

# Datarapport: Kornstørrelsesfordeling Laboratorieanalyser for Miljøstyrelsen

Miljøstyrelsens råstofundersøgelser 2017

Pernille Stockmarr

DE NATIONALE GEOLOGISKE UNDERSØGELSER  
FOR DANMARK OG GRØNLAND,  
ENERGI-, FORSYNINGS- OG KLIMAMINISTERIET



**GEUS**

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## **Prøvebehandling**

GEUS har foretaget analyser på 157 sedimentprøver fra Indre Danske Farvande 2017. Ved modtagelsen af prøverne er de blevet registreret med følgende 5 kategorier:

- dato
- lokalitet
- fortløbende laboratorienummer
- rekvirent
- analysekrav

## **Analysemetoder**

### **Sigteanalyse:**

Totalprøven er tørret og sigtet gennem en sigtesøjle fra 32 mm ned til 0,063 mm med  $\frac{1}{2}$  phi intervaller, hvilket svarer til 16 sigter. Metoden er tillempet i forhold til DS 405.9 DS/EN 933-1 idet der er indføjet flere sigter end der beskrives i denne standard.

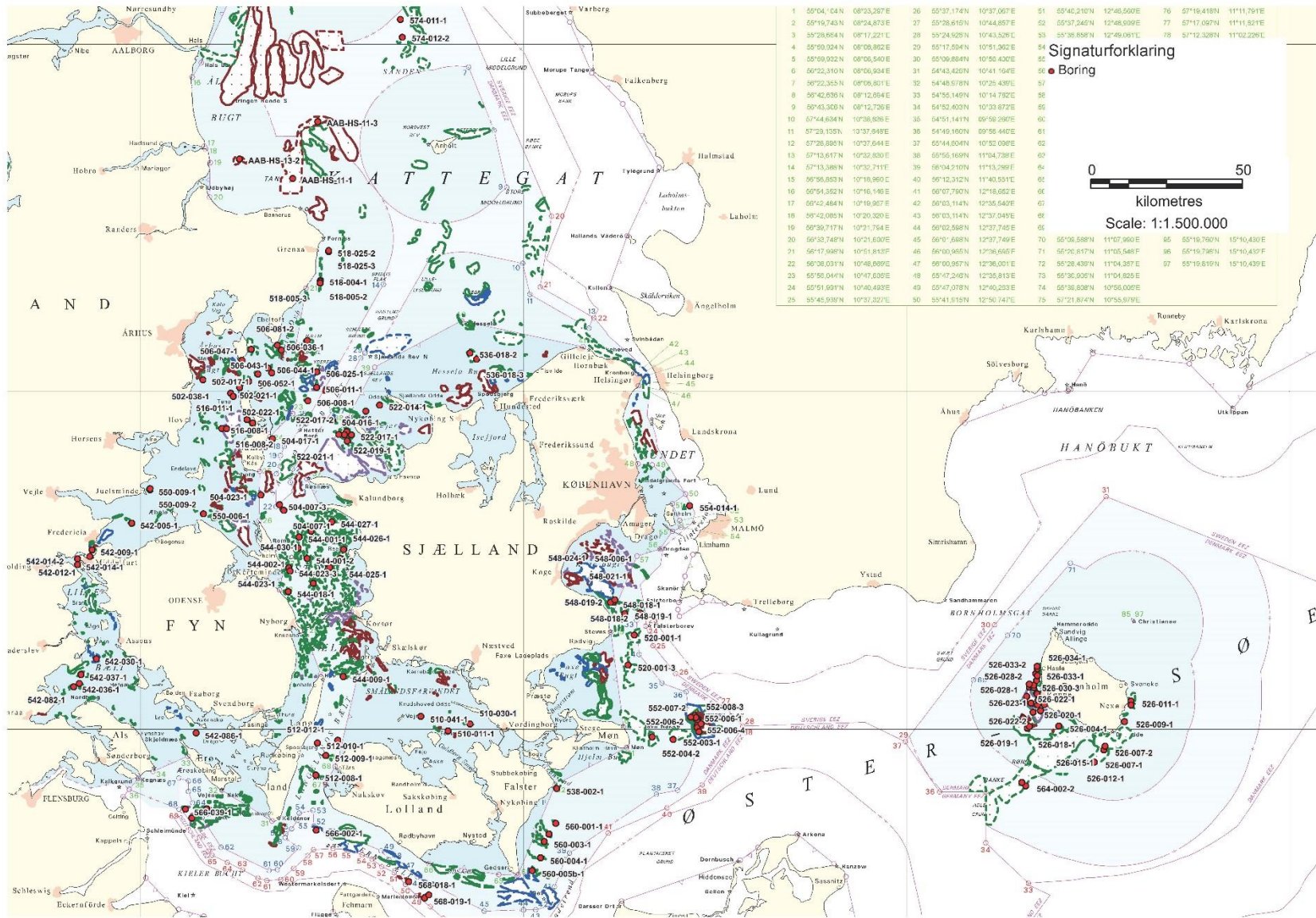
## **Resultater**

I bilag 1 er vist kornkurverne for sedimentprøverne. Kornkurven viser fordeling af sand, silt og ler i prøverne.

## Referencer

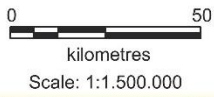
Dansk Standard DS 405.9. Kornstørrelsesfordeling bestemt ved sigteanalyse. Dansk Standardiseringsråd, Kbh. 1978.

DS/EN 933-1. Kornstørrelsesfordeling bestemt ved sigteanalyse. Dansk Standardiseringsråd, Kbh. 2004.



1	55°04,04'N	08°53,267'E	26	55°37,174'N	10°37,007'E	51	55°40,210'N	12°48,500'E	76	57°16,418'N	11°11,791'E
2	55°19,743'N	08°24,873'E	27	55°28,616'N	10°44,857'E	52	55°37,247'N	12°48,500'E	77	57°17,097'N	11°11,821'E
3	55°29,864'N	08°17,221'E	28	55°24,928'N	10°43,526'E	53	55°38,858'N	12°49,091'E	78	57°12,328'N	11°02,226'E
4	55°59,024'N	08°09,802'E	29	55°17,594'N	10°51,302'E	54					
5	55°09,022'N	08°09,540'E	30	55°09,884'N	10°50,430'E	55					
6	55°32,310'N	08°09,594'E	31	54°43,426'N	10°41,194'E	56					
7	55°22,355'N	08°09,801'E	32	54°48,578'N	10°26,439'E	57					
8	55°42,636'N	08°12,664'E	33	54°55,149'N	10°14,792'E	58					
9	55°43,308'N	08°12,736'E	34	54°52,403'N	10°33,872'E	59					
10	57°44,634'N	10°38,836'E	35	54°51,141'N	09°59,290'E	60					
11	57°23,155'N	10°37,948'E	36	54°49,180'N	09°58,440'E	61					
12	57°28,885'N	10°37,644'E	37	55°44,804'N	10°52,008'E	62					
13	57°13,617'N	10°52,830'E	38	55°56,169'N	11°04,798'E	63					
14	57°13,388'N	10°52,711'E	39	55°04,210'N	11°13,289'E	64					
15	55°58,853'N	10°16,860'E	40	55°12,212'N	11°40,531'E	65					
16	55°54,552'N	10°16,148'E	41	55°07,370'N	12°18,052'E	66					
17	55°42,484'N	10°19,067'E	42	55°03,114'N	12°35,640'E	67					
18	55°42,085'N	10°20,320'E	43	55°03,114'N	12°37,049'E	68					
19	55°39,717'N	10°21,764'E	44	55°02,588'N	12°37,749'E	69					
20	55°32,748'N	10°21,830'E	45	55°01,688'N	12°37,749'E	70	55°09,588'N	11°07,980'E	75	55°16,760'N	15°10,430'E
21	55°17,698'N	10°51,819'E	46	55°00,985'N	12°36,665'E	71	55°09,817'N	11°05,548'E	76	55°16,798'N	15°10,432'E
22	55°08,031'N	10°48,609'E	47	55°00,967'N	12°36,001'E	72	55°28,439'N	11°04,357'E	77	55°16,619'N	15°10,439'E
23	55°05,046'N	10°47,605'E	48	55°07,216'N	12°35,813'E	73	55°30,929'N	11°04,823'E			
24	55°01,691'N	10°46,039'E	49	55°07,078'N	12°40,233'E	74	55°38,838'N	10°58,009'E			
25	55°45,893'N	10°37,327'E	50	55°41,815'N	12°50,747'E	75	57°21,874'N	10°55,979'E			

Signaturforklaring  
 ● Boring













## Miljøstyrelsens råstofundersøgelser 2017

labnr.	mærkning	dybde	
170159	502017-1	0-30	cm
170188	502021-1	0-90	cm
170189	502021-1	100-200	cm
170190	502038-1	0-150	cm
170191	502038-1	221-370	cm
170160	502041-1	120-220	cm
170192	504007-1	0-400	cm
170193	504007-3	40-240	cm
170194	504007-3	250-350	cm
170195	504017-1	0-120	cm
170196	504023-1	0-100	cm
170219	506008-1	590-620	cm
170220	506011-1	0-140	cm
170221	506011-1	150-500	cm
170268	506025-1	35-150	cm
170269	506025-1	250-500	cm
170197	506036-1	0-220	cm
170198	506043-1	225-390	cm
170199	506043-1	355-415	cm
170222	506044-1	15-100	cm
170223	506044-1	105-155	cm
170224	506044-1	160-260	cm
170225	506044-1	340-390	cm
170200	506045-1	10-120	cm
170201	506045-1	150-270	cm
170202	506047-1	0-100	cm
170203	506048-1	20-220	cm
170204	506048-1	270-320	cm
170226	506053-1	0-50	cm
170227	506053-1	100-350	cm
170228	506053-1	455-490	cm
170205	506053-4	0-150	cm
170206	506053-4	200-320	cm
170229	506081-2	0-100	cm
170230	506081-2	120-210	cm
170152	510011-1	300-400	cm
170148	510030-1	0-80	cm
170149	510041-1	250-290	cm

<b>labnr.</b>	<b>mærkning</b>	<b>dybde</b>	
170150	510041-1	290-305	cm
170151	510041-1	340-450	cm
170153	512009-1	0-50	cm
170207	516008-1	20-100	cm
170208	516008-1	120-210	cm
170209	516012-1	70-170	cm
170210	518004-1	120-320	cm
170211	518005-3	450-530	cm
170212	518025-2	0-30	cm
170240	518025-3	0-50	cm
170270	518025-3	300-380	cm
170241	520001-1	0-100	cm
170271	520001-1	170-300	cm
170272	520001-3	0-30	cm
170231	522014-1	30-80	cm
170167	522019-1	160-240	cm
170168	522019-1	360-440	cm
170169	522020-1	20-60	cm
170170	522020-1	350-415	cm
170171	522021-1	240-260	cm
170172	522021-1	410-455	cm
170242	526009-1	0-230	cm
170273	526011-1	250-315	cm
170243	526011-2	0-100	cm
170274	526011-2	130-200	cm
170275	526012-1	0-30	cm
170244	526018-1	0-100	cm
170277	526019-1	0-45	cm
170278	526022-1	0-25	cm
170279	526022-2	11-30	cm
170280	526027-2	0-40	cm
170245	526028-1	0-200	cm
170281	526028-2	7-21	cm
170246	526030-3	0-165	cm
170282	526030-4	0-45	cm
170283	526033-1	0-145	cm
170247	526034-3	0-130	cm
170248	526035-2	12-38	cm
170284	526038-1	20-75	cm
170232	536018-2	0-150	cm
170233	536018-2	170-330	cm

<b>labnr.</b>	<b>mærkning</b>	<b>dybde</b>	
170213	542009-1	20-150	cm
170214	542009-1	200-320	cm
170173	542012-1	0-200	cm
170174	542012-1	200-400	cm
170175	542014-1	0-200	cm
170176	542014-1	200-400	cm
170215	542014-2	10-110	cm
170216	542014-2	150-350	cm
170177	542030-1	0-80	cm
170178	542030-1	250-360	cm
170179	542030-1	360-480	cm
170180	542036-1	30-230	cm
170181	542082-1	0-150	cm
170182	542082-1	150-300	cm
170183	542086-1	0-25	cm
170184	544001-2	40-125	cm
170185	544001-2	160-230	cm
170154	544009-1	40-100	cm
170156	544020-1	420-510	cm
170157	544025-1	50-110	cm
170158	544028-1	5-55	cm
170155	544028-1	112-140	cm
170249	548006-1	0-90	cm
170285	548006-1	100-210	cm
170250	548018-1	0-120	cm
170286	548018-1	120-300	cm
170251	548019-1	0-100	cm
170252	548019-2	0-340	cm
170253	548020-1	0-100	cm
170287	548021-1	420-480	cm
170288	548024-1	0-35	cm
170161	550009-2	0-15	cm
170162	550009-2	20-120	cm
170164	550009-2	210-275	cm
170289	552004-2	0-170	cm
170290	552004-2	250-340	cm
170291	552006-1	0-100	cm
170292	552006-1	100-160	cm
170293	552006-1	180-280	cm
170254	552006-2	0-70	cm
170255	552006-2	80-180	cm
170256	552006-3	0-80	cm

<b>labnr.</b>	<b>mærkning</b>	<b>dybde</b>	
170294	552006-3	240-300	cm
170257	552006-4	0-250	cm
170258	552006-4	300-340	cm
170259	552007-1	0-150	cm
170295	552007-1	190-220	cm
170296	552007-1	320-380	cm
170260	552007-2	0-200	cm
170297	552007-2	270-400	cm
170261	552008-1	0-200	cm
170339	552008-1	300-400	cm
170262	552008-2	0-90	cm
170263	552008-2	95-160	cm
170340	552008-2	300-580	cm
170341	552008-3	0-110	cm
170264	552011-1	0-100	cm
170342	560001-1	0-50	cm
170343	560003-1	0-100	cm
170344	560003-1	160-200	cm
170345	560005b-1	0-120	cm
170265	564002-1	0-150	cm
170346	564002-1	200-300	cm
170266	564002-2	0-250	cm
170186	566040-1	40-80	cm
170187	566041-1	415-450	cm
170165	568019-1	60-110	cm
170166	568019-2	21-40	cm
170234	574011-1	0-140	cm
170235	574012-2	0-45	cm
170236	574012-2	46-80	cm
170237	574012-2	100-180	cm
170347	598021-1	90-190	cm
170217	AAB-HS-11-1	20-120	cm
170218	AAB-HS-11-1	200-300	cm
170238	AAB-HS-11-3	0-250	cm
170239	AAB-HS-13-2	12-116	cm
170267	AAB-HS-13-2	128-250	cm

# **Bilag 1**

# Grain Size Distribution

## Geotechnical

**Sample Id:** 502017-1 0-30 cm  
**Lab. Id:** 170159  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 108,39 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,99	0,91	99,09
4,00	-2,00	0,04	0,04	99,05
2,80	-1,49	0,39	0,36	98,69
2,00	-1,00	0,59	0,54	98,15
1,40	-0,49	0,44	0,41	97,74
1,00	0,00	1,66	1,53	96,21
0,710	0,49	2,53	2,33	93,87
0,500	1,00	6,00	5,54	88,34
0,355	1,49	15,86	14,63	73,71
0,250	2,00	42,46	39,17	34,53
0,180	2,47	22,85	21,08	13,45
0,125	3,00	10,21	9,42	4,03
0,090	3,47	2,17	2,00	2,03
0,075	3,74	0,47	0,43	1,60
0,063	3,99	0,27	0,25	1,35
< 0,063	> 3,99	1,46	1,35	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,35
Sand, fine (0,063 mm - 0,200 mm)	18,13
Sand, medium (0,2 mm - 0,6 mm)	71,50
Sand, coarse (0,6 mm - 2 mm)	7,17
Gravel (> 2 mm)	1,85
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,85	0,23
16%	84%	0,46	1,13
25%	75%	0,37	1,44
40%	60%	0,32	1,65
Median 50%	50%	0,29	1,78
75%	25%	0,22	2,20
84%	16%	0,19	2,41
90%	10%	0,16	2,65
95%	5%	0,13	2,94

### Moments Statistics

Mean	1,77
Sorting	0,73
Skewness	-0,08
Kurtosis	1,47
Uniformity Coefficient	1,99

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

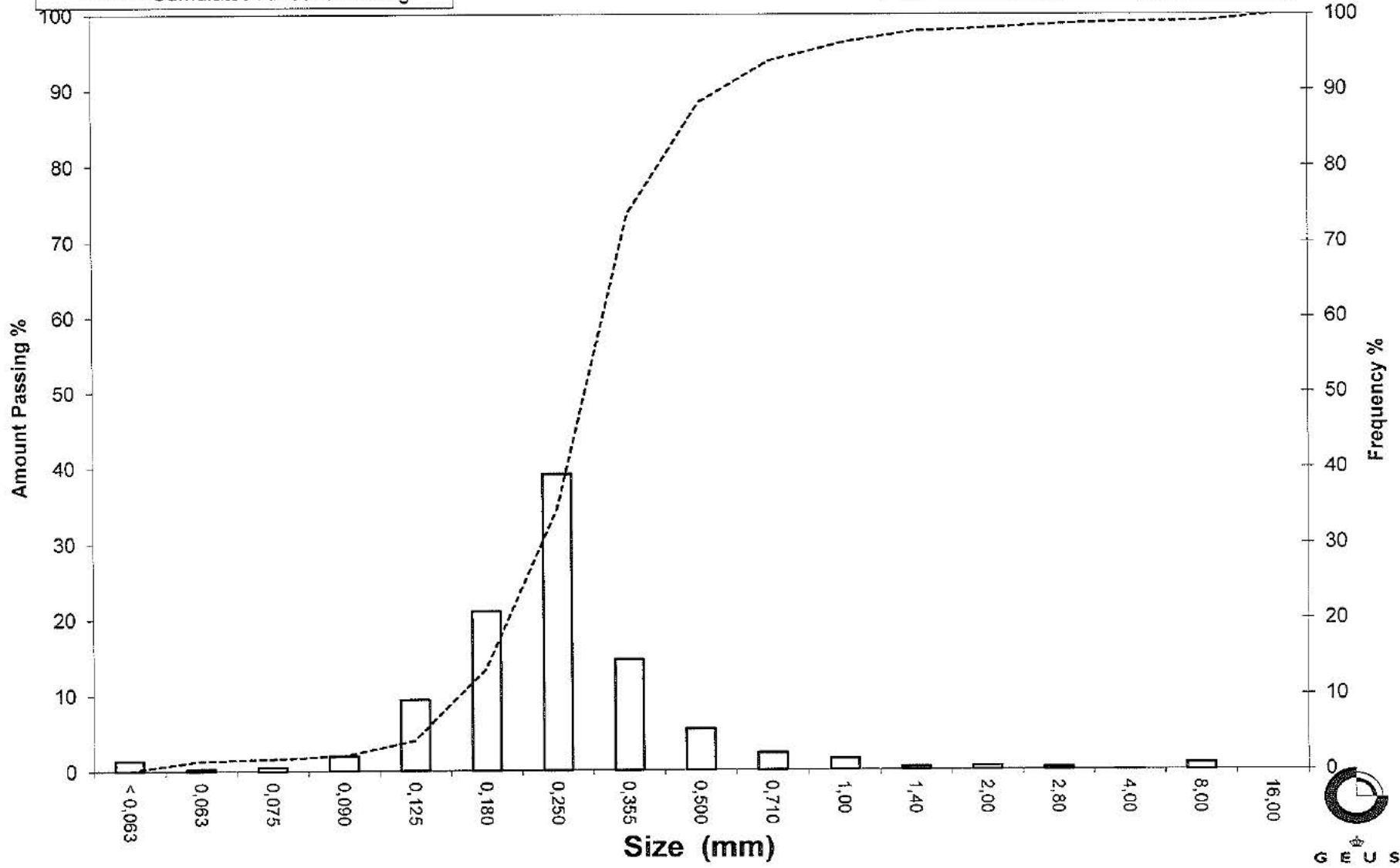
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 502017-1 0-30 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 502021-1 0-90 cm  
**Lab. Id:** 170188  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 93,01 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,42	1,53	98,47
4,00	-2,00	0,51	0,55	97,92
2,80	-1,49	0,43	0,46	97,46
2,00	-1,00	0,40	0,43	97,03
1,40	-0,49	0,59	0,63	96,40
1,00	0,00	1,89	2,03	94,37
0,710	0,49	2,36	2,54	91,83
0,500	1,00	4,32	4,64	87,18
0,355	1,49	7,19	7,73	79,45
0,250	2,00	11,41	12,27	67,19
0,180	2,47	13,70	14,73	52,46
0,125	3,00	17,99	19,34	33,11
0,090	3,47	7,20	7,74	25,37
0,075	3,74	2,02	2,17	23,20
0,063	3,99	1,99	2,14	21,06
< 0,063	> 3,99	19,59	21,06	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	21,06
Sand, fine (0,063 mm - 0,200 mm):	35,60
Sand, medium (0,2 mm - 0,6 mm):	32,73
Sand, coarse (0,6 mm - 2 mm):	7,64
Gravel (> 2 mm):	2,97
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,12	-0,17
16%	84%	0,44	1,18
25%	75%	0,32	1,66
40%	60%	0,22	2,21
Median 50%	50%	0,17	2,53
75%	25%	0,09	3,52
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,86
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

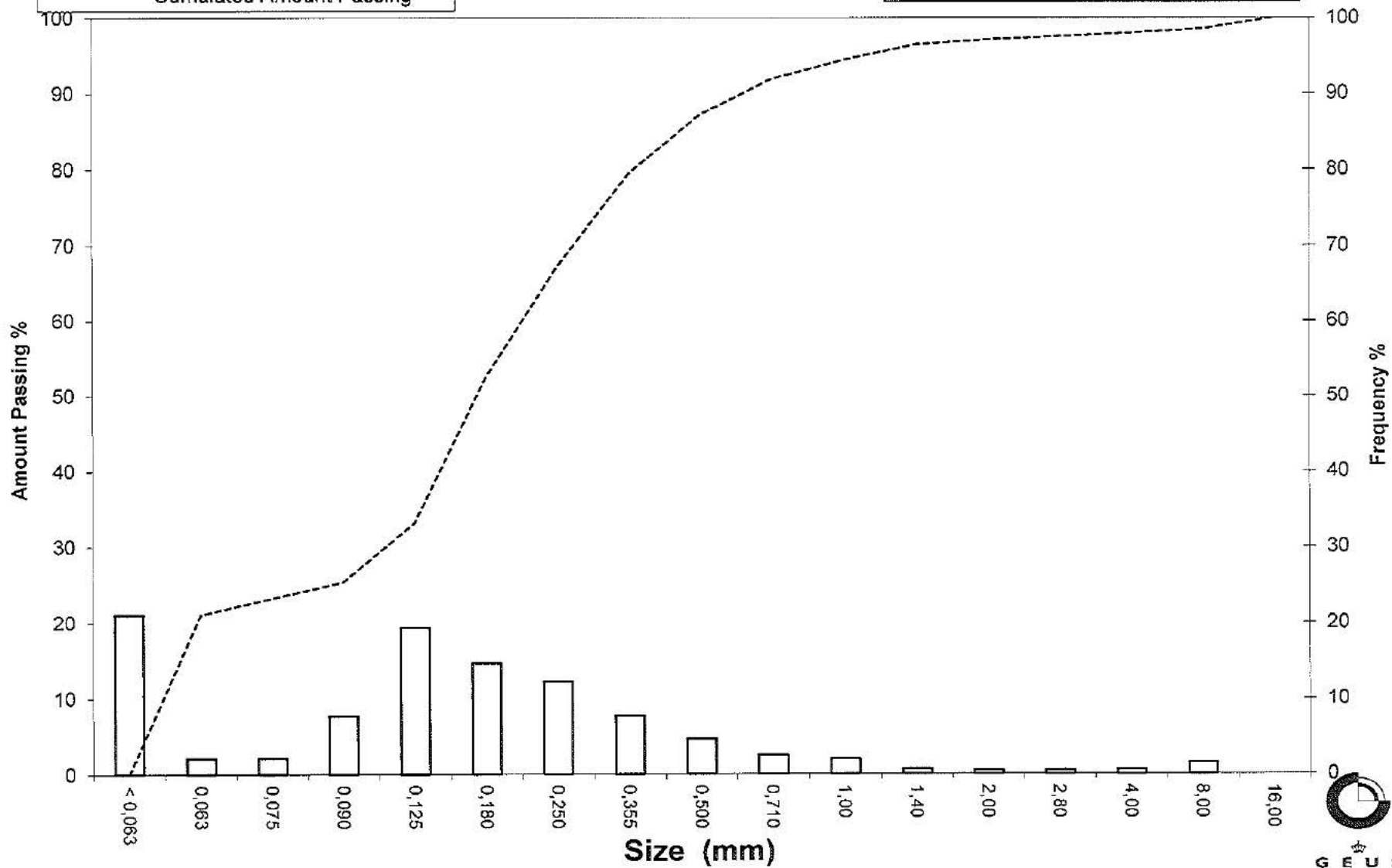
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# Grain Size Distribution

Sample Id: 502021-1 0-90 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 502021-1 100-200 cm  
**Lab. Id:** 170189  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 166,91 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount: passing
mm	φ	g	%	%
16,00	-4,00	10,42	6,24	93,76
8,00	-3,00	14,42	8,64	85,12
4,00	-2,00	11,82	7,08	78,04
2,80	-1,49	5,20	3,12	74,92
2,00	-1,00	5,34	3,20	71,72
1,40	-0,49	4,75	2,85	68,88
1,00	0,00	5,35	3,21	65,67
0,710	0,49	6,16	3,69	61,98
0,500	1,00	10,07	6,03	55,95
0,355	1,49	12,89	7,72	48,22
0,250	2,00	19,23	11,52	36,70
0,180	2,47	16,33	9,78	26,92
0,125	3,00	9,77	5,85	21,07
0,090	3,47	4,65	2,79	18,28
0,075	3,74	1,93	1,16	17,12
0,063	3,99	1,88	1,13	16,00
< 0,063	> 3,99	26,70	16,00	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	16,00
Sand, fine (0,063 mm - 0,200 mm):	13,72
Sand, medium (0,2 mm - 0,6 mm):	29,11
Sand, coarse (0,6 mm - 2 mm):	12,90
Gravel (> 2 mm):	28,28
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	7,37	-2,88
25%	75%	2,83	-1,50
40%	60%	0,64	0,64
Median 50%	50%	0,39	1,36
75%	25%	0,16	2,63
84%	16%	0,06	3,99
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	0,82
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

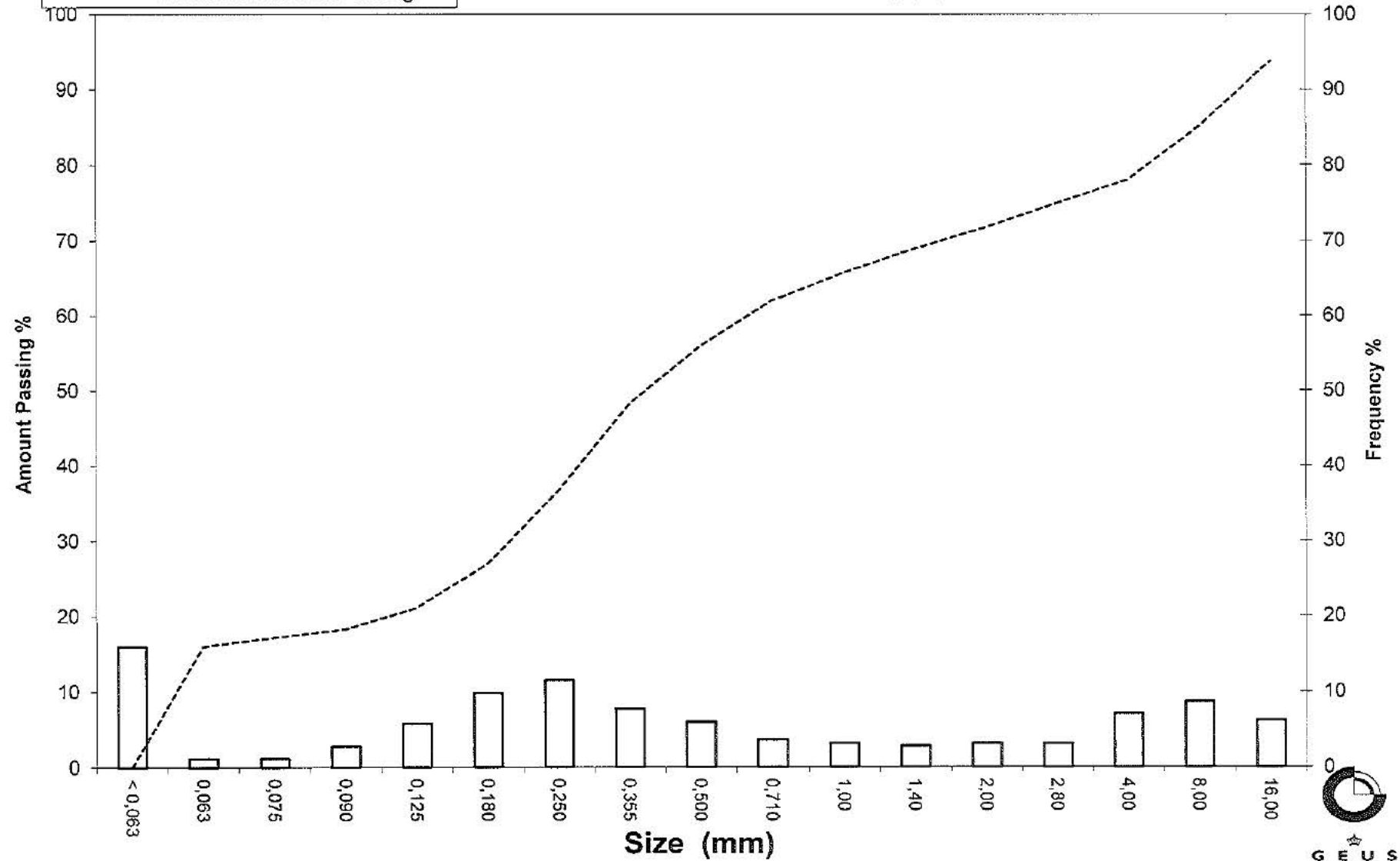
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 502021-1 100-200 cm

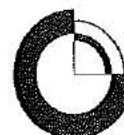
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 502038-1 0-150 cm  
 Lab. Id: 170190  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 116,37 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,43	2,95	97,05
4,00	-2,00	2,57	2,21	94,84
2,80	-1,49	1,22	1,05	93,80
2,00	-1,00	1,77	1,52	92,27
1,40	-0,49	2,00	1,72	90,56
1,00	0,00	4,10	3,52	87,03
0,710	0,49	5,49	4,72	82,32
0,500	1,00	10,26	8,82	73,50
0,355	1,49	11,51	9,89	63,61
0,250	2,00	13,13	11,28	52,32
0,180	2,47	10,92	9,38	42,94
0,125	3,00	12,55	10,78	32,16
0,090	3,47	8,01	6,88	25,27
0,075	3,74	2,43	2,09	23,18
0,063	3,99	2,16	1,86	21,33
< 0,063	> 3,99	24,82	21,33	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	21,33
Sand, fine (0,063 mm - 0,200 mm)	24,29
Sand, medium (0,2 mm - 0,6 mm)	32,08
Sand, coarse (0,6 mm - 2 mm)	14,58
Gravel (> 2 mm)	7,73
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	4,28	-2,10
16%	84%	0,81	0,30
25%	75%	0,54	0,90
40%	60%	0,32	1,64
Median 50%	50%	0,23	2,10
75%	25%	0,09	3,51
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

## Moments Statistics

Mean	1,20
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

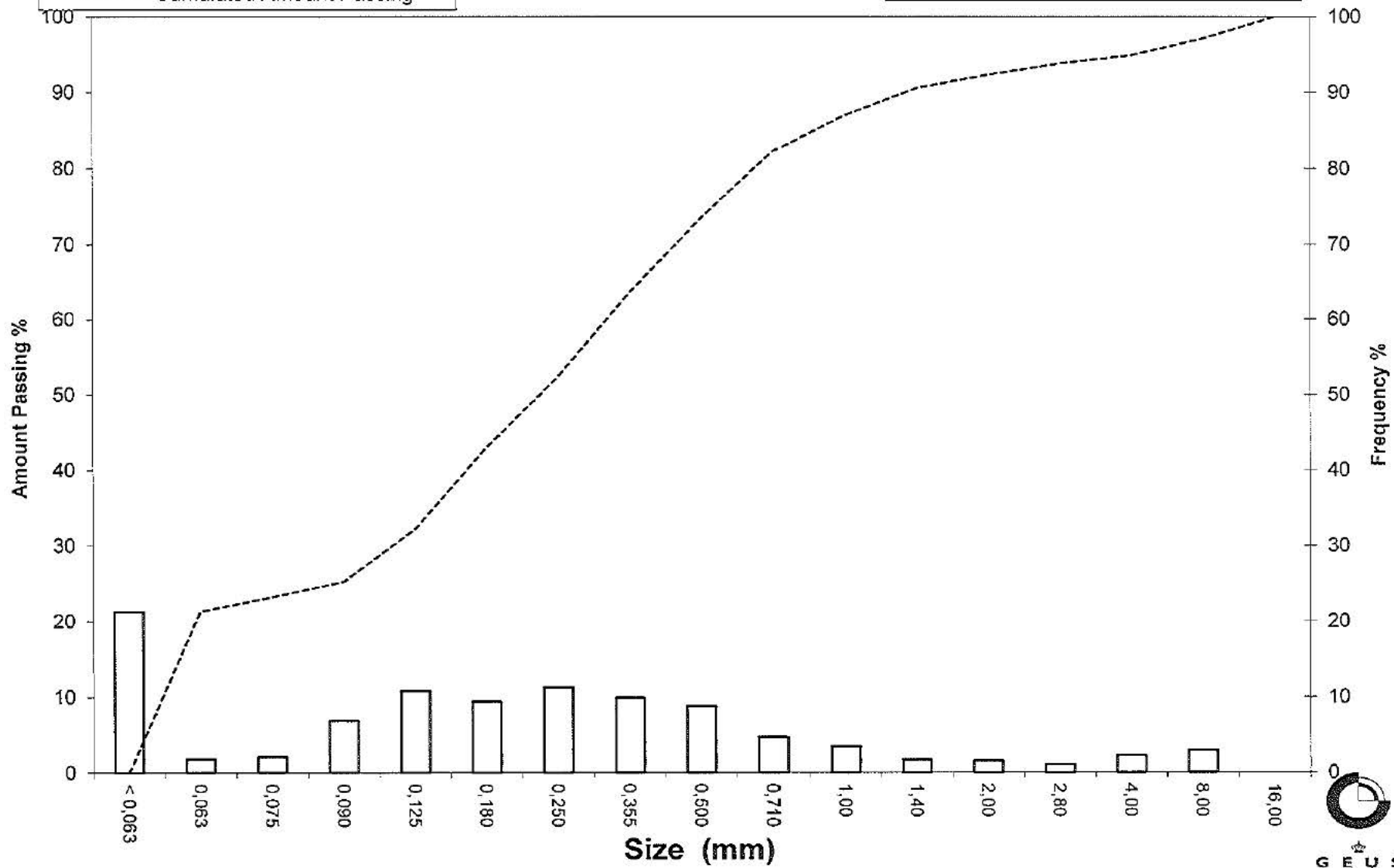
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 502038-1 0-150 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

**Sample Id:** 502038-1 231-370 cm  
**Lab. Id:** 170191  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 131,58 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,15	0,11	99,89
2,00	-1,00	0,05	0,04	99,85
1,40	-0,49	0,13	0,10	99,75
1,00	0,00	0,46	0,35	99,40
0,710	0,49	1,92	1,46	97,94
0,500	1,00	14,91	11,33	86,61
0,355	1,49	52,89	40,20	46,41
0,250	2,00	40,12	30,49	15,92
0,180	2,47	10,72	8,15	7,77
0,125	3,00	4,14	3,15	4,63
0,090	3,47	1,02	0,78	3,85
0,075	3,74	0,23	0,17	3,68
0,063	3,99	0,15	0,11	3,56
< 0,063	> 3,99	4,69	3,56	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	3,56
Sand, fine (0,063 mm - 0,200 mm):	6,54
Sand, medium (0,2 mm - 0,6 mm):	81,90
Sand, coarse (0,6 mm - 2 mm):	7,84
Gravel (> 2 mm):	0,15
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,66	0,61
16%	84%	0,49	1,03
25%	75%	0,46	1,13
40%	60%	0,40	1,31
Median 50%	50%	0,37	1,44
75%	25%	0,28	1,83
84%	16%	0,25	2,00
90%	10%	0,20	2,33
95%	5%	0,13	2,93

## Moments Statistics

Mean	1,49
Sorting	0,59
Skewness	0,21
Kurtosis	1,35
Uniformity Coefficient	2,03

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

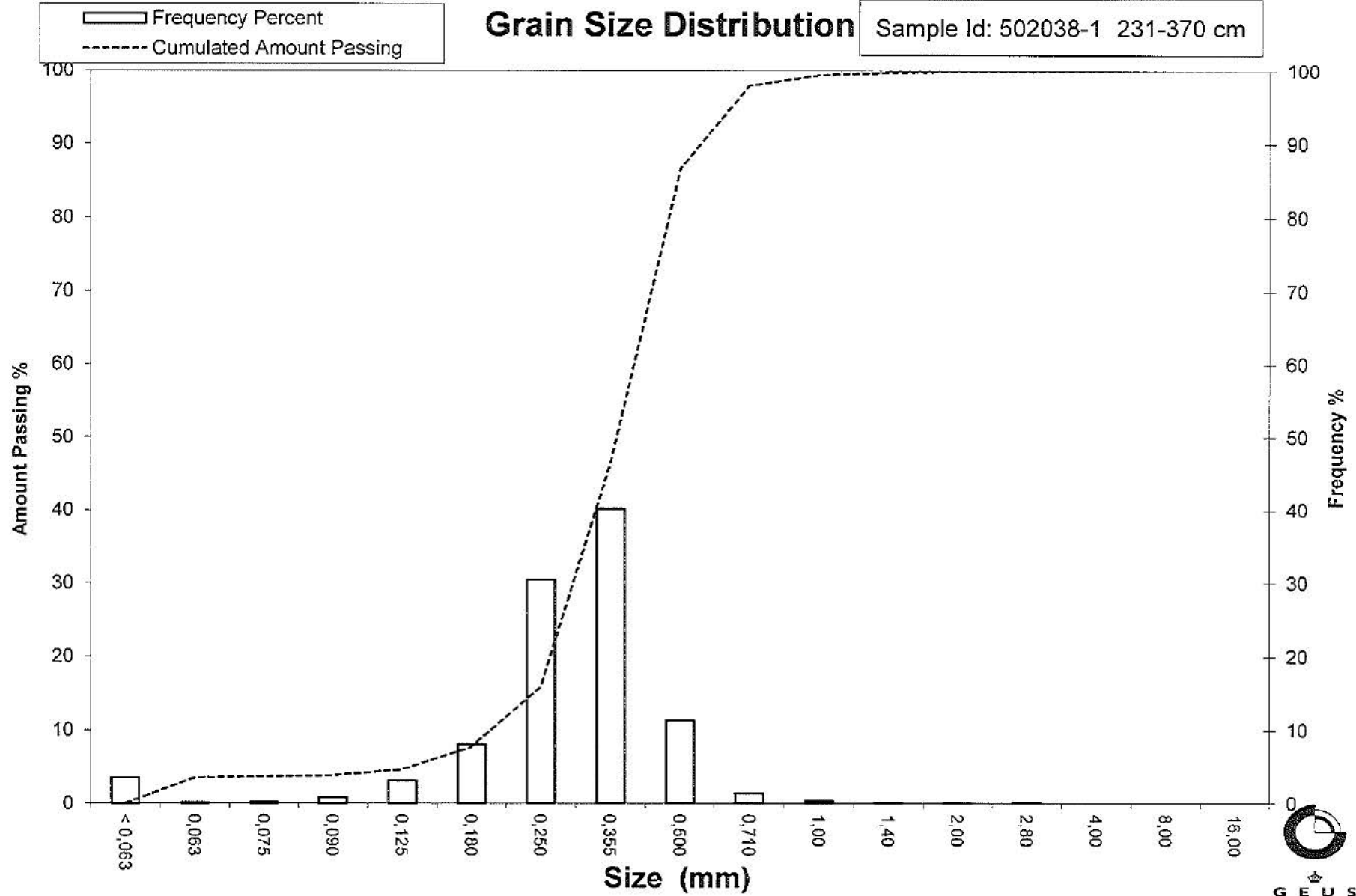
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

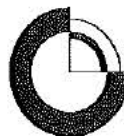
Sample Id: 502038-1 231-370 cm



# Grain Size Distribution

Geotechnical

Sample Id: 502041-1 120-220 cm  
 Lab. Id: 170160  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks: >0,710 mm består af skaller



GEUS

Total Weight 144,8 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	1,02	0,70	99,30
2,80	-1,49	1,29	0,89	98,40
2,00	-1,00	1,32	0,91	97,49
1,40	-0,49	1,40	0,97	96,53
1,00	0,00	1,89	1,31	95,22
0,710	0,49	2,08	1,44	93,78
0,500	1,00	4,21	2,91	90,88
0,355	1,49	6,32	4,36	86,51
0,250	2,00	13,73	9,48	77,03
0,180	2,47	36,00	24,86	52,17
0,125	3,00	35,30	24,38	27,79
0,090	3,47	11,20	7,73	20,06
0,075	3,74	2,46	1,70	18,36
0,063	3,99	1,89	1,31	17,05
< 0,063	> 3,99	24,69	17,05	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	17,05
Sand, fine (0,063 mm - 0,200 mm)	42,22
Sand, medium (0,2 mm - 0,6 mm)	32,99
Sand, coarse (0,6 mm - 2 mm)	5,23
Gravel (> 2 mm)	2,51
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,96	0,07
16%	84%	0,33	1,61
25%	75%	0,24	2,03
40%	60%	0,20	2,31
Median 50%	50%	0,18	2,51
75%	25%	0,11	3,15
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

## Moments Statistics

Mean	2,06
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

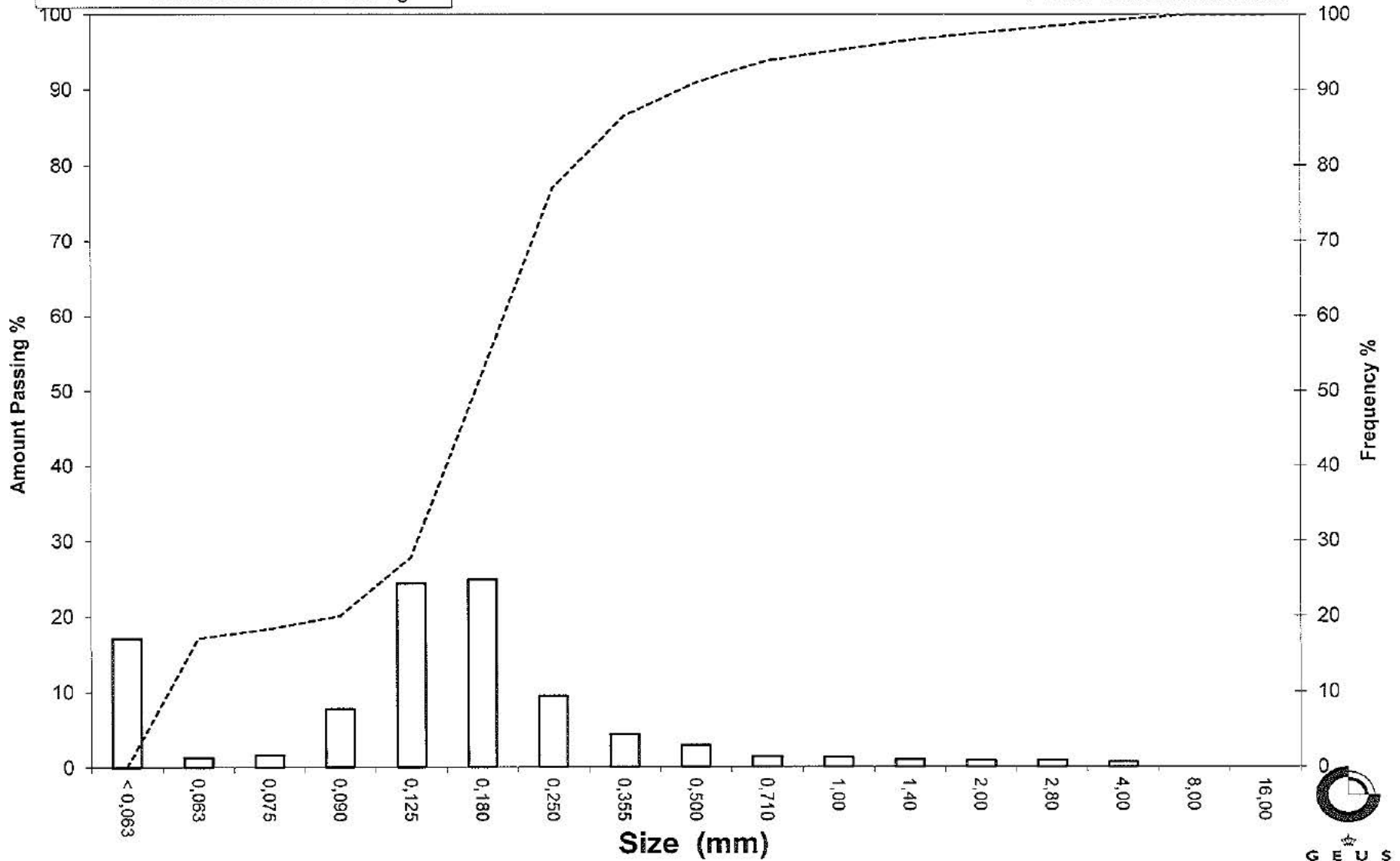
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# Grain Size Distribution

Sample Id: 502041-1 120-220 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 504007-1 0-400 cm  
**Lab. Id:** 170192  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >2,8 mm består af skaller



**Total Weight** 87,28 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,14	0,16	99,84
2,80	-1,49	0,07	0,08	99,76
2,00	-1,00	0,03	0,03	99,73
1,40	-0,49	0,02	0,02	99,70
1,00	0,00	0,10	0,11	99,59
0,710	0,49	0,18	0,21	99,38
0,500	1,00	0,34	0,39	98,99
0,355	1,49	0,94	1,08	97,91
0,250	2,00	7,78	8,91	89,00
0,180	2,47	18,82	21,56	67,44
0,125	3,00	23,00	26,35	41,09
0,090	3,47	8,14	9,33	31,76
0,075	3,74	1,50	1,72	30,04
0,063	3,99	1,23	1,41	28,63
< 0,063	> 3,99	24,99	28,63	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	28,63
Sand, fine (0,063 mm - 0,200 mm):	44,97
Sand, medium (0,2 mm - 0,6 mm):	25,58
Sand, coarse (0,6 mm - 2 mm):	0,55
Gravel (> 2 mm):	0,27
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,32	1,64
16%	84%	0,23	2,10
25%	75%	0,20	2,29
40%	60%	0,16	2,60
Median 50%	50%	0,14	2,80
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,45
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

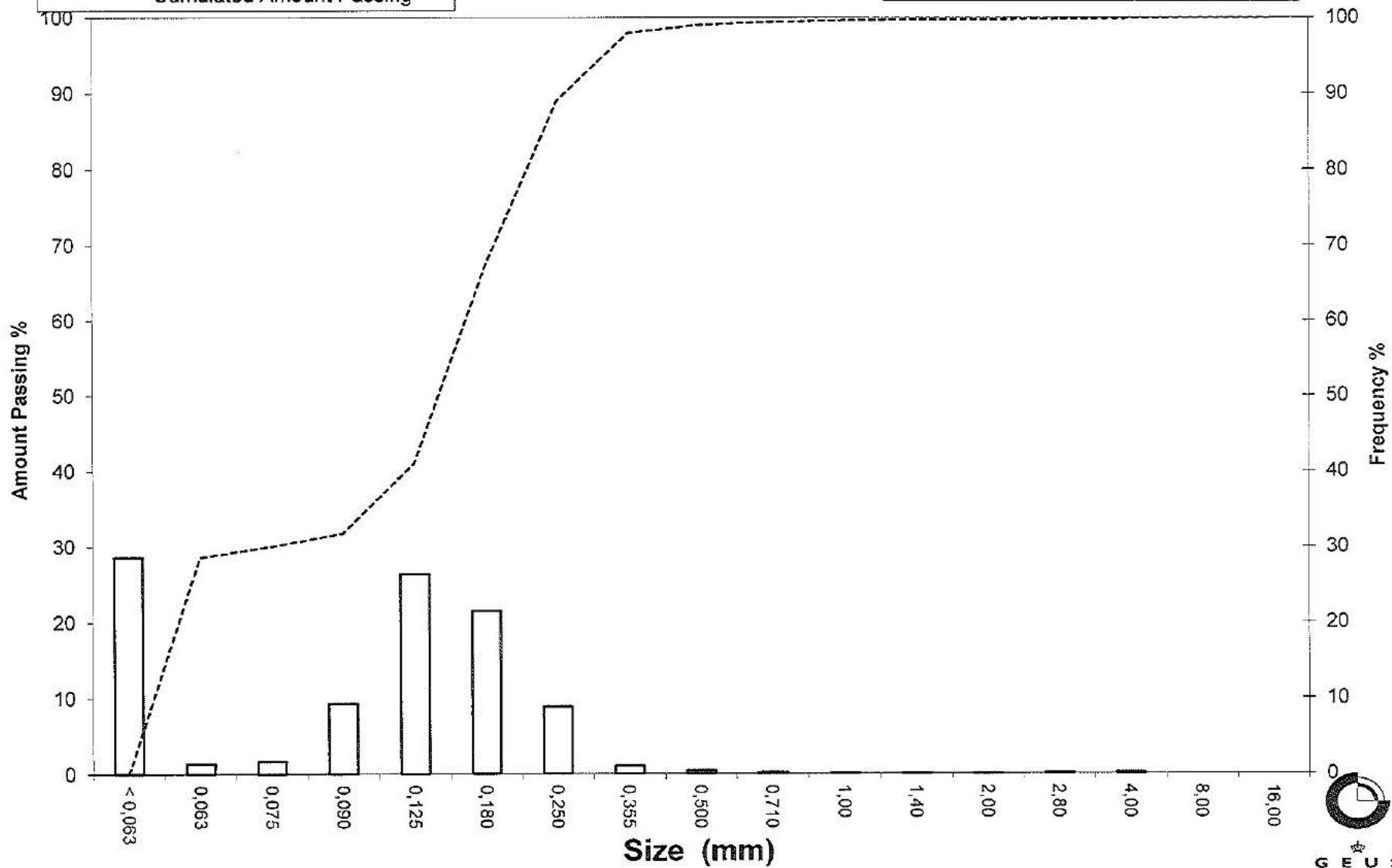
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 504007-1 0-400 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 504007-3 40-240 cm  
**Lab. Id:** 170193  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 121,26 g

### Size Fractions

Size	Size	Weight		Cumulated amount passing
		g	%	
mm	Φ			%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,07	0,06	99,94
0,710	0,49	0,01	0,01	99,93
0,500	1,00	0,24	0,20	99,74
0,355	1,49	4,90	4,04	95,70
0,250	2,00	28,51	23,51	72,18
0,180	2,47	45,84	37,80	34,38
0,125	3,00	34,25	28,25	6,14
0,090	3,47	4,61	3,80	2,33
0,075	3,74	0,49	0,40	1,93
0,063	3,99	0,22	0,18	1,75
< 0,063	> 3,99	2,12	1,75	0,00

Gravel

Sand

Sieve Analysis

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,75
Sand, fine (0,063 mm - 0,200 mm):	43,43
Sand, medium (0,2 mm - 0,6 mm):	54,65
Sand, coarse (0,6 mm - 2 mm):	0,17
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,51
16%	84%	0,30	1,72
25%	75%	0,26	1,93
40%	60%	0,23	2,14
Median 50%	50%	0,21	2,26
75%	25%	0,16	2,63
84%	16%	0,14	2,79
90%	10%	0,13	2,92
95%	5%	0,11	3,13

### Moments Statistics

Mean	2,26
Sorting	0,51
Skewness	0,04
Kurtosis	0,95
Uniformity Coefficient	1,72

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

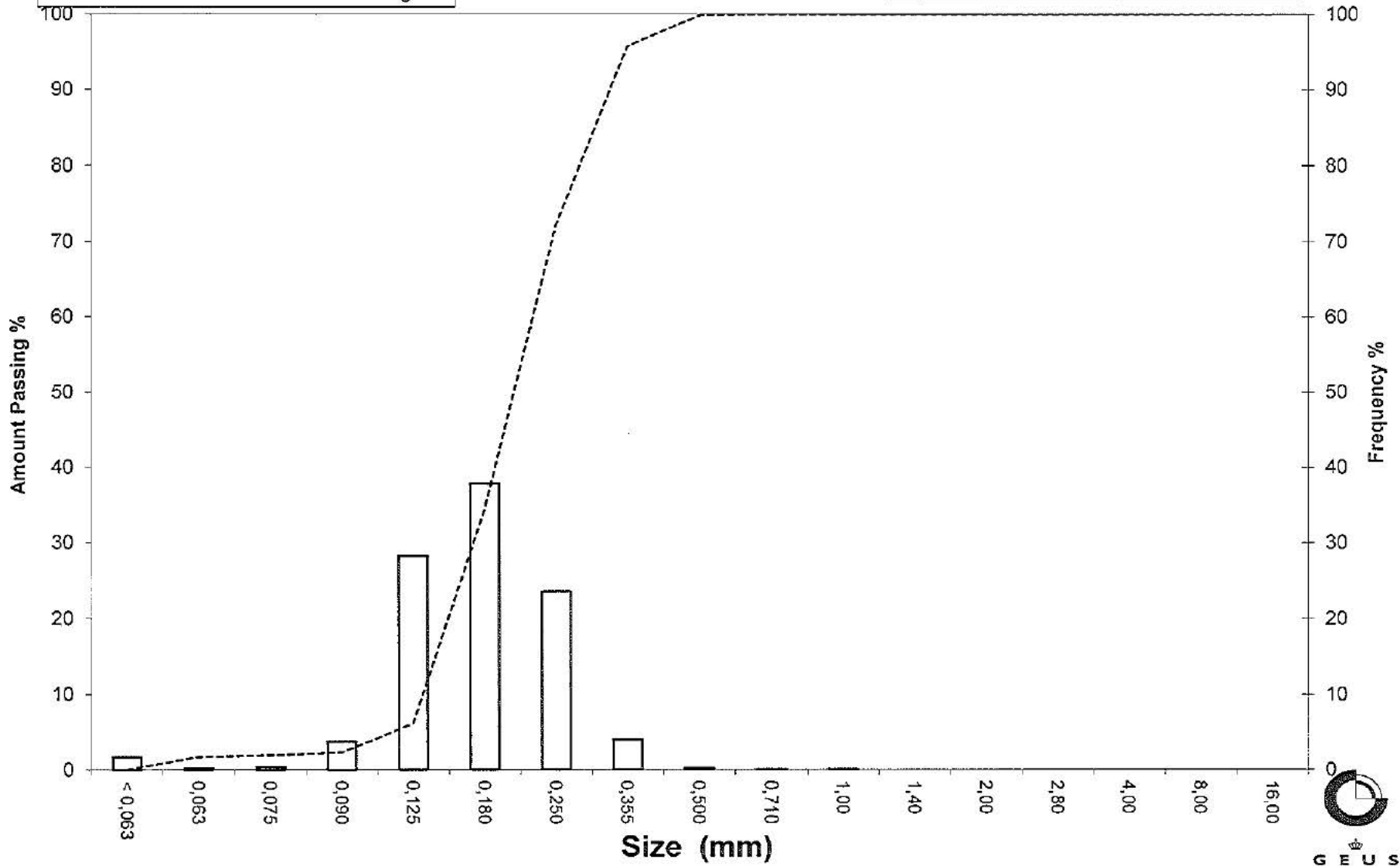
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 504007-3 40-240 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 504007-3 250-350 cm  
**Lab. Id:** 170194  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 119,35 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,01	0,01	99,99
1,40	-0,49	0,00	0,00	99,99
1,00	0,00	0,09	0,08	99,92
0,710	0,49	0,18	0,15	99,77
0,500	1,00	1,15	0,96	98,80
0,355	1,49	30,62	25,66	73,15
0,250	2,00	67,59	56,63	16,51
0,180	2,47	9,90	8,29	8,22
0,125	3,00	6,87	5,76	2,46
0,090	3,47	1,46	1,22	1,24
0,075	3,74	0,15	0,13	1,11
0,063	3,99	0,06	0,05	1,06
< 0,063	> 3,99	1,27	1,06	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,06
Sand, fine (0,063 mm - 0,200 mm):	9,53
Sand, medium (0,2 mm - 0,6 mm):	88,67
Sand, coarse (0,6 mm - 2 mm):	0,73
Gravel (> 2 mm):	0,01
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,48	1,06
16%	84%	0,42	1,26
25%	75%	0,37	1,45
40%	60%	0,33	1,60
Median 50%	50%	0,31	1,68
75%	25%	0,27	1,91
84%	16%	0,25	2,03
90%	10%	0,20	2,36
95%	5%	0,15	2,74

### Moments Statistics

Mean	1,66
Sorting	0,44
Skewness	0,09
Kurtosis	1,50
Uniformity Coefficient	1,70

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

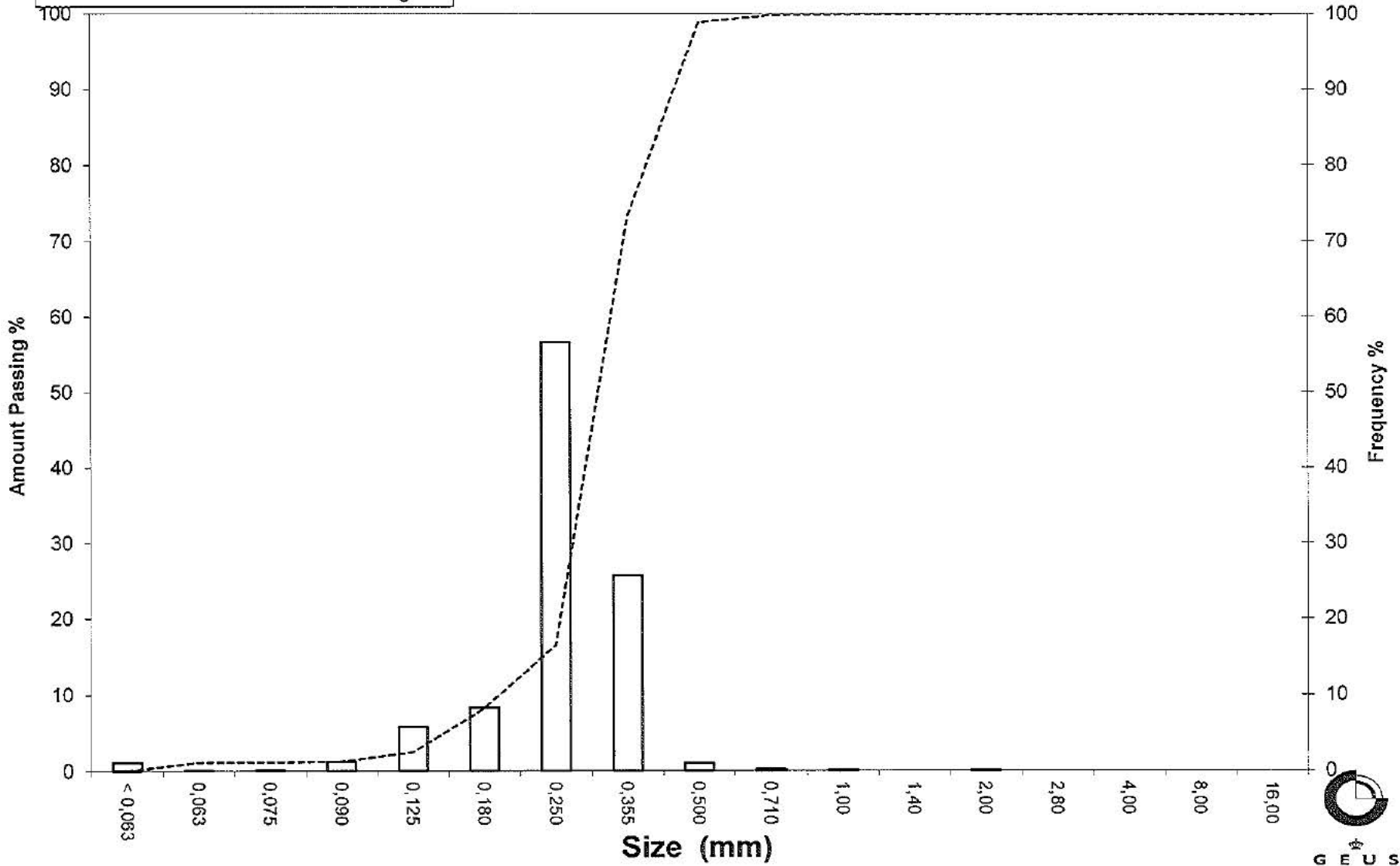
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 504007-3 250-350 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 504017-1 0-120 cm  
**Lab. Id:** 170195  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >2,8 mm består af skaller



**Total Weight** 112,95 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	1,06	0,94	99,06
2,80	-1,49	1,23	1,09	97,97
2,00	-1,00	0,81	0,72	97,26
1,40	-0,49	1,21	1,07	96,18
1,00	0,00	1,47	1,30	94,88
0,710	0,49	1,68	1,49	93,40
0,500	1,00	2,77	2,45	90,94
0,355	1,49	3,78	3,35	87,60
0,250	2,00	5,98	5,29	82,30
0,180	2,47	8,02	7,10	75,20
0,125	3,00	13,51	11,96	63,24
0,090	3,47	14,51	12,85	50,39
0,075	3,74	7,98	7,07	43,33
0,063	3,99	8,98	7,95	35,38
< 0,063	> 3,99	39,96	35,38	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	35,38
Sand, fine (0,063 mm - 0,200 mm):	41,85
Sand, medium (0,2 mm - 0,6 mm):	14,88
Sand, coarse (0,6 mm - 2 mm):	5,14
Gravel (> 2 mm):	2,74
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	1,04	-0,05
16%	84%	0,28	1,82
25%	75%	0,18	2,48
40%	60%	0,12	3,11
Median 50%	50%	0,09	3,49
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,65
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

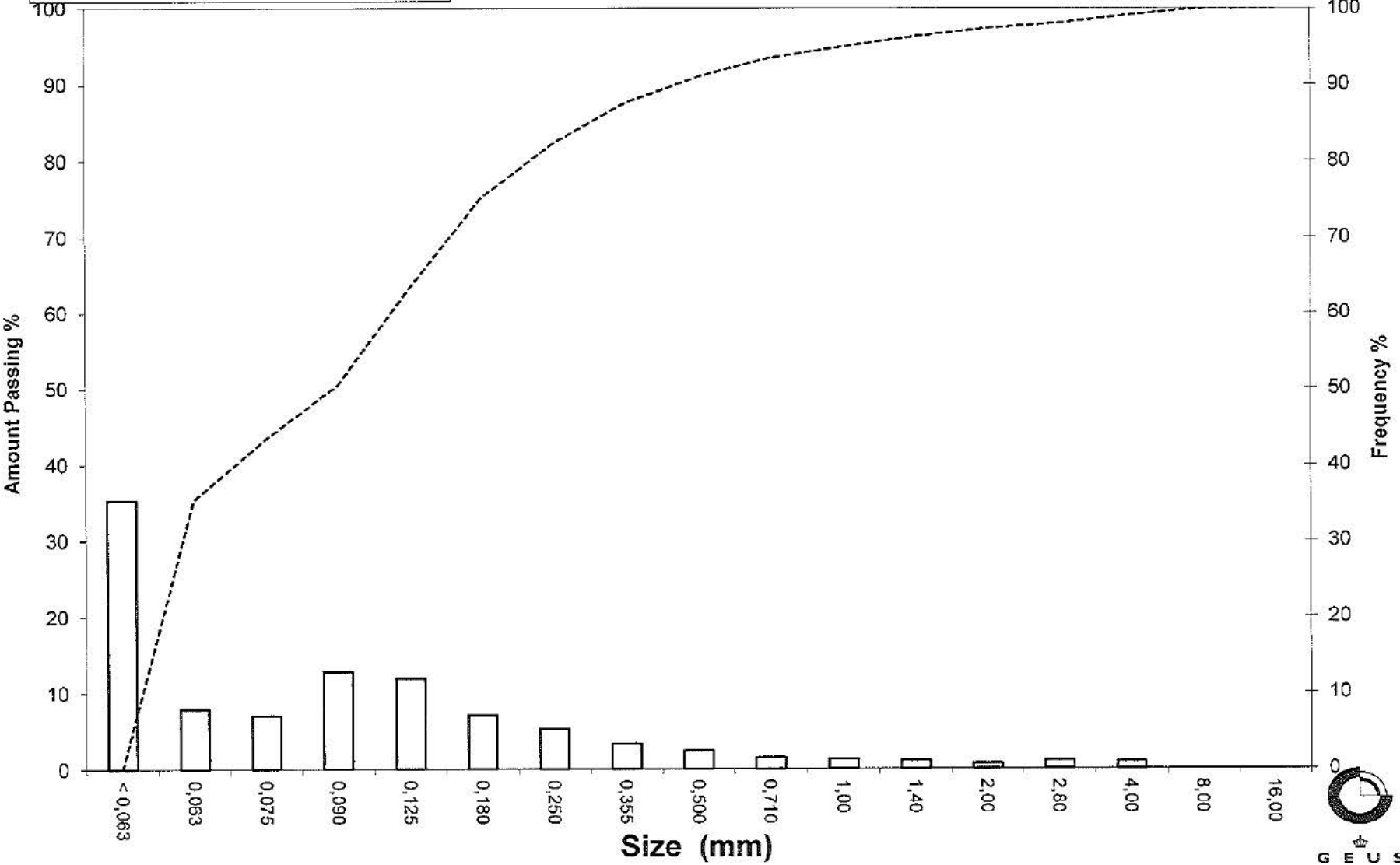
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# Grain Size Distribution

Sample Id: 504017-1 0-120 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 504023-1 0-100 cm  
**Lab. Id:** 170196  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 103,46 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,16	0,15	99,85
2,80	-1,49	0,38	0,37	99,48
2,00	-1,00	0,51	0,49	98,99
1,40	-0,49	0,43	0,42	98,57
1,00	0,00	1,36	1,31	97,25
0,710	0,49	2,04	1,97	95,28
0,500	1,00	3,97	3,84	91,45
0,355	1,49	6,26	6,05	85,40
0,250	2,00	10,44	10,09	75,30
0,180	2,47	20,74	20,05	55,26
0,125	3,00	34,84	33,67	21,58
0,090	3,47	7,40	7,15	14,43
0,075	3,74	1,12	1,08	13,35
0,063	3,99	0,80	0,77	12,57
< 0,063	> 3,99	13,01	12,57	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	12,57
Sand, fine (0,063 mm - 0,200 mm):	48,41
Sand, medium (0,2 mm - 0,6 mm):	32,29
Sand, coarse (0,6 mm - 2 mm):	5,71
Gravel (> 2 mm):	1,01
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,69	0,53
16%	84%	0,34	1,55
25%	75%	0,25	2,01
40%	60%	0,20	2,35
Median 50%	50%	0,17	2,54
75%	25%	0,13	2,94
84%	16%	0,10	3,36
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,48
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{80\%} / d_{10\%})$  (dgf-Bulletin 1988)

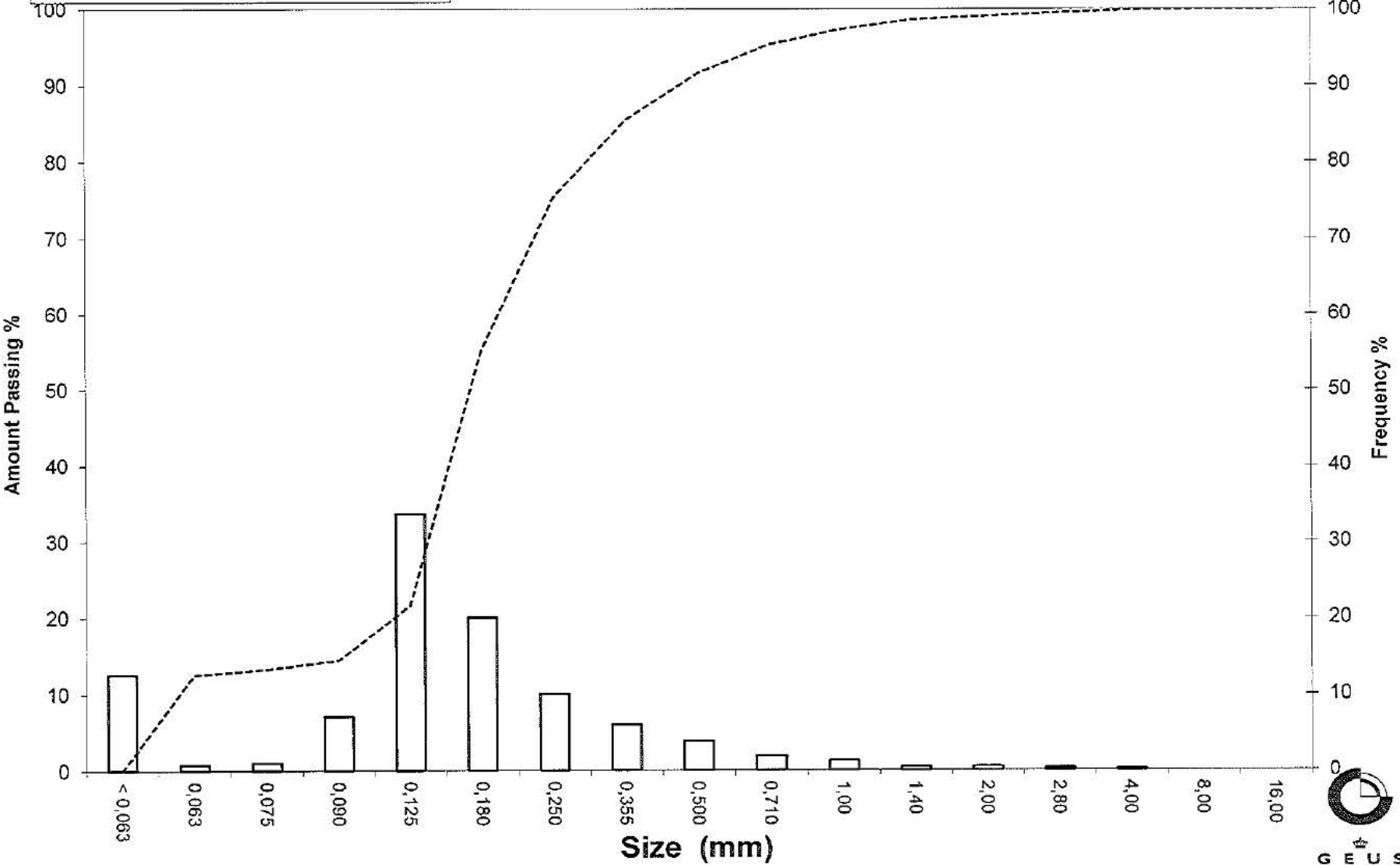
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 504023-1 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506008-1 590-620 cm  
**Lab. Id:** 170219  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 131,05 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,45	0,34	99,66
2,80	-1,49	0,45	0,34	99,31
2,00	-1,00	0,74	0,56	98,75
1,40	-0,49	1,14	0,87	97,88
1,00	0,00	3,02	2,30	95,57
0,710	0,49	7,39	5,64	89,94
0,500	1,00	22,41	17,10	72,83
0,355	1,49	33,79	25,78	47,05
0,250	2,00	34,74	26,51	20,54
0,180	2,47	16,45	12,55	7,99
0,125	3,00	5,97	4,56	3,43
0,090	3,47	0,81	0,62	2,82
0,075	3,74	0,13	0,10	2,72
0,063	3,99	0,05	0,04	2,68
< 0,063	> 3,99	3,51	2,68	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,68
Sand, fine (0,063 mm - 0,200 mm):	8,90
Sand, medium (0,2 mm - 0,6 mm):	69,40
Sand, coarse (0,6 mm - 2 mm):	17,77
Gravel (> 2 mm):	1,25
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,97	0,04
16%	84%	0,64	0,65
25%	75%	0,53	0,93
40%	60%	0,43	1,22
Median 50%	50%	0,37	1,43
75%	25%	0,27	1,90
84%	16%	0,22	2,15
90%	10%	0,19	2,39
95%	5%	0,14	2,80

### Moments Statistics

Mean	1,41
Sorting	0,79
Skewness	-0,02
Kurtosis	1,16
Uniformity Coefficient	2,24

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{80\%} / d_{10\%})$  (dgf-Bulletin 1988)

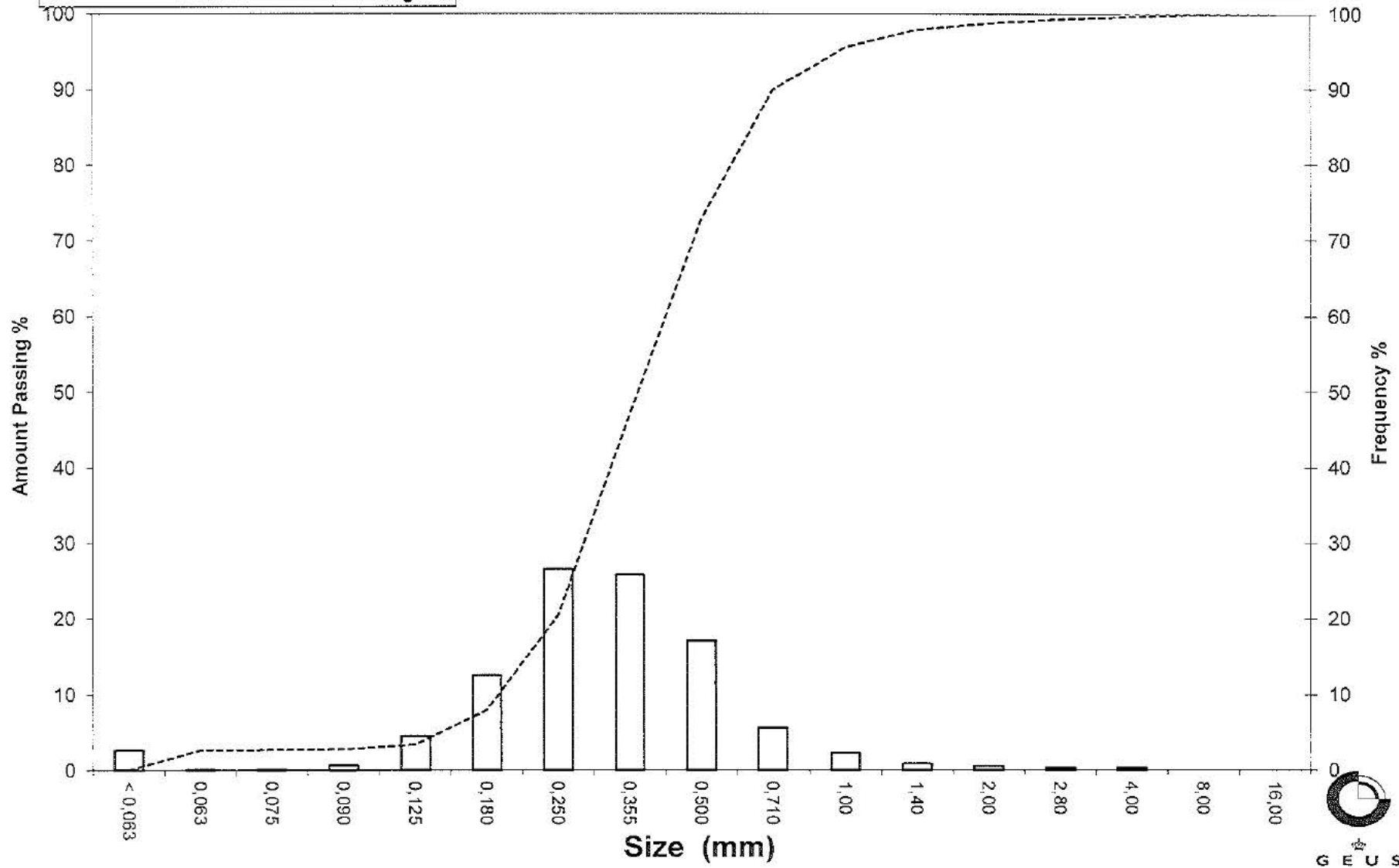
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506008-1 590-620 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506011-1 0-140 cm  
**Lab. Id:** 170220  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



  
**GEUS**

**Total Weight** 97,77 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	1,50	1,53	98,47
2,80	-1,49	0,91	0,93	97,54
2,00	-1,00	0,74	0,76	96,78
1,40	-0,49	0,55	0,56	96,22
1,00	0,00	1,17	1,20	95,02
0,710	0,49	1,78	1,82	93,20
0,500	1,00	5,85	5,98	87,21
0,355	1,49	12,53	12,82	74,40
0,250	2,00	12,86	13,15	61,25
0,180	2,47	7,68	7,86	53,39
0,125	3,00	8,13	8,32	45,08
0,090	3,47	5,94	6,08	39,00
0,075	3,74	2,18	2,23	36,77
0,063	3,99	2,34	2,39	34,38
< 0,063	> 3,99	33,61	34,38	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	34,38
Sand, fine (0,063 mm - 0,200 mm):	21,26
Sand, medium (0,2 mm - 0,6 mm):	34,43
Sand, coarse (0,6 mm - 2 mm):	6,71
Gravel (> 2 mm):	3,22
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,00	0,00
16%	84%	0,46	1,11
25%	75%	0,36	1,47
40%	60%	0,24	2,07
Median 50%	50%	0,16	2,67
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,89
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

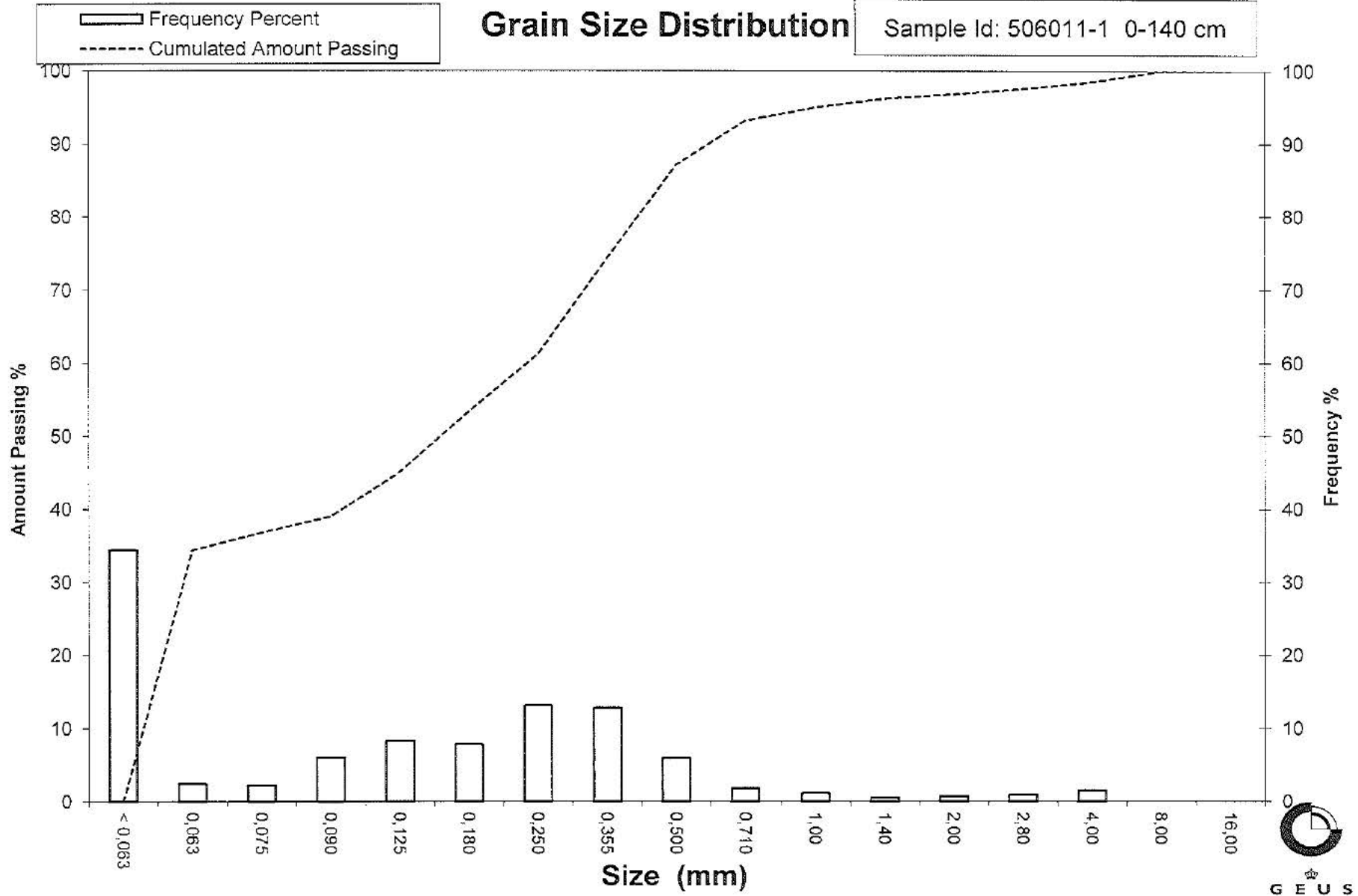
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

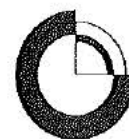
Sample Id: 506011-1 0-140 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506011-1 150-500 cm  
**Lab. Id:** 170221  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



  
**GEUS**

**Total Weight** 116,48 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,08	0,07	99,93
2,00	-1,00	0,00	0,00	99,93
1,40	-0,49	0,03	0,03	99,91
1,00	0,00	0,17	0,15	99,76
0,710	0,49	0,60	0,52	99,24
0,500	1,00	3,39	2,91	96,33
0,355	1,49	23,17	19,89	76,44
0,250	2,00	56,60	48,59	27,85
0,180	2,47	21,35	18,33	9,52
0,125	3,00	8,15	7,00	2,52
0,090	3,47	1,33	1,14	1,38
0,075	3,74	0,21	0,18	1,20
0,063	3,99	0,09	0,08	1,12
< 0,063	> 3,99	1,31	1,12	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,12
Sand, fine (0,063 mm - 0,200 mm):	13,63
Sand, medium (0,2 mm - 0,6 mm):	82,96
Sand, coarse (0,6 mm - 2 mm):	2,21
Gravel (> 2 mm):	0,07
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,49	1,03
16%	84%	0,41	1,29
25%	75%	0,35	1,51
40%	60%	0,32	1,65
Median 50%	50%	0,30	1,75
75%	25%	0,24	2,06
84%	16%	0,20	2,29
90%	10%	0,18	2,46
95%	5%	0,14	2,79

### Moments Statistics

Mean	1,77
Sorting	0,52
Skewness	0,13
Kurtosis	1,30
Uniformity Coefficient	1,76

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

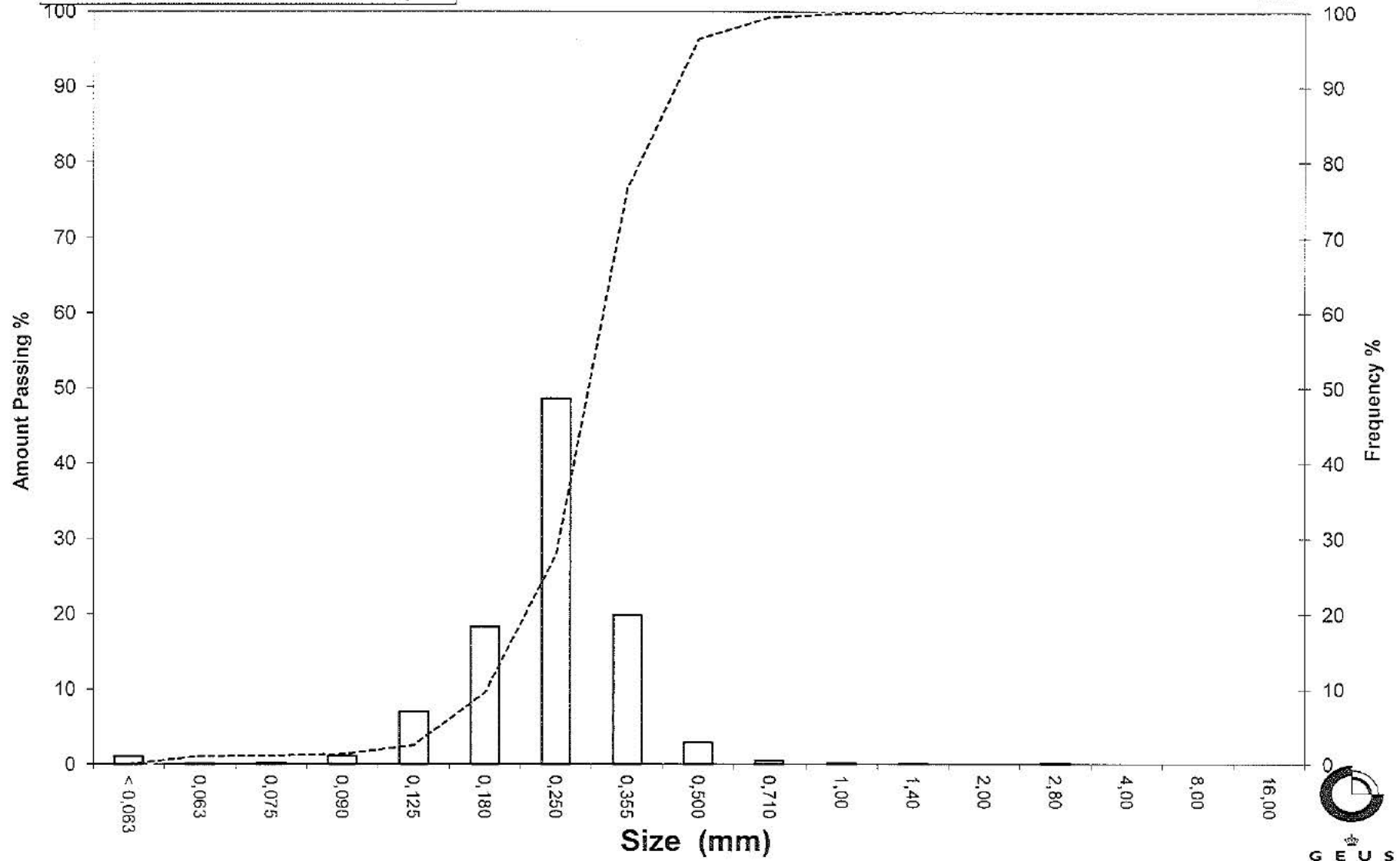
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# Grain Size Distribution

Sample Id: 506011-1 150-500 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506025-1 35-150 cm  
**Lab. Id:** 170268  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >0,710 mm består af skaller



**Total Weight** 108,17 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,84	0,78	99,22
2,80	-1,49	0,45	0,42	98,81
2,00	-1,00	0,89	0,82	97,98
1,40	-0,49	0,40	0,37	97,61
1,00	0,00	0,71	0,66	96,96
0,710	0,49	0,90	0,83	96,13
0,500	1,00	3,89	3,60	92,53
0,355	1,49	13,44	12,42	80,11
0,250	2,00	20,85	19,28	60,83
0,180	2,47	16,04	14,83	46,00
0,125	3,00	13,47	12,45	33,55
0,090	3,47	7,36	6,80	26,74
0,075	3,74	2,54	2,35	24,40
0,063	3,99	2,43	2,25	22,15
< 0,063	> 3,99	23,96	22,15	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	22,15
Sand, fine (0,063 mm - 0,200 mm)	28,09
Sand, medium (0,2 mm - 0,6 mm)	44,00
Sand, coarse (0,6 mm - 2 mm)	3,74
Gravel (> 2 mm)	2,02
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,64	0,63
16%	84%	0,40	1,32
25%	75%	0,33	1,61
40%	60%	0,25	2,02
Median 50%	50%	0,20	2,33
75%	25%	0,08	3,66
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,83
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

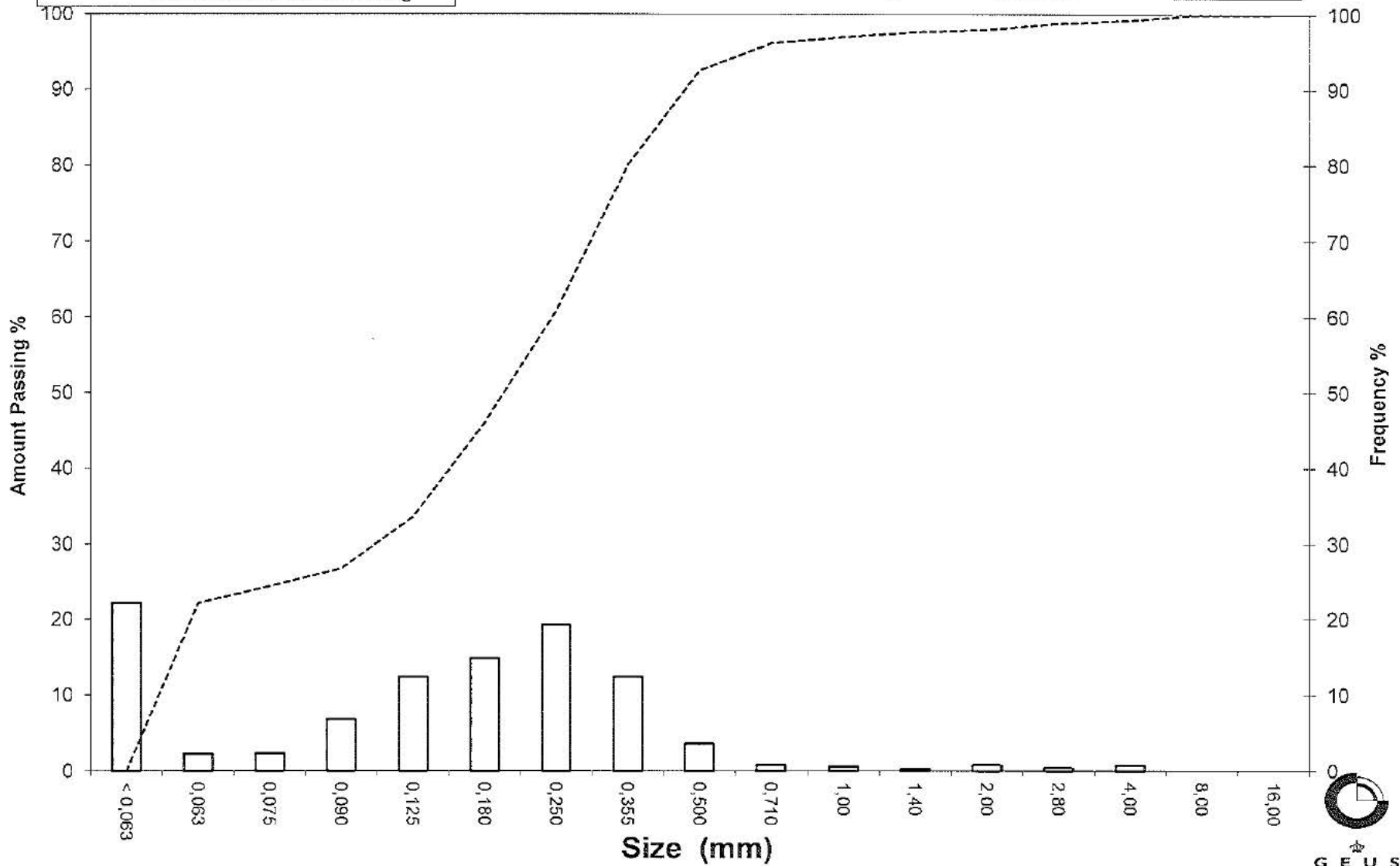
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506025-1 35-150 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506025-1 250-500 cm  
**Lab. Id:** 170269  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 107,95 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,04	0,04	99,96
0,710	0,49	0,06	0,06	99,91
0,500	1,00	1,23	1,14	98,77
0,355	1,49	27,11	25,11	73,65
0,250	2,00	51,99	48,16	25,49
0,180	2,47	17,96	16,64	8,86
0,125	3,00	5,98	5,54	3,32
0,090	3,47	1,74	1,61	1,70
0,075	3,74	0,32	0,30	1,41
0,063	3,99	0,16	0,15	1,26
< 0,063	> 3,99	1,36	1,26	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,26
Sand, fine (0,063 mm - 0,200 mm):	12,35
Sand, medium (0,2 mm - 0,6 mm):	85,70
Sand, coarse (0,6 mm - 2 mm):	0,69
Gravel (> 2 mm):	0,00
<b>Sunt:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,48	1,06
16%	84%	0,41	1,27
25%	75%	0,36	1,46
40%	60%	0,33	1,62
Median 50%	50%	0,30	1,72
75%	25%	0,25	2,01
84%	16%	0,21	2,25
90%	10%	0,18	2,44
95%	5%	0,14	2,82

### Moments Statistics

Mean	1,75
Sorting	0,51
Skewness	0,17
Kurtosis	1,31
Uniformity Coefficient	1,76

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

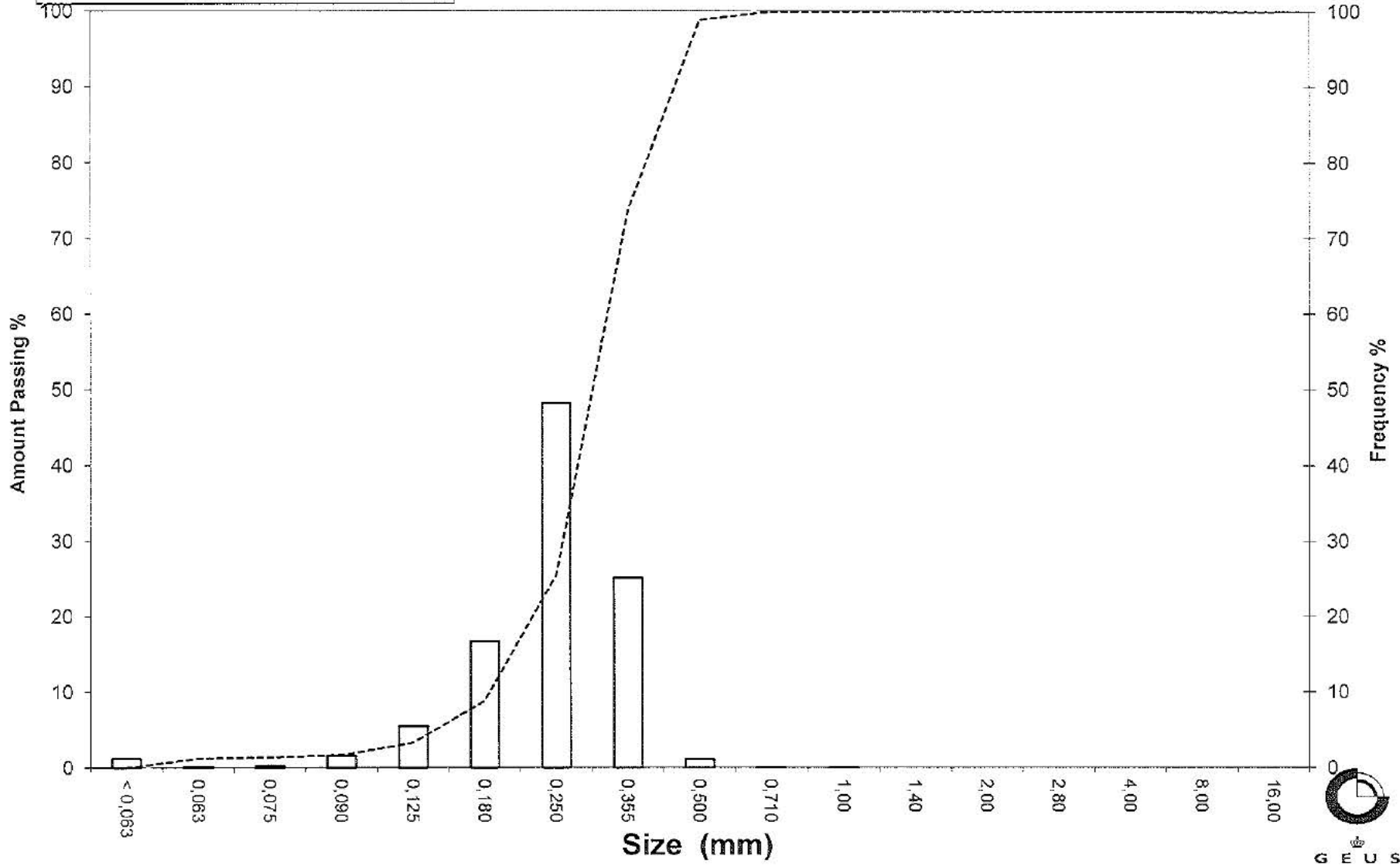
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506025-1 250-500 cm

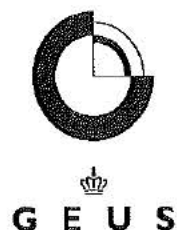
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506036-1 0-220 cm  
**Lab. Id:** 170197  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 109,29 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,06	0,05	99,95
2,80	-1,49	0,00	0,00	99,95
2,00	-1,00	0,00	0,00	99,95
1,40	-0,49	0,00	0,00	99,95
1,00	0,00	0,08	0,07	99,87
0,710	0,49	0,09	0,08	99,79
0,500	1,00	0,14	0,13	99,66
0,355	1,49	0,25	0,23	99,43
0,250	2,00	2,66	2,43	97,00
0,180	2,47	41,58	38,05	58,95
0,125	3,00	55,86	51,11	7,84
0,090	3,47	6,32	5,78	2,06
0,075	3,74	0,57	0,52	1,54
0,063	3,99	0,24	0,22	1,32
< 0,063	> 3,99	1,44	1,32	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,32
Sand, fine (0,063 mm - 0,200 mm):	68,51
Sand, medium (0,2 mm - 0,6 mm):	29,90
Sand, coarse (0,6 mm - 2 mm):	0,22
Gravel (> 2 mm):	0,05
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,25	2,02
16%	84%	0,23	2,15
25%	75%	0,21	2,25
40%	60%	0,18	2,46
Median 50%	50%	0,17	2,55
75%	25%	0,14	2,80
84%	16%	0,13	2,90
90%	10%	0,13	2,97
95%	5%	0,11	3,21

### Moments Statistics

Mean	2,53
Sorting	0,37
Skewness	0,01
Kurtosis	0,89
Uniformity Coefficient	1,43

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

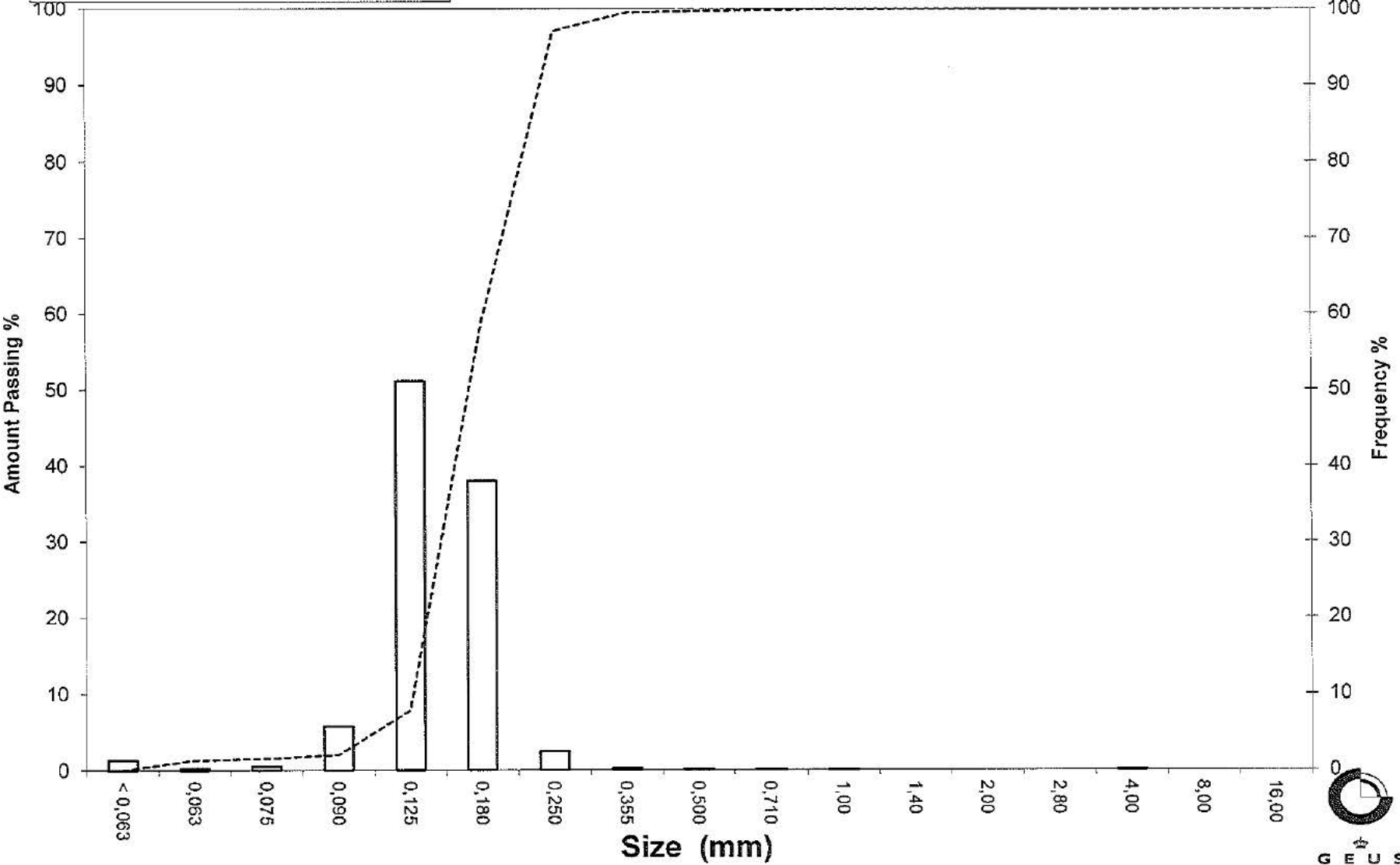
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506036-1 0-220 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

**Sample Id:** 506043-1 225-390 cm  
**Lab. Id:** 170198  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 110,05 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,01	0,01	99,99
1,00	0,00	0,04	0,04	99,95
0,710	0,49	0,09	0,08	99,87
0,500	1,00	0,72	0,65	99,22
0,355	1,49	4,17	3,79	95,43
0,250	2,00	11,28	10,25	85,18
0,180	2,47	18,61	16,91	68,27
0,125	3,00	41,90	38,07	30,20
0,090	3,47	20,61	18,73	11,47
0,075	3,74	3,20	2,91	8,56
0,063	3,99	2,16	1,96	6,60
< 0,063	> 3,99	7,26	6,60	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	6,60
Sand, fine (0,063 mm - 0,200 mm):	66,50
Sand, medium (0,2 mm - 0,6 mm):	26,43
Sand, coarse (0,6 mm - 2 mm):	0,47
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,51
16%	84%	0,25	2,03
25%	75%	0,21	2,27
40%	60%	0,17	2,57
Median 50%	50%	0,15	2,70
75%	25%	0,12	3,12
84%	16%	0,10	3,34
90%	10%	0,08	3,60
95%	5%	-----	-----

## Moments Statistics

Mean	2,69
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,04

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

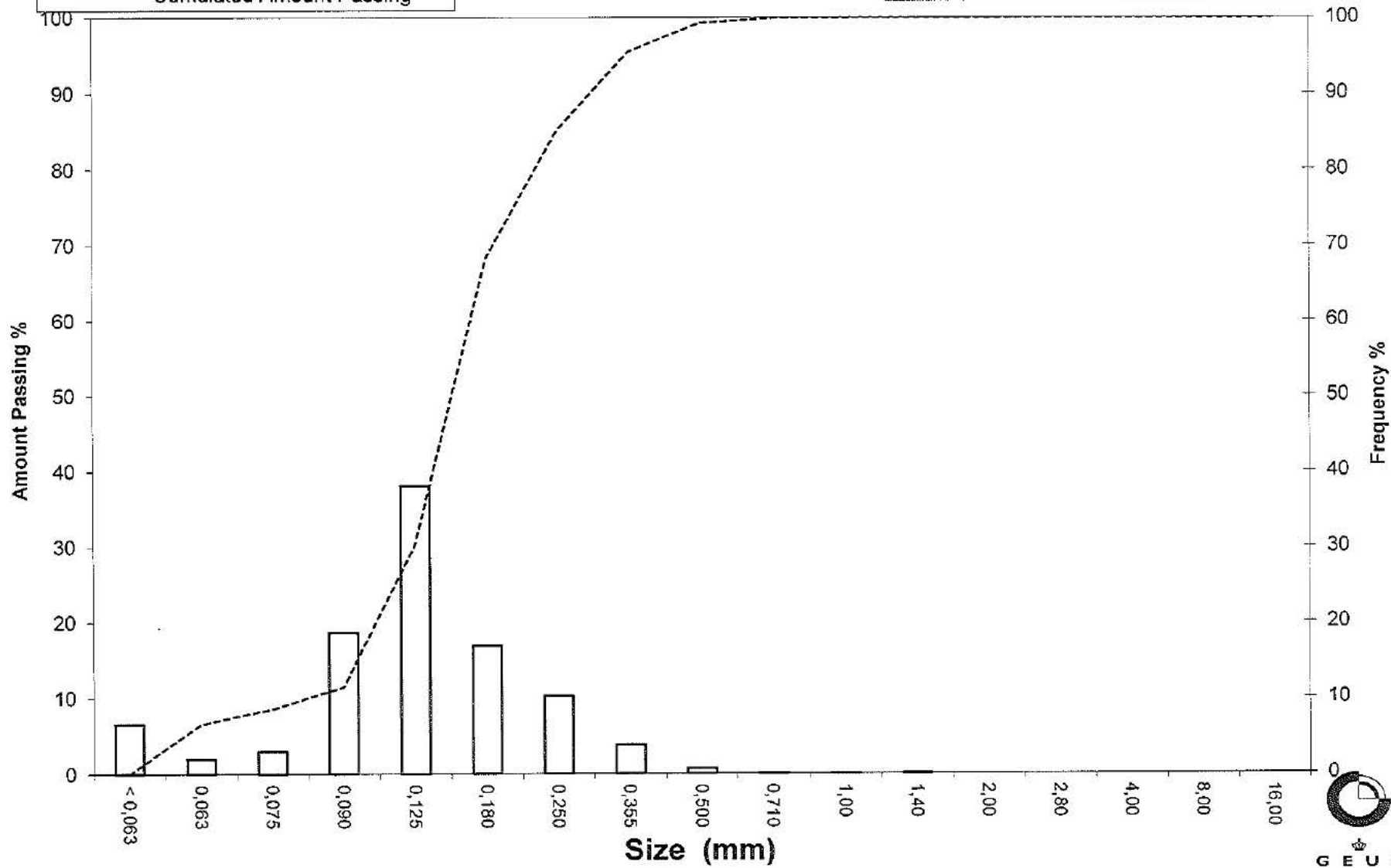
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# Grain Size Distribution

Sample Id: 506043-1 225-390 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506043-1 355-415 cm  
**Lab. Id:** 170199  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 112,6 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,02	0,02	99,98
1,00	0,00	0,14	0,12	99,86
0,710	0,49	0,64	0,57	99,29
0,500	1,00	4,47	3,97	95,32
0,355	1,49	13,50	11,99	83,33
0,250	2,00	25,23	22,41	60,92
0,180	2,47	24,22	21,51	39,41
0,125	3,00	20,63	18,32	21,09
0,090	3,47	8,97	7,97	13,13
0,075	3,74	2,77	2,46	10,67
0,063	3,99	2,04	1,81	8,85
< 0,063	> 3,99	9,97	8,85	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	8,85
Sand, fine (0,063 mm - 0,200 mm):	36,71
Sand, medium (0,2 mm - 0,6 mm):	51,65
Sand, coarse (0,6 mm - 2 mm):	2,79
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,50	1,01
16%	84%	0,36	1,46
25%	75%	0,32	1,66
40%	60%	0,25	2,02
Median 50%	50%	0,21	2,22
75%	25%	0,14	2,87
84%	16%	0,10	3,28
90%	10%	0,07	3,82
95%	5%	-----	-----

### Moments Statistics

Mean	2,32
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,50

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

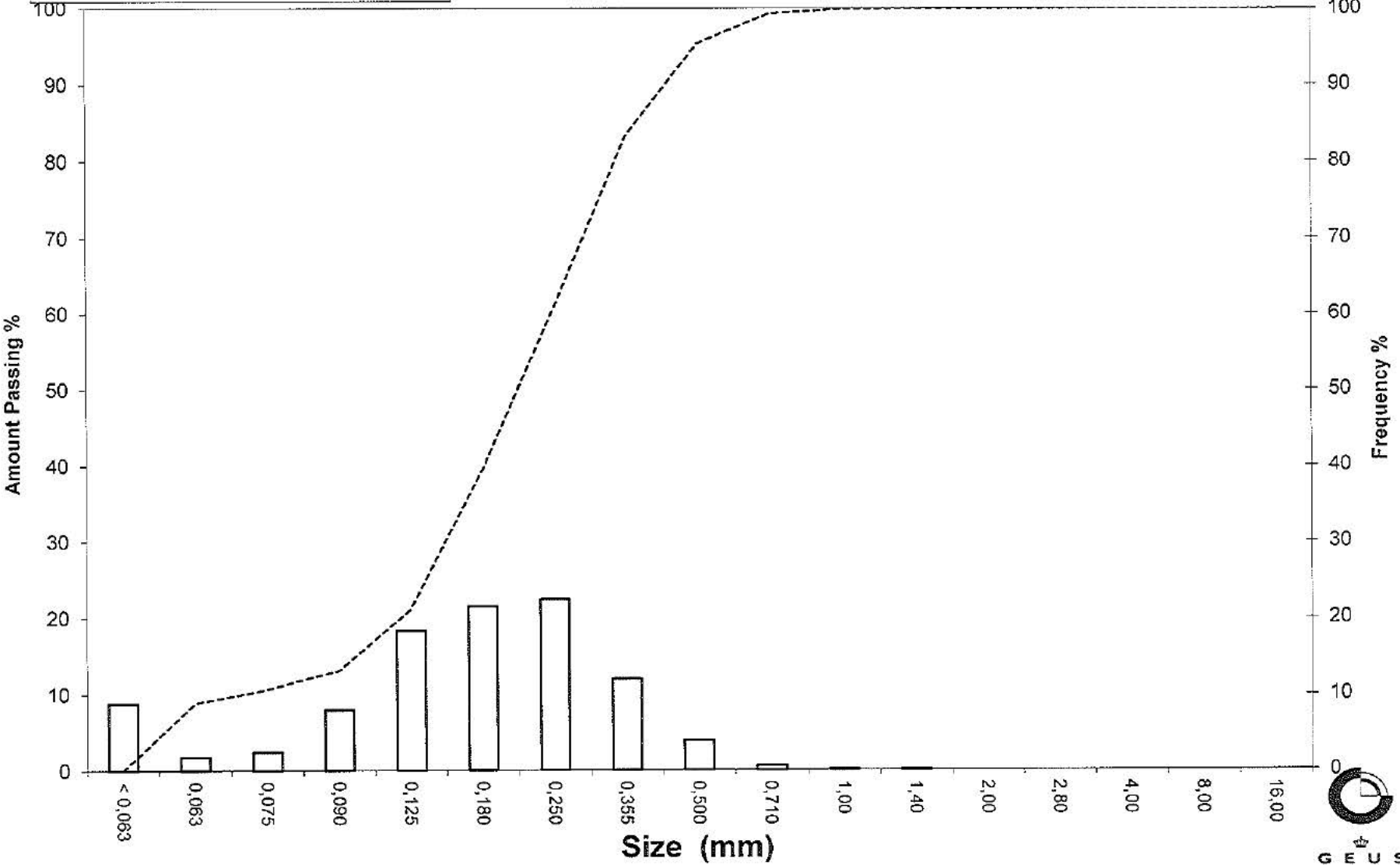
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506043-1 355-415 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 506044-1 15-100 cm  
 Lab. Id: 170222  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 210,43 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	6,81	3,24	96,76
4,00	-2,00	20,93	9,95	86,82
2,80	-1,49	8,30	3,94	82,87
2,00	-1,00	8,46	4,02	78,85
1,40	-0,49	8,58	4,08	74,78
1,00	0,00	12,97	6,16	68,61
0,710	0,49	14,48	6,88	61,73
0,500	1,00	25,48	12,11	49,62
0,355	1,49	31,40	14,92	34,70
0,250	2,00	31,65	15,04	19,66
0,180	2,47	19,40	9,22	10,44
0,125	3,00	8,06	3,83	6,61
0,090	3,47	3,49	1,66	4,95
0,075	3,74	0,80	0,38	4,57
0,063	3,99	0,57	0,27	4,30
< 0,063	> 3,99	9,05	4,30	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	4,30
Sand, fine (0,063 mm - 0,200 mm):	8,77
Sand, medium (0,2 mm - 0,6 mm):	42,31
Sand, coarse (0,6 mm - 2 mm):	23,46
Gravel (> 2 mm):	21,15
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	7,29	-2,87
16%	84%	3,14	-1,65
25%	75%	1,43	-0,52
40%	60%	0,68	0,56
Median 50%	50%	0,51	0,98
75%	25%	0,29	1,80
84%	16%	0,22	2,17
90%	10%	0,17	2,53
95%	5%	0,09	3,46

## Moments Statistics

Mean	0,50
Sorting	1,91
Skewness	-0,30
Kurtosis	1,12
Uniformity Coefficient	3,92

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

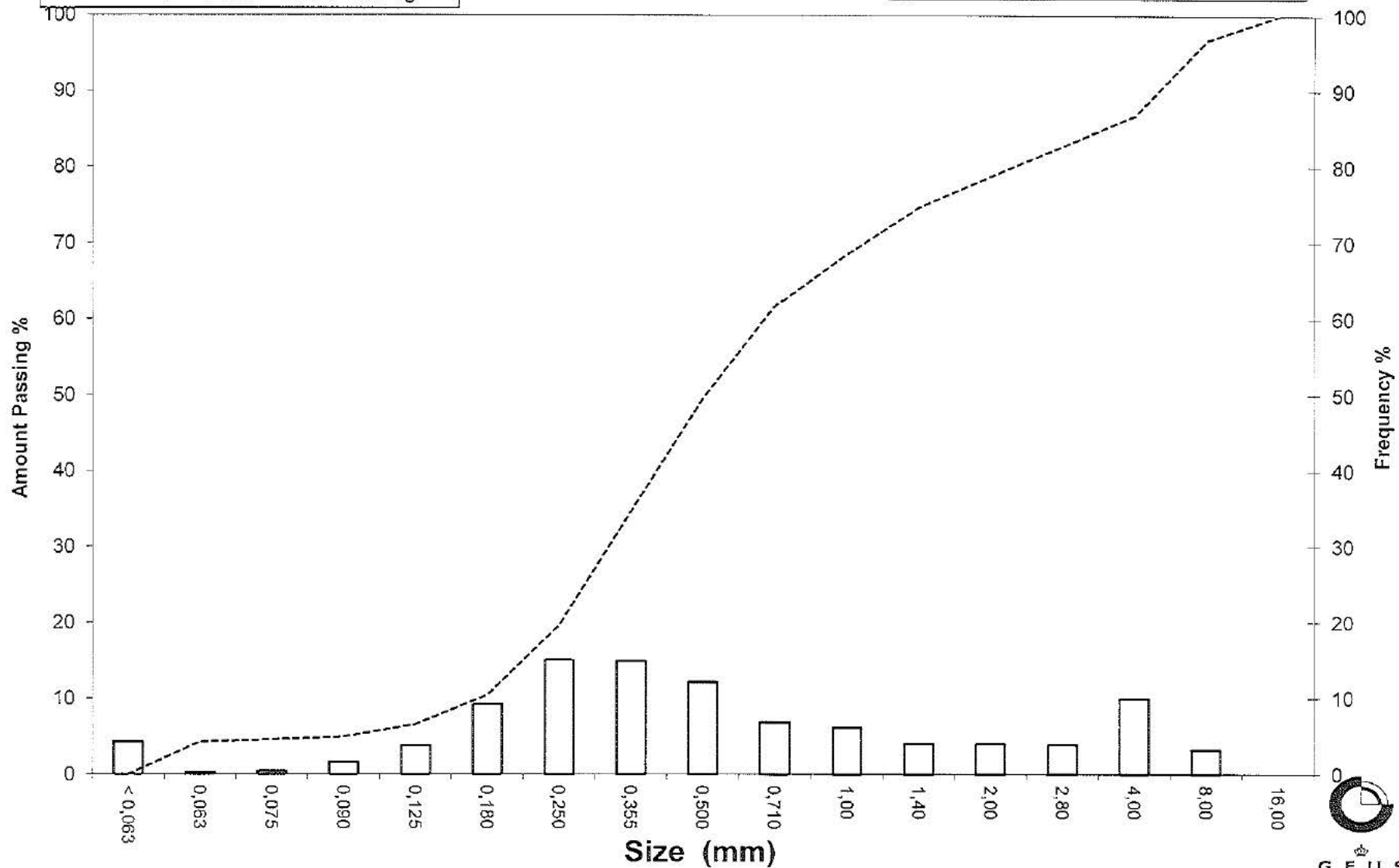
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506044-1 15-100 cm

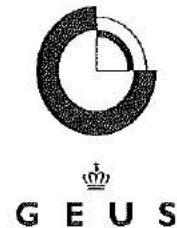
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506044-1 105-155 cm  
**Lab. Id:** 170223  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** > 32mm ( 61g) indgår i >16mm



**Total Weight** 734,86 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	151,69	20,64	79,36
8,00	-3,00	115,22	15,68	63,68
4,00	-2,00	55,51	7,55	56,12
2,80	-1,49	28,80	3,92	52,21
2,00	-1,00	23,58	3,21	49,00
1,40	-0,49	25,97	3,53	45,46
1,00	0,00	37,70	5,13	40,33
0,710	0,49	41,97	5,71	34,62
0,500	1,00	60,40	8,22	26,40
0,355	1,49	61,93	8,43	17,97
0,250	2,00	50,33	6,85	11,13
0,180	2,47	29,21	3,97	7,15
0,125	3,00	14,97	2,04	5,11
0,090	3,47	4,61	0,63	4,49
0,075	3,74	1,17	0,16	4,33
0,063	3,99	0,94	0,13	4,20
< 0,063	> 3,99	30,86	4,20	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	4,20
Sand, fine (0,063 mm - 0,200 mm):	4,09
Sand, medium (0,2 mm - 0,6 mm):	22,03
Sand, coarse (0,6 mm - 2 mm):	18,68
Gravel (> 2 mm):	51,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	13,78	-3,78
40%	60%	6,05	-2,60
Median 50%	50%	2,25	-1,17
75%	25%	0,48	1,07
84%	16%	0,32	1,62
90%	10%	0,23	2,12
95%	5%	0,12	3,08

### Moments Statistics

Mean	0,23
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	26,29

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

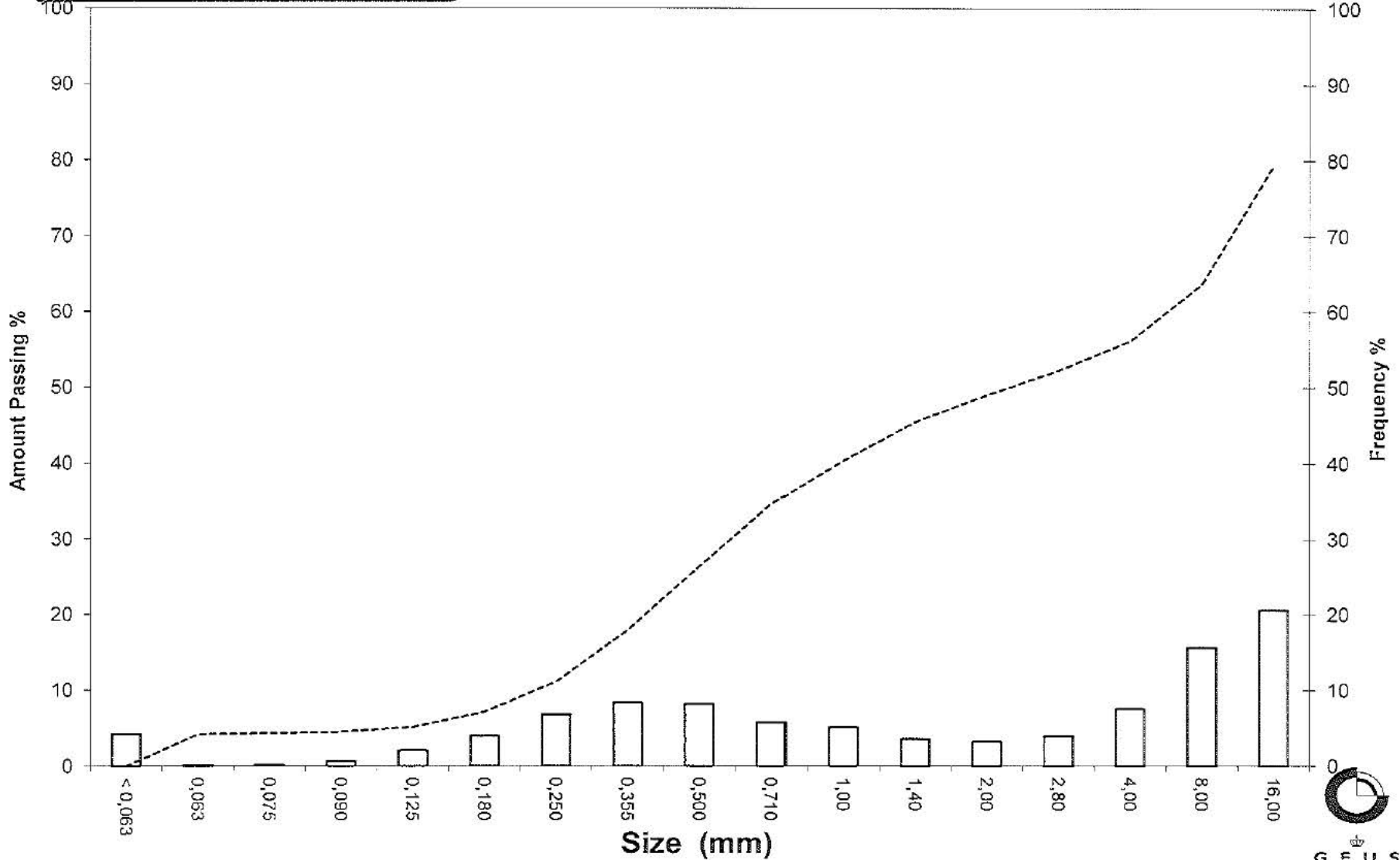
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506044-1 105-155 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 506044-1 160-260 cm  
 Lab. Id: 170224  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 419,64 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	36,35	8,66	91,34
8,00	-3,00	57,05	13,59	77,74
4,00	-2,00	39,13	9,32	68,42
2,80	-1,49	25,56	6,09	62,33
2,00	-1,00	23,62	5,63	56,70
1,40	-0,49	25,29	6,03	50,67
1,00	0,00	31,61	7,53	43,14
0,710	0,49	34,69	8,27	34,87
0,500	1,00	54,05	12,88	21,99
0,355	1,49	52,12	12,42	9,57
0,250	2,00	24,30	5,79	3,78
0,180	2,47	5,69	1,36	2,43
0,125	3,00	1,58	0,38	2,05
0,090	3,47	0,50	0,12	1,93
0,075	3,74	0,18	0,04	1,89
0,063	3,99	0,14	0,03	1,85
< 0,063	> 3,99	7,78	1,85	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,85
Sand, fine (0,063 mm - 0,200 mm)	0,96
Sand, medium (0,2 mm - 0,6 mm)	25,31
Sand, coarse (0,6 mm - 2 mm)	28,57
Gravel (> 2 mm)	43,30
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	11,68	-3,55
25%	75%	6,82	-2,77
40%	60%	2,47	-1,30
Median 50%	50%	1,36	-0,45
75%	25%	0,55	0,87
84%	16%	0,43	1,22
90%	10%	0,36	1,47
95%	5%	0,27	1,88

## Moments Statistics

Mean	-0,93
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	6,86

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

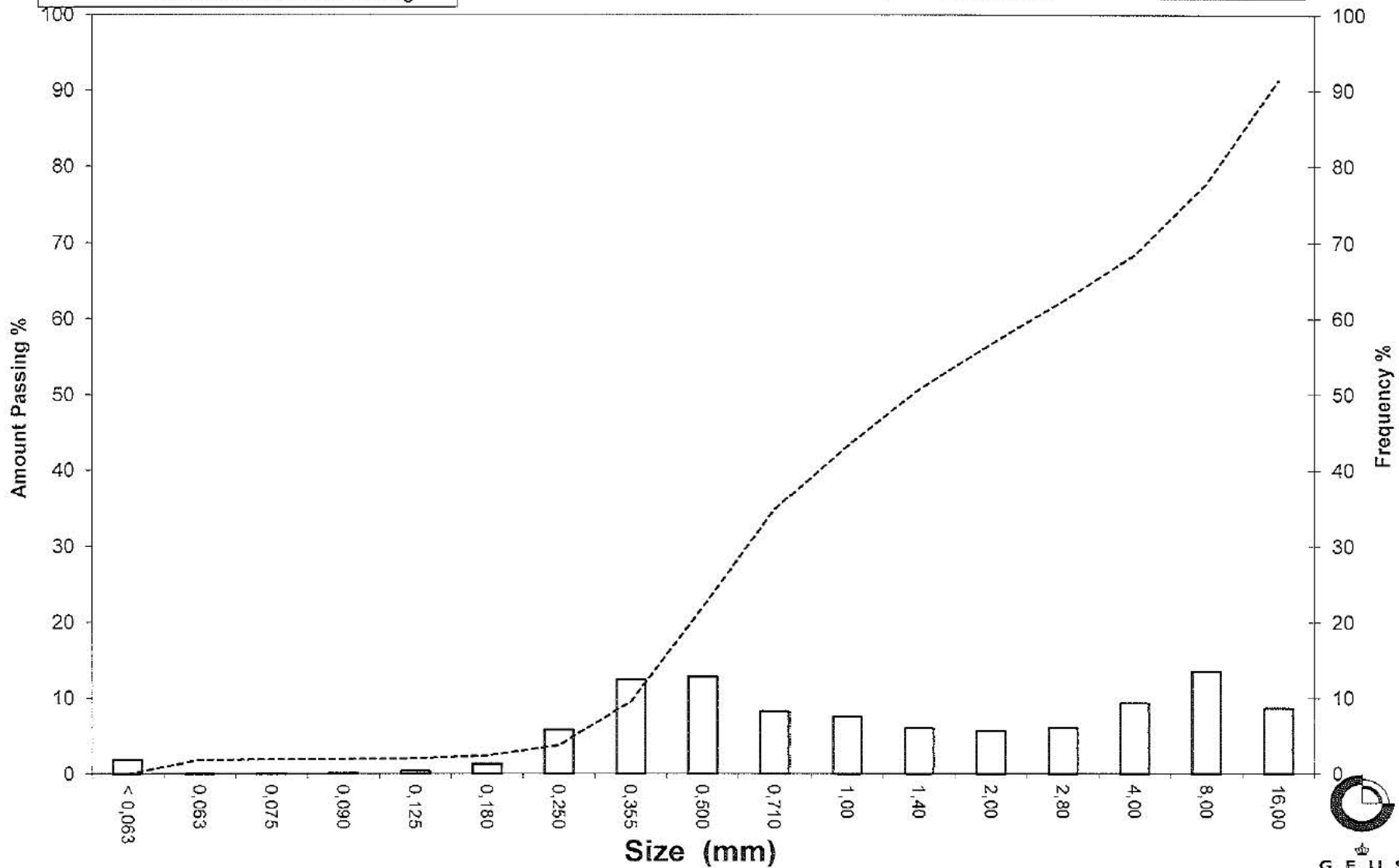
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# Grain Size Distribution

Sample Id: 506044-1 160-260 cm

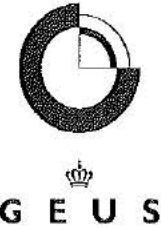
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506044-1 340-390 cm  
**Lab. Id:** 170225  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 116,35 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,05	0,04	99,96
2,00	-1,00	0,05	0,04	99,91
1,40	-0,49	0,05	0,04	99,87
1,00	0,00	0,18	0,15	99,72
0,710	0,49	0,52	0,45	99,27
0,500	1,00	2,45	2,11	97,16
0,355	1,49	6,48	5,57	91,59
0,250	2,00	9,61	8,26	83,33
0,180	2,47	10,20	8,77	74,57
0,125	3,00	15,78	13,56	61,01
0,090	3,47	15,98	13,73	47,27
0,075	3,74	9,22	7,92	39,35
0,063	3,99	11,17	9,60	29,75
< 0,063	> 3,99	34,61	29,75	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	29,75
Sand, fine (0,063 mm - 0,200 mm)	47,33
Sand, medium (0,2 mm - 0,6 mm)	21,09
Sand, coarse (0,6 mm - 2 mm)	1,75
Gravel (> 2 mm)	0,09
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,44	1,17
16%	84%	0,26	1,95
25%	75%	0,18	2,45
40%	60%	0,12	3,03
Median 50%	50%	0,10	3,37
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,66
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

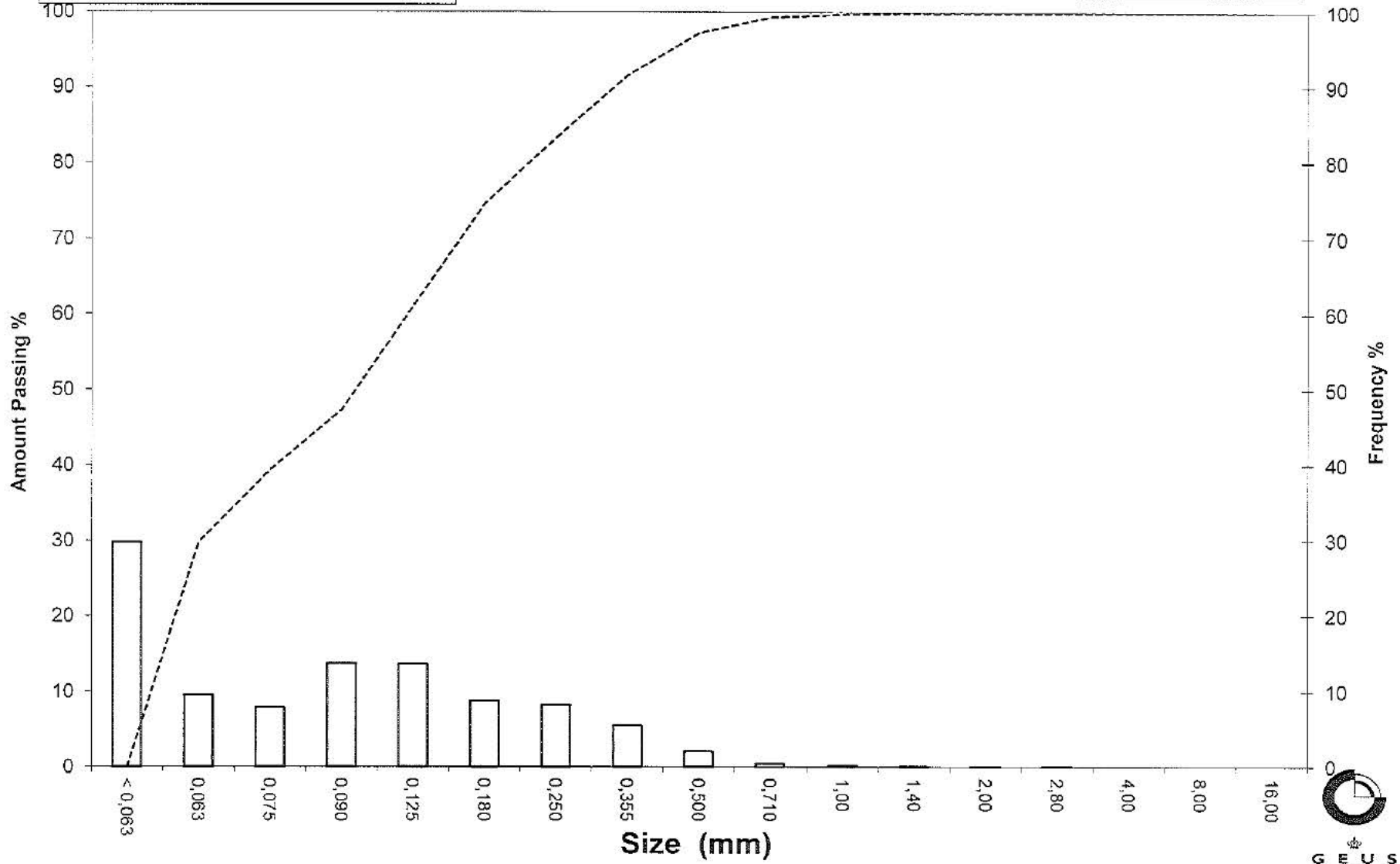
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506044-1 340-390 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506045-1 10-120 cm  
**Lab. Id:** 170200  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



  
**GEUS**

**Total Weight** 114,15 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	6,24	5,47	94,53
2,80	-1,49	1,87	1,64	92,90
2,00	-1,00	2,32	2,03	90,86
1,40	-0,49	1,60	1,40	89,46
1,00	0,00	3,19	2,79	86,67
0,710	0,49	3,47	3,04	83,63
0,500	1,00	7,57	6,63	77,00
0,355	1,49	15,57	13,64	63,36
0,250	2,00	17,28	15,14	48,22
0,180	2,47	9,68	8,48	39,74
0,125	3,00	8,58	7,52	32,22
0,090	3,47	7,43	6,51	25,71
0,075	3,74	2,47	2,16	23,55
0,063	3,99	2,08	1,82	21,73
< 0,063	> 3,99	24,80	21,73	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	21,73
Sand, fine (0,063 mm - 0,200 mm):	20,43
Sand, medium (0,2 mm - 0,6 mm):	37,99
Sand, coarse (0,6 mm - 2 mm):	10,71
Gravel (> 2 mm):	9,14
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	4,34	-2,12
16%	84%	0,75	0,42
25%	75%	0,48	1,06
40%	60%	0,33	1,59
Median 50%	50%	0,26	1,93
75%	25%	0,09	3,56
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,18
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

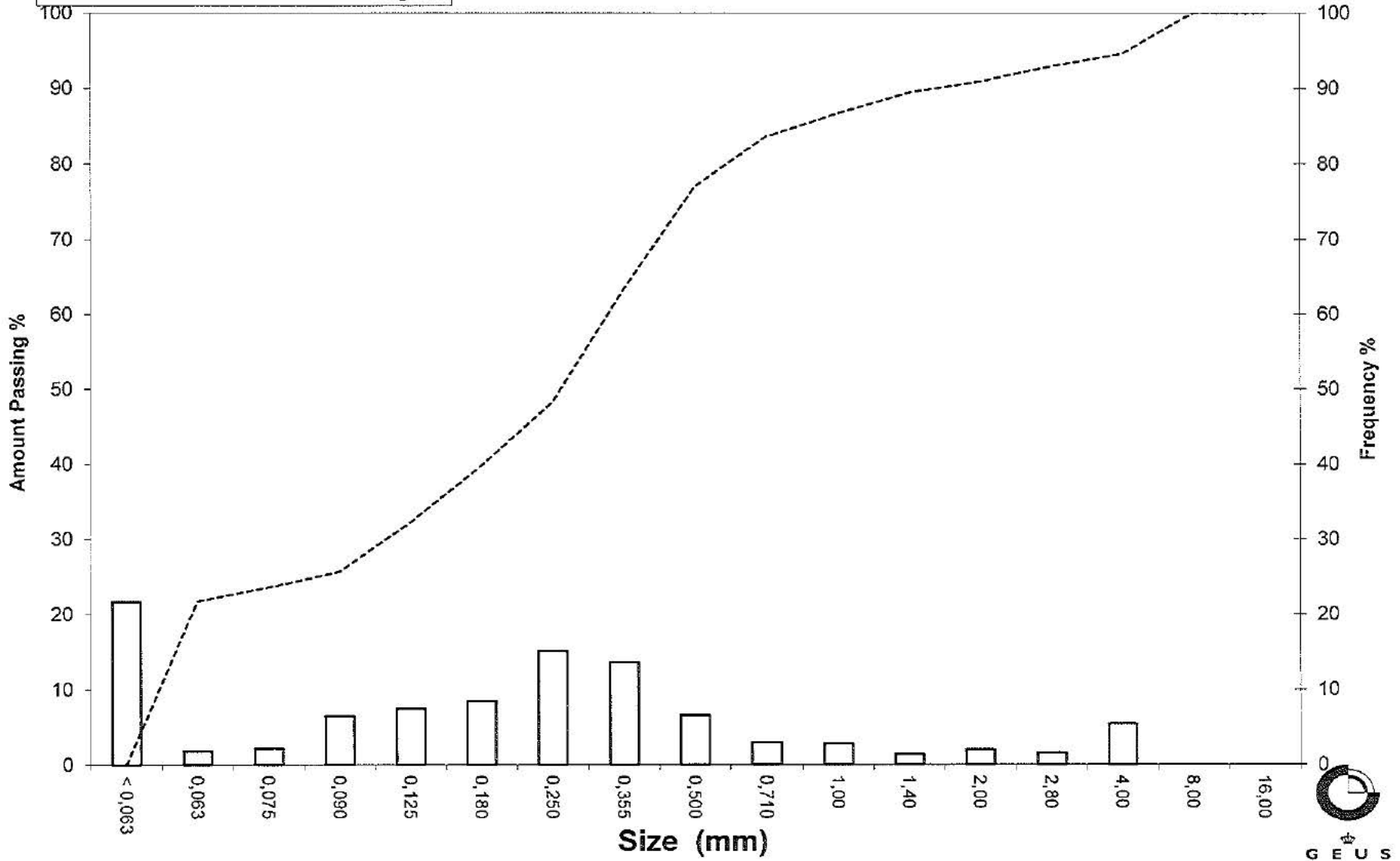
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506045-1 10-120 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506045-1 150-270 cm  
**Lab. Id:** 170201  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 225,48 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	5,05	2,24	97,76
8,00	-3,00	2,65	1,18	96,59
4,00	-2,00	11,95	5,30	91,29
2,80	-1,49	5,66	2,51	88,78
2,00	-1,00	6,36	2,82	85,95
1,40	-0,49	6,97	3,09	82,86
1,00	0,00	8,57	3,80	79,06
0,710	0,49	11,98	5,31	73,75
0,500	1,00	33,87	15,02	58,73
0,355	1,49	61,11	27,10	31,63
0,250	2,00	40,92	18,15	13,48
0,180	2,47	13,04	5,78	7,69
0,125	3,00	5,04	2,24	5,46
0,090	3,47	0,63	0,28	5,18
0,075	3,74	0,16	0,07	5,11
0,063	3,99	0,12	0,05	5,06
< 0,063	> 3,99	11,40	5,06	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	5,06
Sand, fine (0,063 mm - 0,200 mm):	4,29
Sand, medium (0,2 mm - 0,6 mm):	56,53
Sand, coarse (0,6 mm - 2 mm):	20,07
Gravel (> 2 mm):	14,05
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	6,80	-2,77
16%	84%	1,62	-0,70
25%	75%	0,78	0,36
40%	60%	0,52	0,95
Median 50%	50%	0,45	1,14
75%	25%	0,32	1,66
84%	16%	0,26	1,92
90%	10%	0,21	2,27
95%	5%	-----	-----

### Moments Statistics

Mean	0,79
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,49

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

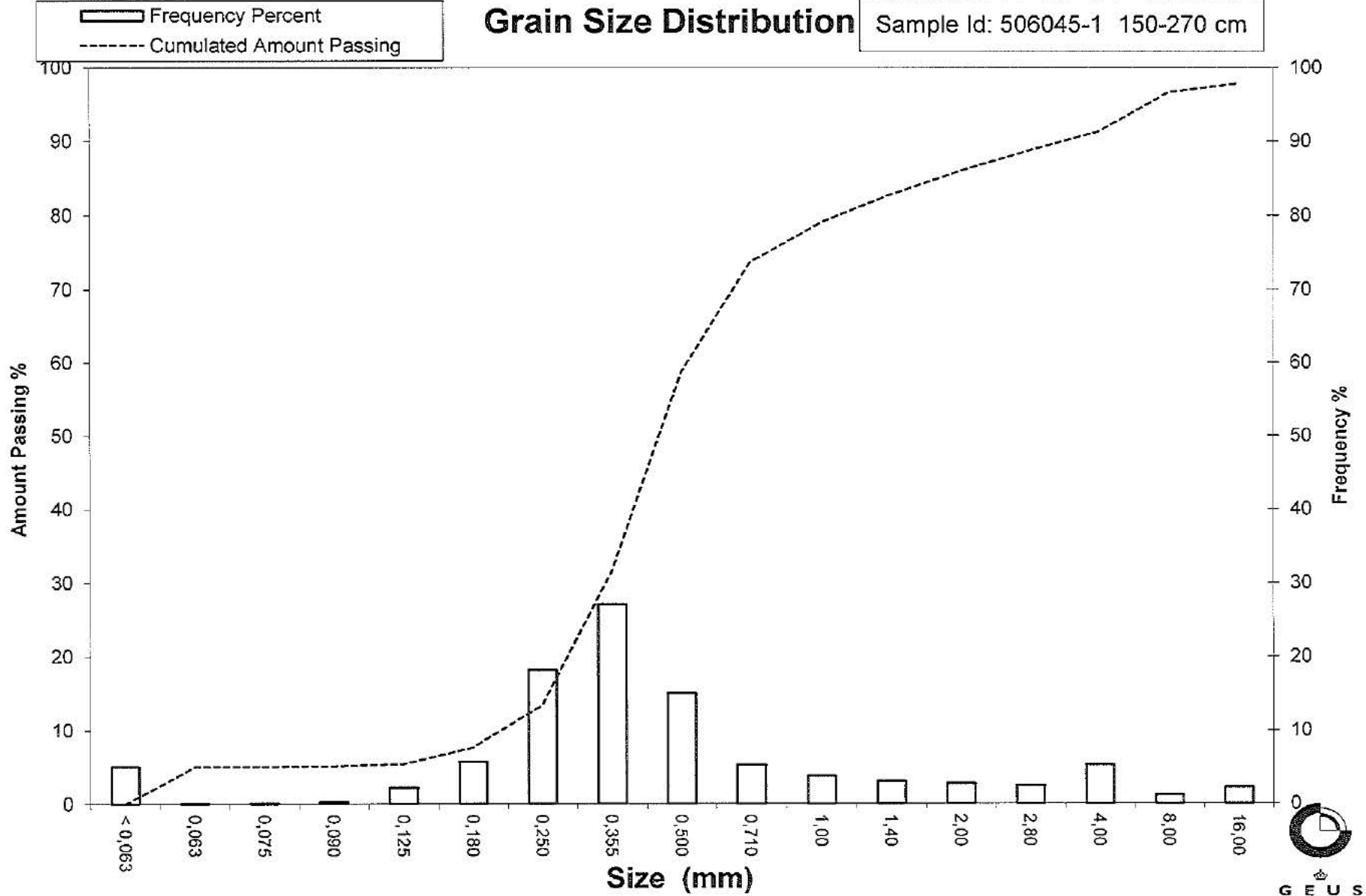
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506045-1 150-270 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506047-1 0-100 cm  
**Lab. Id:** 170202  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 116,74 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	2,02	1,73	98,27
4,00	-2,00	2,23	1,91	96,36
2,80	-1,49	0,46	0,39	95,97
2,00	-1,00	0,88	0,75	95,21
1,40	-0,49	1,30	1,11	94,10
1,00	0,00	2,88	2,47	91,63
0,710	0,49	3,99	3,42	88,21
0,500	1,00	10,01	8,57	79,64
0,355	1,49	17,25	14,78	64,86
0,250	2,00	25,90	22,19	42,68
0,180	2,47	25,45	21,80	20,88
0,125	3,00	16,06	13,76	7,12
0,090	3,47	4,06	3,48	3,64
0,075	3,74	0,73	0,63	3,02
0,063	3,99	0,43	0,37	2,65
< 0,063	> 3,99	3,09	2,65	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,65
Sand, fine (0,063 mm - 0,200 mm):	24,46
Sand, medium (0,2 mm - 0,6 mm):	56,62
Sand, coarse (0,6 mm - 2 mm):	11,49
Gravel (> 2 mm):	4,79
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,89	-0,92
16%	84%	0,61	0,72
25%	75%	0,45	1,14
40%	60%	0,33	1,59
Median 50%	50%	0,28	1,81
75%	25%	0,19	2,37
84%	16%	0,16	2,64
90%	10%	0,14	2,87
95%	5%	0,10	3,27

### Moments Statistics

Mean	1,72
Sorting	1,11
Skewness	-0,22
Kurtosis	1,39
Uniformity Coefficient	2,43

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

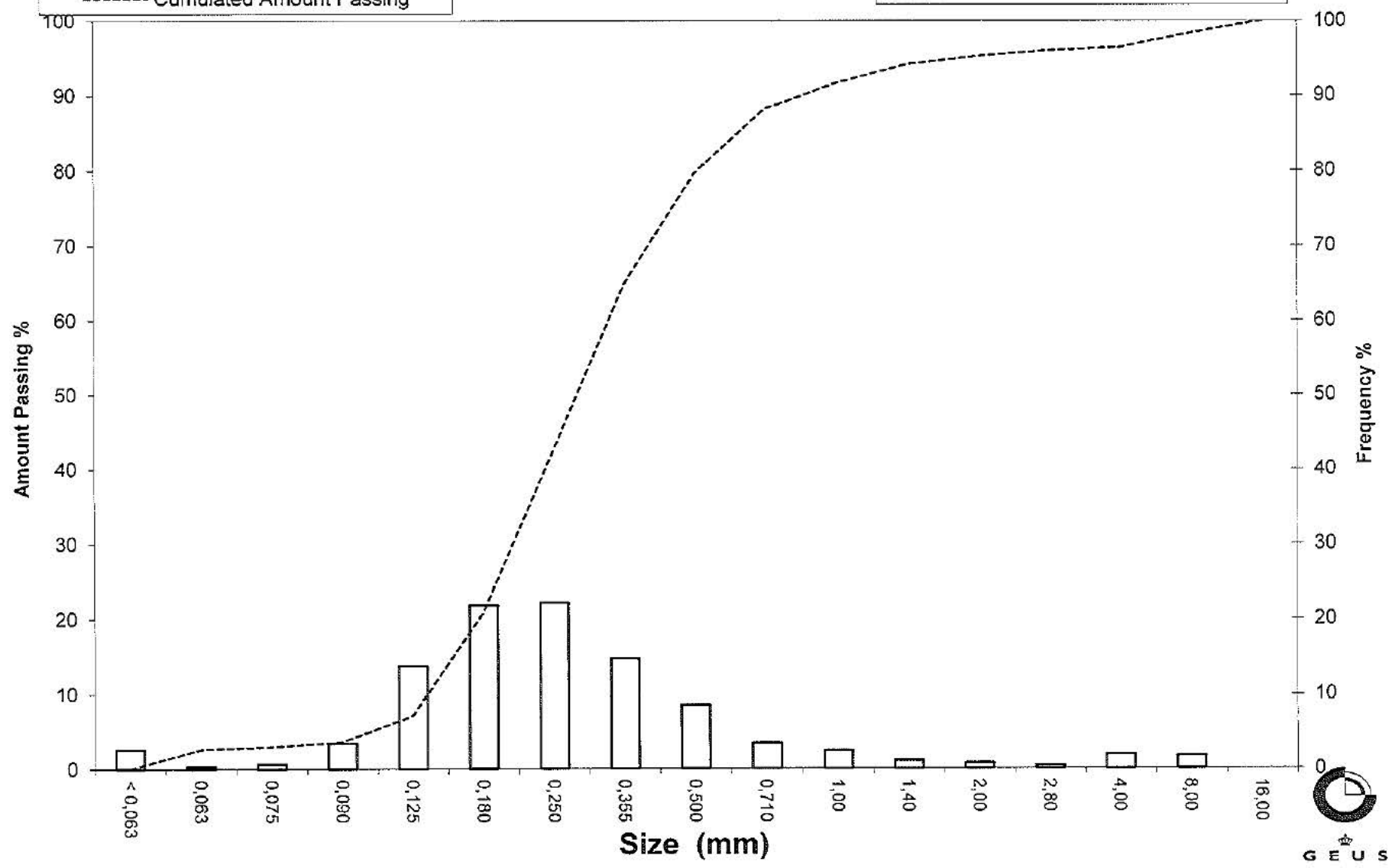
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# Grain Size Distribution

Sample Id: 506047-1 0-100 cm

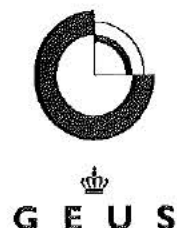
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506048-1 20-220 cm  
**Lab. Id:** 170203  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 136,22 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,84	0,62	99,38
4,00	-2,00	0,40	0,29	99,09
2,80	-1,49	0,63	0,46	98,63
2,00	-1,00	0,95	0,70	97,93
1,40	-0,49	1,11	0,81	97,11
1,00	0,00	2,36	1,73	95,38
0,710	0,49	5,80	4,26	91,12
0,500	1,00	20,33	14,92	76,20
0,355	1,49	17,68	12,98	63,22
0,250	2,00	9,69	7,11	56,11
0,180	2,47	32,18	23,62	32,48
0,125	3,00	32,69	24,00	8,49
0,090	3,47	5,50	4,04	4,45
0,075	3,74	0,88	0,65	3,80
0,063	3,99	0,52	0,38	3,42
< 0,063	> 3,99	4,66	3,42	0,00

Gravel

Sand

Sieve Analysis

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	3,42
Sand, fine (0,063 mm - 0,200 mm):	35,81
Sand, medium (0,2 mm - 0,6 mm):	44,07
Sand, coarse (0,6 mm - 2 mm):	14,62
Gravel (> 2 mm):	2,07
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,97	0,04
16%	84%	0,61	0,71
25%	75%	0,49	1,04
40%	60%	0,31	1,70
Median 50%	50%	0,23	2,11
75%	25%	0,16	2,62
84%	16%	0,14	2,81
90%	10%	0,13	2,96
95%	5%	0,09	3,40

### Moments Statistics

Mean	1,88
Sorting	1,03
Skewness	-0,28
Kurtosis	0,87
Uniformity Coefficient	2,39

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

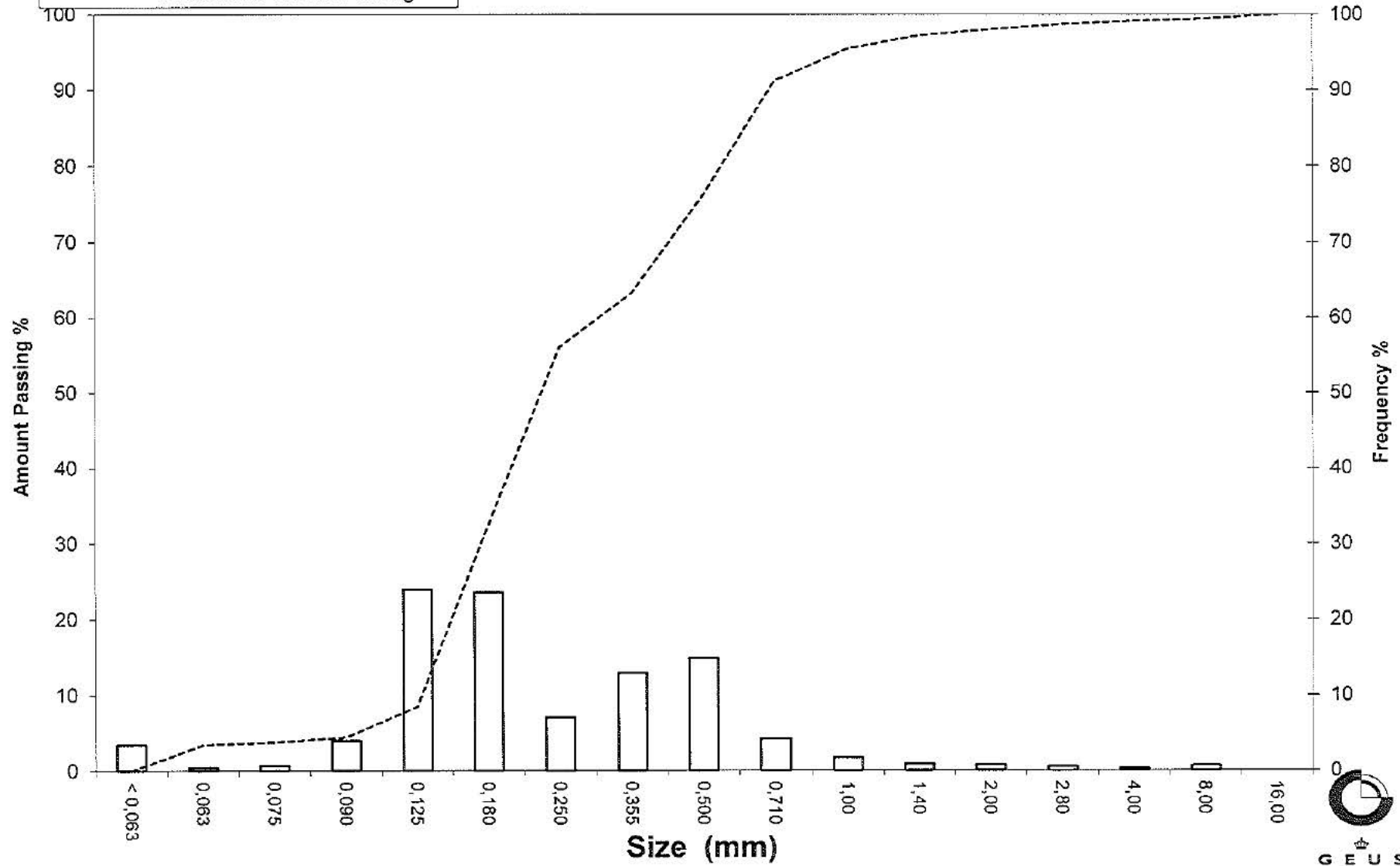
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506048-1 20-220 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 506048-1 270-320 cm  
 Lab. Id: 170204  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



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Total Weight 724,63 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	passing
16,00	-4,00	229,24	31,64	68,36
8,00	-3,00	114,11	15,75	52,62
4,00	-2,00	54,46	7,52	45,10
2,80	-1,49	18,37	2,54	42,57
2,00	-1,00	13,11	1,81	40,76
1,40	-0,49	27,18	3,75	37,01
1,00	0,00	20,85	2,88	34,13
0,710	0,49	31,20	4,31	29,82
0,500	1,00	63,57	8,77	21,05
0,355	1,49	53,10	7,33	13,72
0,250	2,00	28,88	3,99	9,74
0,180	2,47	29,93	4,13	5,61
0,125	3,00	20,93	2,89	2,72
0,090	3,47	3,96	0,55	2,17
0,075	3,74	0,90	0,12	2,05
0,063	3,99	0,74	0,10	1,95
< 0,063	> 3,99	14,10	1,95	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,95
Sand, fine (0,063 mm - 0,200 mm):	4,84
Sand, medium (0,2 mm - 0,6 mm):	18,44
Sand, coarse (0,6 mm - 2 mm):	15,53
Gravel (> 2 mm):	59,24
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	-----	-----
40%	60%	11,75	-3,55
Median 50%	50%	6,61	-2,72
75%	25%	0,59	0,75
84%	16%	0,40	1,32
90%	10%	0,26	1,96
95%	5%	0,17	2,57

## Moments Statistics

Mean	-0,70
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	45,74

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

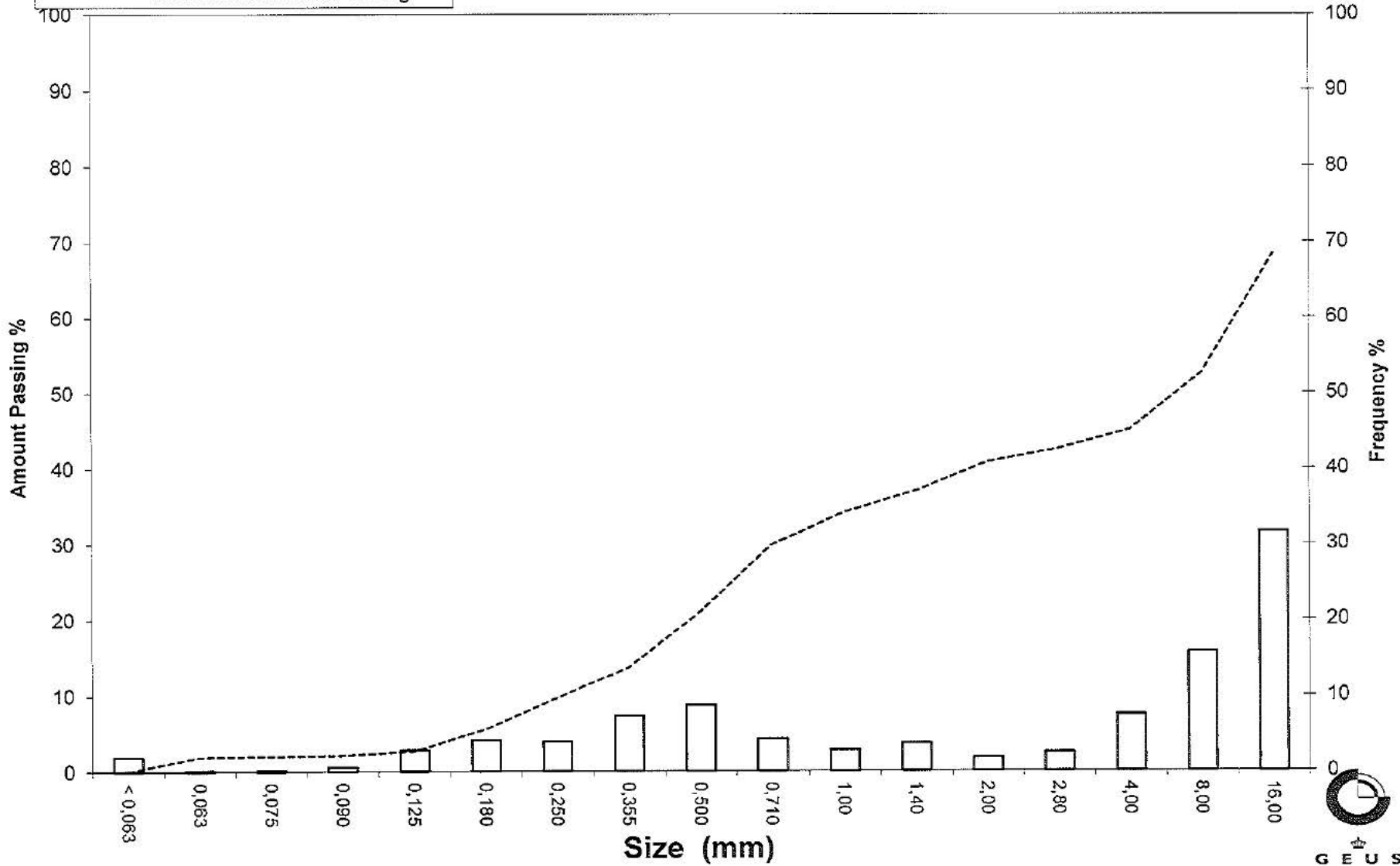
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506048-1 270-320 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506053-1 0-50 cm  
**Lab. Id:** 170226  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



  
**GEUS**

**Total Weight** 143,18 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,29	0,20	99,80
2,80	-1,49	0,31	0,22	99,58
2,00	-1,00	0,63	0,44	99,14
1,40	-0,49	1,30	0,91	98,23
1,00	0,00	4,56	3,18	95,05
0,710	0,49	9,87	6,89	88,15
0,500	1,00	28,15	19,66	68,49
0,355	1,49	42,17	29,45	39,04
0,250	2,00	30,95	21,62	17,43
0,180	2,47	10,99	7,68	9,75
0,125	3,00	3,38	2,36	7,39
0,090	3,47	2,03	1,42	5,97
0,075	3,74	1,22	0,85	5,12
0,063	3,99	1,10	0,77	4,35
< 0,063	> 3,99	6,23	4,35	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	4,35
Sand, fine (0,063 mm - 0,200 mm):	7,59
Sand, medium (0,2 mm - 0,6 mm):	65,91
Sand, coarse (0,6 mm - 2 mm):	21,28
Gravel (> 2 mm):	0,86
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,00	0,00
16%	84%	0,67	0,59
25%	75%	0,57	0,81
40%	60%	0,46	1,13
Median 50%	50%	0,41	1,29
75%	25%	0,29	1,80
84%	16%	0,24	2,08
90%	10%	0,18	2,46
95%	5%	0,07	3,77

### Moments Statistics

Mean	1,32
Sorting	0,94
Skewness	0,19
Kurtosis	1,56
Uniformity Coefficient	2,51

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

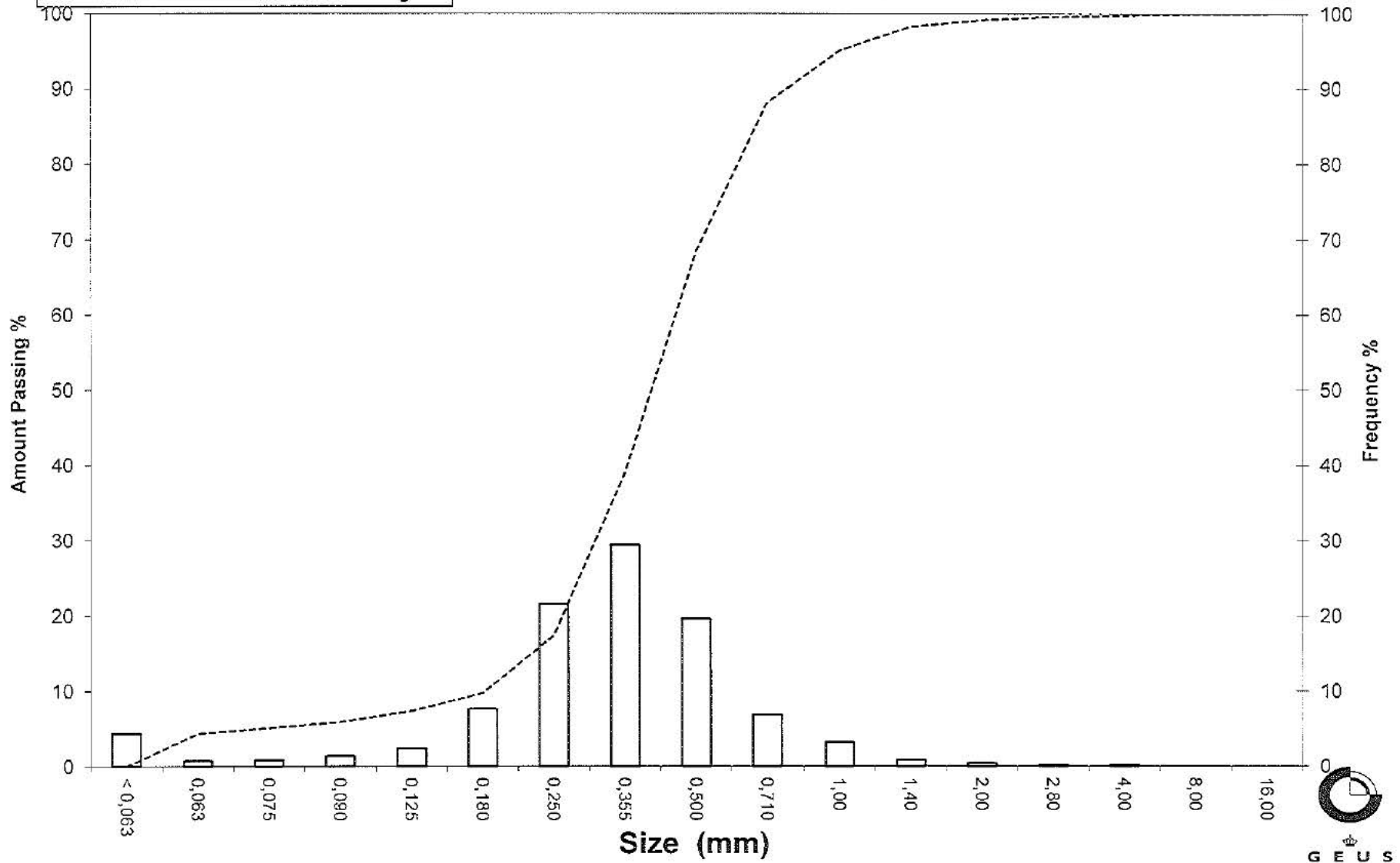
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506053-1 0-50 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506053-1 100-350 cm  
**Lab. Id:** 170227  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 124,15 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,26	0,21	99,79
2,80	-1,49	0,26	0,21	99,58
2,00	-1,00	0,22	0,18	99,40
1,40	-0,49	0,28	0,23	99,18
1,00	0,00	0,41	0,33	98,85
0,710	0,49	0,68	0,55	98,30
0,500	1,00	1,89	1,52	96,78
0,355	1,49	6,64	5,35	91,43
0,250	2,00	25,90	20,86	70,57
0,180	2,47	39,26	31,62	38,94
0,125	3,00	24,05	19,37	19,57
0,090	3,47	5,43	4,37	15,20
0,075	3,74	1,49	1,20	14,00
0,063	3,99	1,31	1,06	12,94
< 0,063	> 3,99	16,07	12,94	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	12,94
Sand, fine (0,063 mm - 0,200 mm):	35,04
Sand, medium (0,2 mm - 0,6 mm):	49,52
Sand, coarse (0,6 mm - 2 mm):	1,90
Gravel (> 2 mm):	0,60
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,45	1,15
16%	84%	0,32	1,65
25%	75%	0,27	1,88
40%	60%	0,23	2,14
Median 50%	50%	0,20	2,29
75%	25%	0,14	2,83
84%	16%	0,10	3,37
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,44
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

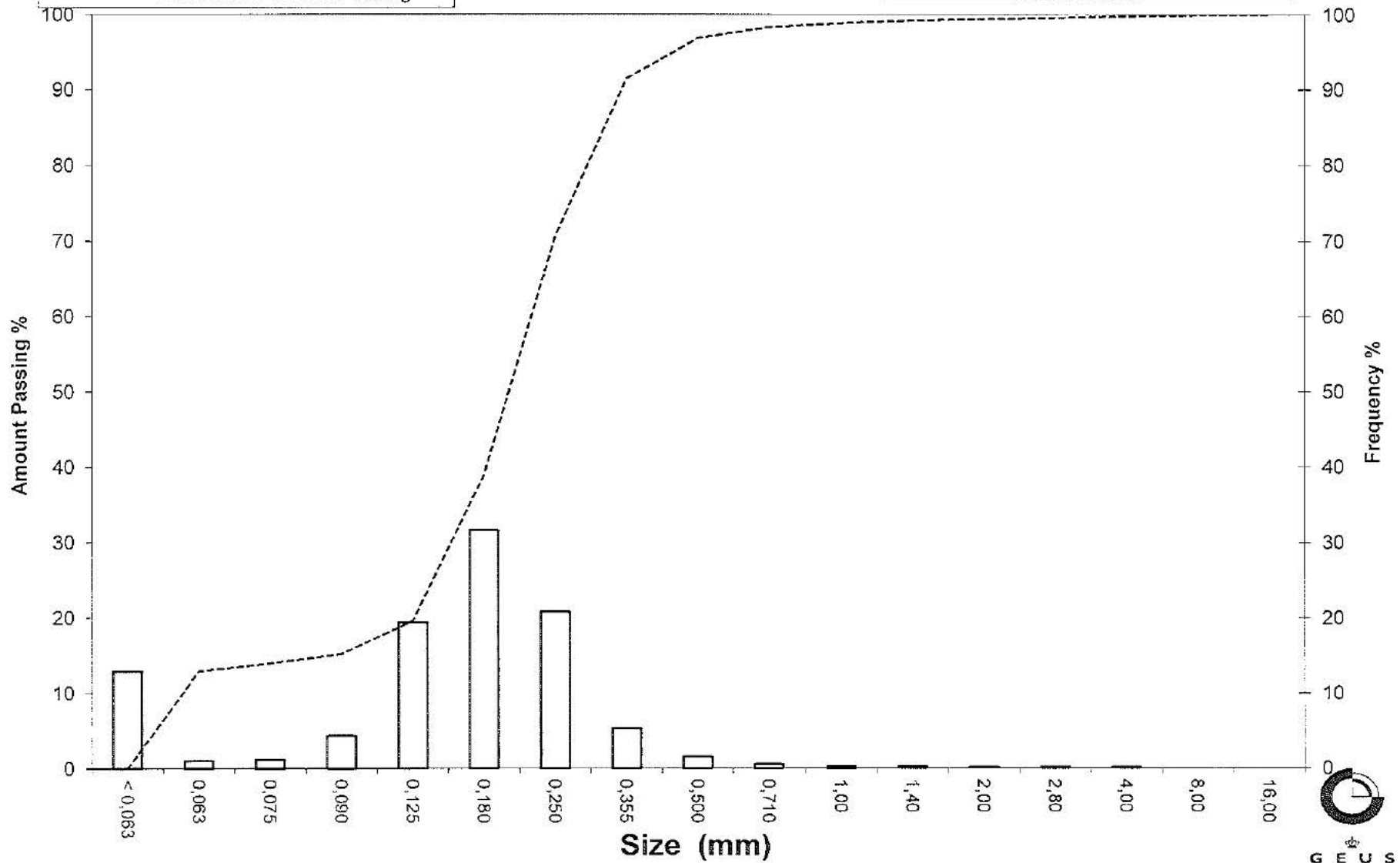
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# Grain Size Distribution

Sample Id: 506053-1 100-350 cm

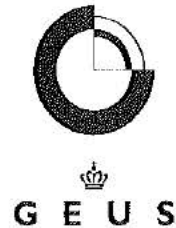
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506053-1 455-490 cm  
**Lab. Id:** 170228  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 112,58 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,02	0,02	99,98
1,00	0,00	0,41	0,36	99,62
0,710	0,49	0,95	0,84	98,77
0,500	1,00	3,09	2,74	96,03
0,355	1,49	10,05	8,93	87,10
0,250	2,00	23,60	20,96	66,14
0,180	2,47	28,99	25,75	40,39
0,125	3,00	27,23	24,19	16,20
0,090	3,47	12,62	11,21	4,99
0,075	3,74	2,32	2,06	2,93
0,063	3,99	1,13	1,00	1,93
< 0,063	> 3,99	2,17	1,93	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,93
Sand, fine (0,063 mm - 0,200 mm):	45,82
Sand, medium (0,2 mm - 0,6 mm):	49,59
Sand, coarse (0,6 mm - 2 mm):	2,66
Gravel (> 2 mm):	0,00
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,48	1,05
16%	84%	0,34	1,56
25%	75%	0,29	1,76
40%	60%	0,23	2,10
Median 50%	50%	0,21	2,28
75%	25%	0,15	2,79
84%	16%	0,12	3,01
90%	10%	0,11	3,24
95%	5%	0,09	3,47

### Moments Statistics

Mean	2,28
Sorting	0,73
Skewness	0,00
Kurtosis	0,97
Uniformity Coefficient	2,21

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

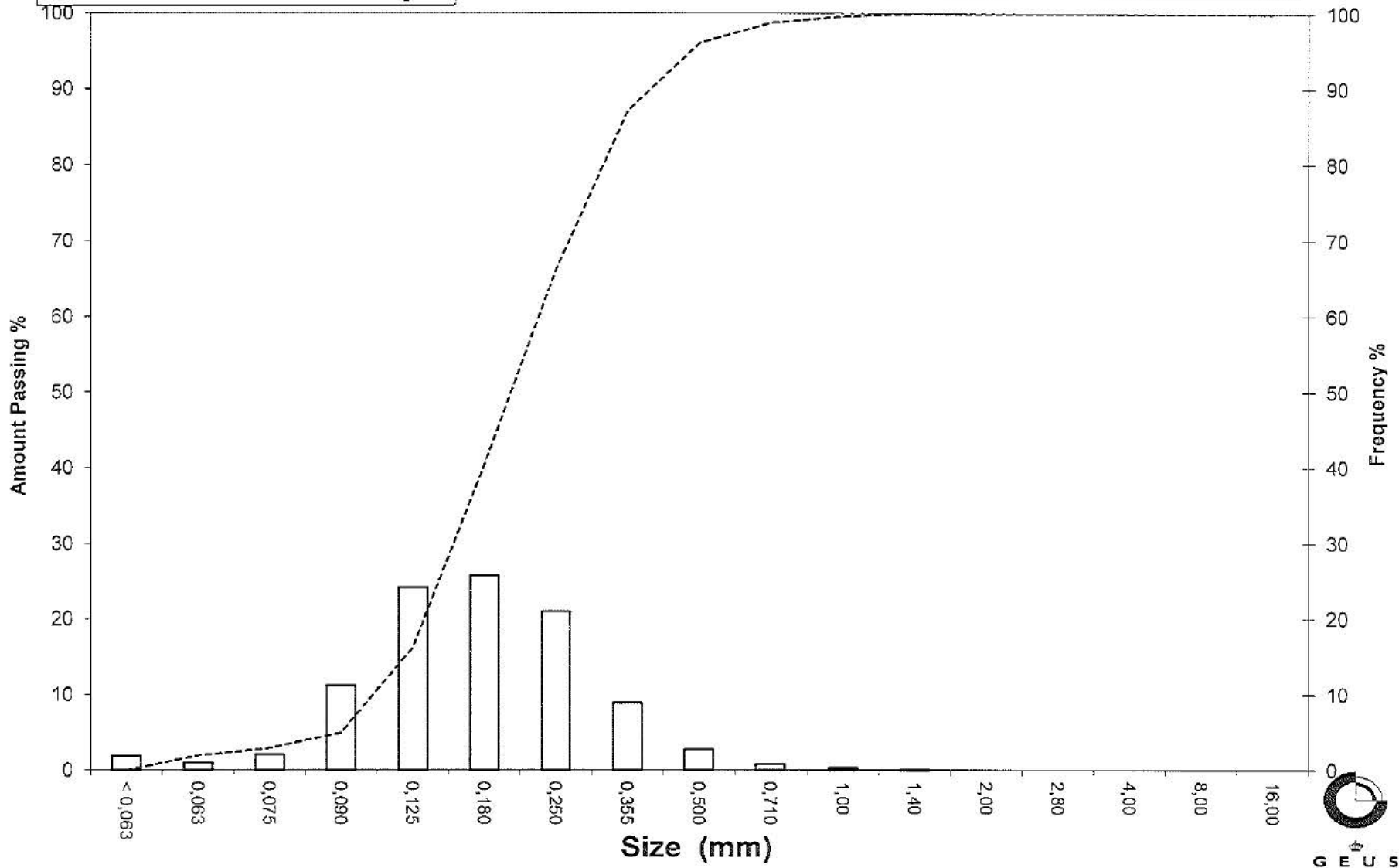
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506053-1 455-490 cm

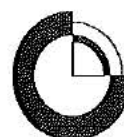
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 506053-4 0-150 cm  
 Lab. Id: 170205  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 108,51 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,08	0,07	99,93
0,710	0,49	0,14	0,13	99,80
0,500	1,00	0,57	0,53	99,27
0,355	1,49	4,16	3,83	95,44
0,250	2,00	24,03	22,15	73,29
0,180	2,47	41,62	38,36	34,94
0,125	3,00	19,14	17,64	17,30
0,090	3,47	4,44	4,09	13,21
0,075	3,74	1,55	1,43	11,78
0,063	3,99	1,26	1,16	10,62
< 0,063	> 3,99	11,52	10,62	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	10,62
Sand, fine (0,063 mm - 0,200 mm)	35,28
Sand, medium (0,2 mm - 0,6 mm)	53,63
Sand, coarse (0,6 mm - 2 mm)	0,48
Gravel (> 2 mm)	0,00
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,50
16%	84%	0,30	1,73
25%	75%	0,26	1,95
40%	60%	0,23	2,15
Median 50%	50%	0,21	2,27
75%	25%	0,15	2,75
84%	16%	0,11	3,13
90%	10%	-----	-----
95%	5%	-----	-----

## Moments Statistics

Mean	2,38
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

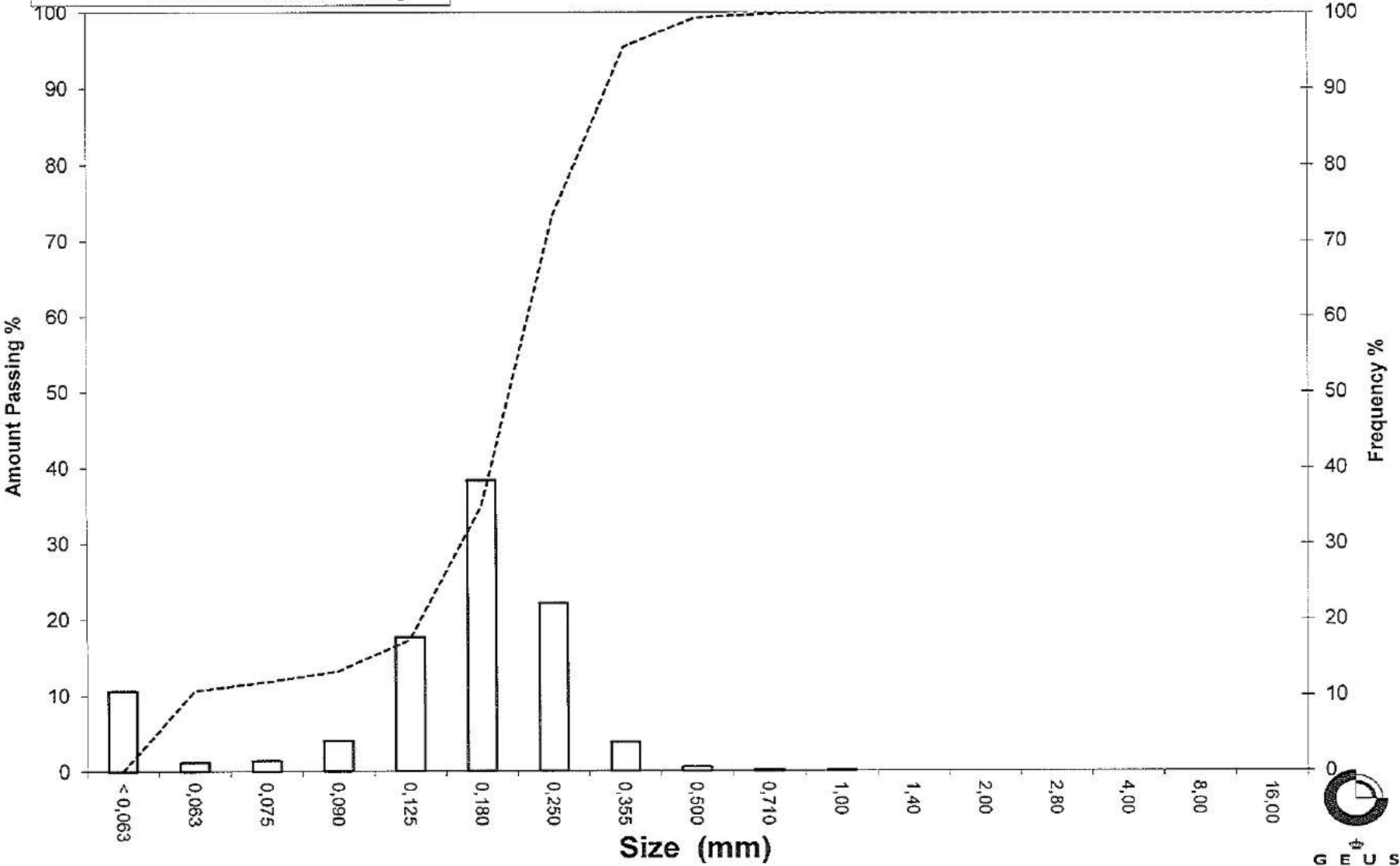
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506053-4 0-150 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

**Sample Id:** 506053-4 200-320 cm  
**Lab. Id:** 170206  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 110,35 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,27	0,24	99,76
2,00	-1,00	0,11	0,10	99,66
1,40	-0,49	0,17	0,15	99,50
1,00	0,00	0,29	0,26	99,24
0,710	0,49	0,35	0,32	98,92
0,500	1,00	1,04	0,94	97,98
0,355	1,49	5,39	4,88	93,09
0,250	2,00	34,21	31,00	62,09
0,180	2,47	40,79	36,96	25,13
0,125	3,00	16,06	14,55	10,58
0,090	3,47	3,34	3,03	7,55
0,075	3,74	0,92	0,83	6,71
0,063	3,99	0,73	0,66	6,05
< 0,063	> 3,99	6,68	6,05	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	6,05
Sand, fine (0,063 mm - 0,200 mm)	29,64
Sand, medium (0,2 mm - 0,6 mm)	62,74
Sand, coarse (0,6 mm - 2 mm)	1,23
Gravel (> 2 mm)	0,34
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,41	1,28
16%	84%	0,32	1,63
25%	75%	0,29	1,77
40%	60%	0,25	2,02
Median 50%	50%	0,23	2,14
75%	25%	0,18	2,48
84%	16%	0,15	2,78
90%	10%	0,12	3,08
95%	5%	-----	-----

## Moments Statistics

Mean	2,18
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,08

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

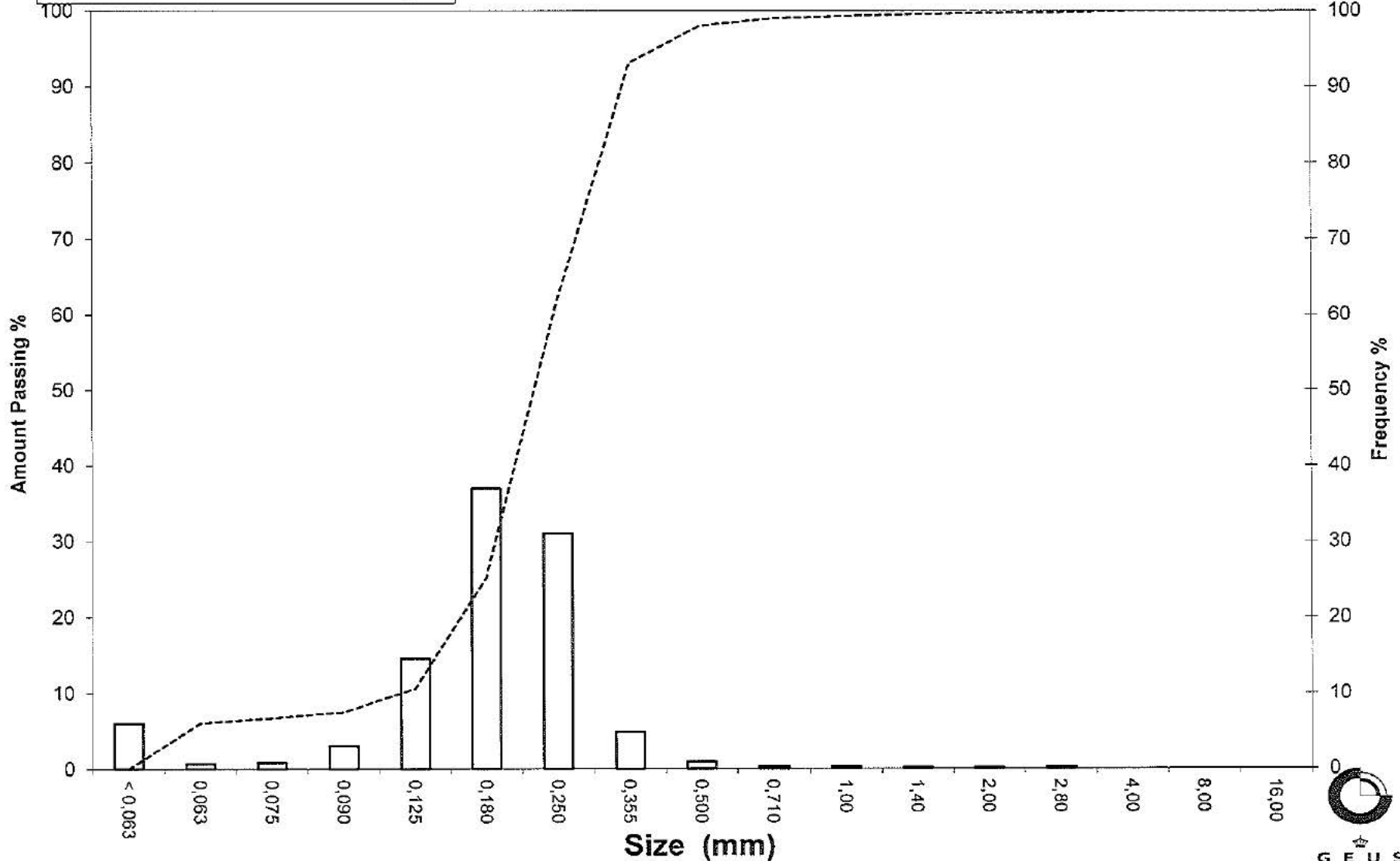
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506053-4 200-320 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506081-2 0-100 cm  
**Lab. Id:** 170229  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 167,32 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,19	0,71	99,29
4,00	-2,00	4,96	2,96	96,32
2,80	-1,49	2,53	1,51	94,81
2,00	-1,00	2,28	1,36	93,45
1,40	-0,49	2,71	1,62	91,83
1,00	0,00	4,50	2,69	89,14
0,710	0,49	6,28	3,75	85,39
0,500	1,00	10,77	6,44	78,95
0,355	1,49	15,81	9,45	69,50
0,250	2,00	21,14	12,63	56,87
0,180	2,47	20,13	12,03	44,84
0,125	3,00	22,11	13,21	31,62
0,090	3,47	11,02	6,59	25,04
0,075	3,74	3,62	2,16	22,87
0,063	3,99	3,11	1,86	21,01
< 0,063	> 3,99	35,16	21,01	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	21,01
Sand, fine (0,063 mm - 0,200 mm):	27,26
Sand, medium (0,2 mm - 0,6 mm):	33,74
Sand, coarse (0,6 mm - 2 mm):	11,43
Gravel (> 2 mm):	6,55
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	2,95	-1,56
16%	84%	0,66	0,59
25%	75%	0,44	1,19
40%	60%	0,28	1,86
Median 50%	50%	0,21	2,25
75%	25%	0,09	3,48
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,42
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgr-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

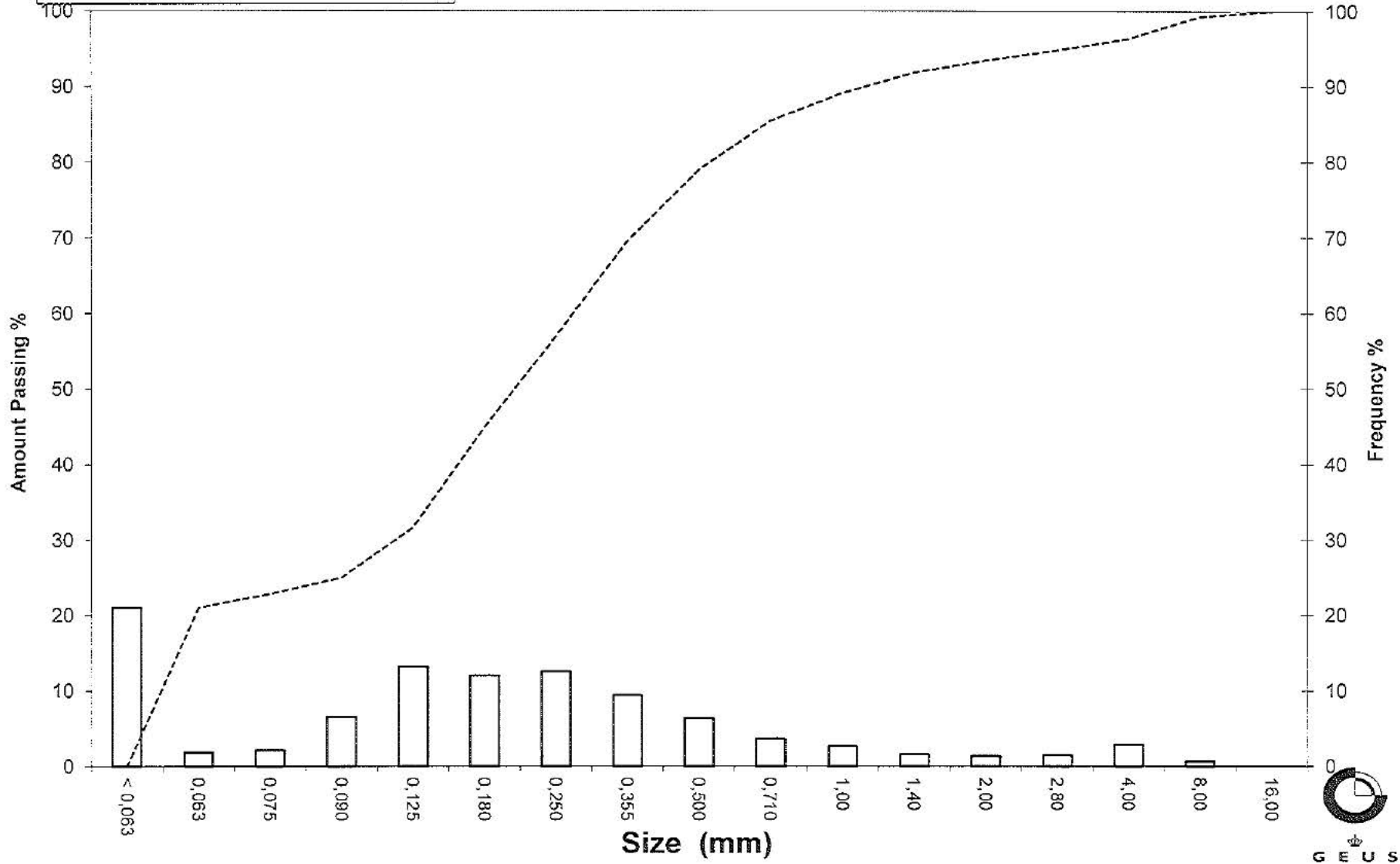
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# Grain Size Distribution

Sample Id: 506081-2 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 506081-2 120-210 cm  
**Lab. Id:** 170230  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



  
**GEUS**

**Total Weight** 130,47 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,11	0,08	99,92
1,40	-0,49	0,14	0,11	99,81
1,00	0,00	1,09	0,84	98,97
0,710	0,49	1,59	1,22	97,75
0,500	1,00	6,08	4,66	93,09
0,355	1,49	15,41	11,81	81,28
0,250	2,00	24,64	18,89	62,40
0,180	2,47	24,58	18,84	43,56
0,125	3,00	27,96	21,43	22,13
0,090	3,47	13,11	10,05	12,08
0,075	3,74	3,40	2,61	9,47
0,063	3,99	2,82	2,16	7,31
< 0,063	> 3,99	9,54	7,31	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	7,31
Sand, fine (0,063 mm - 0,200 mm):	41,63
Sand, medium (0,2 mm - 0,6 mm):	46,37
Sand, coarse (0,6 mm - 2 mm):	4,60
Gravel (> 2 mm):	0,08
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,59	0,77
16%	84%	0,39	1,36
25%	75%	0,32	1,64
40%	60%	0,24	2,05
Median 50%	50%	0,20	2,29
75%	25%	0,13	2,92
84%	16%	0,10	3,27
90%	10%	0,08	3,68
95%	5%	-----	-----

### Moments Statistics

Mean	2,31
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,09

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

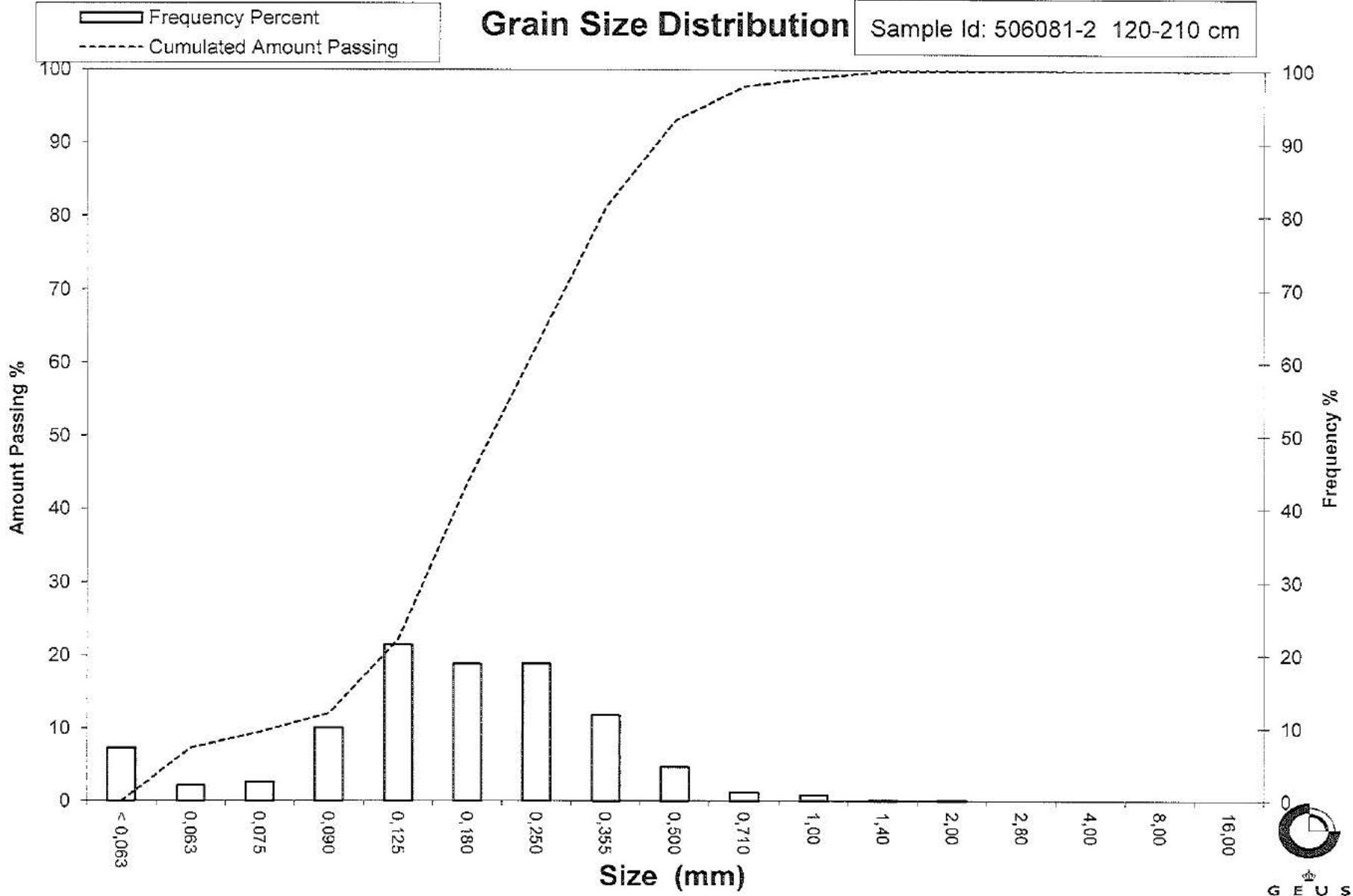
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgi-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 506081-2 120-210 cm

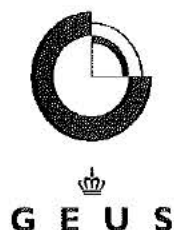


G E C S

# Grain Size Distribution

## Geotechnical

**Sample Id:** 510011-1 300-400 cm  
**Lab. Id:** 170152  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelses råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 145,03 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,21	0,14	99,86
0,710	0,49	0,15	0,10	99,75
0,500	1,00	0,42	0,29	99,46
0,355	1,49	2,58	1,78	97,68
0,250	2,00	36,85	25,41	72,27
0,180	2,47	79,67	54,93	17,34
0,125	3,00	19,50	13,45	3,90
0,090	3,47	2,60	1,79	2,10
0,075	3,74	0,36	0,25	1,85
0,063	3,99	0,19	0,13	1,72
< 0,063	> 3,99	2,50	1,72	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,72
Sand, fine (0,063 mm - 0,200 mm):	31,31
Sand, medium (0,2 mm - 0,6 mm):	66,56
Sand, coarse (0,6 mm - 2 mm):	0,40
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,34	1,54
16%	84%	0,30	1,74
25%	75%	0,26	1,94
40%	60%	0,23	2,09
Median 50%	50%	0,22	2,17
75%	25%	0,19	2,40
84%	16%	0,17	2,52
90%	10%	0,15	2,74
95%	5%	0,13	2,95

### Moments Statistics

Mean	2,15
Sorting	0,41
Skewness	0,00
Kurtosis	1,25
Uniformity Coefficient	1,56

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

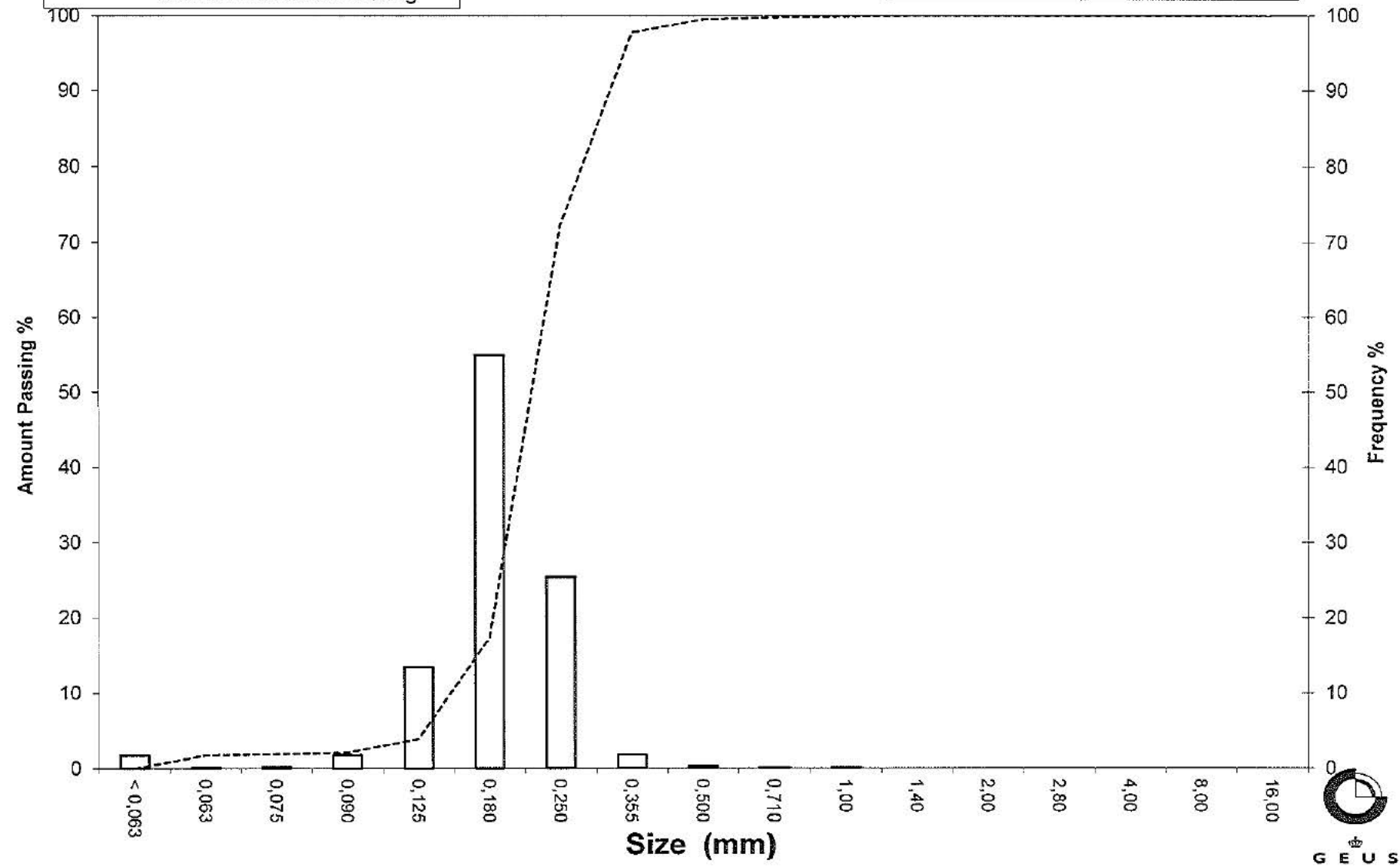
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 510011-1 300-400 cm

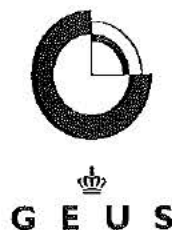
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 510030-1 0-80 cm  
**Lab. Id:** 170148  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 152 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,20	0,13	99,87
2,80	-1,49	0,16	0,11	99,76
2,00	-1,00	0,54	0,36	99,41
1,40	-0,49	1,34	0,88	98,53
1,00	0,00	6,07	3,99	94,53
0,710	0,49	11,08	7,29	87,24
0,500	1,00	23,01	15,14	72,11
0,355	1,49	28,42	18,70	53,41
0,250	2,00	30,29	19,93	33,48
0,180	2,47	21,43	14,10	19,38
0,125	3,00	15,85	10,43	8,95
0,090	3,47	5,90	3,88	5,07
0,075	3,74	1,42	0,93	4,14
0,063	3,99	1,03	0,68	3,46
< 0,063	> 3,99	5,26	3,46	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	3,46
Sand, fine (0,063 mm - 0,200 mm):	19,95
Sand, medium (0,2 mm - 0,6 mm):	55,90
Sand, coarse (0,6 mm - 2 mm):	20,09
Gravel (> 2 mm):	0,59
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	1,05	-0,07
16%	84%	0,67	0,59
25%	75%	0,54	0,89
40%	60%	0,41	1,30
Median 50%	50%	0,34	1,57
75%	25%	0,21	2,27
84%	16%	0,16	2,62
90%	10%	0,13	2,94
95%	5%	0,09	3,49

### Moments Statistics

Mean	1,59
Sorting	1,05
Skewness	0,06
Kurtosis	1,06
Uniformity Coefficient	3,11

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

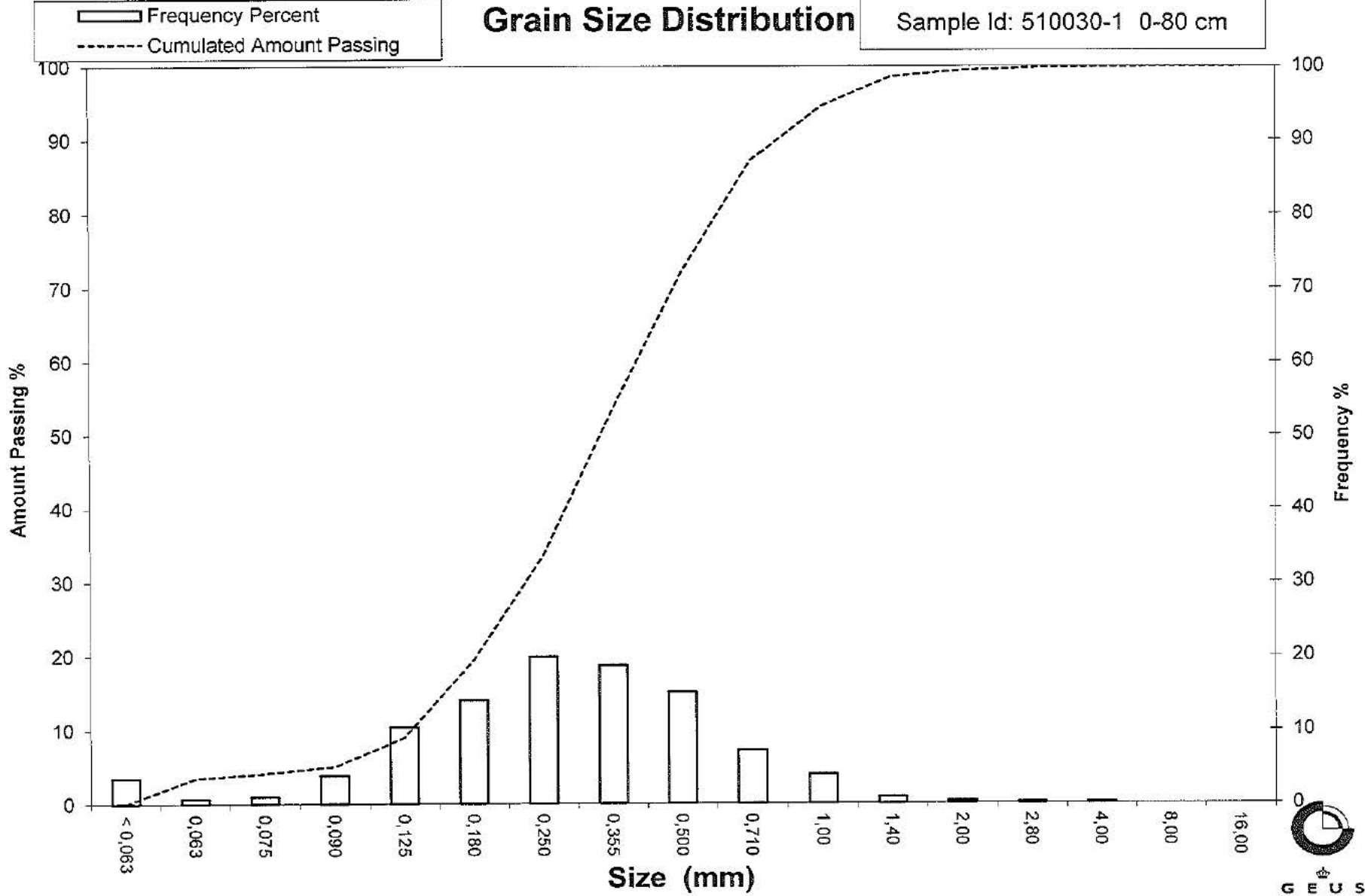
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 510030-1 0-80 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 510041-1 250-290 cm  
**Lab. Id:** 170149  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 159,57 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,47	0,29	99,71
2,80	-1,49	1,19	0,75	98,96
2,00	-1,00	1,80	1,13	97,83
1,40	-0,49	3,37	2,11	95,72
1,00	0,00	5,21	3,27	92,45
0,710	0,49	8,45	5,30	87,16
0,500	1,00	18,26	11,44	75,72
0,355	1,49	40,18	25,18	50,54
0,250	2,00	43,68	27,37	23,16
0,180	2,47	12,68	7,95	15,22
0,125	3,00	9,67	6,06	9,16
0,090	3,47	6,11	3,83	5,33
0,075	3,74	1,83	1,15	4,18
0,063	3,99	1,30	0,81	3,37
< 0,063	> 3,99	5,37	3,37	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	3,37
Sand, fine (0,063 mm - 0,200 mm):	14,12
Sand, medium (0,2 mm - 0,6 mm):	63,68
Sand, coarse (0,6 mm - 2 mm):	16,67
Gravel (> 2 mm):	2,17
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,31	-0,39
16%	84%	0,65	0,62
25%	75%	0,50	1,01
40%	60%	0,41	1,29
Median 50%	50%	0,35	1,50
75%	25%	0,26	1,96
84%	16%	0,19	2,42
90%	10%	0,13	2,91
95%	5%	0,09	3,54

### Moments Statistics

Mean	1,51
Sorting	1,05
Skewness	0,03
Kurtosis	1,70
Uniformity Coefficient	3,09

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

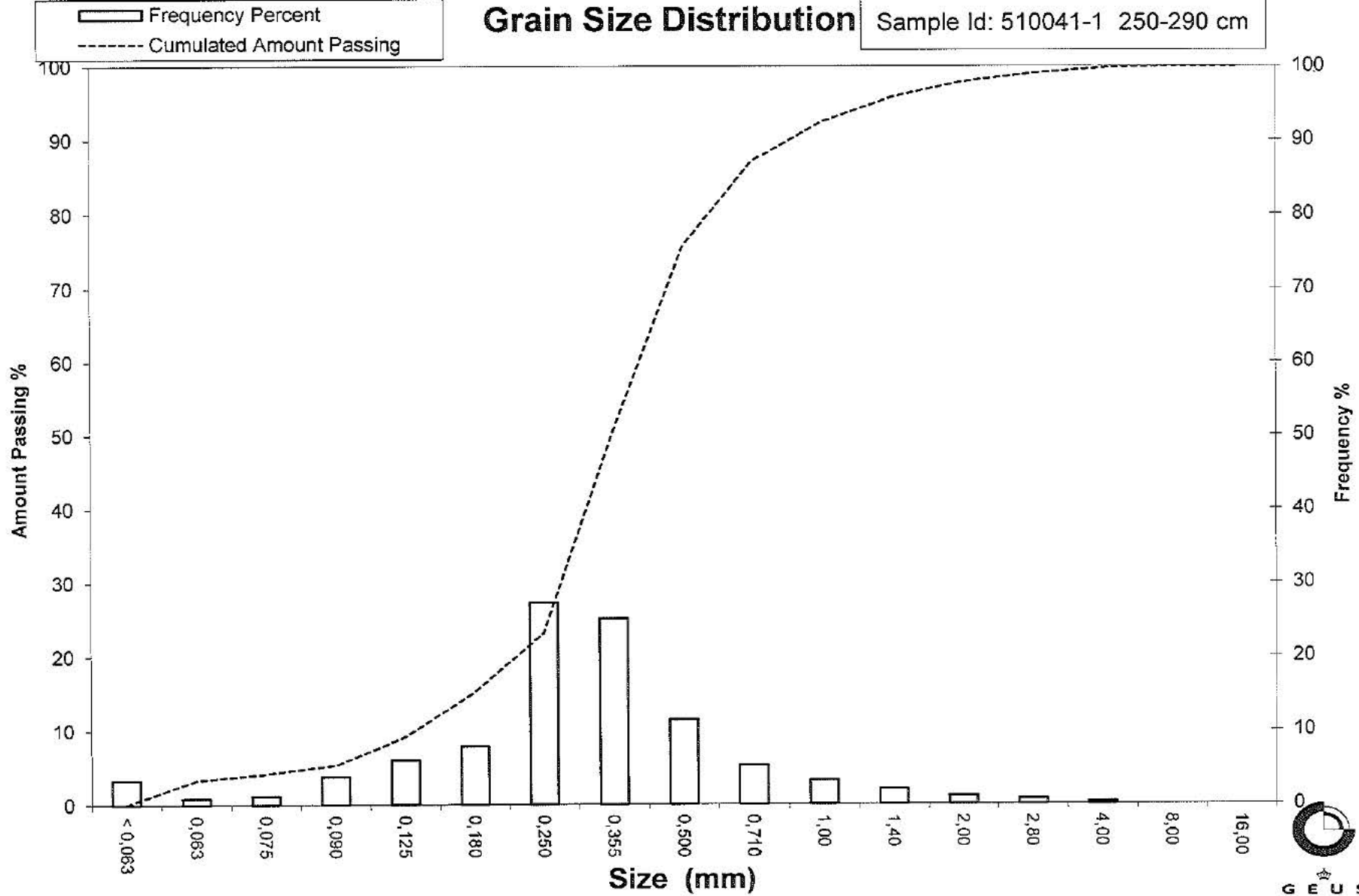
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 510041-1 250-290 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 510041-1 290-305 cm  
**Lab. Id:** 170150  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 170,28 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	5,90	3,46	96,54
4,00	-2,00	9,22	5,41	91,12
2,80	-1,49	6,98	4,10	87,02
2,00	-1,00	6,87	4,03	82,99
1,40	-0,49	8,29	4,87	78,12
1,00	0,00	16,16	9,49	68,63
0,710	0,49	19,58	11,50	57,13
0,500	1,00	26,23	15,40	41,73
0,355	1,49	25,25	14,83	26,90
0,250	2,00	22,78	13,38	13,52
0,180	2,47	8,91	5,23	8,29
0,125	3,00	4,43	2,60	5,68
0,090	3,47	2,78	1,63	4,05
0,075	3,74	0,79	0,46	3,59
0,063	3,99	0,58	0,34	3,25
< 0,063	> 3,99	5,53	3,25	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	3,25
Sand, fine (0,063 mm - 0,200 mm)	6,53
Sand, medium (0,2 mm - 0,6 mm)	39,28
Sand, coarse (0,6 mm - 2 mm)	33,93
Gravel (> 2 mm)	17,01
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	6,87	-2,78
16%	84%	2,20	-1,14
25%	75%	1,27	-0,34
40%	60%	0,78	0,35
Median 50%	50%	0,61	0,71
75%	25%	0,34	1,56
84%	16%	0,27	1,89
90%	10%	0,20	2,30
95%	5%	0,11	3,18

### Moments Statistics

Mean	0,49
Sorting	1,66
Skewness	-0,19
Kurtosis	1,29
Uniformity Coefficient	3,86

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

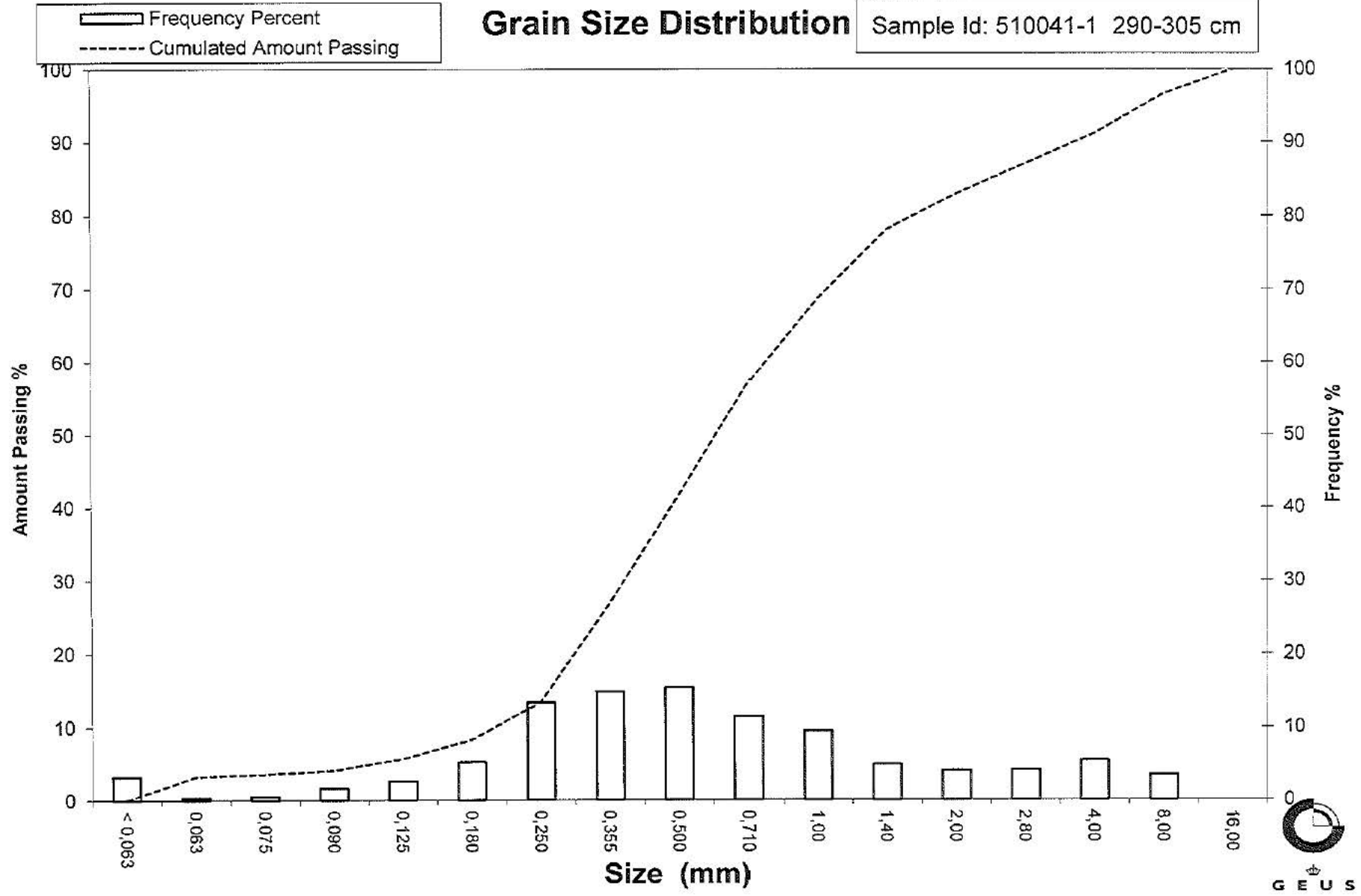
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 510041-1 290-305 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 510041-1 340-450 cm  
**Lab. Id:** 170151  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 158,6 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,65	2,30	97,70
4,00	-2,00	3,35	2,11	95,59
2,80	-1,49	1,85	1,17	94,42
2,00	-1,00	1,88	1,19	93,23
1,40	-0,49	2,08	1,31	91,92
1,00	0,00	3,24	2,04	89,88
0,710	0,49	4,77	3,01	86,87
0,500	1,00	12,81	8,08	78,80
0,355	1,49	39,63	24,99	53,81
0,250	2,00	62,71	39,54	14,27
0,180	2,47	13,09	8,25	6,02
0,125	3,00	5,26	3,32	2,70
0,090	3,47	1,13	0,71	1,99
0,075	3,74	0,23	0,15	1,84
0,063	3,99	0,13	0,08	1,76
< 0,063	> 3,99	2,79	1,76	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,76
Sand, fine (0,063 mm - 0,200 mm)	6,61
Sand, medium (0,2 mm - 0,8 mm)	74,27
Sand, coarse (0,6 mm - 2 mm)	10,59
Gravel (> 2 mm)	6,77
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,40	-1,76
16%	84%	0,64	0,65
25%	75%	0,48	1,06
40%	60%	0,39	1,36
Median 50%	50%	0,34	1,54
75%	25%	0,28	1,84
84%	16%	0,25	1,97
90%	10%	0,21	2,23
95%	5%	0,16	2,62

### Moments Statistics

Mean	1,39
Sorting	0,99
Skewness	-0,42
Kurtosis	2,30
Uniformity Coefficient	1,83

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

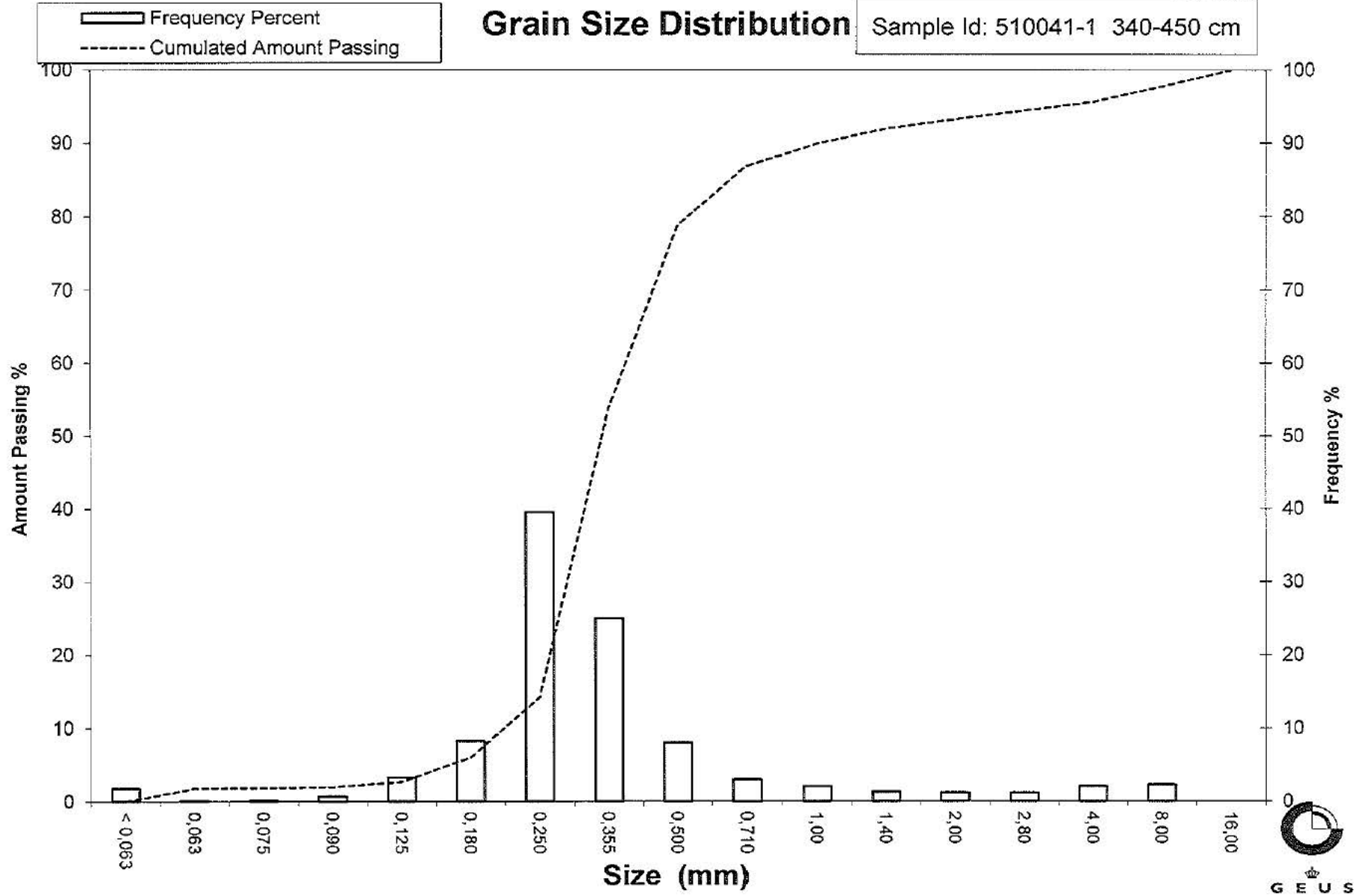
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgi-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 510041-1 340-450 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 512009-1 0-50 cm  
**Lab. Id:** 170153  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsen råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 149,98 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,21	0,14	99,86
2,00	-1,00	0,46	0,31	99,55
1,40	-0,49	1,10	0,73	98,82
1,00	0,00	3,13	2,09	96,73
0,710	0,49	6,01	4,01	92,73
0,500	1,00	14,78	9,85	82,87
0,355	1,49	24,49	16,33	66,54
0,250	2,00	31,08	20,72	45,82
0,180	2,47	21,44	14,30	31,52
0,125	3,00	24,87	16,58	14,94
0,090	3,47	10,47	6,98	7,96
0,075	3,74	2,21	1,47	6,49
0,063	3,99	1,39	0,93	5,56
< 0,063	> 3,99	8,34	5,56	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	5,56
Sand, fine (0,063 mm - 0,200 mm):	30,05
Sand, medium (0,2 mm - 0,6 mm):	51,96
Sand, coarse (0,6 mm - 2 mm):	11,99
Gravel (> 2 mm):	0,45
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,87	0,19
16%	84%	0,52	0,93
25%	75%	0,43	1,22
40%	60%	0,32	1,64
Median 50%	50%	0,27	1,88
75%	25%	0,16	2,66
84%	16%	0,13	2,96
90%	10%	0,10	3,32
95%	5%	-----	-----

### Moments Statistics

Mean	1,92
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,21

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{80\%} / d_{10\%})$  (dgf-Bulletin 1988)

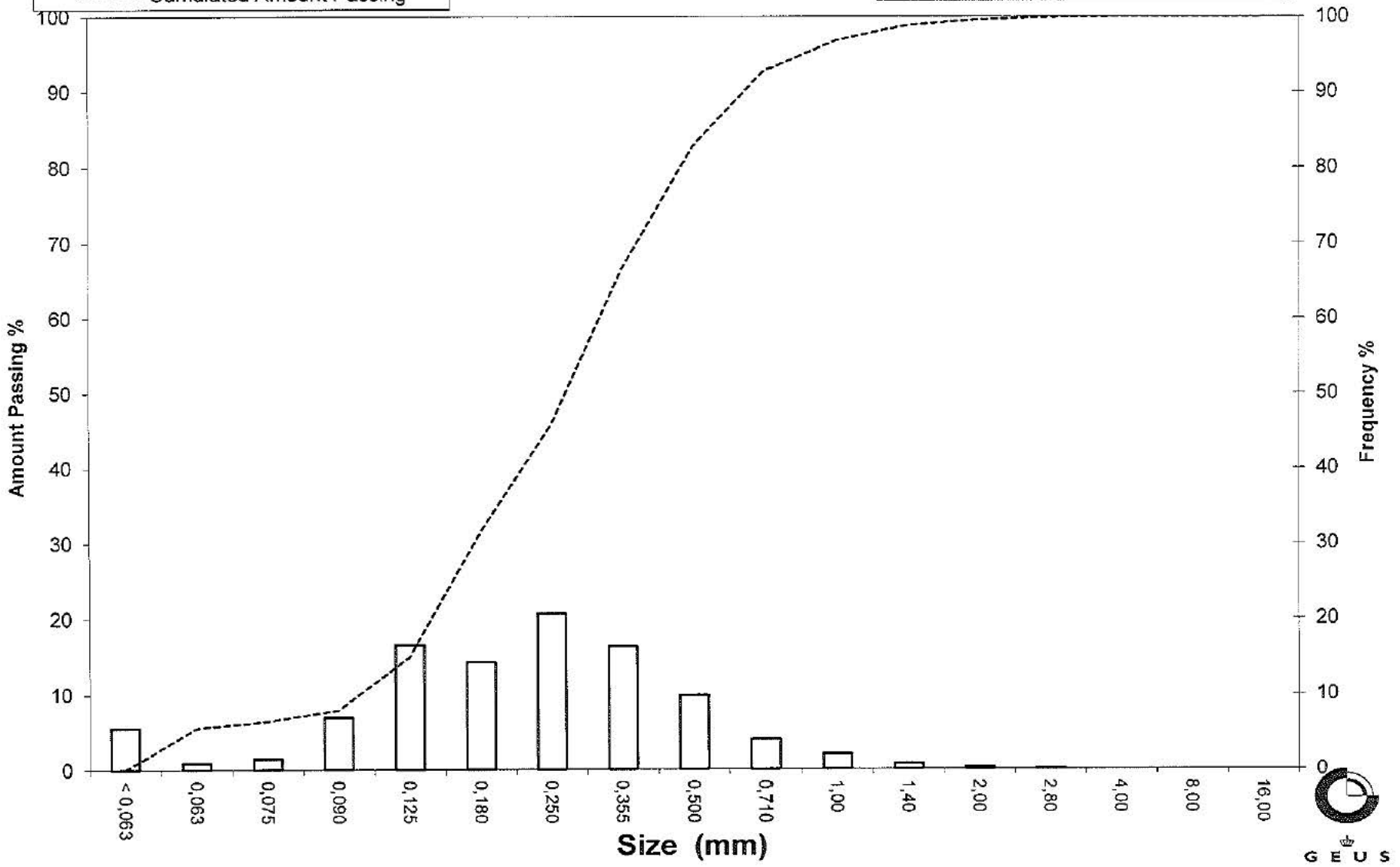
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 512009-1 0-50 cm

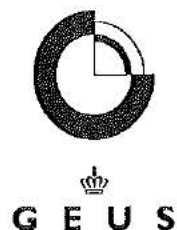
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 516008-1 20-100 cm  
**Lab. Id:** 170207  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 102,19 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,82	1,78	98,22
4,00	-2,00	2,45	2,40	95,82
2,80	-1,49	1,38	1,35	94,47
2,00	-1,00	1,97	1,93	92,54
1,40	-0,49	1,10	1,08	91,47
1,00	0,00	1,85	1,81	89,66
0,710	0,49	1,79	1,75	87,90
0,500	1,00	3,52	3,44	84,46
0,355	1,49	6,02	5,89	78,57
0,250	2,00	10,69	10,46	68,11
0,180	2,47	11,76	11,51	56,60
0,125	3,00	13,02	12,74	43,86
0,090	3,47	9,35	9,15	34,71
0,075	3,74	3,58	3,50	31,21
0,063	3,99	3,48	3,41	27,80
< 0,063	> 3,99	28,41	27,80	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	27,80
Sand, fine (0,063 mm - 0,200 mm)	32,09
Sand, medium (0,2 mm - 0,6 mm)	26,21
Sand, coarse (0,6 mm - 2 mm)	6,44
Gravel (> 2 mm)	7,46
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,27	-1,71
16%	84%	0,49	1,03
25%	75%	0,32	1,65
40%	60%	0,20	2,32
Median 50%	50%	0,15	2,72
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,88
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{80\%} / d_{10\%})$  (dgf-Bulletin 1988)

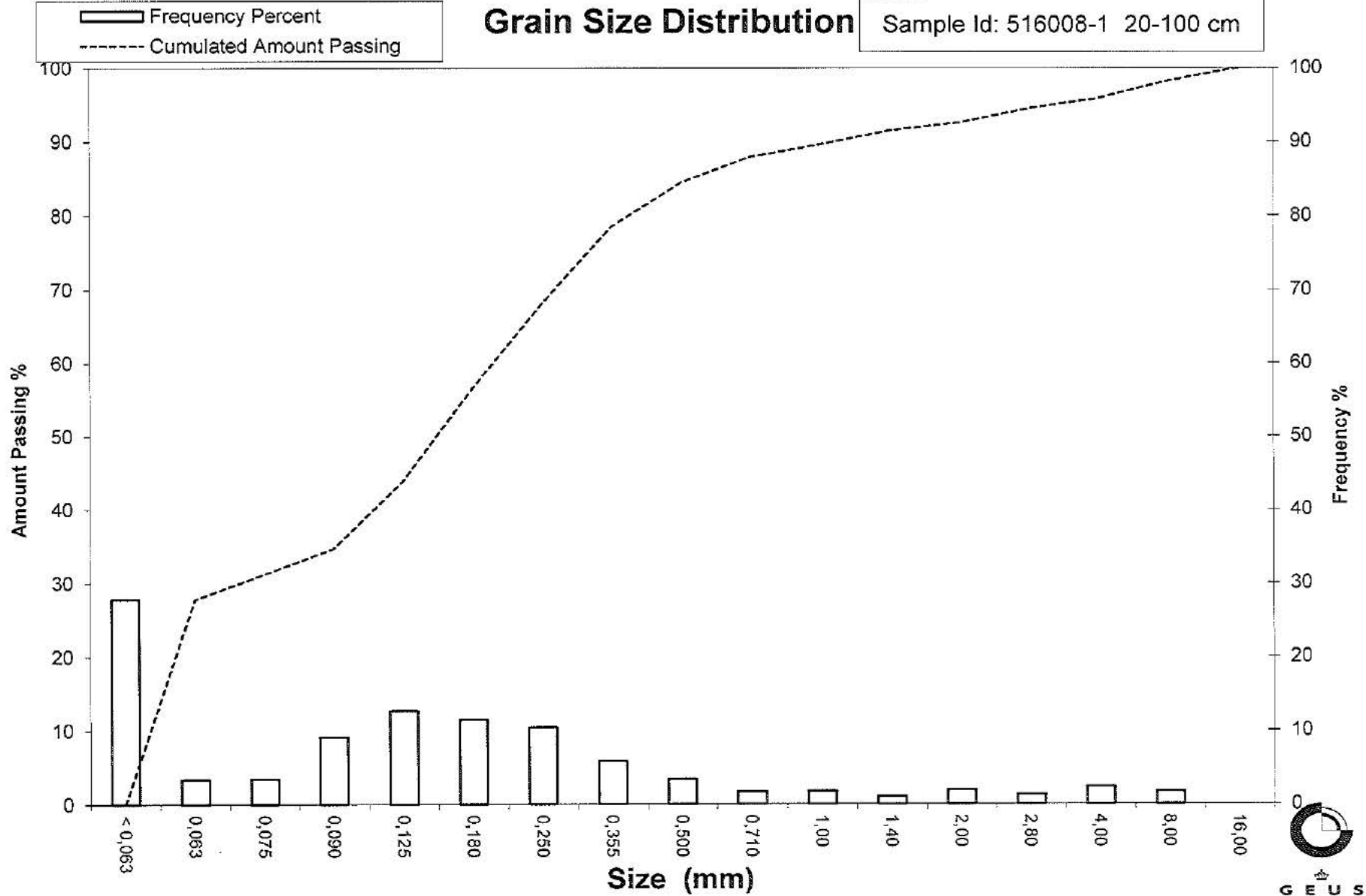
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 516008-1 20-100 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 516008-1 120-210 cm  
**Lab. Id:** 170208  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 114,25 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,10	0,09	99,91
2,00	-1,00	0,08	0,07	99,84
1,40	-0,49	0,07	0,06	99,78
1,00	0,00	0,17	0,15	99,63
0,710	0,49	0,28	0,25	99,39
0,500	1,00	0,86	0,75	98,63
0,355	1,49	3,25	2,84	95,79
0,250	2,00	12,44	10,89	84,90
0,180	2,47	18,25	15,97	68,93
0,125	3,00	24,09	21,09	47,84
0,090	3,47	16,20	14,18	33,66
0,075	3,74	6,46	5,65	28,01
0,063	3,99	6,32	5,53	22,48
< 0,063	> 3,99	25,68	22,48	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	22,48
Sand, fine (0,063 mm - 0,200 mm):	51,01
Sand, medium (0,2 mm - 0,6 mm):	25,50
Sand, coarse (0,6 mm - 2 mm):	0,85
Gravel (> 2 mm):	0,16
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,53
16%	84%	0,25	2,02
25%	75%	0,21	2,28
40%	60%	0,16	2,67
Median 50%	50%	0,13	2,94
75%	25%	0,07	3,87
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,48
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

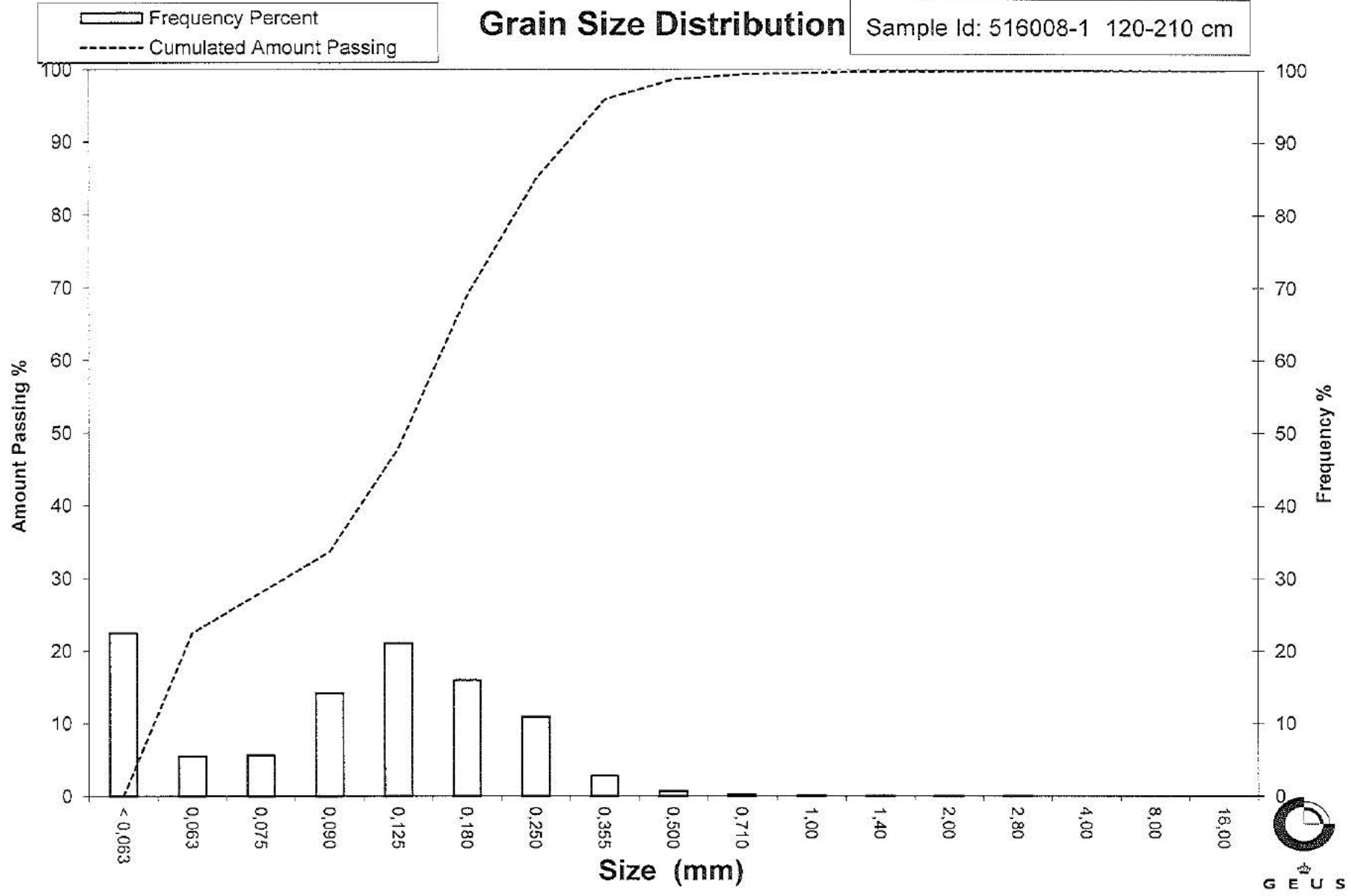
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

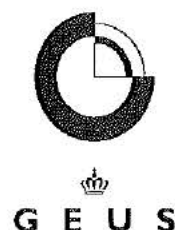
Sample Id: 516008-1 120-210 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 516012-1 70-170 cm  
**Lab. Id:** 170209  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 116,06 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,54	1,33	98,67
4,00	-2,00	10,22	8,81	89,87
2,80	-1,49	4,09	3,52	86,34
2,00	-1,00	3,41	2,94	83,41
1,40	-0,49	2,91	2,51	80,90
1,00	0,00	4,63	3,99	76,91
0,710	0,49	4,14	3,57	73,34
0,500	1,00	7,29	6,28	67,06
0,355	1,49	10,89	9,38	57,68
0,250	2,00	19,32	16,65	41,03
0,180	2,47	20,47	17,64	23,39
0,125	3,00	13,79	11,88	11,51
0,090	3,47	4,82	4,15	7,36
0,075	3,74	1,16	1,00	6,36
0,063	3,99	0,81	0,70	5,66
< 0,063	> 3,99	6,57	5,66	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	5,66
Sand, fine (0,063 mm - 0,200 mm):	22,77
Sand, medium (0,2 mm - 0,6 mm):	41,62
Sand, coarse (0,6 mm - 2 mm):	13,35
Gravel (> 2 mm):	16,59
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	6,33	-2,66
16%	84%	2,16	-1,11
25%	75%	0,84	0,24
40%	60%	0,39	1,36
Median 50%	50%	0,31	1,71
75%	25%	0,19	2,42
84%	16%	0,15	2,78
90%	10%	0,11	3,16
95%	5%	-----	-----

### Moments Statistics

Mean	1,12
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,48

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{80\%} / d_{10\%})$  (dgf-Bulletin 1988)

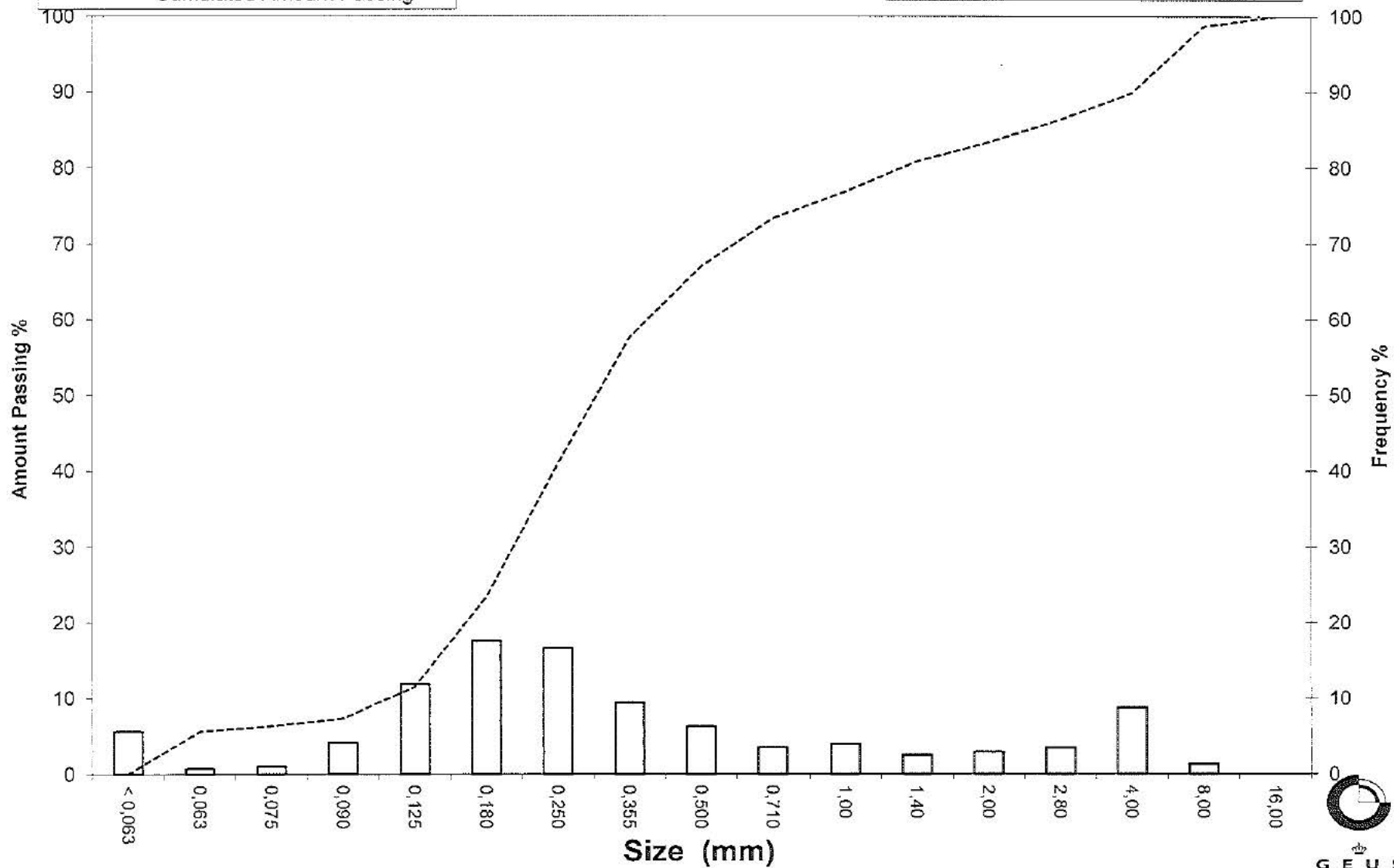
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 516012-1 70-170 cm

Frequency Percent  
Cumulated Amount Passing



GEUS

# Grain Size Distribution

## Geotechnical

**Sample Id:** 518004-1 120-320 cm  
**Lab. Id:** 170210  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



  
**GEUS**

**Total Weight** 107,28 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,03	0,03	99,97
2,80	-1,49	0,00	0,00	99,97
2,00	-1,00	0,00	0,00	99,97
1,40	-0,49	0,01	0,01	99,96
1,00	0,00	0,12	0,11	99,85
0,710	0,49	0,29	0,27	99,58
0,500	1,00	1,62	1,51	98,07
0,355	1,49	5,61	5,23	92,84
0,250	2,00	12,86	11,99	80,85
0,180	2,47	20,32	18,94	61,91
0,125	3,00	32,45	30,25	31,66
0,090	3,47	19,04	17,75	13,92
0,075	3,74	5,31	4,95	8,97
0,063	3,99	3,52	3,28	5,69
< 0,063	> 3,99	6,10	5,69	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	5,69
Sand, fine (0,063 mm - 0,200 mm):	61,64
Sand, medium (0,2 mm - 0,6 mm):	31,47
Sand, coarse (0,6 mm - 2 mm):	1,18
Gravel (> 2 mm):	0,03
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,41	1,27
16%	84%	0,28	1,85
25%	75%	0,23	2,13
40%	60%	0,18	2,50
Median 50%	50%	0,16	2,66
75%	25%	0,11	3,16
84%	16%	0,09	3,41
90%	10%	0,08	3,68
95%	5%	-----	-----

### Moments Statistics

Mean	2,64
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,26

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

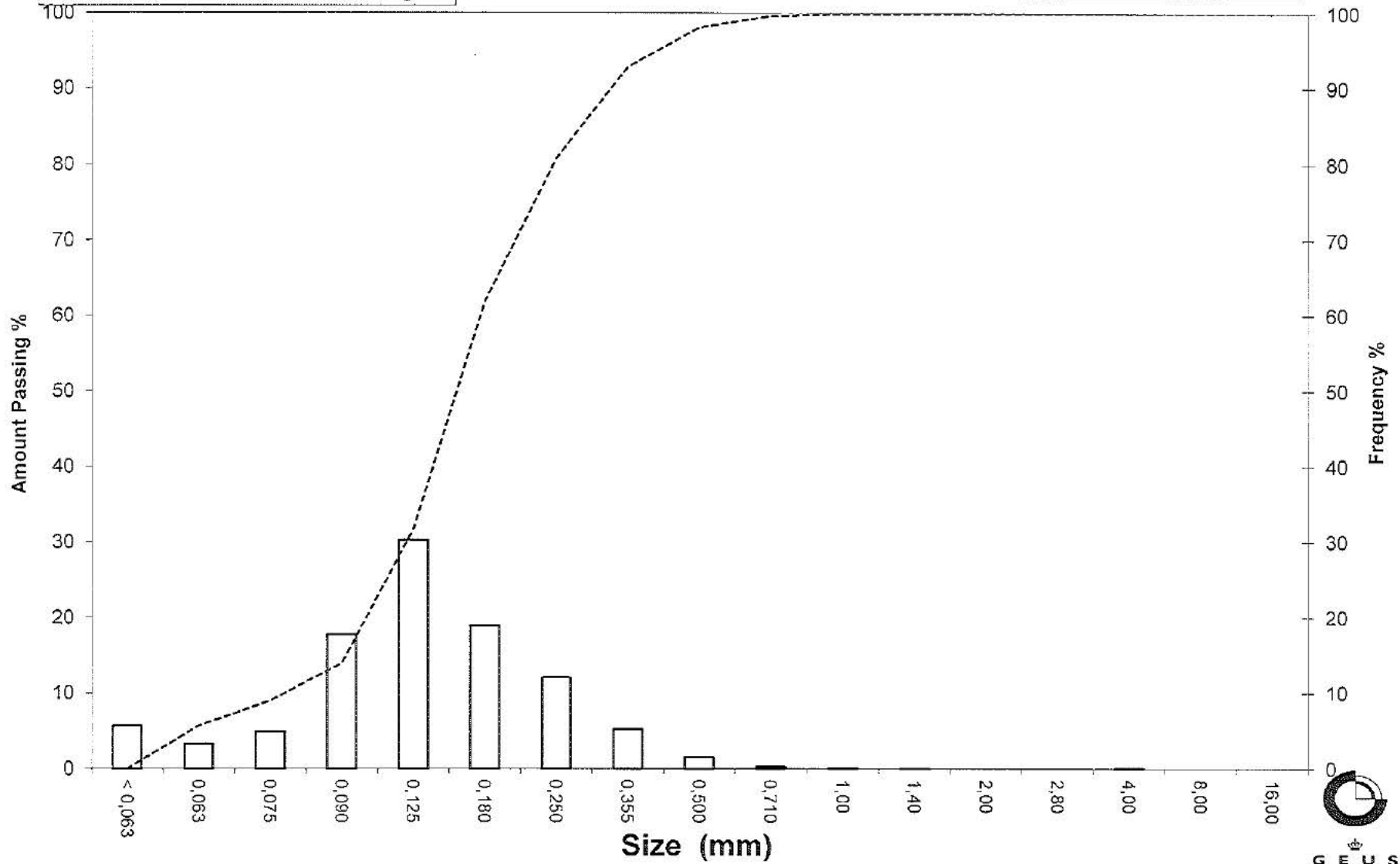
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 518004-1 120-320 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 518005-3 450-530 cm  
**Lab. Id:** 170211  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 259,73 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	16,48	6,35	93,65
8,00	-3,00	21,90	8,43	85,22
4,00	-2,00	17,71	6,82	78,40
2,80	-1,49	4,73	1,82	76,58
2,00	-1,00	4,40	1,69	74,89
1,40	-0,49	4,84	1,86	73,03
1,00	0,00	7,88	3,03	69,99
0,710	0,49	10,20	3,93	66,06
0,500	1,00	28,54	10,99	55,08
0,355	1,49	59,13	22,77	32,31
0,250	2,00	38,20	14,71	17,60
0,180	2,47	23,81	9,17	8,44
0,125	3,00	11,99	4,62	3,82
0,090	3,47	2,12	0,82	3,00
0,075	3,74	0,40	0,15	2,85
0,063	3,99	0,34	0,13	2,72
< 0,063	> 3,99	7,06	2,72	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,72
Sand, fine (0,063 mm - 0,200 mm):	8,34
Sand, medium (0,2 mm - 0,6 mm):	49,25
Sand, coarse (0,6 mm - 2 mm):	14,58
Gravel (> 2 mm):	25,11
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	7,28	-2,86
25%	75%	2,05	-1,04
40%	60%	0,59	0,75
Median 50%	50%	0,47	1,10
75%	25%	0,30	1,72
84%	16%	0,24	2,07
90%	10%	0,19	2,38
95%	5%	0,14	2,85

### Moments Statistics

Mean	0,10
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,10

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

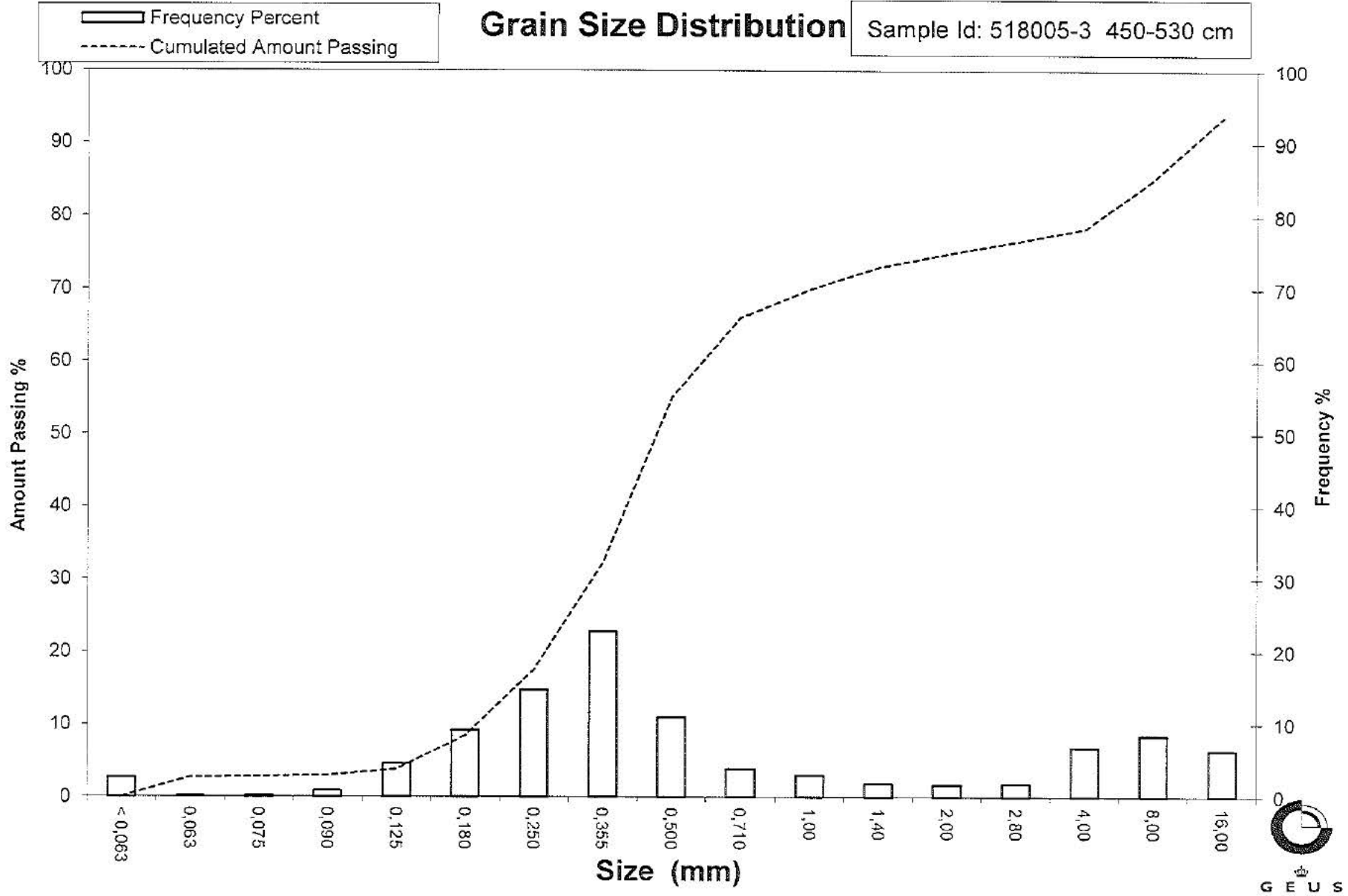
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

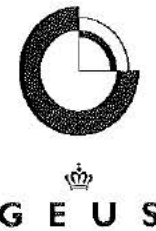
Sample Id: 518005-3 450-530 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 518025-2 0-30 cm  
**Lab. Id:** 170212  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 110 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,23	0,21	99,79
2,80	-1,49	0,23	0,21	99,58
2,00	-1,00	0,13	0,12	99,46
1,40	-0,49	0,24	0,22	99,25
1,00	0,00	0,70	0,64	98,61
0,710	0,49	1,33	1,21	97,40
0,500	1,00	4,37	3,97	93,43
0,355	1,49	14,20	12,91	80,52
0,250	2,00	35,24	32,04	48,48
0,180	2,47	21,70	19,73	28,75
0,125	3,00	8,89	8,08	20,67
0,090	3,47	5,64	5,13	15,55
0,075	3,74	1,71	1,55	13,99
0,063	3,99	1,09	0,99	13,00
< 0,063	> 3,99	14,30	13,00	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	13,00
Sand, fine (0,063 mm - 0,200 mm):	21,39
Sand, medium (0,2 mm - 0,6 mm):	60,93
Sand, coarse (0,6 mm - 2 mm):	4,14
Gravel (> 2 mm):	0,54
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,58	0,78
16%	84%	0,39	1,34
25%	75%	0,34	1,57
40%	60%	0,29	1,80
Median 50%	50%	0,25	1,97
75%	25%	0,15	2,89
84%	16%	0,09	3,43
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,25
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 + (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2\phi_{50\%}) / (2(\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2\phi_{50\%}) / (2(\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

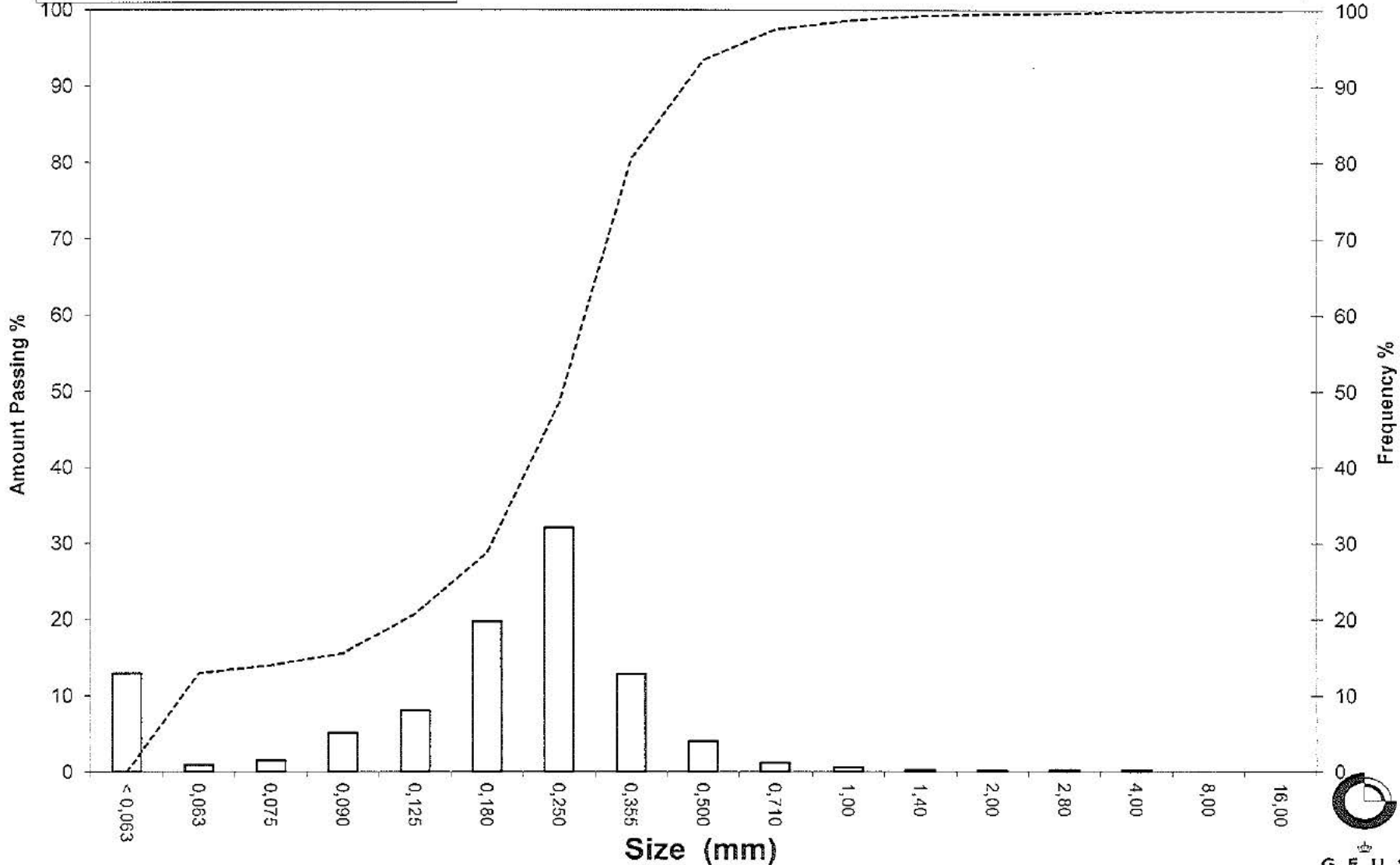
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 518025-2 0-30 cm

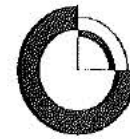
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 518025-3 0-50 cm  
**Lab. Id:** 170240  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >1,0 mm består af skaller



**GEUS**

**Total Weight** 106,31 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,43	0,40	99,60
2,80	-1,49	0,35	0,33	99,27
2,00	-1,00	0,18	0,17	99,10
1,40	-0,49	0,14	0,13	98,97
1,00	0,00	0,32	0,30	98,66
0,710	0,49	0,53	0,50	98,17
0,500	1,00	1,61	1,51	96,65
0,355	1,49	4,16	3,91	92,74
0,250	2,00	7,85	7,38	85,35
0,180	2,47	16,48	15,50	69,85
0,125	3,00	45,87	43,15	26,70
0,090	3,47	13,76	12,94	13,76
0,075	3,74	3,33	3,13	10,63
0,063	3,99	1,99	1,87	8,76
< 0,063	> 3,99	9,31	8,76	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	8,76
Sand, fine (0,063 mm - 0,200 mm)	65,52
Sand, medium (0,2 mm - 0,6 mm)	23,09
Sand, coarse (0,6 mm - 2 mm)	1,72
Gravel (> 2 mm)	0,90
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,44	1,19
16%	84%	0,24	2,04
25%	75%	0,20	2,30
40%	60%	0,17	2,58
Median 50%	50%	0,15	2,69
75%	25%	0,12	3,05
84%	16%	0,10	3,38
90%	10%	0,07	3,82
95%	5%	-----	-----

### Moments Statistics

Mean	2,70
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,36

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

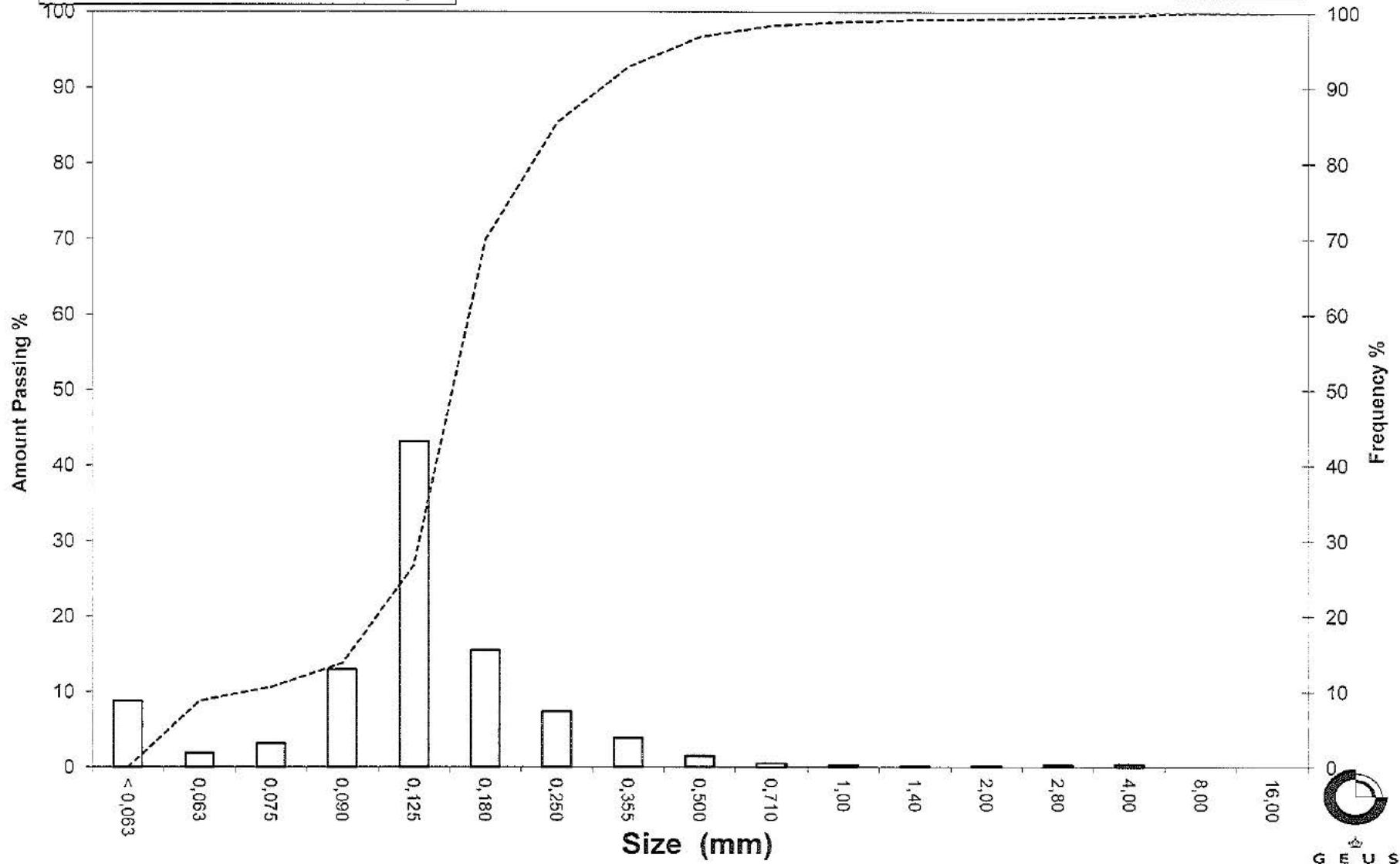
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 518025-3 0-50 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 518025-3 300-380 cm  
**Lab. Id:** 170270  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 105,98 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,07	0,07	99,93
2,00	-1,00	0,02	0,02	99,92
1,40	-0,49	0,01	0,01	99,91
1,00	0,00	0,16	0,15	99,75
0,710	0,49	0,20	0,19	99,57
0,500	1,00	0,81	0,76	98,80
0,355	1,49	3,04	2,87	95,93
0,250	2,00	9,60	9,06	86,87
0,180	2,47	18,08	17,06	69,82
0,125	3,00	22,90	21,61	48,21
0,090	3,47	21,14	19,95	28,26
0,075	3,74	7,75	7,31	20,95
0,063	3,99	7,17	6,77	14,18
< 0,063	> 3,99	15,03	14,18	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	14,18
Sand, fine (0,063 mm - 0,200 mm)	60,51
Sand, medium (0,2 mm - 0,6 mm)	24,48
Sand, coarse (0,6 mm - 2 mm)	0,75
Gravel (> 2 mm)	0,08
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,34	1,54
16%	84%	0,24	2,07
25%	75%	0,20	2,31
40%	60%	0,16	2,69
Median 50%	50%	0,13	2,95
75%	25%	0,08	3,59
84%	16%	0,07	3,92
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,98
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

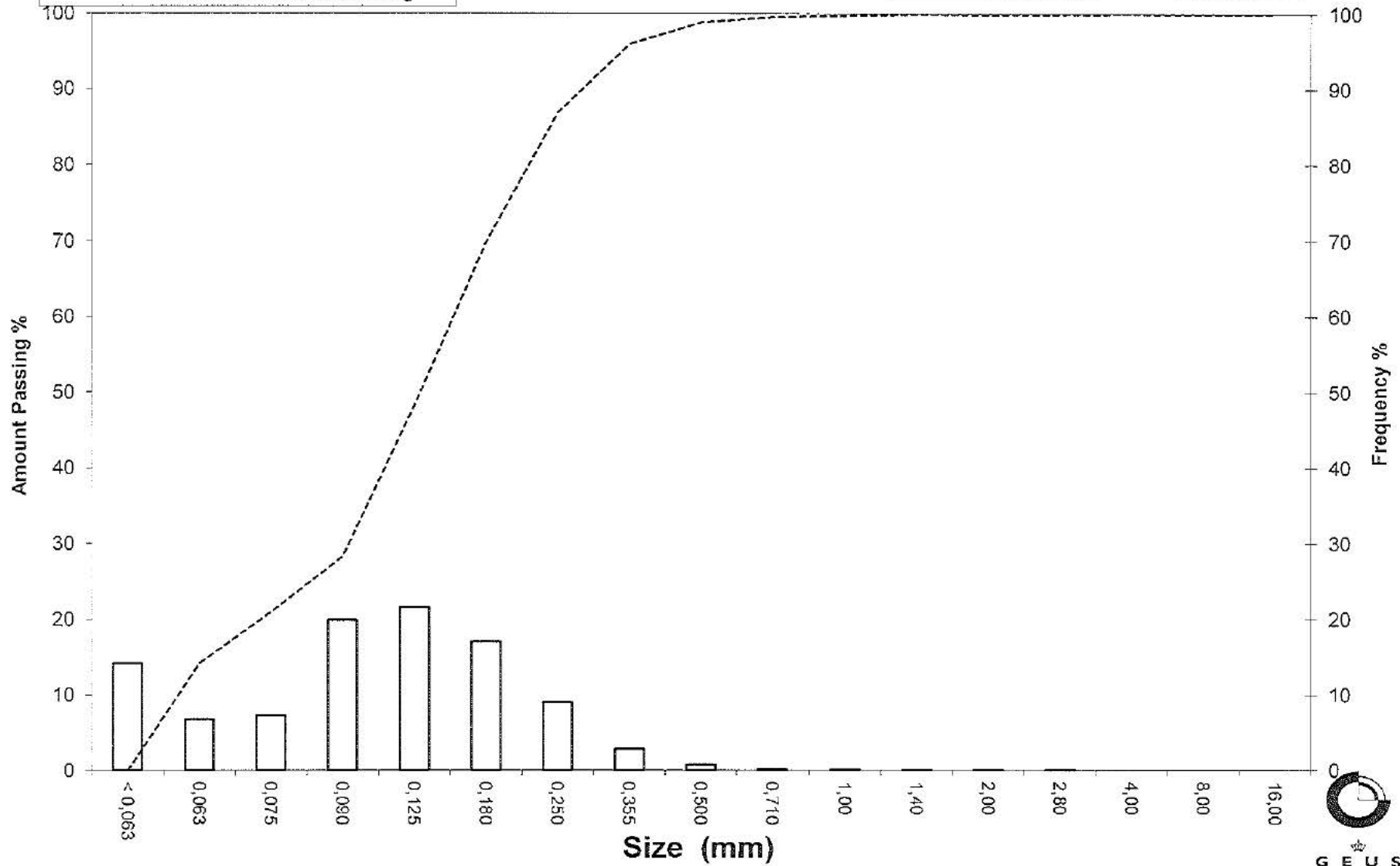
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 518025-3 300-380 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 520001-1 0-100 cm  
**Lab. Id:** 170241  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 111,45 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,05	0,04	99,96
0,710	0,49	0,14	0,13	99,83
0,500	1,00	1,57	1,41	98,42
0,355	1,49	9,13	8,19	90,23
0,250	2,00	26,15	23,46	66,77
0,180	2,47	31,39	28,17	38,60
0,125	3,00	22,91	20,56	18,04
0,090	3,47	9,62	8,63	9,41
0,075	3,74	3,98	3,57	5,84
0,063	3,99	2,35	2,11	3,73
< 0,063	> 3,99	4,16	3,73	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	3,73
Sand, fine (0,063 mm - 0,200 mm):	42,91
Sand, medium (0,2 mm - 0,6 mm):	52,44
Sand, coarse (0,6 mm - 2 mm):	0,91
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,44	1,19
16%	84%	0,33	1,61
25%	75%	0,29	1,80
40%	60%	0,23	2,10
Median 50%	50%	0,21	2,26
75%	25%	0,14	2,80
84%	16%	0,12	3,10
90%	10%	0,09	3,44
95%	5%	0,07	3,83

### Moments Statistics

Mean	2,32
Sorting	0,77
Skewness	0,16
Kurtosis	1,09
Uniformity Coefficient	2,52

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

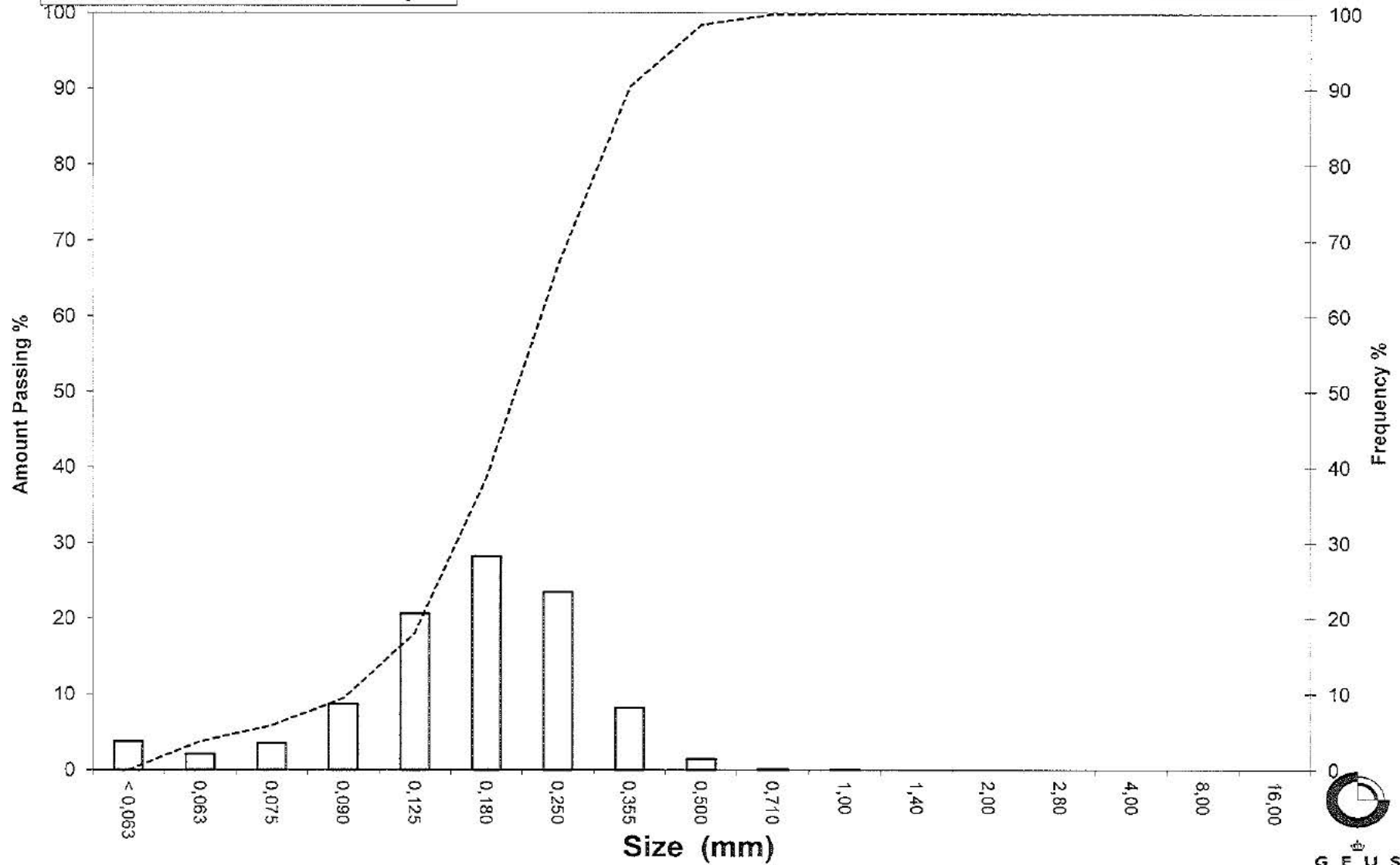
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# Grain Size Distribution

Sample Id: 520001-1 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 520001-1 170-300 cm  
**Lab. Id:** 170271  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 91,63 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,04	0,04	99,96
0,710	0,49	0,00	0,00	99,96
0,500	1,00	0,06	0,07	99,89
0,355	1,49	0,10	0,11	99,78
0,250	2,00	0,12	0,13	99,65
0,180	2,47	0,34	0,37	99,28
0,125	3,00	14,33	15,64	83,64
0,090	3,47	32,59	35,57	48,07
0,075	3,74	11,22	12,24	35,83
0,063	3,99	9,70	10,59	25,24
< 0,063	> 3,99	23,13	25,24	0,00

**Sieve Analysis**  
 Gravel  
 Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	25,24
Sand, fine (0,063 mm - 0,200 mm):	74,14
Sand, medium (0,2 mm - 0,6 mm):	0,54
Sand, coarse (0,6 mm - 2 mm):	0,08
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,16	2,60
16%	84%	0,13	2,99
25%	75%	0,12	3,10
40%	60%	0,10	3,30
Median 50%	50%	0,09	3,44
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,21
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgg-Bulletin 1988)

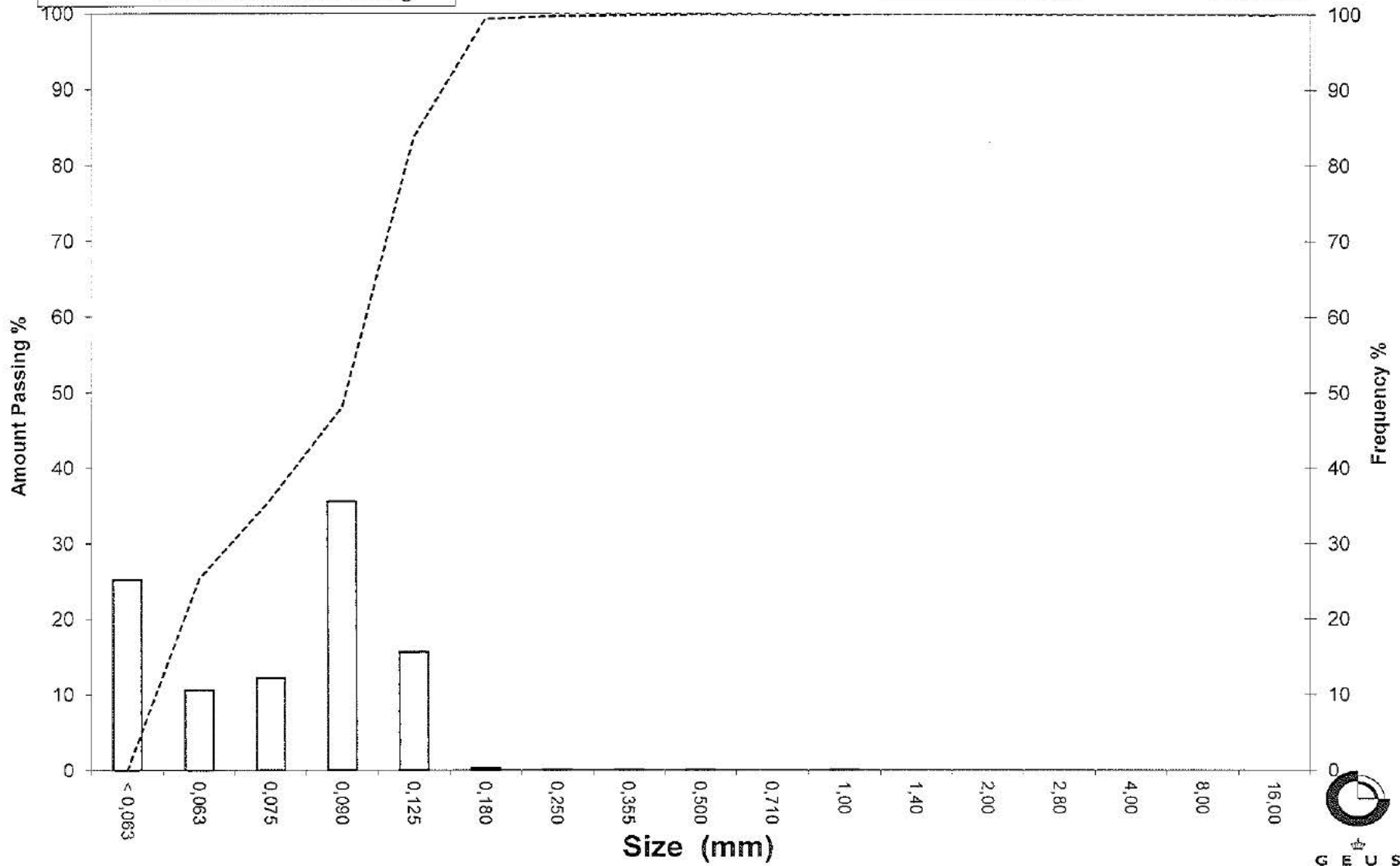
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 520001-1 170-300 cm

— Frequency Percent  
- - - Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 520001-3 0-30 cm  
**Lab. Id:** 170272  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 97,73 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,09	0,09	99,91
0,710	0,49	0,20	0,20	99,70
0,500	1,00	0,56	0,57	99,13
0,355	1,49	3,86	3,95	95,18
0,250	2,00	19,11	19,55	75,63
0,180	2,47	30,91	31,63	44,00
0,125	3,00	27,69	28,33	15,67
0,090	3,47	7,44	7,61	8,05
0,075	3,74	1,91	1,95	6,10
0,063	3,99	1,77	1,81	4,29
< 0,063	> 3,99	4,19	4,29	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	4,29
Sand, fine (0,063 mm - 0,200 mm):	48,75
Sand, medium (0,2 mm - 0,6 mm):	46,37
Sand, coarse (0,6 mm - 2 mm):	0,60
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,35	1,50
16%	84%	0,29	1,76
25%	75%	0,25	2,01
40%	60%	0,22	2,21
Median 50%	50%	0,19	2,37
75%	25%	0,14	2,80
84%	16%	0,13	2,99
90%	10%	0,10	3,34
95%	5%	0,07	3,88

### Moments Statistics

Mean	2,38
Sorting	0,67
Skewness	0,14
Kurtosis	1,23
Uniformity Coefficient	2,18

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

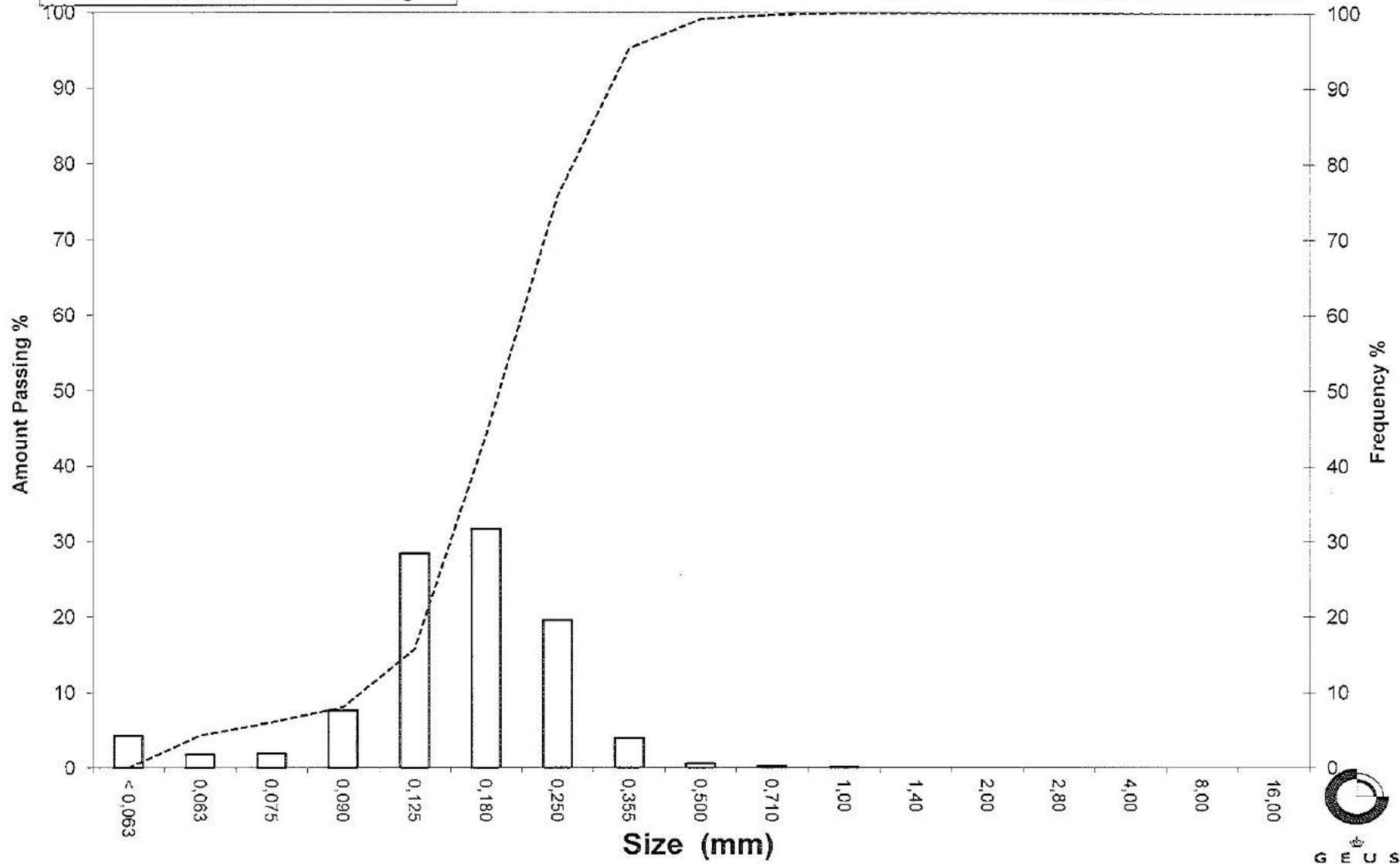
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 520001-3 0-30 cm

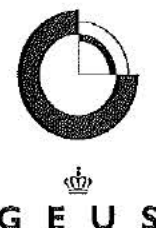
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522014-1 30-80 cm  
**Lab. Id:** 170231  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 205,73 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,92	1,91	98,09
4,00	-2,00	10,80	5,25	92,84
2,80	-1,49	5,16	2,51	90,34
2,00	-1,00	5,16	2,51	87,83
1,40	-0,49	4,17	2,03	85,80
1,00	0,00	7,79	3,79	82,02
0,710	0,49	7,81	3,80	78,22
0,500	1,00	13,99	6,80	71,42
0,355	1,49	14,57	7,08	64,34
0,250	2,00	14,04	6,82	57,51
0,180	2,47	7,25	3,52	53,99
0,125	3,00	7,25	3,52	50,46
0,090	3,47	17,29	8,40	42,06
0,075	3,74	10,93	5,31	36,75
0,063	3,99	13,12	6,38	30,37
< 0,063	> 3,99	62,48	30,37	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm)	30,37
Sand, fine (0,063 mm - 0,200 mm)	24,63
Sand, medium (0,2 mm - 0,6 mm)	19,66
Sand, coarse (0,6 mm - 2 mm)	13,17
Gravel (> 2 mm)	12,17
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	5,64	-2,50
16%	84%	1,21	-0,27
25%	75%	0,61	0,71
40%	60%	0,29	1,79
Median 50%	50%	0,12	3,02
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,37
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

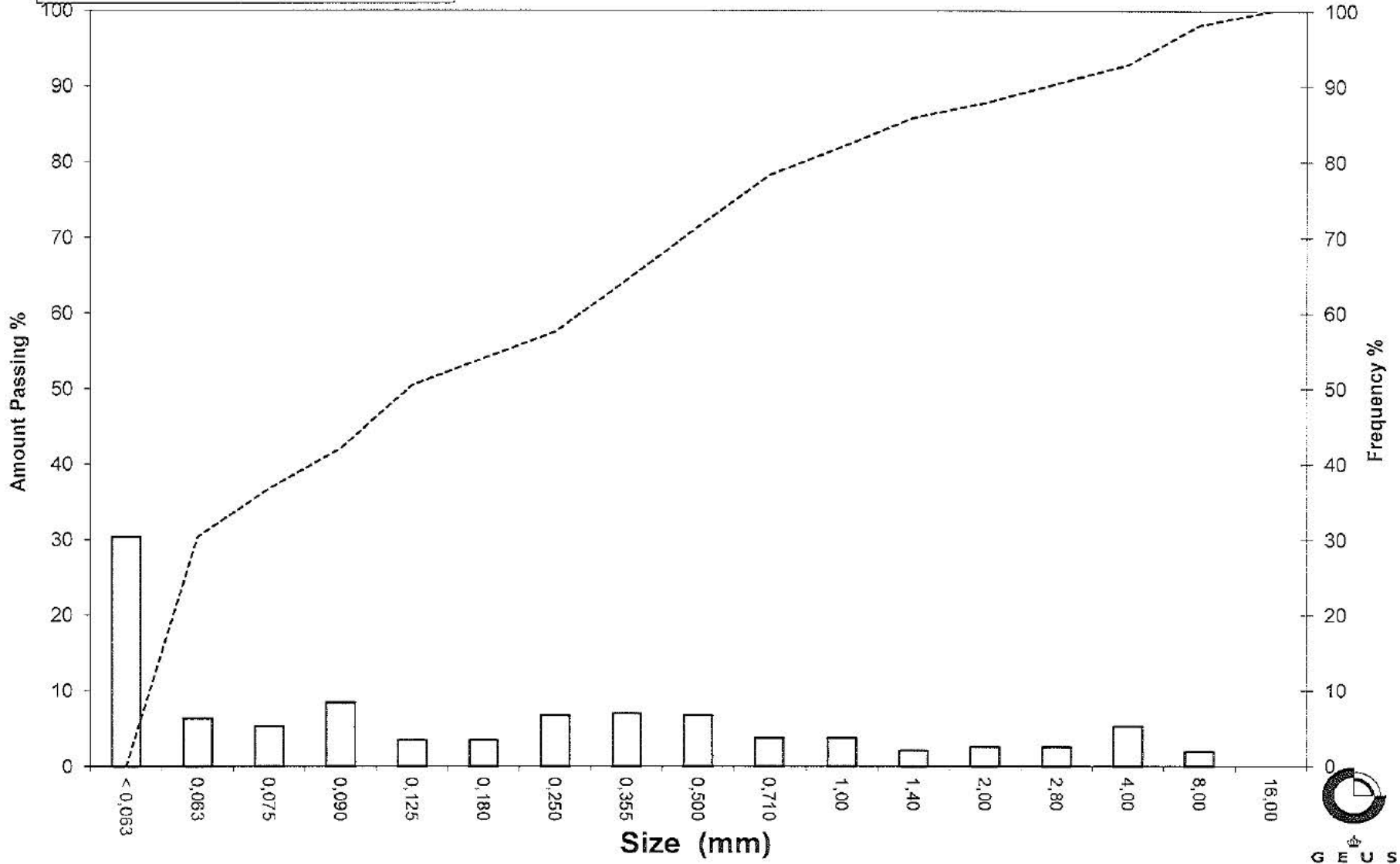
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 522014-1 30-80 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522019-1 160-240 cm  
**Lab. Id:** 170167  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 117,45 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	2,31	1,97	98,03
4,00	-2,00	2,73	2,32	95,71
2,80	-1,49	1,68	1,43	94,28
2,00	-1,00	1,98	1,69	92,59
1,40	-0,49	2,25	1,92	90,68
1,00	0,00	4,79	4,08	86,60
0,710	0,49	6,98	5,94	80,66
0,500	1,00	18,24	15,53	65,13
0,355	1,49	27,56	23,47	41,66
0,250	2,00	14,20	12,09	29,57
0,180	2,47	4,71	4,01	25,56
0,125	3,00	2,54	2,16	23,40
0,090	3,47	3,24	2,76	20,64
0,075	3,74	2,41	2,05	18,59
0,063	3,99	2,98	2,54	16,05
< 0,063	> 3,99	18,85	16,05	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	16,05
Sand, fine (0,063 mm - 0,200 mm):	10,66
Sand, medium (0,2 mm - 0,6 mm):	45,82
Sand, coarse (0,6 mm - 2 mm):	20,07
Gravel (> 2 mm):	7,41
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,41	-1,77
16%	84%	0,87	0,20
25%	75%	0,63	0,66
40%	60%	0,47	1,09
Median 50%	50%	0,41	1,30
75%	25%	0,17	2,59
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	0,75
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

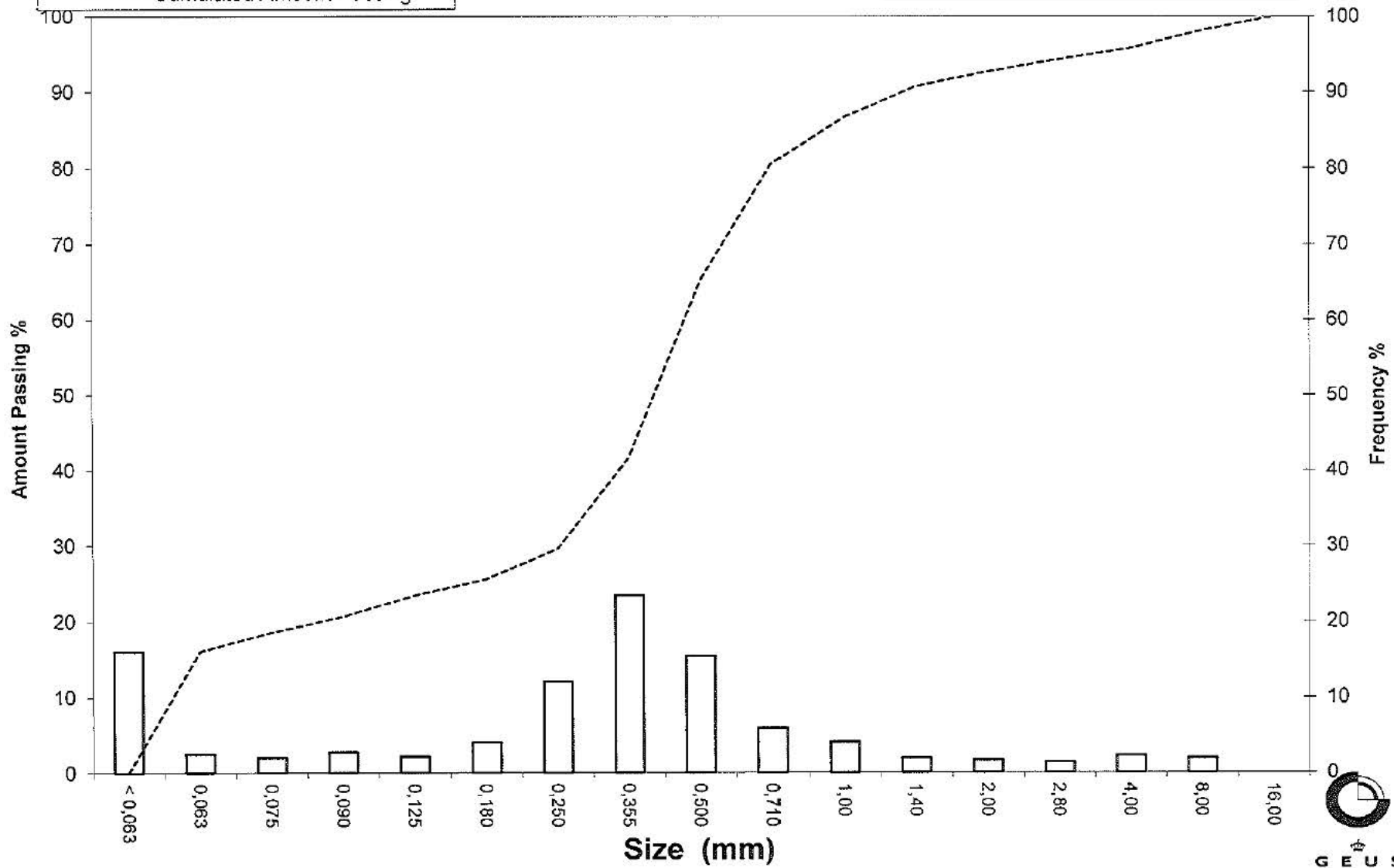
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# Grain Size Distribution

Sample Id: 522019-1 160-240 cm

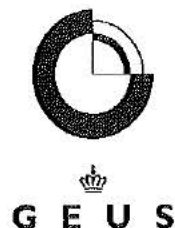
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522019-1 360-440 cm  
**Lab. Id:** 170168  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 142,41 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	4,26	2,99	97,01
4,00	-2,00	1,64	1,15	95,86
2,80	-1,49	1,15	0,81	95,05
2,00	-1,00	2,02	1,42	93,63
1,40	-0,49	1,96	1,38	92,25
1,00	0,00	6,12	4,30	87,96
0,710	0,49	13,59	9,54	78,41
0,500	1,00	38,43	26,99	51,43
0,355	1,49	50,24	35,28	16,15
0,250	2,00	18,09	12,70	3,45
0,180	2,47	2,23	1,57	1,88
0,125	3,00	0,66	0,46	1,42
0,090	3,47	0,22	0,15	1,26
0,075	3,74	0,07	0,05	1,21
0,063	3,99	0,07	0,05	1,17
< 0,063	> 3,99	1,66	1,17	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,17
Sand, fine (0,063 mm - 0,200 mm):	1,16
Sand, medium (0,2 mm - 0,6 mm):	61,95
Sand, coarse (0,6 mm - 2 mm):	29,35
Gravel (> 2 mm):	6,37
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	2,77	-1,47
16%	84%	0,88	0,18
25%	75%	0,68	0,55
40%	60%	0,57	0,82
Median 50%	50%	0,49	1,02
75%	25%	0,39	1,35
84%	16%	0,35	1,50
90%	10%	0,30	1,72
95%	5%	0,26	1,93

### Moments Statistics

Mean	0,90
Sorting	0,84
Skewness	-0,37
Kurtosis	1,73
Uniformity Coefficient	1,86

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

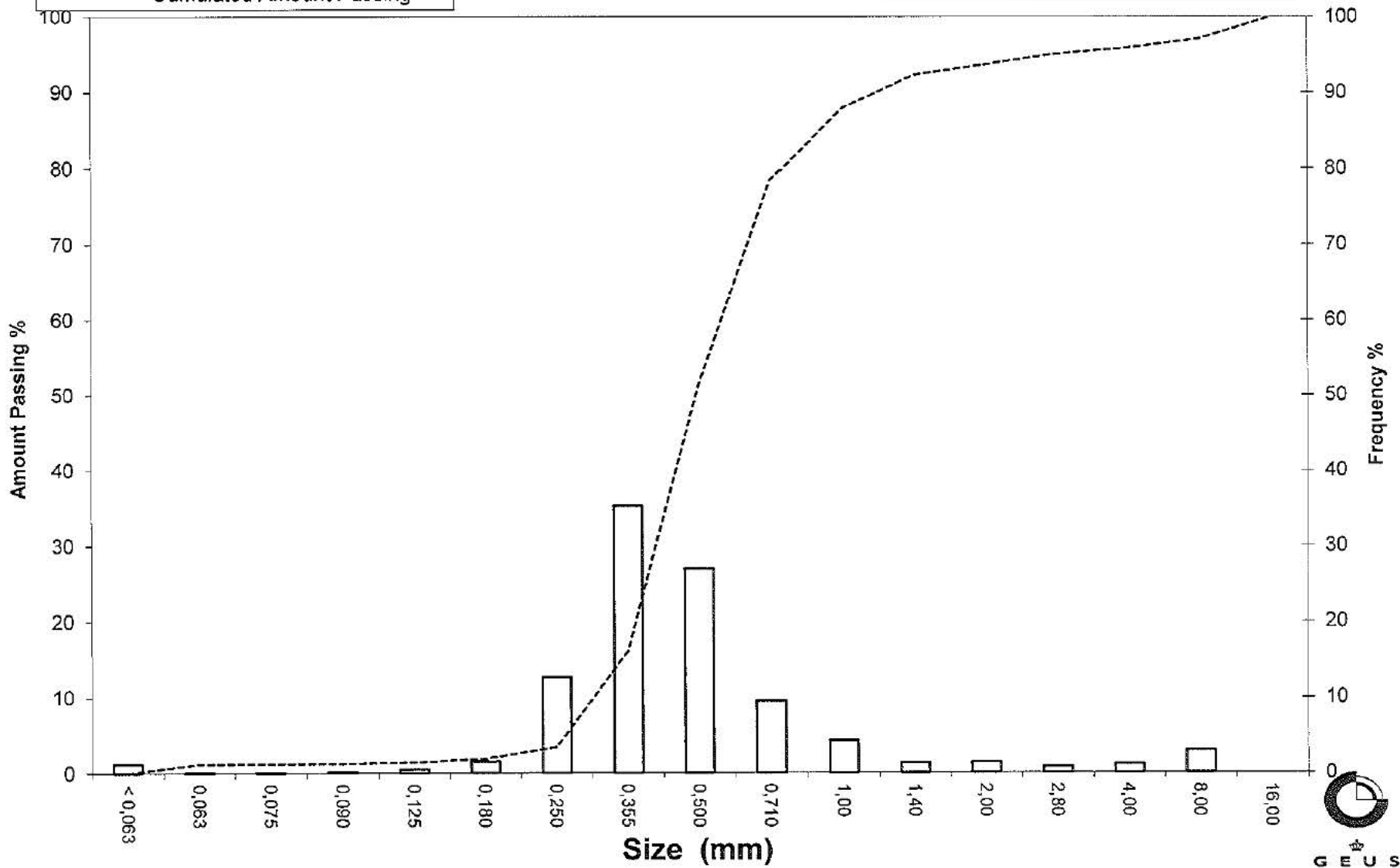
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 522019-1 360-440 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522020-1 20-60 cm  
**Lab. Id:** 170169  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 104,11 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	2,76	2,65	97,35
2,80	-1,49	1,52	1,46	95,89
2,00	-1,00	1,38	1,33	94,56
1,40	-0,49	1,21	1,16	93,40
1,00	0,00	1,92	1,84	91,56
0,710	0,49	2,16	2,07	89,48
0,500	1,00	4,35	4,18	85,30
0,355	1,49	5,26	5,05	80,25
0,250	2,00	4,79	4,60	75,65
0,180	2,47	8,55	8,21	67,44
0,125	3,00	23,70	22,76	44,67
0,090	3,47	19,66	18,88	25,79
0,075	3,74	5,03	4,83	20,96
0,063	3,99	3,63	3,49	17,47
< 0,063	> 3,99	18,19	17,47	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	17,47
Sand, fine (0,063 mm - 0,200 mm)	52,31
Sand, medium (0,2 mm - 0,6 mm)	17,51
Sand, coarse (0,6 mm - 2 mm)	7,27
Gravel (> 2 mm)	5,44
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	2,26	-1,18
16%	84%	0,46	1,11
25%	75%	0,24	2,03
40%	60%	0,16	2,63
Median 50%	50%	0,14	2,86
75%	25%	0,09	3,51
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	1,99
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

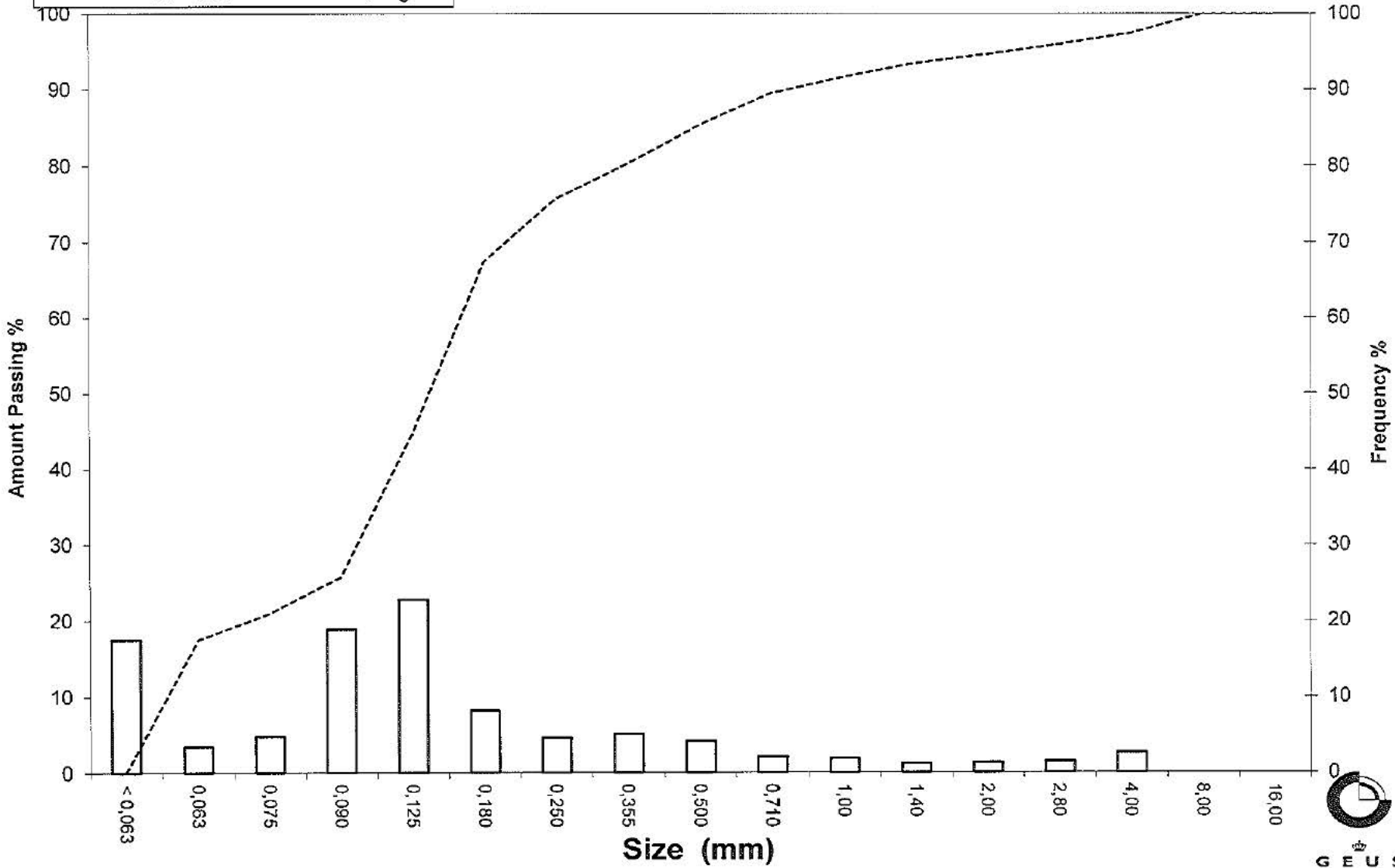
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 522020-1 20-60 cm

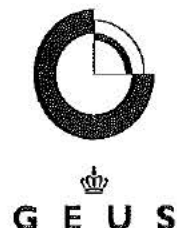
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522020-1 350-415 cm  
**Lab. Id:** 170170  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 107,6 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,29	0,27	99,73
2,00	-1,00	0,09	0,08	99,65
1,40	-0,49	0,09	0,08	99,56
1,00	0,00	0,25	0,23	99,33
0,710	0,49	0,51	0,47	98,86
0,500	1,00	2,57	2,39	96,47
0,355	1,49	13,14	12,21	84,26
0,250	2,00	49,41	45,92	38,34
0,180	2,47	29,54	27,45	10,88
0,125	3,00	7,11	6,61	4,28
0,090	3,47	1,18	1,10	3,18
0,075	3,74	0,23	0,21	2,96
0,063	3,99	0,16	0,15	2,82
< 0,063	> 3,99	3,03	2,82	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,82
Sand, fine (0,063 mm - 0,200 mm):	15,91
Sand, medium (0,2 mm - 0,6 mm):	78,88
Sand, coarse (0,6 mm - 2 mm):	2,04
<b>Gravel (&gt; 2 mm):</b>	<b>0,35</b>
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,48	1,05
16%	84%	0,35	1,50
25%	75%	0,33	1,58
40%	60%	0,30	1,74
Median 50%	50%	0,28	1,85
75%	25%	0,22	2,21
84%	16%	0,19	2,37
90%	10%	0,17	2,53
95%	5%	0,13	2,93

### Moments Statistics

Mean	1,91
Sorting	0,50
Skewness	0,17
Kurtosis	1,23
Uniformity Coefficient	1,73

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

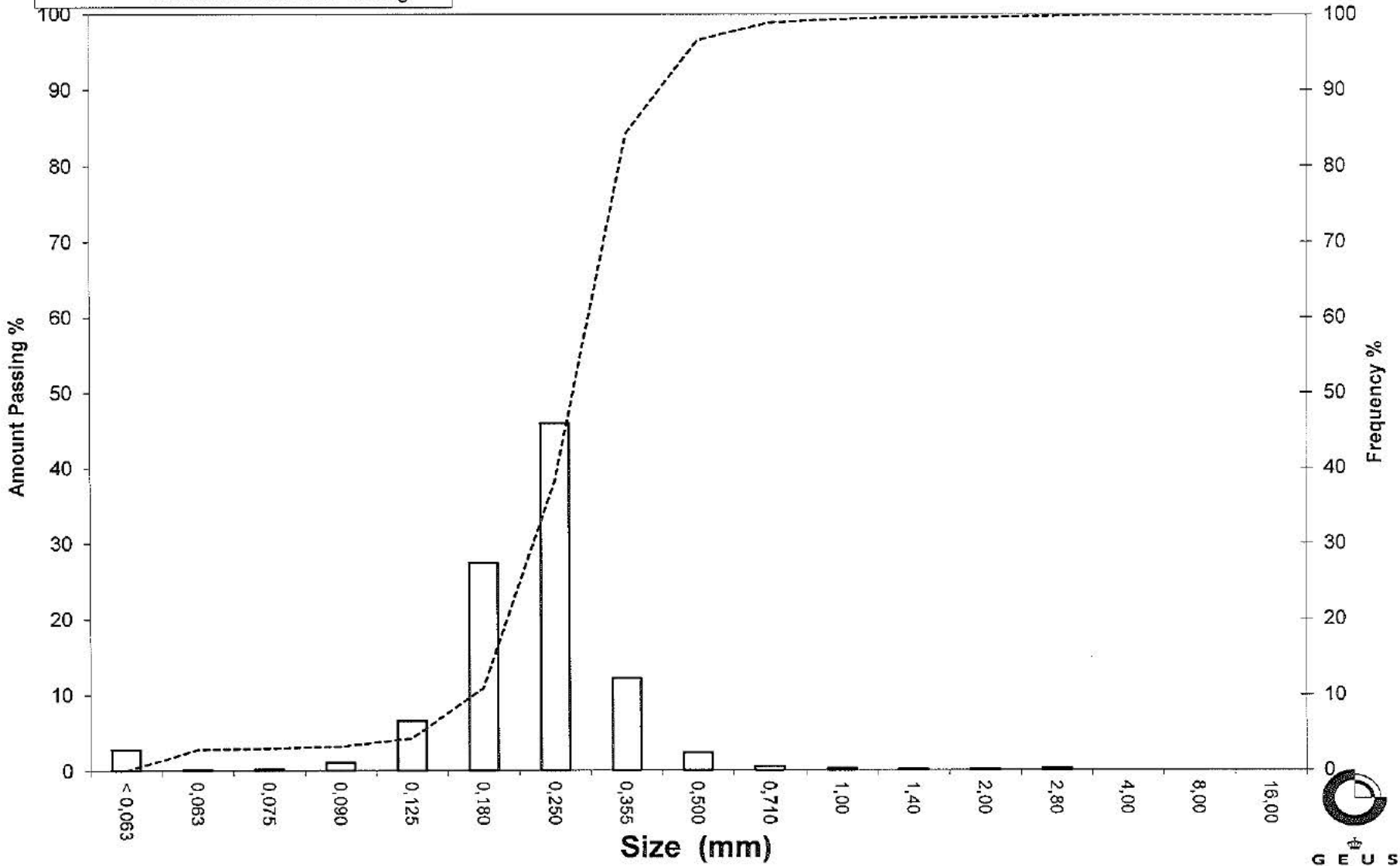
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 522020-1 350-415 cm

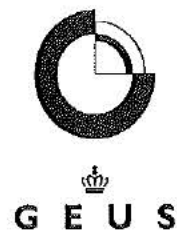
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522021-1 240-260 cm  
**Lab. Id:** 170171  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 102,23 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,04	0,04	99,96
0,710	0,49	0,07	0,07	99,89
0,500	1,00	0,11	0,11	99,78
0,355	1,49	0,16	0,16	99,63
0,250	2,00	0,33	0,32	99,31
0,180	2,47	4,32	4,23	95,08
0,125	3,00	34,74	33,98	61,10
0,090	3,47	23,87	23,35	37,75
0,075	3,74	9,02	8,82	28,92
0,063	3,99	8,48	8,30	20,63
< 0,063	> 3,99	21,09	20,63	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	20,63
Sand, fine (0,063 mm - 0,200 mm):	75,66
Sand, medium (0,2 mm - 0,6 mm):	3,55
Sand, coarse (0,6 mm - 2 mm):	0,16
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,18	2,47
16%	84%	0,16	2,63
25%	75%	0,15	2,76
40%	60%	0,12	3,02
Median 50%	50%	0,11	3,21
75%	25%	0,07	3,85
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,92
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

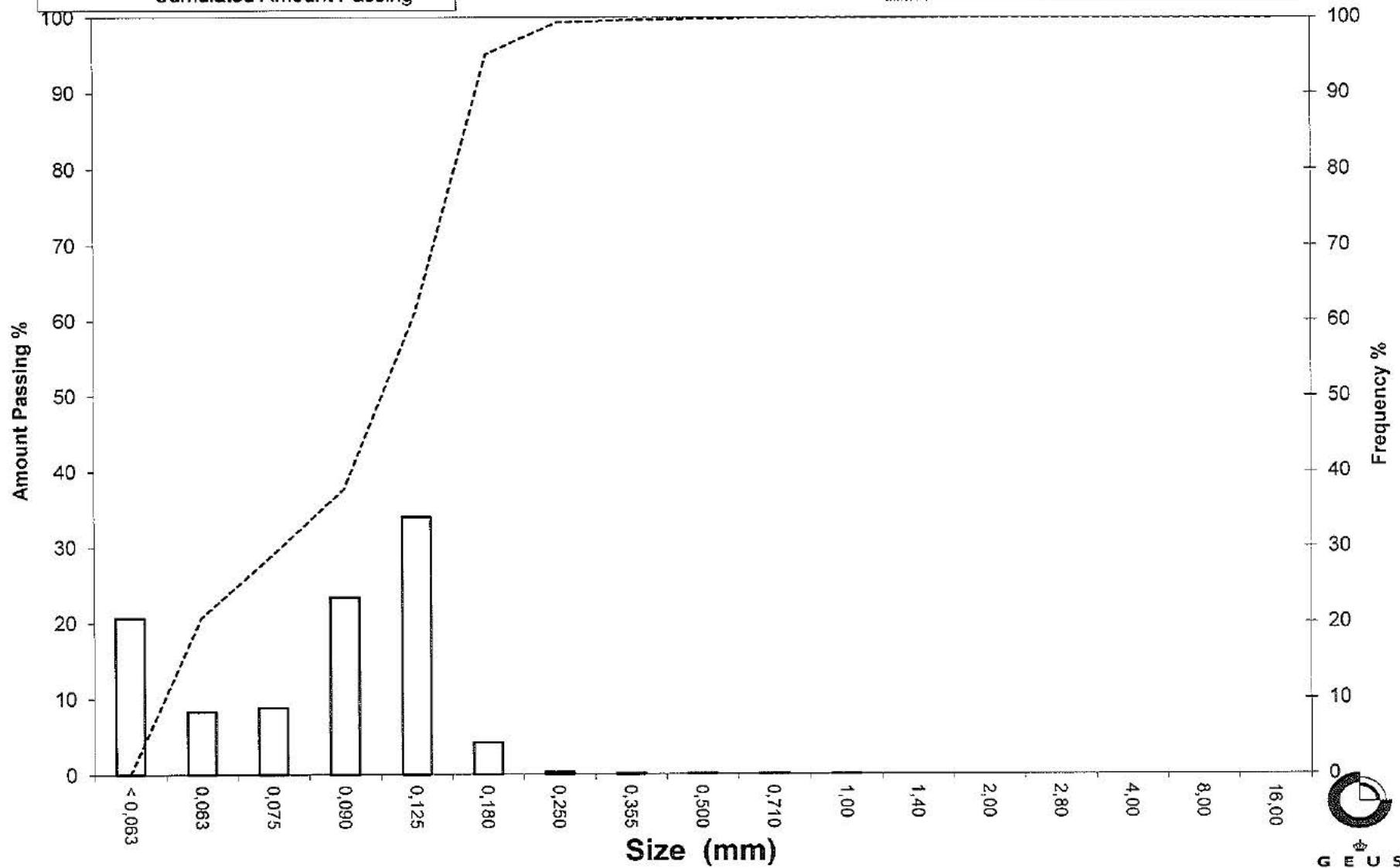
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# Grain Size Distribution

Sample Id: 522021-1 240-260 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 522021-1 410-455 cm  
**Lab. Id:** 170172  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 655,05 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	80,68	12,32	87,68
8,00	-3,00	47,16	7,20	80,48
4,00	-2,00	24,33	3,71	76,77
2,80	-1,49	11,27	1,72	75,05
2,00	-1,00	9,92	1,51	73,53
1,40	-0,49	9,09	1,39	72,15
1,00	0,00	13,89	2,12	70,03
0,710	0,49	14,30	2,18	67,84
0,500	1,00	23,02	3,51	64,33
0,355	1,49	33,99	5,19	59,14
0,250	2,00	57,11	8,72	50,42
0,180	2,47	78,95	12,05	38,37
0,125	3,00	96,46	14,73	23,64
0,090	3,47	59,71	9,12	14,53
0,075	3,74	19,09	2,91	11,61
0,063	3,99	16,42	2,51	9,11
< 0,063	> 3,99	59,66	9,11	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	9,11
Sand, fine (0,063 mm - 0,200 mm):	32,71
Sand, medium (0,2 mm - 0,6 mm):	24,19
Sand, coarse (0,6 mm - 2 mm):	7,53
Gravel (> 2 mm):	26,47
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	11,91	-3,57
25%	75%	2,77	-1,47
40%	60%	0,38	1,40
Median 50%	50%	0,25	2,01
75%	25%	0,13	2,94
84%	16%	0,10	3,39
90%	10%	0,07	3,89
95%	5%	-----	-----

### Moments Statistics

Mean	0,61
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	5,63

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

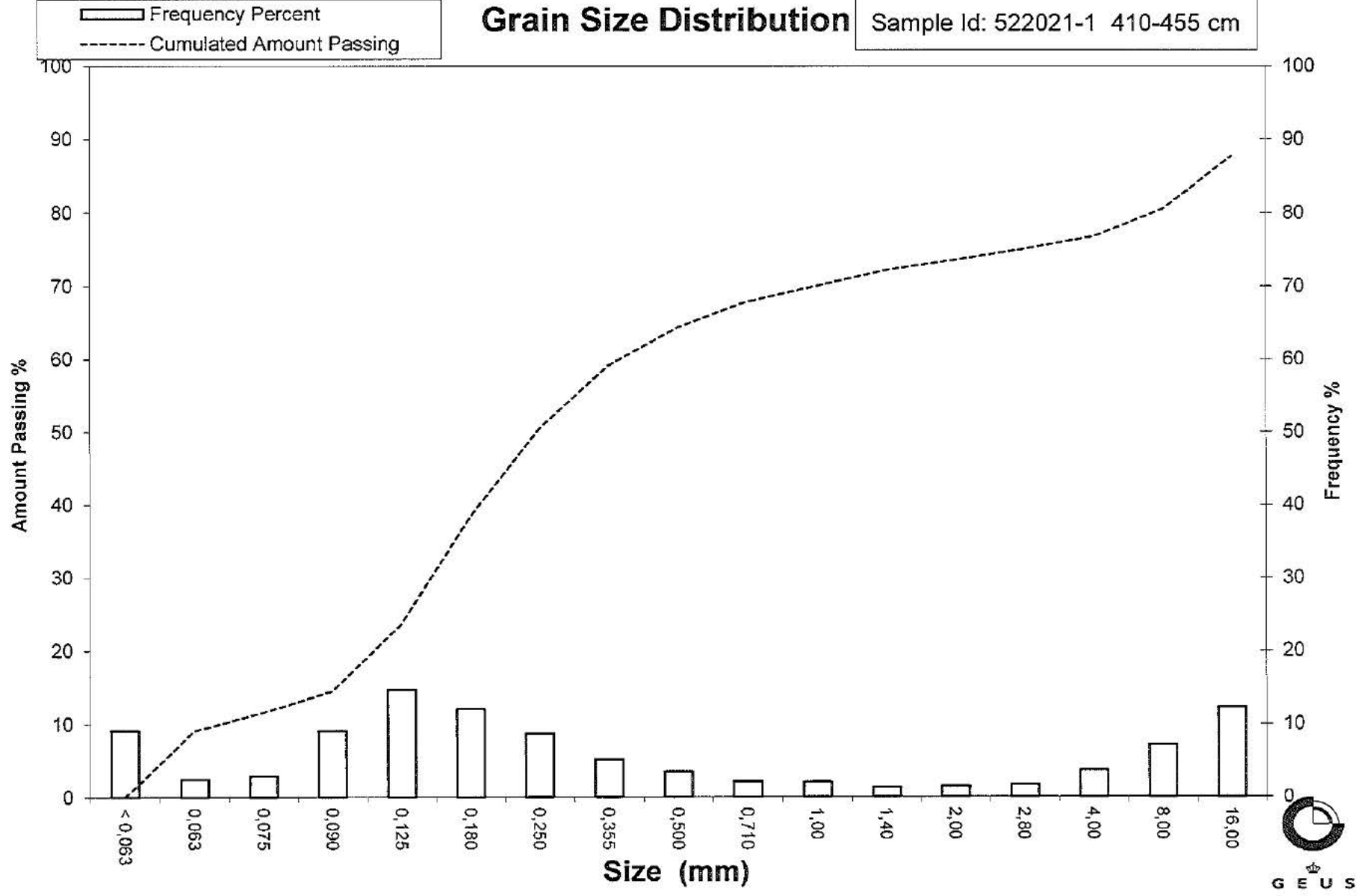
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 522021-1 410-455 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526009-1 0-230 cm  
**Lab. Id:** 170242  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 104,42 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,12	0,11	99,89
2,00	-1,00	0,00	0,00	99,89
1,40	-0,49	0,11	0,11	99,78
1,00	0,00	0,21	0,20	99,58
0,710	0,49	0,22	0,21	99,37
0,500	1,00	0,30	0,29	99,08
0,355	1,49	0,35	0,34	98,75
0,250	2,00	0,59	0,57	98,18
0,180	2,47	2,72	2,60	95,58
0,125	3,00	51,46	49,28	46,29
0,090	3,47	42,99	41,17	5,12
0,075	3,74	3,08	2,95	2,17
0,063	3,99	1,25	1,20	0,98
< 0,063	> 3,99	1,02	0,98	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,98
Sand, fine (0,063 mm - 0,200 mm):	95,34
Sand, medium (0,2 mm - 0,6 mm):	2,90
Sand, coarse (0,6 mm - 2 mm):	0,67
Gravel (> 2 mm):	0,11
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,18	2,48
16%	84%	0,17	2,58
25%	75%	0,16	2,67
40%	60%	0,14	2,83
Median 50%	50%	0,13	2,95
75%	25%	0,11	3,23
84%	16%	0,10	3,33
90%	10%	0,09	3,41
95%	5%	0,09	3,48

### Moments Statistics

Mean	2,96
Sorting	0,34
Skewness	0,03
Kurtosis	0,74
Uniformity Coefficient	1,49

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

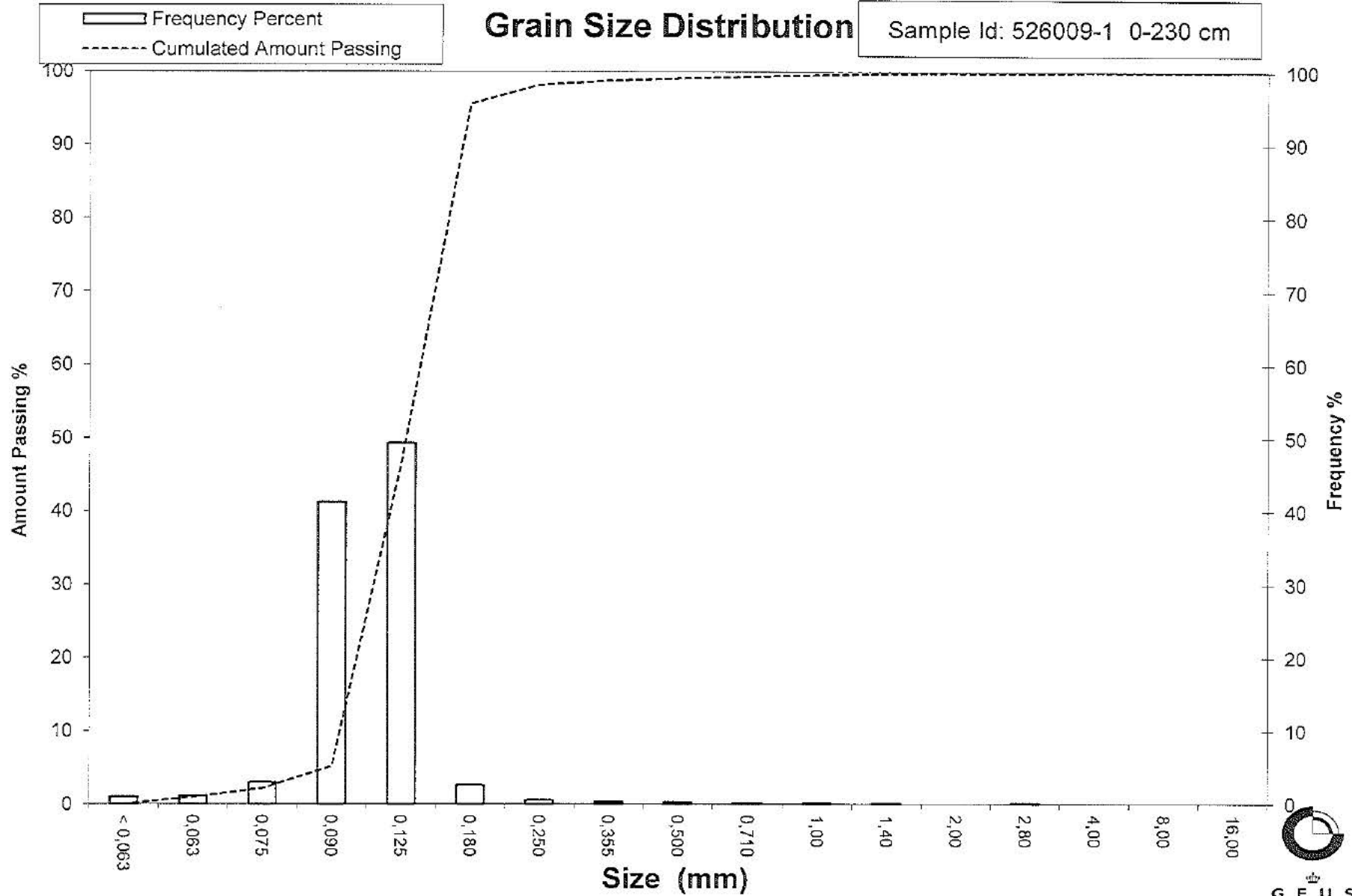
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

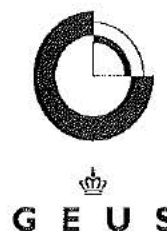
Sample Id: 526009-1 0-230 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526011-1 250-315 cm  
**Lab. Id:** 170273  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 95,26 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,03	0,03	99,97
0,710	0,49	0,05	0,05	99,92
0,500	1,00	0,08	0,08	99,83
0,355	1,49	0,14	0,15	99,69
0,250	2,00	0,24	0,25	99,43
0,180	2,47	0,70	0,73	98,70
0,125	3,00	11,36	11,93	86,77
0,090	3,47	49,90	52,38	34,39
0,075	3,74	15,09	15,84	18,55
0,063	3,99	7,18	7,54	11,01
< 0,063	> 3,99	10,49	11,01	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	11,01
Sand, fine (0,063 mm - 0,200 mm):	87,90
Sand, medium (0,2 mm - 0,6 mm):	0,96
Sand, coarse (0,6 mm - 2 mm):	0,13
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,16	2,62
16%	84%	0,12	3,02
25%	75%	0,12	3,09
40%	60%	0,11	3,22
Median 50%	50%	0,10	3,32
75%	25%	0,08	3,62
84%	16%	0,07	3,82
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,38
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)  
 Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)  
 Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)  
 Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)  
 Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

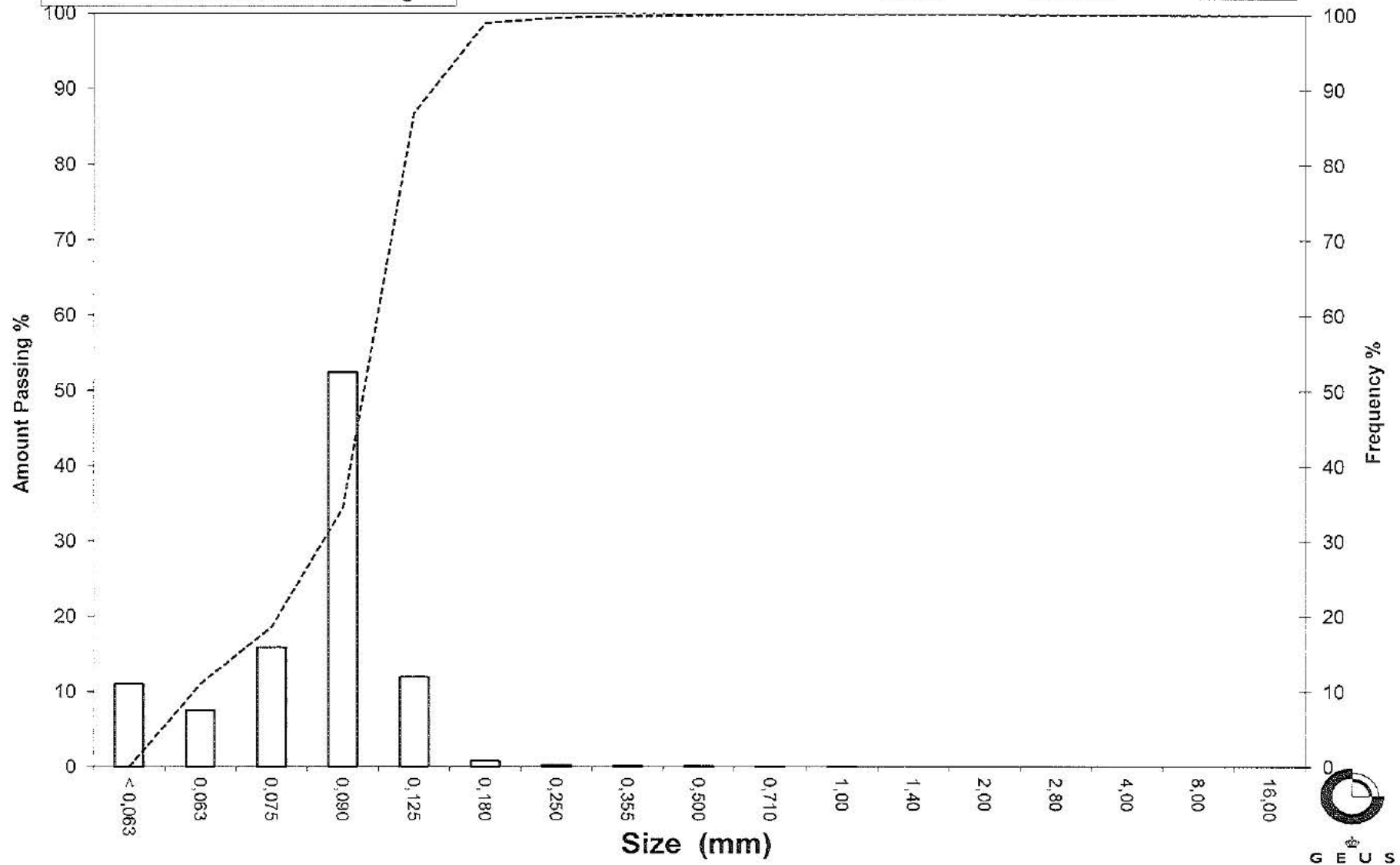
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526011-1 250-315 cm

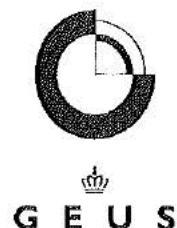
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 526011-2 0-100 cm  
 Lab. Id: 170243  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



Total Weight 106,69 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,04	0,04	99,96
1,40	-0,49	0,03	0,03	99,93
1,00	0,00	0,21	0,20	99,74
0,710	0,49	1,08	1,01	98,73
0,500	1,00	6,98	6,54	92,18
0,355	1,49	12,46	11,68	80,50
0,250	2,00	6,80	6,37	74,13
0,180	2,47	11,84	11,10	63,03
0,125	3,00	27,26	25,55	37,48
0,090	3,47	28,37	26,59	10,89
0,075	3,74	6,47	6,06	4,83
0,063	3,99	2,65	2,48	2,34
< 0,063	> 3,99	2,50	2,34	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	2,34
Sand, fine (0,063 mm - 0,200 mm)	63,86
Sand, medium (0,2 mm - 0,6 mm)	29,09
Sand, coarse (0,6 mm - 2 mm)	4,68
Gravel (> 2 mm)	0,04
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,59	0,76
16%	84%	0,40	1,33
25%	75%	0,26	1,92
40%	60%	0,17	2,53
Median 50%	50%	0,15	2,72
75%	25%	0,11	3,20
84%	16%	0,10	3,37
90%	10%	0,09	3,51
95%	5%	0,08	3,73

## Moments Statistics

Mean	2,47
Sorting	0,96
Skewness	-0,34
Kurtosis	0,95
Uniformity Coefficient	1,98

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

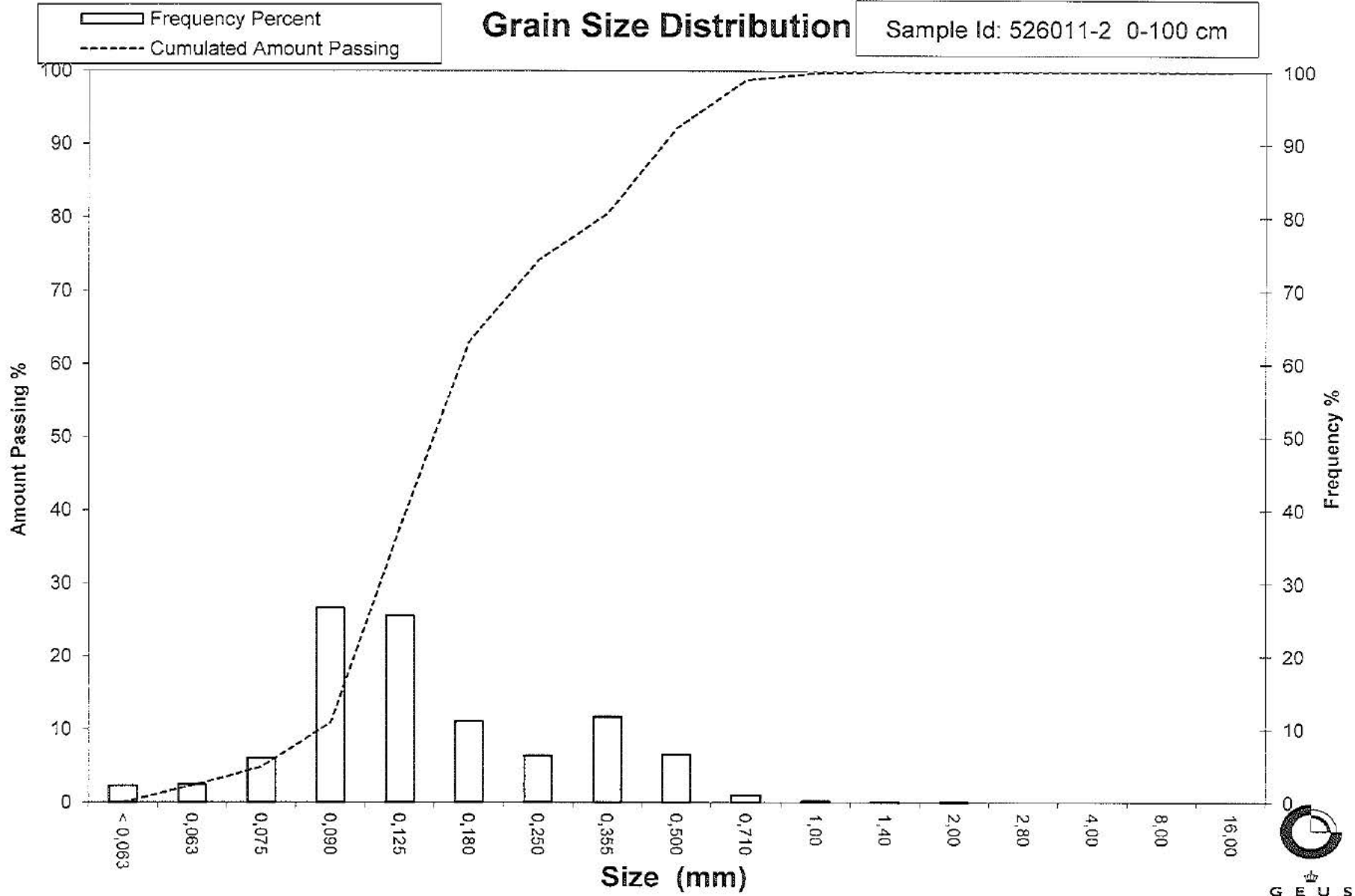
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526011-2 0-100 cm

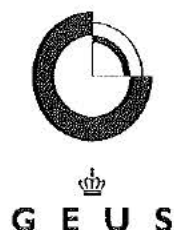


G E U S

# Grain Size Distribution

## Geotechnical

**Sample Id:** 526011-2 130-200 cm  
**Lab. Id:** 170274  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 95,86 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,35	0,37	99,63
2,00	-1,00	0,26	0,27	99,36
1,40	-0,49	0,22	0,23	99,13
1,00	0,00	0,23	0,24	98,89
0,710	0,49	0,17	0,18	98,72
0,500	1,00	0,23	0,24	98,48
0,355	1,49	0,40	0,42	98,06
0,250	2,00	1,68	1,75	96,31
0,180	2,47	8,38	8,74	87,57
0,125	3,00	28,39	29,62	57,95
0,090	3,47	35,78	37,33	20,62
0,075	3,74	10,42	10,87	9,75
0,063	3,99	4,77	4,98	4,78
< 0,063	> 3,99	4,58	4,78	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	4,78
Sand, fine (0,063 mm - 0,200 mm)	85,29
Sand, medium (0,2 mm - 0,6 mm)	8,53
Sand, coarse (0,6 mm - 2 mm)	0,77
Gravel (> 2 mm)	0,64
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,24	2,06
16%	84%	0,17	2,53
25%	75%	0,16	2,67
40%	60%	0,13	2,96
Median 50%	50%	0,12	3,09
75%	25%	0,09	3,41
84%	16%	0,08	3,58
90%	10%	0,08	3,73
95%	5%	0,06	3,98

### Moments Statistics

Mean	3,07
Sorting	0,55
Skewness	-0,07
Kurtosis	1,07
Uniformity Coefficient	1,71

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

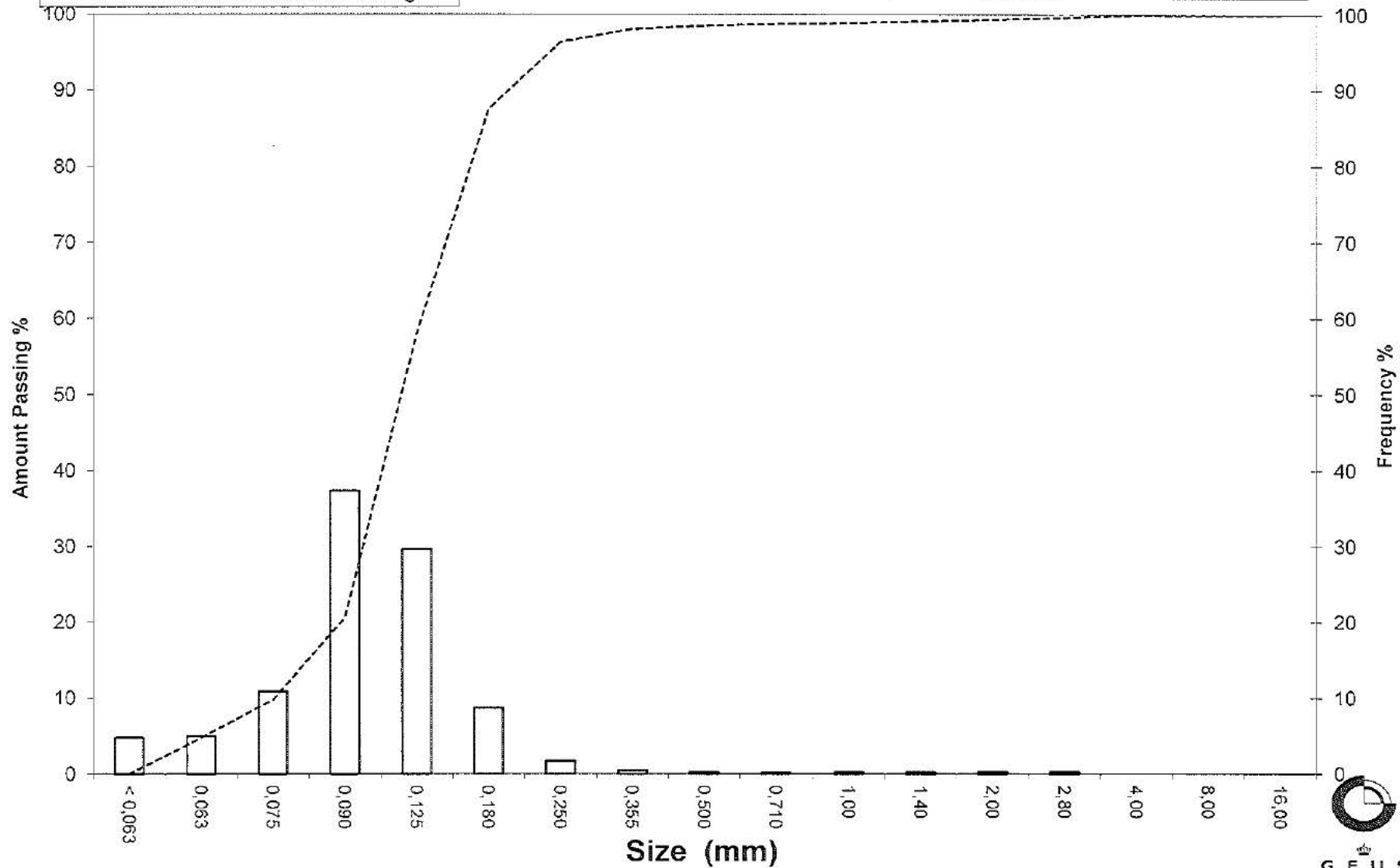
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526011-2 130-200 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526012-1 0-30 cm  
**Lab. Id:** 170275  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 91,68 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,07	0,08	99,92
1,40	-0,49	0,07	0,08	99,85
1,00	0,00	0,25	0,27	99,57
0,710	0,49	0,30	0,33	99,25
0,500	1,00	0,66	0,72	98,53
0,355	1,49	1,12	1,22	97,31
0,250	2,00	1,59	1,73	95,57
0,180	2,47	1,36	1,48	94,09
0,125	3,00	6,36	6,94	87,15
0,090	3,47	33,85	36,92	50,23
0,075	3,74	18,69	20,39	29,84
0,063	3,99	12,37	13,49	16,35
< 0,063	> 3,99	14,99	16,35	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	16,35
Sand, fine (0,063 mm - 0,200 mm)	78,16
Sand, medium (0,2 mm - 0,6 mm)	4,36
Sand, coarse (0,6 mm - 2 mm)	1,05
Gravel (> 2 mm)	0,08
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,22	2,16
16%	84%	0,12	3,03
25%	75%	0,11	3,14
40%	60%	0,10	3,33
Median 50%	50%	0,09	3,48
75%	25%	0,07	3,82
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,26
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

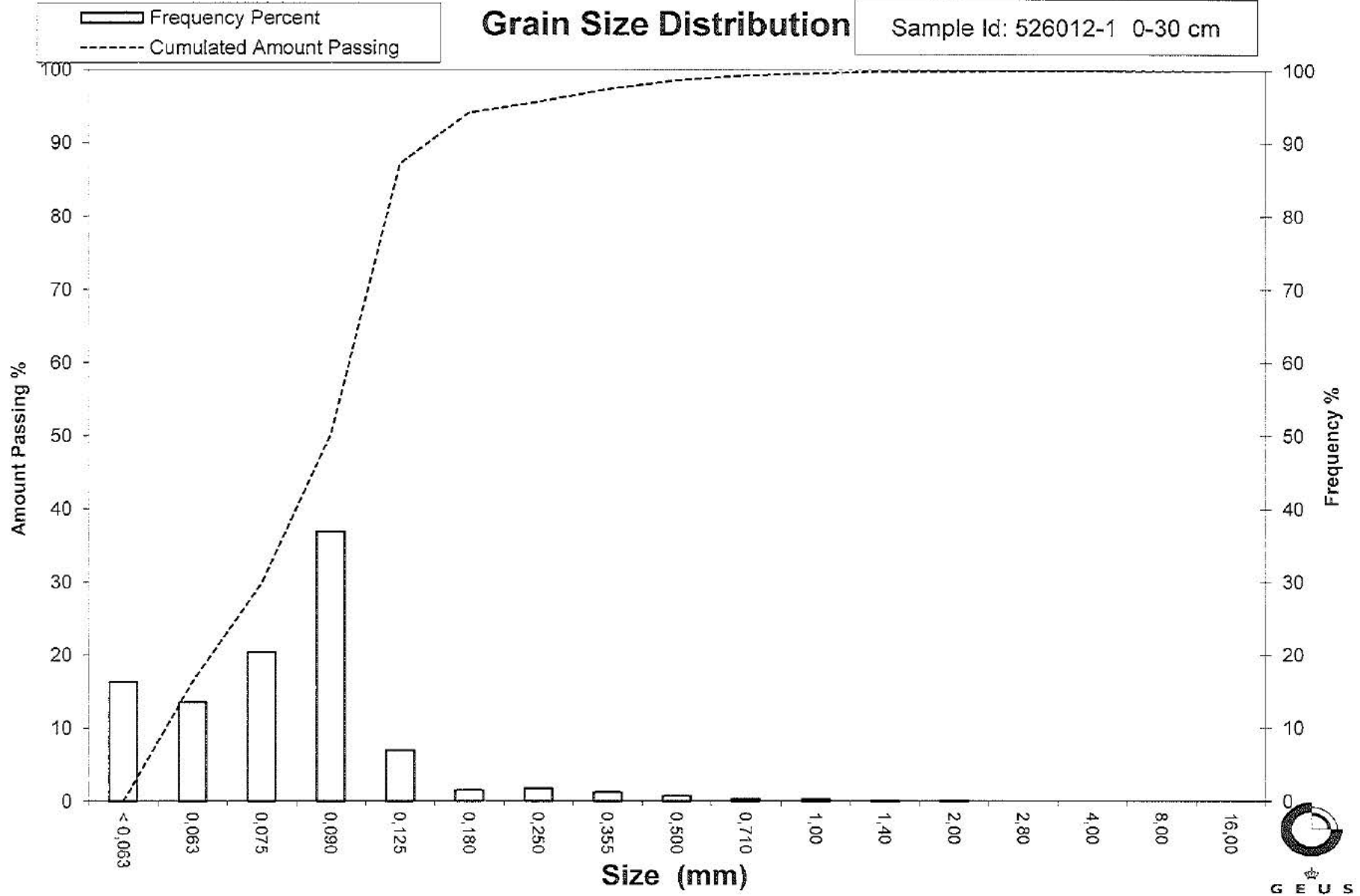
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

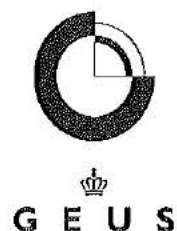
Sample Id: 526012-1 0-30 cm



# Grain Size Distribution

Geotechnical

Sample Id: 526018-1 0-100 cm  
 Lab. Id: 170244  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



Total Weight 121,01 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,07	0,06	99,94
2,80	-1,49	0,14	0,12	99,83
2,00	-1,00	0,07	0,06	99,77
1,40	-0,49	0,37	0,31	99,46
1,00	0,00	4,06	3,36	96,11
0,710	0,49	10,10	8,35	87,76
0,500	1,00	20,15	16,65	71,11
0,355	1,49	32,47	26,83	44,28
0,250	2,00	31,92	26,38	17,90
0,180	2,47	10,08	8,33	9,57
0,125	3,00	2,78	2,30	7,27
0,090	3,47	2,17	1,79	5,48
0,075	3,74	1,06	0,88	4,60
0,063	3,99	0,88	0,73	3,88
< 0,063	> 3,99	4,69	3,88	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	3,88
Sand, fine (0,063 mm - 0,200 mm):	8,07
Sand, medium (0,2 mm - 0,6 mm):	67,09
Sand, coarse (0,6 mm - 2 mm):	20,73
Gravel (> 2 mm):	0,23
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,96	0,06
16%	84%	0,66	0,59
25%	75%	0,55	0,86
40%	60%	0,44	1,18
Median 50%	50%	0,39	1,37
75%	25%	0,28	1,85
84%	16%	0,23	2,10
90%	10%	0,18	2,45
95%	5%	0,08	3,61

## Moments Statistics

Mean	1,35
Sorting	0,91
Skewness	0,11
Kurtosis	1,49
Uniformity Coefficient	2,40

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

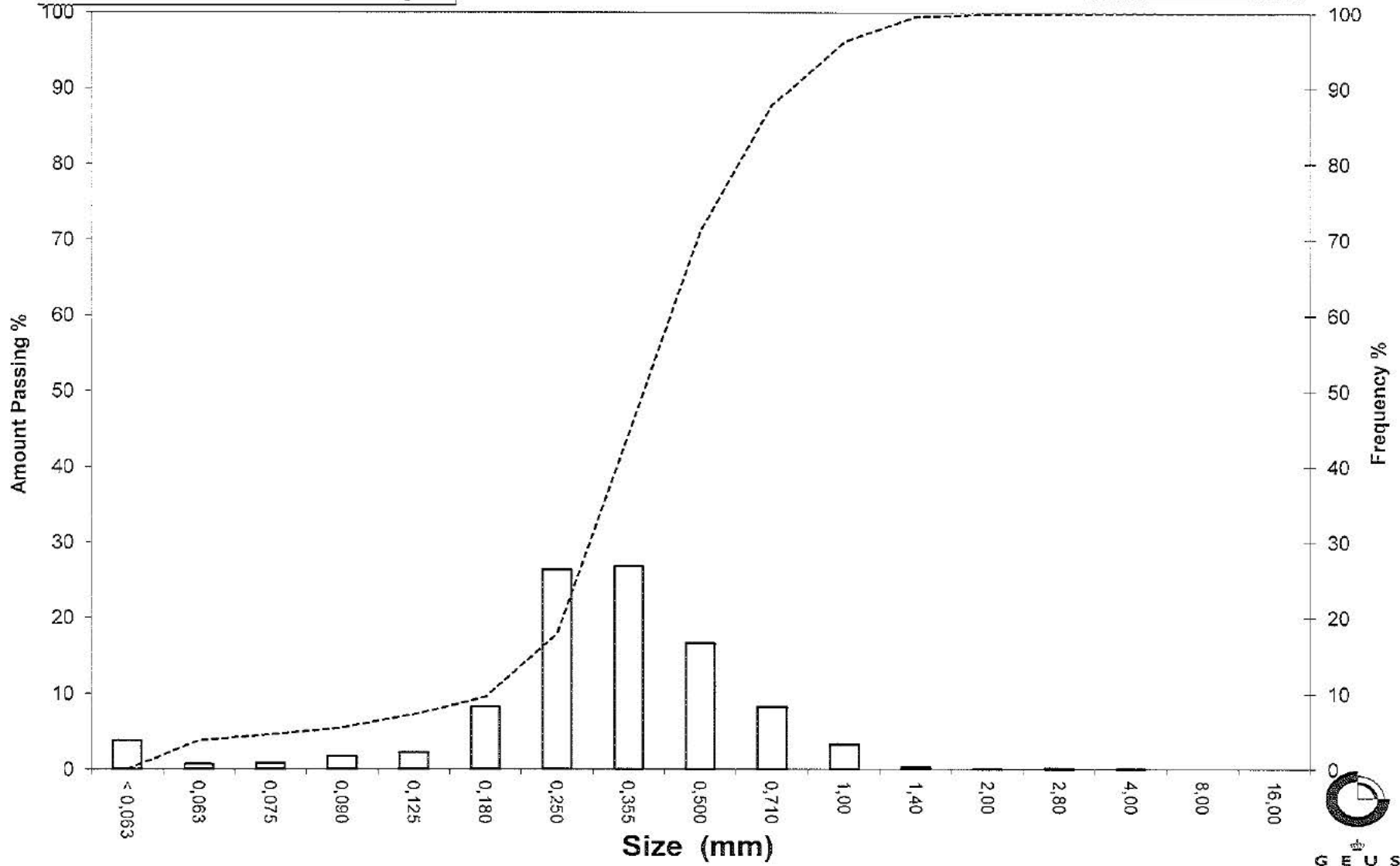
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526018-1 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526019-1 0-45 cm  
**Lab. Id:** 170277  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 111,43 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,12	0,11	99,89
2,00	-1,00	0,23	0,21	99,69
1,40	-0,49	0,71	0,64	99,05
1,00	0,00	2,94	2,64	96,41
0,710	0,49	8,75	7,85	88,56
0,500	1,00	21,90	19,65	68,90
0,355	1,49	37,74	33,87	35,04
0,250	2,00	25,95	23,29	11,75
0,180	2,47	7,57	6,79	4,95
0,125	3,00	3,38	3,03	1,92
0,090	3,47	0,69	0,62	1,30
0,075	3,74	0,16	0,14	1,16
0,063	3,99	0,09	0,08	1,08
< 0,063	> 3,99	1,20	1,08	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,08
Sand, fine (0,063 mm - 0,200 mm):	5,82
Sand, medium (0,2 mm - 0,6 mm):	71,37
Sand, coarse (0,6 mm - 2 mm):	21,42
Gravel (> 2 mm):	0,31
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,95	0,08
16%	84%	0,66	0,60
25%	75%	0,57	0,82
40%	60%	0,46	1,11
Median 50%	50%	0,42	1,25
75%	25%	0,31	1,69
84%	16%	0,27	1,89
90%	10%	0,23	2,11
95%	5%	0,18	2,47

### Moments Statistics

Mean	1,25
Sorting	0,69
Skewness	0,00
Kurtosis	1,13
Uniformity Coefficient	1,99

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

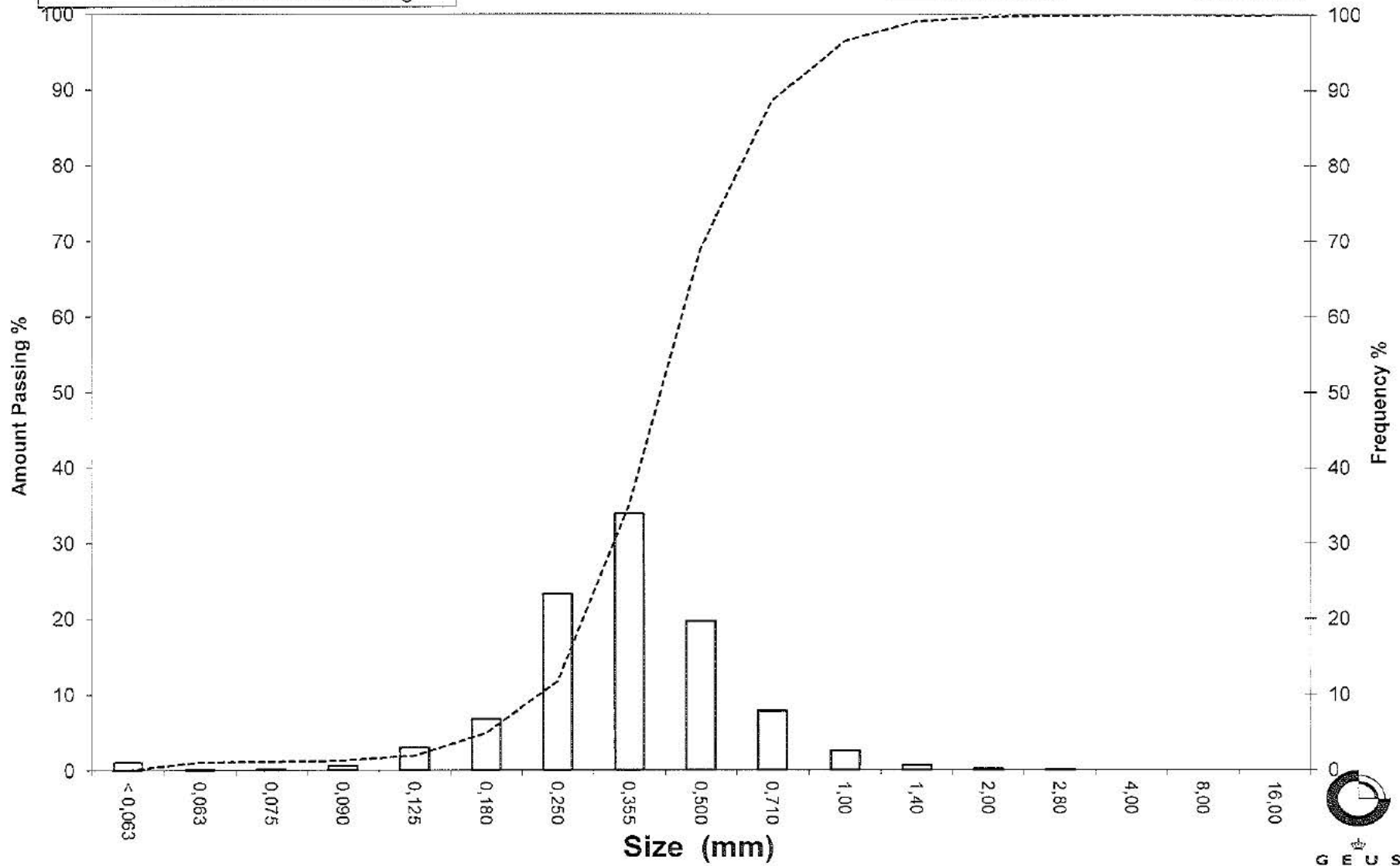
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# Grain Size Distribution

Sample Id: 526019-1 0-45 cm

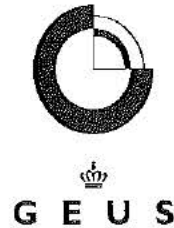
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526022-1 0-25 cm  
**Lab. Id:** 170278  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 90,28 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,02	0,02	99,98
1,40	-0,49	0,00	0,00	99,98
1,00	0,00	0,24	0,27	99,71
0,710	0,49	0,20	0,22	99,49
0,500	1,00	0,25	0,28	99,21
0,355	1,49	1,69	1,87	97,34
0,250	2,00	10,41	11,53	85,81
0,180	2,47	21,67	24,00	61,81
0,125	3,00	26,88	29,77	32,03
0,090	3,47	15,11	16,74	15,30
0,075	3,74	4,42	4,90	10,40
0,063	3,99	2,87	3,18	7,22
< 0,063	> 3,99	6,52	7,22	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	7,22
Sand, fine (0,063 mm - 0,200 mm):	61,44
Sand, medium (0,2 mm - 0,6 mm):	30,68
Sand, coarse (0,6 mm - 2 mm):	0,63
Gravel (> 2 mm):	0,02
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,33	1,58
16%	84%	0,24	2,03
25%	75%	0,22	2,19
40%	60%	0,18	2,50
Median 50%	50%	0,16	2,66
75%	25%	0,11	3,18
84%	16%	0,09	3,45
90%	10%	0,07	3,77
95%	5%	-----	-----

### Moments Statistics

Mean	2,71
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,40

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

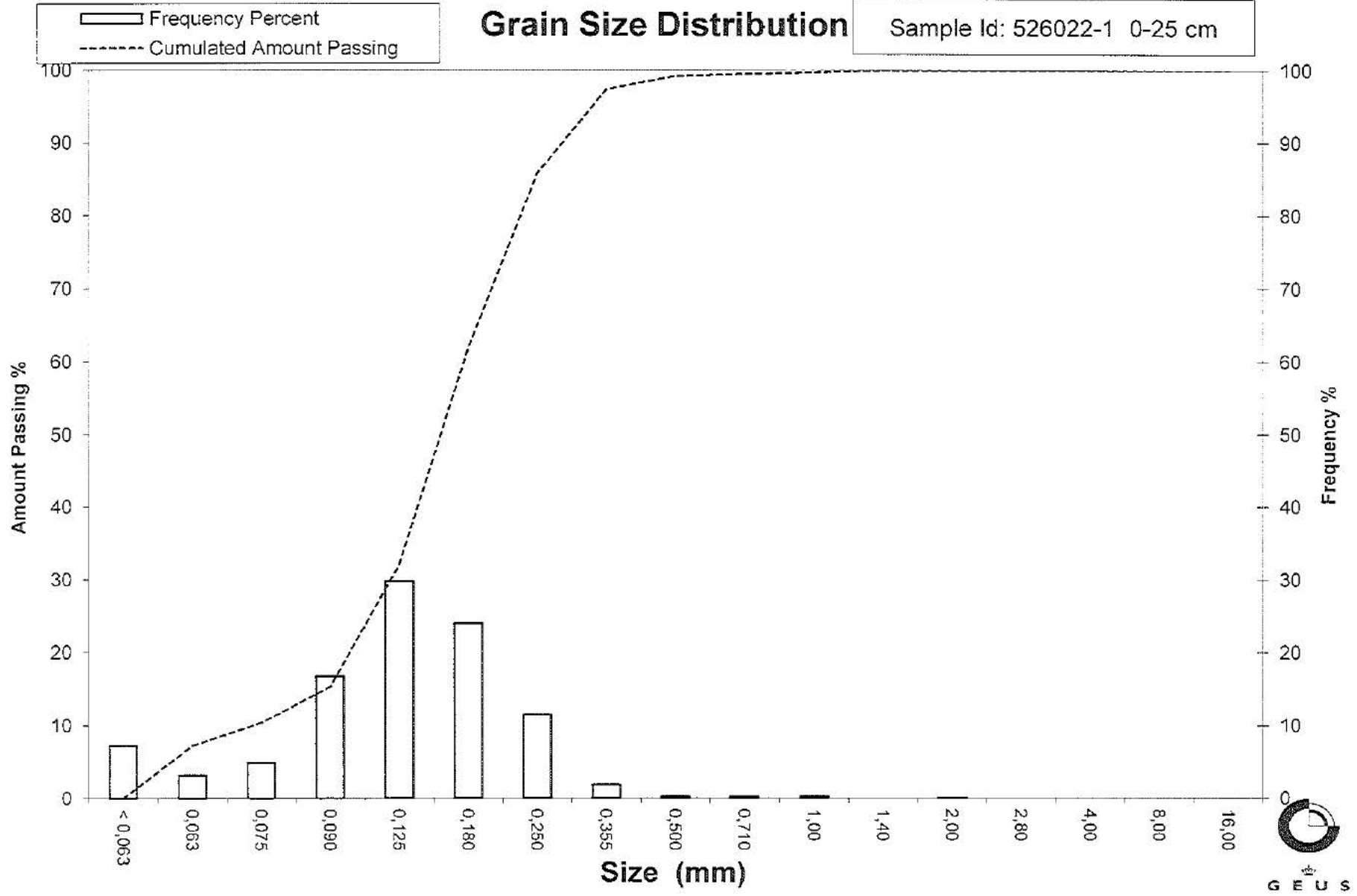
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

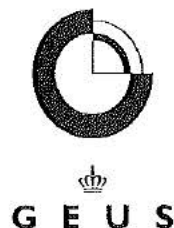
Sample Id: 526022-1 0-25 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526022-2 11-30 cm  
**Lab. Id:** 170279  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 192,87 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	6,32	3,28	96,72
4,00	-2,00	3,52	1,83	94,90
2,80	-1,49	0,90	0,47	94,43
2,00	-1,00	0,74	0,38	94,05
1,40	-0,49	1,59	0,82	93,22
1,00	0,00	51,90	26,91	66,31
0,710	0,49	99,26	51,46	14,85
0,500	1,00	16,83	8,73	6,12
0,355	1,49	7,31	3,79	2,33
0,250	2,00	2,03	1,05	1,28
0,180	2,47	0,40	0,21	1,07
0,125	3,00	0,17	0,09	0,99
0,090	3,47	0,35	0,18	0,80
0,075	3,74	0,23	0,12	0,68
0,063	3,99	0,15	0,08	0,61
< 0,063	> 3,99	1,17	0,61	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,61
Sand, fine (0,063 mm - 0,200 mm)	0,53
Sand, medium (0,2 mm - 0,6 mm)	9,15
Sand, coarse (0,6 mm - 2 mm)	83,77
Gravel (> 2 mm)	5,95
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	4,22	-2,08
16%	84%	1,26	-0,34
25%	75%	1,13	-0,18
40%	60%	0,96	0,05
Median 50%	50%	0,91	0,14
75%	25%	0,77	0,38
84%	16%	0,72	0,48
90%	10%	0,59	0,75
95%	5%	0,46	1,13

### Moments Statistics

Mean	0,09
Sorting	0,69
Skewness	-0,27
Kurtosis	2,36
Uniformity Coefficient	1,63

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

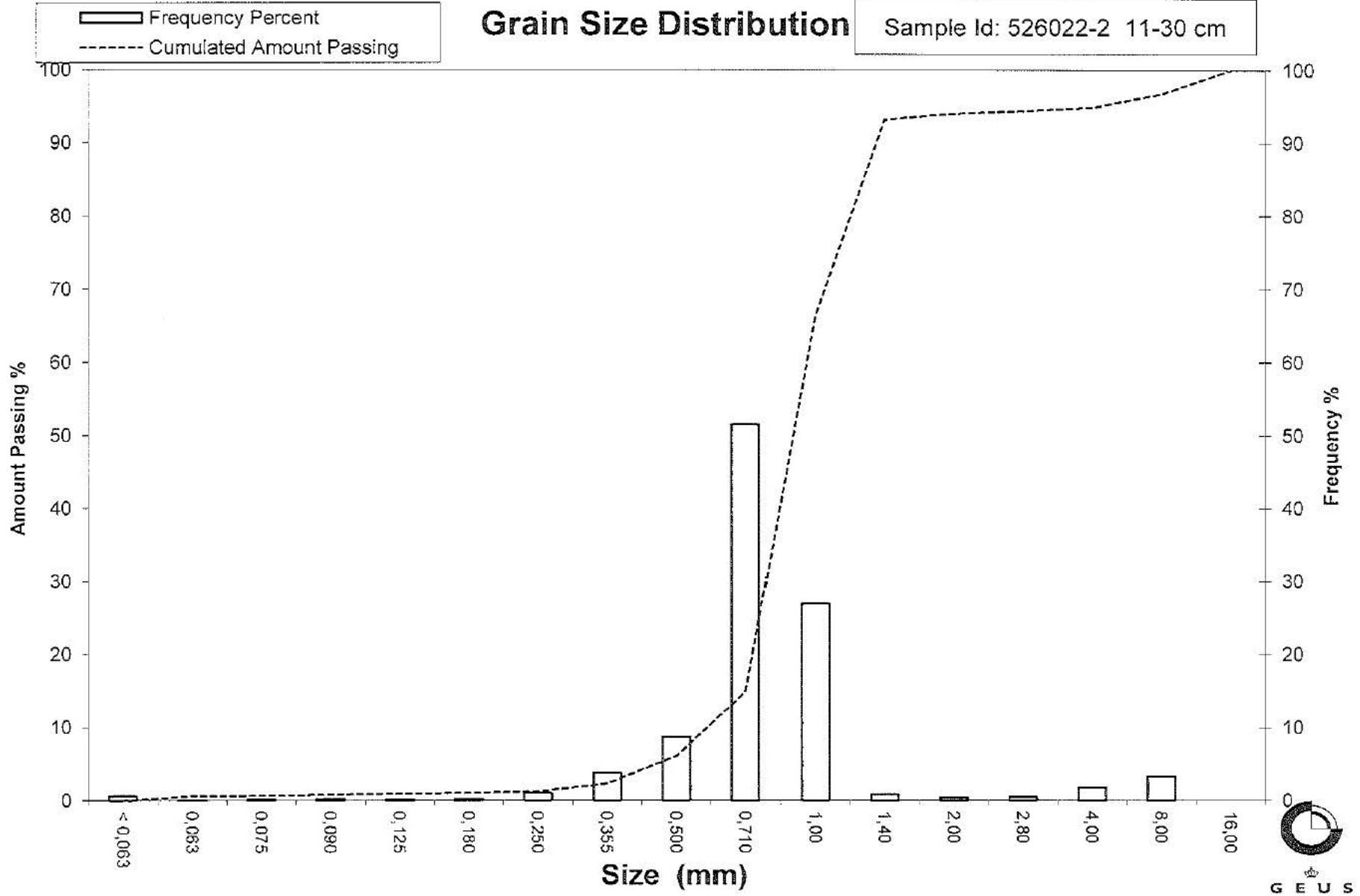
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

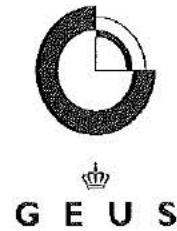
Sample Id: 526022-2 11-30 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526027-2 0-40 cm  
**Lab. Id:** 170280  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 82,89 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,00	0,00	100,00
0,710	0,49	0,00	0,00	100,00
0,500	1,00	0,04	0,05	99,95
0,355	1,49	0,50	0,60	99,35
0,250	2,00	2,22	2,68	96,67
0,180	2,47	2,78	3,35	93,32
0,125	3,00	23,04	27,80	65,52
0,090	3,47	35,72	43,09	22,43
0,075	3,74	8,65	10,44	11,99
0,063	3,99	2,87	3,46	8,53
< 0,063	> 3,99	7,07	8,53	0,00

**Sieve Analysis**  
Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	8,53
Sand, fine (0,063 mm - 0,200 mm):	85,75
Sand, medium (0,2 mm - 0,6 mm):	5,70
Sand, coarse (0,6 mm - 2 mm):	0,03
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,22	2,22
16%	84%	0,16	2,63
25%	75%	0,14	2,80
40%	60%	0,12	3,05
Median 50%	50%	0,11	3,15
75%	25%	0,09	3,44
84%	16%	0,08	3,63
90%	10%	0,07	3,88
95%	5%	-----	-----

### Moments Statistics

Mean	3,14
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	1,77

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

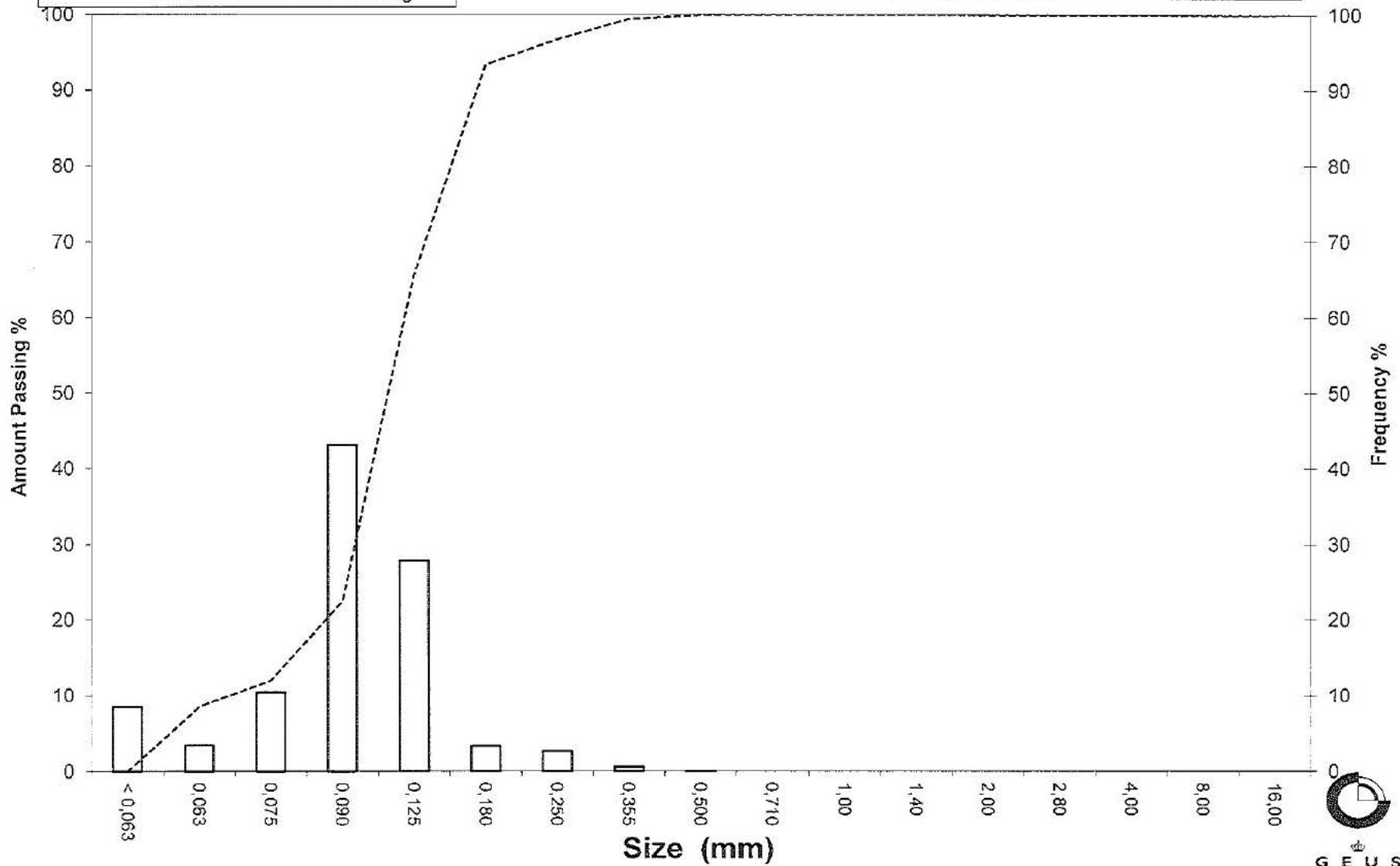
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526027-2 0-40 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526028-1 0-200 cm  
**Lab. Id:** 170245  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 109,12 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,01	0,01	99,99
2,00	-1,00	0,00	0,00	99,99
1,40	-0,49	0,00	0,00	99,99
1,00	0,00	0,21	0,19	99,80
0,710	0,49	2,19	2,01	97,79
0,500	1,00	13,74	12,59	85,20
0,355	1,49	16,48	15,10	70,10
0,250	2,00	6,45	5,91	64,19
0,180	2,47	4,26	3,90	60,28
0,125	3,00	31,96	29,29	30,99
0,090	3,47	27,82	25,49	5,50
0,075	3,74	2,59	2,37	3,13
0,063	3,99	1,18	1,08	2,04
< 0,063	> 3,99	2,23	2,04	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,04
Sand, fine (0,063 mm - 0,200 mm):	59,35
Sand, medium (0,2 mm - 0,6 mm):	29,80
Sand, coarse (0,6 mm - 2 mm):	8,80
Gravel (> 2 mm):	0,01
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,66	0,59
16%	84%	0,49	1,03
25%	75%	0,40	1,31
40%	60%	0,18	2,48
Median 50%	50%	0,16	2,64
75%	25%	0,12	3,10
84%	16%	0,10	3,26
90%	10%	0,10	3,38
95%	5%	0,09	3,53

### Moments Statistics

Mean	2,31
Sorting	1,00
Skewness	-0,42
Kurtosis	0,67
Uniformity Coefficient	1,87

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

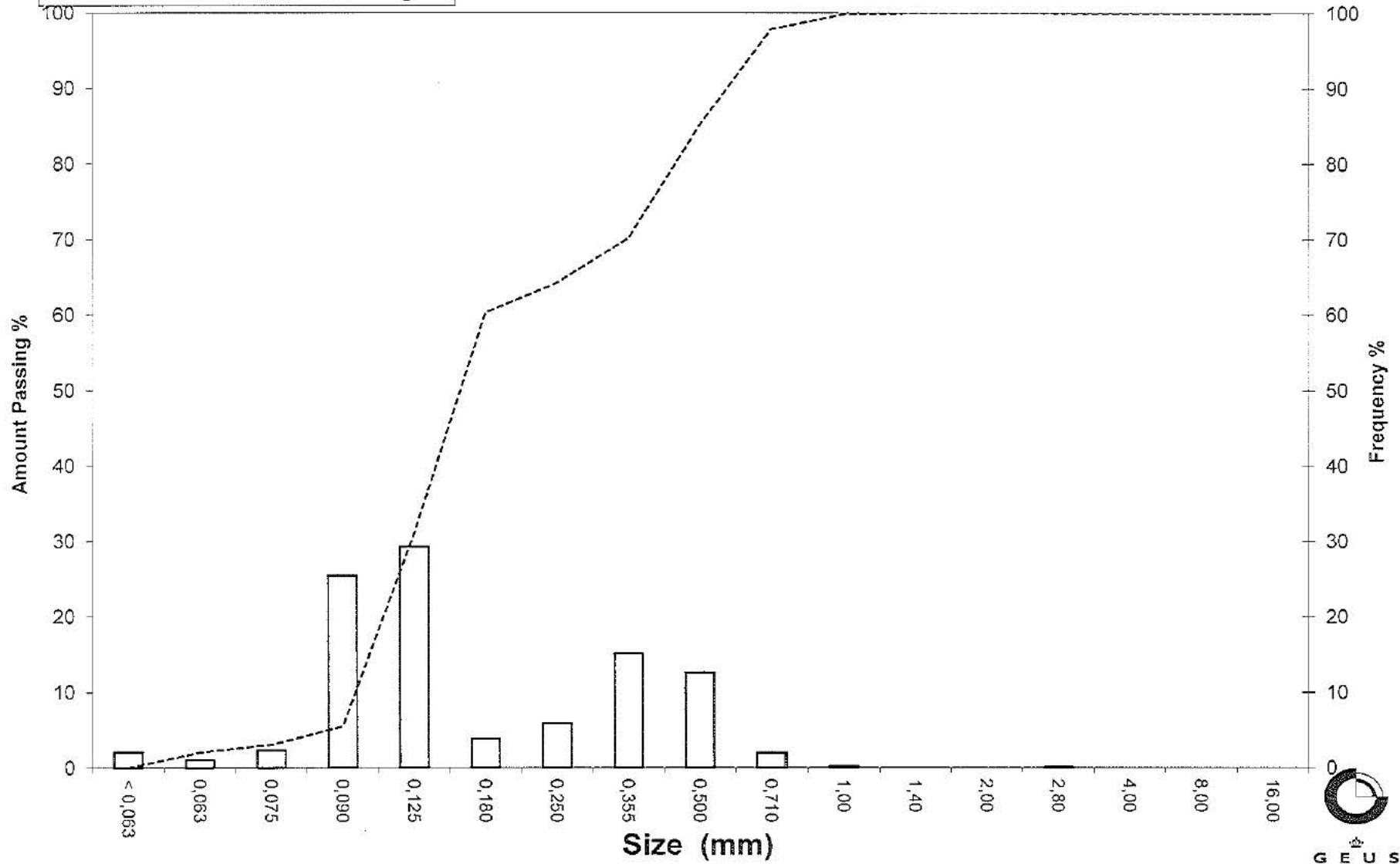
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# Grain Size Distribution

Sample Id: 526028-1 0-200 cm

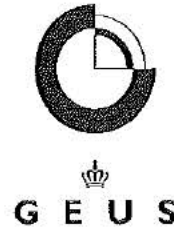
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526028-2 7-21 cm  
**Lab. Id:** 170281  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 127,03 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,57	1,24	98,76
4,00	-2,00	4,70	3,70	95,06
2,80	-1,49	3,07	2,42	92,65
2,00	-1,00	3,24	2,55	90,10
1,40	-0,49	2,93	2,31	87,79
1,00	0,00	4,08	3,21	84,58
0,710	0,49	20,78	16,36	68,22
0,500	1,00	52,65	41,45	26,77
0,355	1,49	7,24	5,70	21,07
0,250	2,00	4,30	3,39	17,69
0,180	2,47	3,37	2,65	15,04
0,125	3,00	9,54	7,51	7,53
0,090	3,47	4,25	3,35	4,18
0,075	3,74	1,55	1,22	2,96
0,063	3,99	0,88	0,69	2,27
< 0,063	> 3,99	2,88	2,27	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	2,27
Sand, fine (0,063 mm - 0,200 mm)	13,53
Sand, medium (0,2 mm - 0,6 mm)	30,72
Sand, coarse (0,6 mm - 2 mm)	43,59
Gravel (> 2 mm)	9,90
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,97	-1,99
16%	84%	0,99	0,01
25%	75%	0,83	0,27
40%	60%	0,67	0,58
<b>Median 50%</b>	<b>50%</b>	<b>0,62</b>	<b>0,70</b>
75%	25%	0,45	1,14
84%	16%	0,21	2,28
90%	10%	0,14	2,80
95%	5%	0,10	3,34

### Moments Statistics

Mean	1,00
Sorting	1,37
Skewness	0,20
Kurtosis	2,52
Uniformity Coefficient	4,67

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

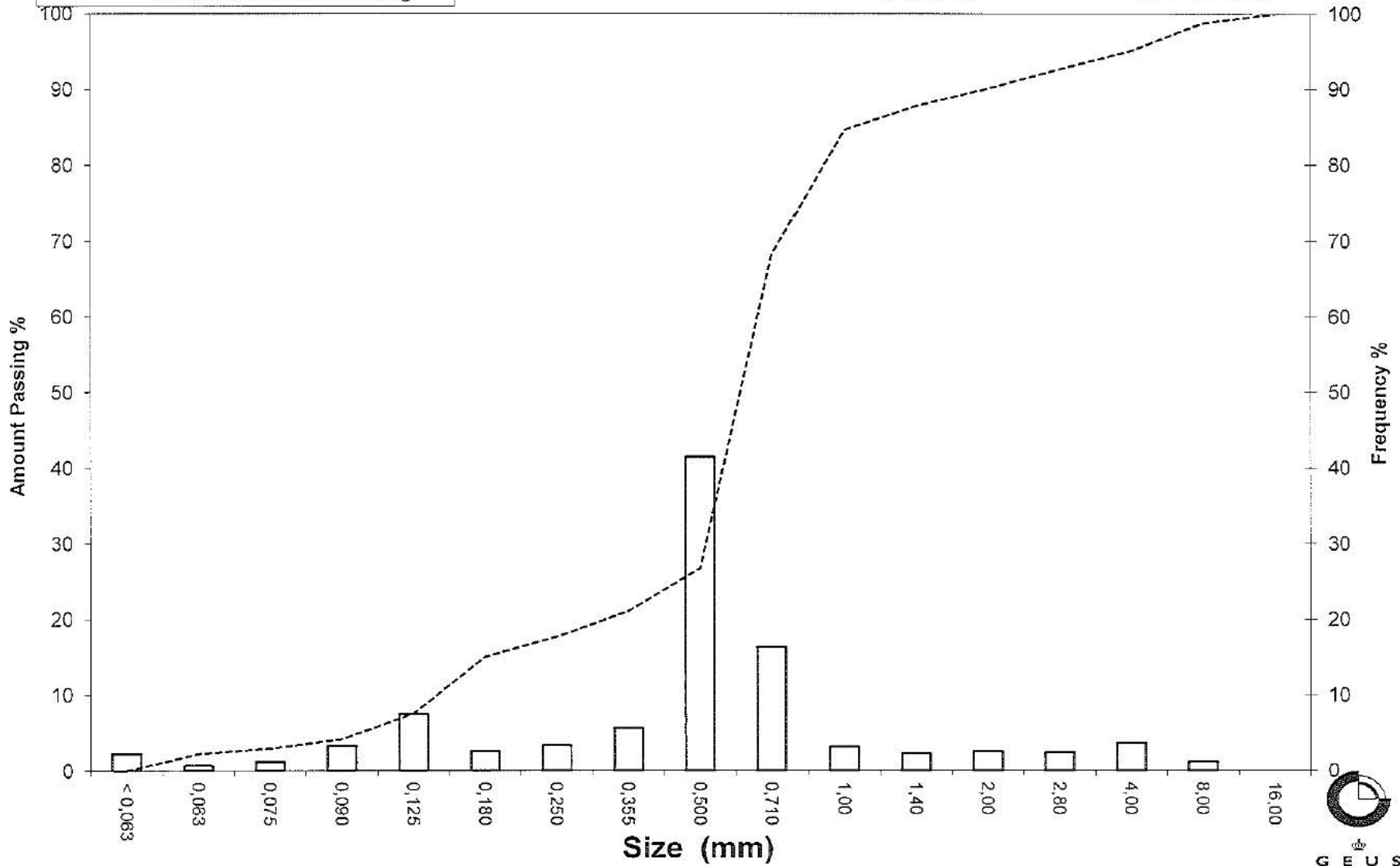
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526028-2 7-21 cm



# Grain Size Distribution

Geotechnical

Sample Id: 526030-3 0-165 cm  
 Lab. Id: 170246  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 107,81 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,09	0,08	99,92
2,80	-1,49	0,02	0,02	99,90
2,00	-1,00	0,00	0,00	99,90
1,40	-0,49	0,06	0,06	99,84
1,00	0,00	0,32	0,30	99,55
0,710	0,49	1,37	1,27	98,27
0,500	1,00	5,83	5,41	92,87
0,355	1,49	6,52	6,05	86,82
0,250	2,00	4,99	4,63	82,19
0,180	2,47	6,07	5,63	76,56
0,125	3,00	46,10	42,76	33,80
0,090	3,47	34,13	31,66	2,14
0,075	3,74	0,81	0,75	1,39
0,063	3,99	0,29	0,27	1,12
< 0,063	> 3,99	1,21	1,12	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,12
Sand, fine (0,063 mm - 0,200 mm)	77,05
Sand, medium (0,2 mm - 0,6 mm)	17,27
Sand, coarse (0,6 mm - 2 mm)	4,46
Gravel (> 2 mm)	0,10
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,58	0,78
16%	84%	0,29	1,78
25%	75%	0,18	2,49
40%	60%	0,16	2,66
Median 50%	50%	0,15	2,78
75%	25%	0,12	3,12
84%	16%	0,11	3,25
90%	10%	0,10	3,34
95%	5%	0,09	3,42

## Moments Statistics

Mean	2,60
Sorting	0,77
Skewness	-0,44
Kurtosis	1,73
Uniformity Coefficient	1,61

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

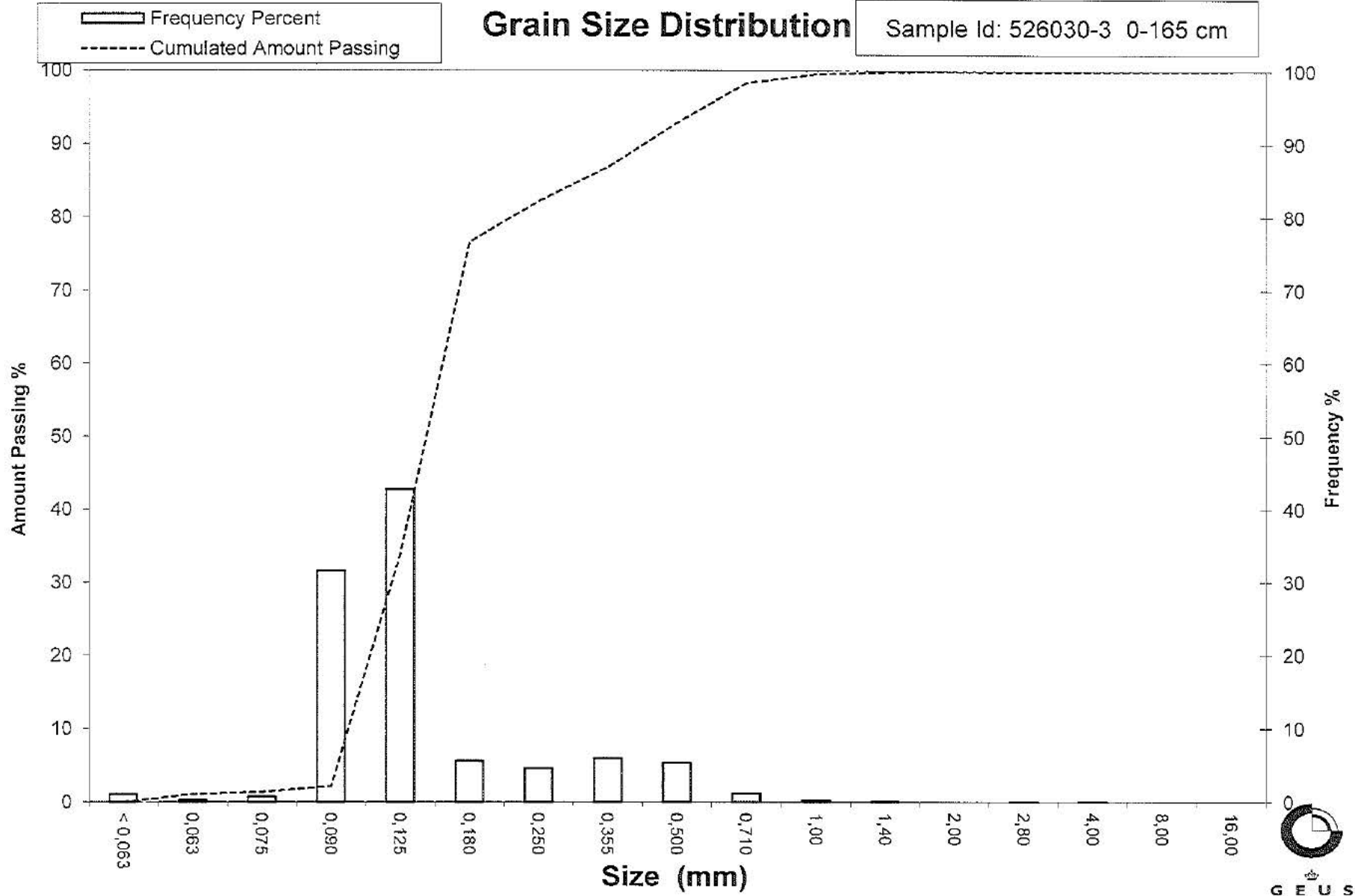
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526030-3 0-165 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526030-4 0-45 cm  
**Lab. Id:** 170282  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 90,25 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,02	0,02	99,98
1,40	-0,49	0,05	0,08	99,92
1,00	0,00	0,30	0,33	99,59
0,710	0,49	0,25	0,28	99,31
0,500	1,00	0,52	0,58	98,74
0,355	1,49	0,48	0,53	98,20
0,250	2,00	0,62	0,69	97,52
0,180	2,47	2,76	3,06	94,46
0,125	3,00	44,95	49,81	44,65
0,090	3,47	33,28	36,88	7,78
0,075	3,74	3,04	3,37	4,41
0,063	3,99	1,34	1,48	2,93
< 0,063	> 3,99	2,64	2,93	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	2,93
Sand, fine (0,063 mm - 0,200 mm):	92,41
Sand, medium (0,2 mm - 0,6 mm):	3,88
Sand, coarse (0,6 mm - 2 mm):	0,97
Gravel (> 2 mm):	0,02
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,19	2,38
16%	84%	0,17	2,57
25%	75%	0,16	2,66
40%	60%	0,14	2,82
Median 50%	50%	0,13	2,93
75%	25%	0,11	3,23
84%	16%	0,10	3,35
90%	10%	0,09	3,44
95%	5%	0,08	3,69

### Moments Statistics

Mean	2,95
Sorting	0,39
Skewness	0,11
Kurtosis	0,93
Uniformity Coefficient	1,54

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

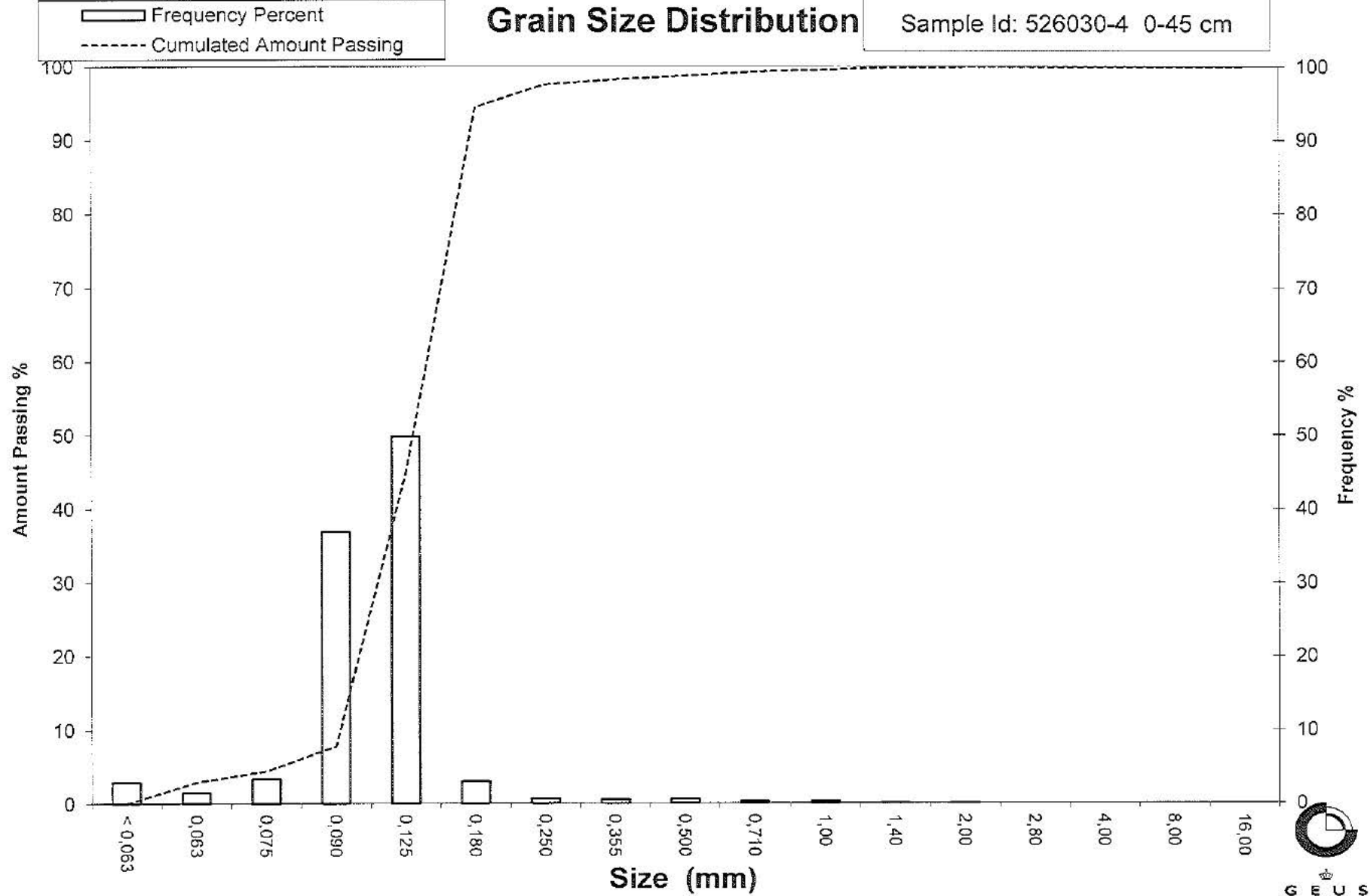
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

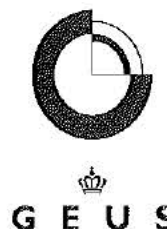
Sample Id: 526030-4 0-45 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526033-1 0-145 cm  
**Lab. Id:** 170283  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 118,62 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,54	0,46	99,54
8,00	-3,00	0,00	0,00	99,54
4,00	-2,00	0,80	0,67	98,87
2,80	-1,49	2,36	1,99	96,88
2,00	-1,00	2,46	2,07	94,81
1,40	-0,49	2,56	2,16	92,65
1,00	0,00	4,08	3,44	89,21
0,710	0,49	7,06	5,95	83,26
0,500	1,00	12,15	10,24	73,01
0,355	1,49	18,49	15,59	57,43
0,250	2,00	31,97	26,95	30,48
0,180	2,47	20,03	16,89	13,59
0,125	3,00	10,09	8,51	5,08
0,090	3,47	4,28	3,61	1,48
0,075	3,74	0,38	0,32	1,15
0,063	3,99	0,10	0,08	1,07
< 0,063	> 3,99	1,27	1,07	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,07
Sand, fine (0,063 mm - 0,200 mm):	17,34
Sand, medium (0,2 mm - 0,6 mm):	59,48
Sand, coarse (0,6 mm - 2 mm):	16,91
Gravel (> 2 mm):	5,19
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	2,07	-1,05
16%	84%	0,75	0,42
25%	75%	0,54	0,89
40%	60%	0,38	1,40
Median 50%	50%	0,33	1,62
75%	25%	0,23	2,14
84%	16%	0,19	2,40
90%	10%	0,16	2,67
95%	5%	0,12	3,01

### Moments Statistics

Mean	1,48
Sorting	1,11
Skewness	-0,26
Kurtosis	1,33
Uniformity Coefficient	2,42

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgg-Bulletin 1988)

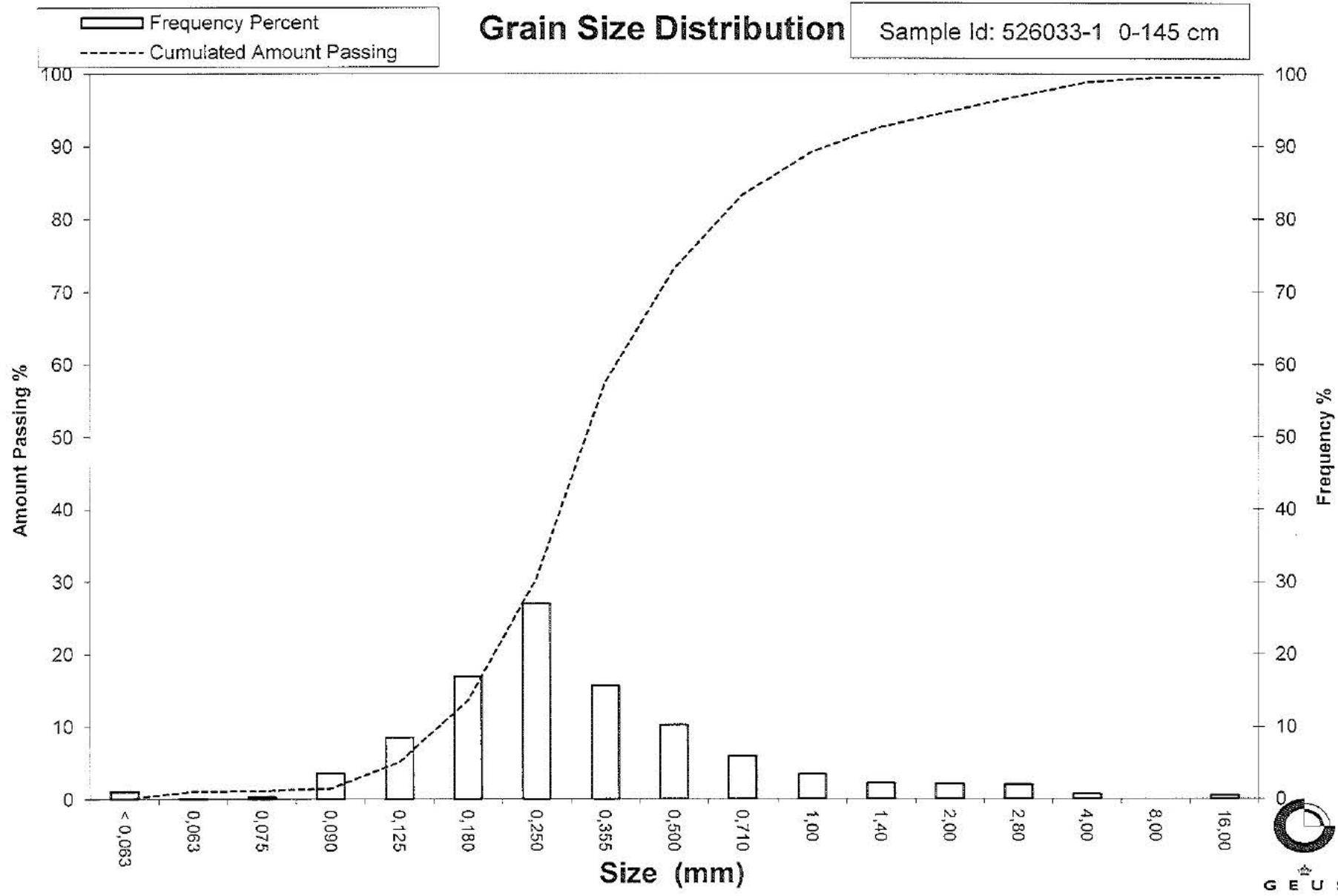
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526033-1 0-145 cm



# Grain Size Distribution

Geotechnical

Sample Id: 526034-3 0-130 cm  
 Lab. Id: 170247  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



Total Weight 108,96 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,05	0,05	99,95
1,40	-0,49	0,43	0,39	99,56
1,00	0,00	2,51	2,30	97,26
0,710	0,49	7,20	6,61	90,65
0,500	1,00	19,29	17,70	72,94
0,355	1,49	31,19	28,63	44,32
0,250	2,00	26,22	24,08	20,26
0,180	2,47	11,37	10,44	9,82
0,125	3,00	5,35	4,91	4,91
0,090	3,47	1,79	1,64	3,27
0,075	3,74	0,55	0,50	2,76
0,063	3,99	0,42	0,39	2,38
< 0,063	> 3,99	2,59	2,38	0,00

Sieve Analysis

Gravel  
Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	2,38
Sand, fine (0,063 mm - 0,200 mm)	10,42
Sand, medium (0,2 mm - 0,6 mm)	68,57
Sand, coarse (0,6 mm - 2 mm)	18,58
Gravel (> 2 mm)	0,05
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,90	0,15
16%	84%	0,63	0,66
25%	75%	0,52	0,93
40%	60%	0,43	1,20
Median 50%	50%	0,38	1,38
75%	25%	0,27	1,89
84%	16%	0,22	2,17
90%	10%	0,18	2,46
95%	5%	0,13	2,99

## Moments Statistics

Mean	1,41
Sorting	0,81
Skewness	0,09
Kurtosis	1,22
Uniformity Coefficient	2,40

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

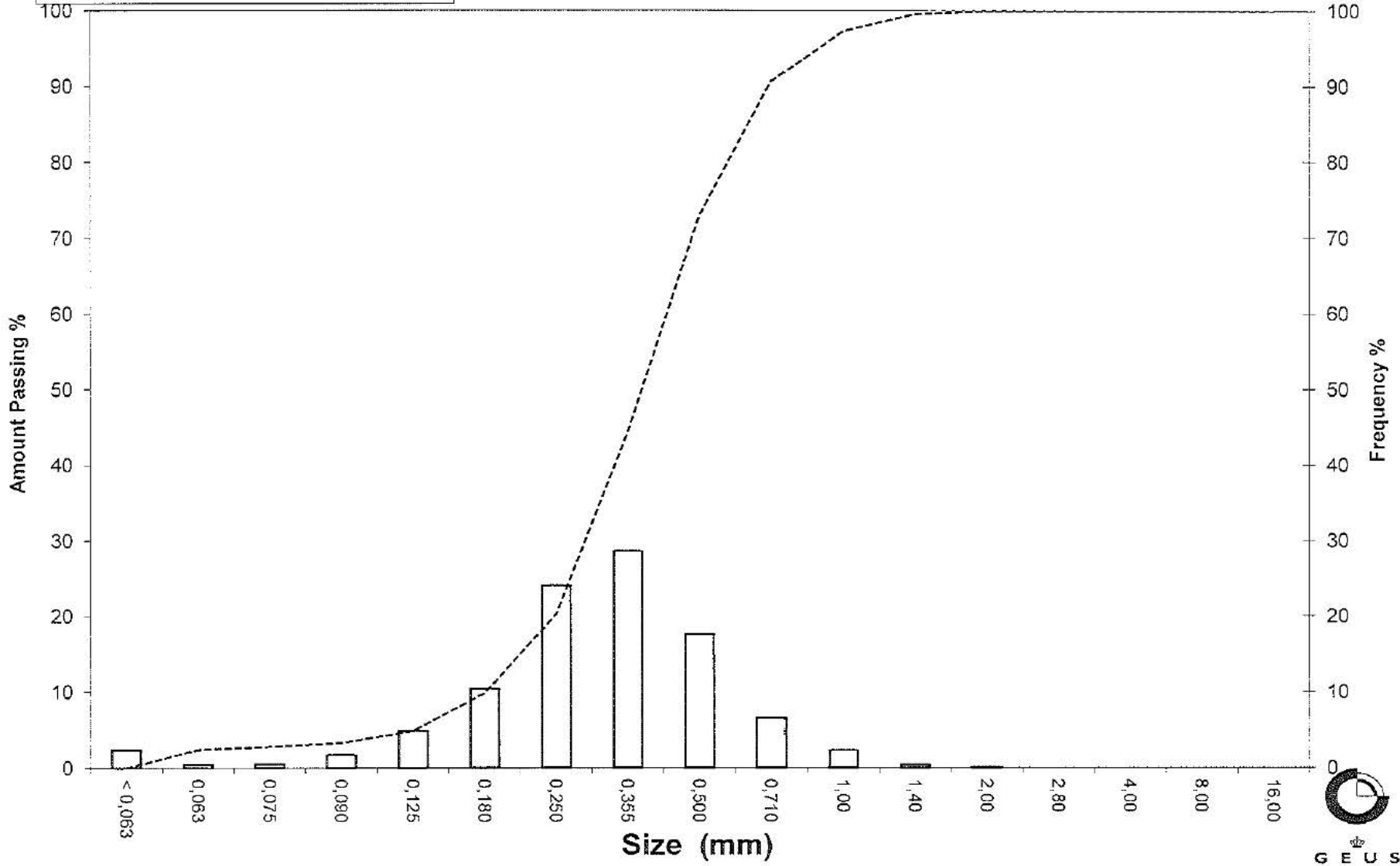
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526034-3 0-130 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 526035-2 12-38 cm  
 Lab. Id: 170248  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



Total Weight 190,06 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	3,05	1,60	98,40
2,80	-1,49	8,40	4,42	93,98
2,00	-1,00	19,80	10,42	83,56
1,40	-0,49	31,47	16,56	67,00
1,00	0,00	35,79	18,83	48,17
0,710	0,49	33,14	17,44	30,73
0,500	1,00	30,75	16,18	14,55
0,355	1,49	15,19	7,99	6,56
0,250	2,00	6,07	3,19	3,37
0,180	2,47	2,08	1,09	2,27
0,125	3,00	1,19	0,63	1,65
0,090	3,47	0,51	0,27	1,38
0,075	3,74	0,18	0,09	1,28
0,063	3,99	0,15	0,08	1,20
< 0,063	> 3,99	2,29	1,20	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,20
Sand, fine (0,063 mm - 0,200 mm)	1,38
Sand, medium (0,2 mm - 0,6 mm)	19,67
Sand, coarse (0,6 mm - 2 mm)	61,30
Gravel (> 2 mm)	16,44
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,08	-1,62
16%	84%	2,03	-1,02
25%	75%	1,69	-0,76
40%	60%	1,25	-0,32
Median 50%	50%	1,04	-0,06
75%	25%	0,64	0,65
84%	16%	0,52	0,95
90%	10%	0,42	1,26
95%	5%	0,30	1,72

## Moments Statistics

Mean	-0,04
Sorting	1,00
Skewness	0,04
Kurtosis	0,97
Uniformity Coefficient	3,00

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

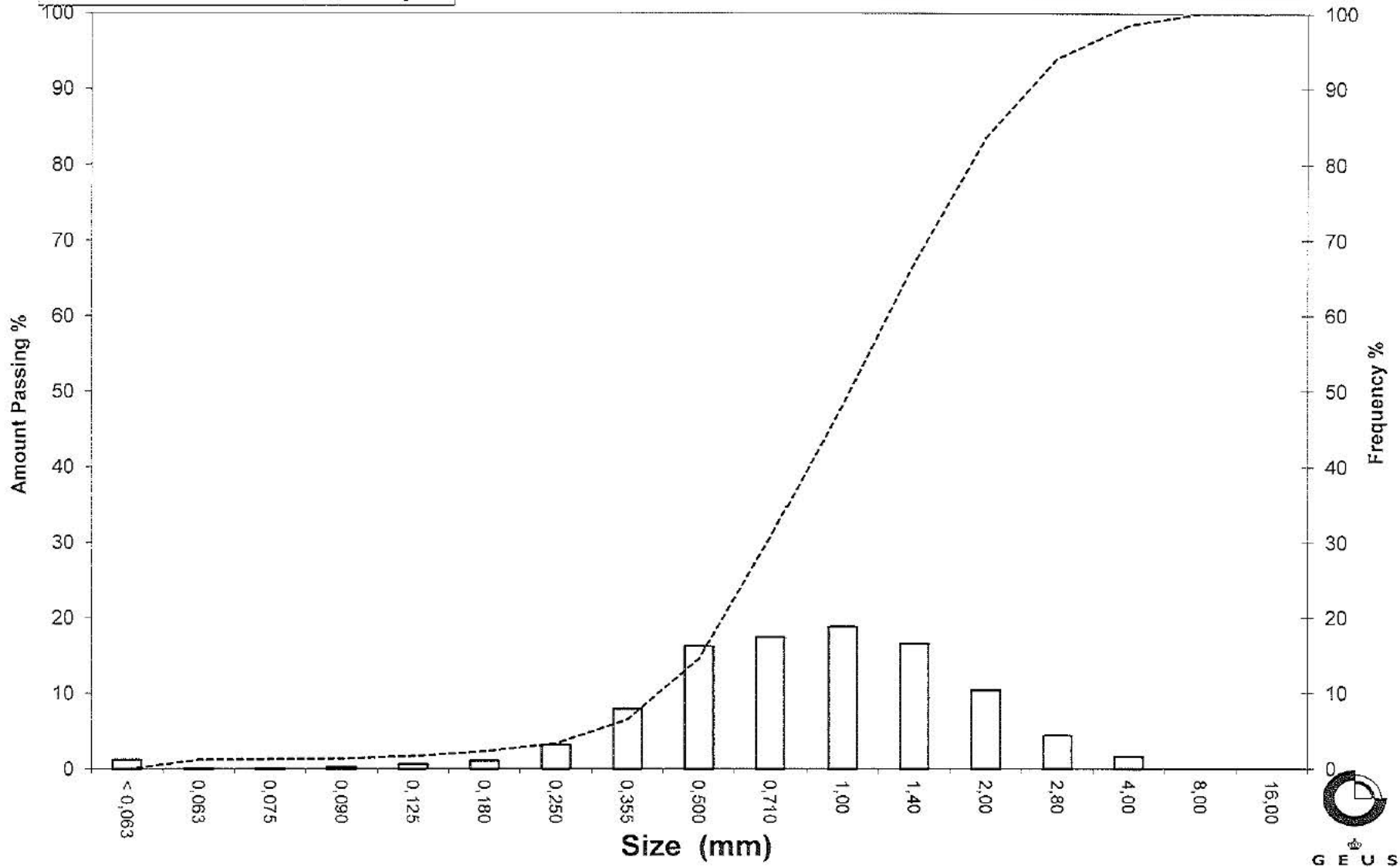
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526035-2 12-38 cm

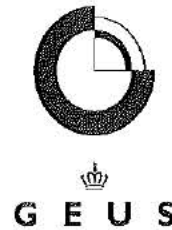
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 526038-1 20-75 cm  
**Lab. Id:** 170284  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 122,97 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,12	0,10	99,90
2,80	-1,49	1,04	0,85	99,06
2,00	-1,00	3,79	3,08	95,97
1,40	-0,49	9,42	7,66	88,31
1,00	0,00	24,31	19,77	68,55
0,710	0,49	26,62	21,65	46,90
0,500	1,00	29,01	23,59	23,31
0,355	1,49	11,71	9,52	13,78
0,250	2,00	7,95	6,46	7,32
0,180	2,47	3,66	2,98	4,34
0,125	3,00	1,47	1,20	3,15
0,090	3,47	0,62	0,50	2,64
0,075	3,74	0,20	0,16	2,48
0,063	3,99	0,16	0,13	2,35
< 0,063	> 3,99	2,89	2,35	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	2,35
Sand, fine (0,063 mm - 0,200 mm):	2,84
Sand, medium (0,2 mm - 0,6 mm):	29,35
Sand, coarse (0,6 mm - 2 mm):	61,43
Gravel (> 2 mm):	4,03
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,92	-0,94
16%	84%	1,31	-0,39
25%	75%	1,13	-0,18
40%	60%	0,89	0,18
Median 50%	50%	0,75	0,41
75%	25%	0,52	0,96
84%	16%	0,39	1,36
90%	10%	0,29	1,77
95%	5%	0,20	2,36

### Moments Statistics

Mean	0,46
Sorting	0,94
Skewness	0,13
Kurtosis	1,19
Uniformity Coefficient	3,02

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

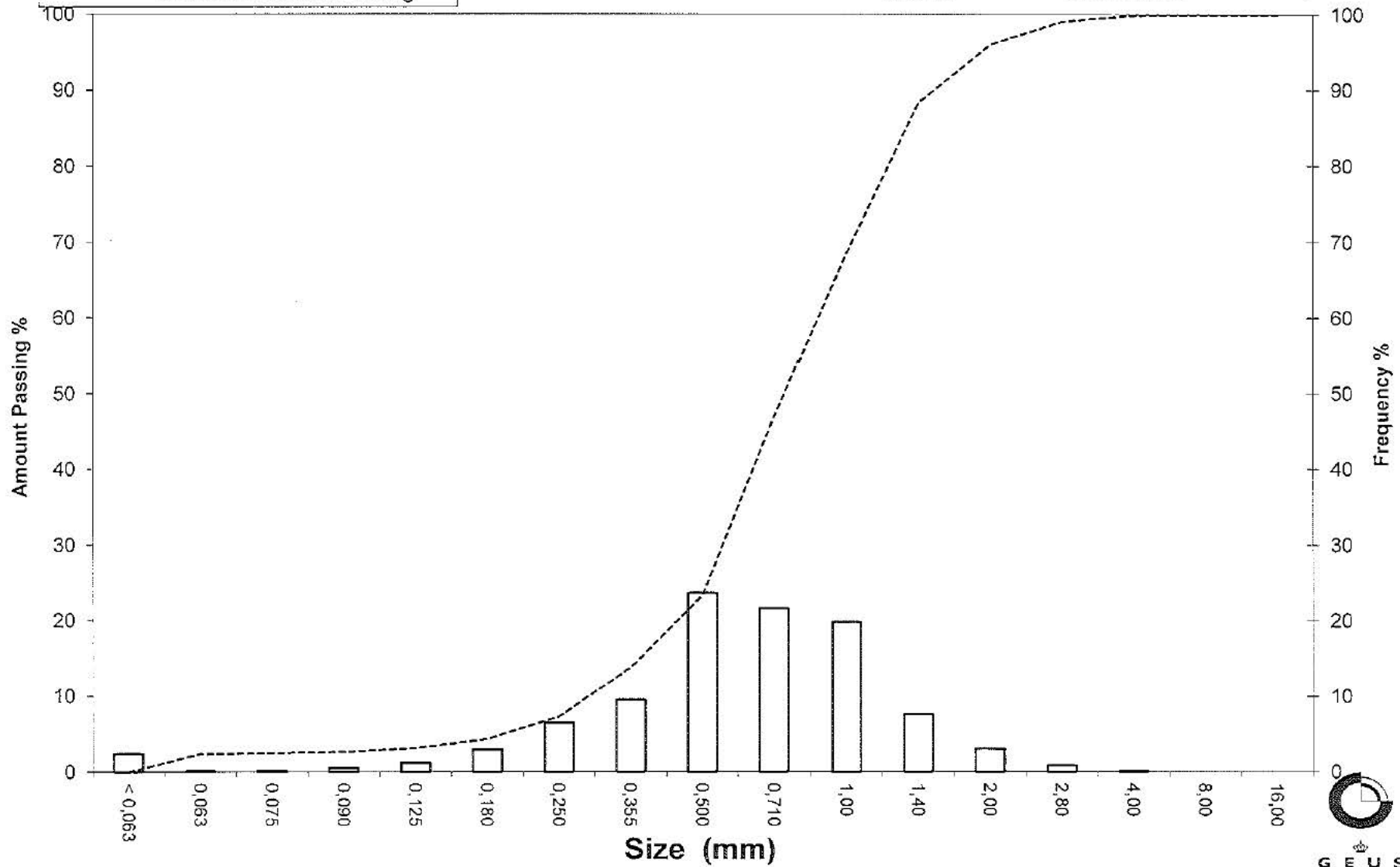
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 526038-1 20-75 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 536018-2 0-150 cm  
**Lab. Id:** 170232  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >2,8 mm består af skaller



**Total Weight** 112,95 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,28	1,13	98,87
4,00	-2,00	0,44	0,39	98,48
2,80	-1,49	0,37	0,33	98,15
2,00	-1,00	0,42	0,37	97,78
1,40	-0,49	0,63	0,56	97,22
1,00	0,00	1,85	1,64	95,58
0,710	0,49	3,37	2,98	92,60
0,500	1,00	11,84	10,48	82,12
0,355	1,49	23,53	20,83	61,28
0,250	2,00	21,58	19,11	42,18
0,180	2,47	12,74	11,28	30,90
0,125	3,00	10,26	9,08	21,81
0,090	3,47	8,52	7,54	14,27
0,075	3,74	2,65	2,35	11,93
0,063	3,99	1,83	1,62	10,31
< 0,063	> 3,99	11,64	10,31	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	10,31
Sand, fine (0,063 mm - 0,200 mm):	23,82
Sand, medium (0,2 mm - 0,6 mm):	52,99
Sand, coarse (0,6 mm - 2 mm):	10,67
Gravel (> 2 mm):	2,22
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,94	0,08
16%	84%	0,54	0,90
25%	75%	0,45	1,15
40%	60%	0,35	1,52
Median 50%	50%	0,29	1,77
75%	25%	0,14	2,79
84%	16%	0,10	3,35
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,01
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{80\%} / d_{10\%})$  (dgg-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

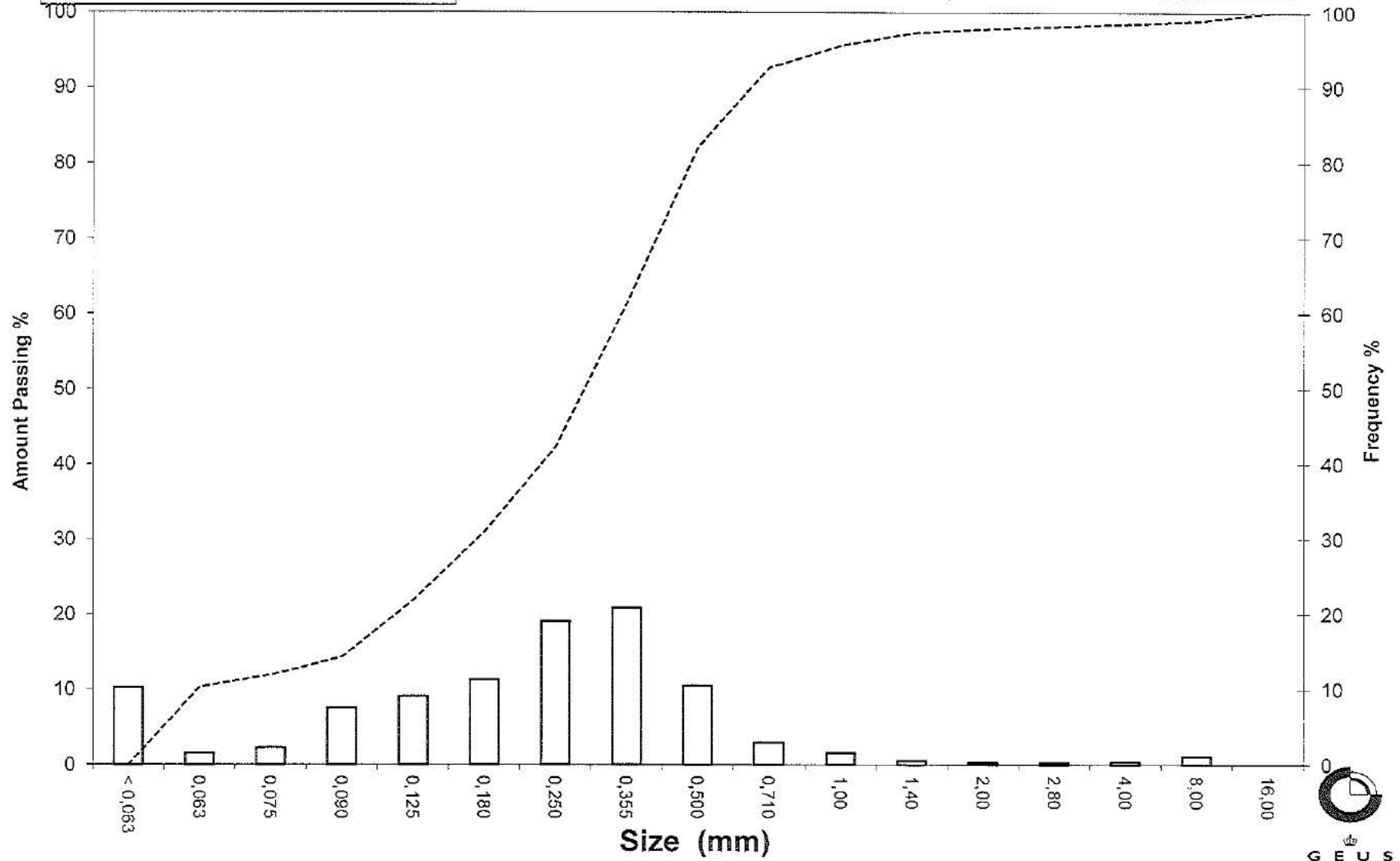
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# Grain Size Distribution

Sample Id: 536018-2 0-150 cm

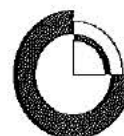
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 536018-2 170-330 cm  
 Lab. Id: 170233  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



**GEUS**

Total Weight 133,8 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	2,82	2,11	97,89
4,00	-2,00	1,51	1,13	96,76
2,80	-1,49	0,71	0,53	96,23
2,00	-1,00	0,67	0,50	95,73
1,40	-0,49	1,02	0,76	94,97
1,00	0,00	1,71	1,28	93,69
0,710	0,49	3,96	2,96	90,73
0,500	1,00	24,33	18,18	72,55
0,355	1,49	57,57	43,03	29,52
0,250	2,00	28,11	21,01	8,51
0,180	2,47	7,69	5,75	2,77
0,125	3,00	1,82	1,36	1,41
0,090	3,47	0,28	0,21	1,20
0,075	3,74	0,07	0,05	1,14
0,063	3,99	0,03	0,02	1,12
< 0,063	> 3,99	1,50	1,12	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,12
Sand, fine (0,063 mm - 0,200 mm):	3,29
Sand, medium (0,2 mm - 0,6 mm):	76,80
Sand, coarse (0,6 mm - 2 mm):	14,52
Gravel (> 2 mm):	4,27
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,42	-0,51
16%	84%	0,63	0,66
25%	75%	0,53	0,92
40%	60%	0,46	1,13
Median 50%	50%	0,42	1,24
75%	25%	0,33	1,59
84%	16%	0,29	1,80
90%	10%	0,26	1,96
95%	5%	0,21	2,27

## Moments Statistics

Mean	1,23
Sorting	0,71
Skewness	-0,14
Kurtosis	1,70
Uniformity Coefficient	1,78

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

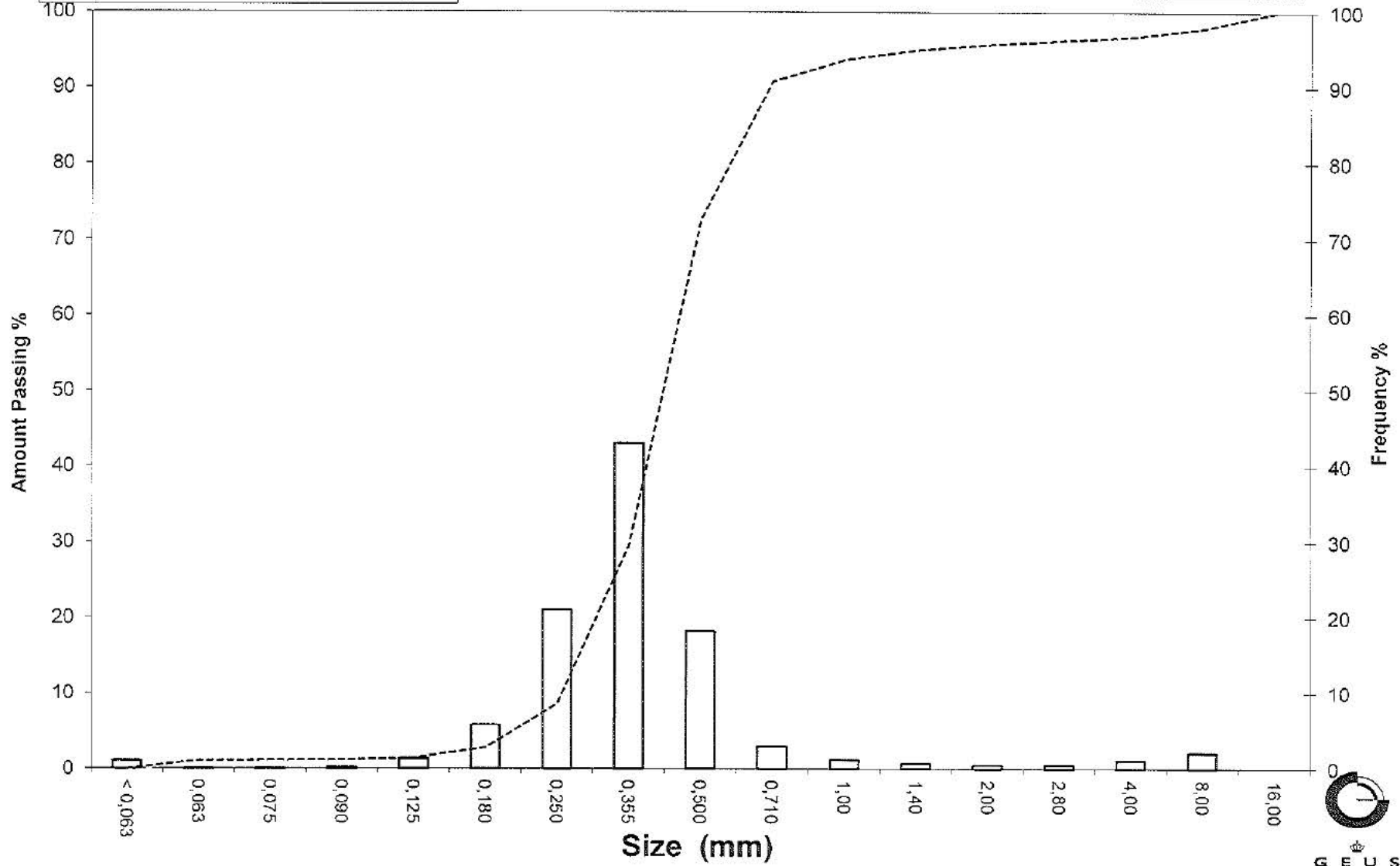
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 536018-2 170-330 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 542009-1 20-150 cm  
 Lab. Id: 170213  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



Total Weight 106,82 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,20	0,19	99,81
0,710	0,49	0,28	0,26	99,55
0,500	1,00	7,56	7,08	92,47
0,355	1,49	66,32	62,09	30,39
0,250	2,00	30,42	28,48	1,91
0,180	2,47	1,17	1,10	0,81
0,125	3,00	0,10	0,09	0,72
0,090	3,47	0,02	0,02	0,70
0,075	3,74	0,00	0,00	0,70
0,063	3,99	0,00	0,00	0,70
< 0,063	> 3,99	0,75	0,70	0,00

Sieve Analysis

Gravel  
Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	0,70
Sand, fine (0,063 mm - 0,200 mm):	0,43
Sand, medium (0,2 mm - 0,6 mm):	94,72
Sand, coarse (0,6 mm - 2 mm):	4,16
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,57	0,80
16%	84%	0,48	1,06
25%	75%	0,46	1,12
40%	60%	0,42	1,24
Median 50%	50%	0,40	1,32
75%	25%	0,34	1,58
84%	16%	0,30	1,73
90%	10%	0,28	1,84
95%	5%	0,26	1,94

## Moments Statistics

Mean	1,37
Sorting	0,34
Skewness	0,16
Kurtosis	1,03
Uniformity Coefficient	1,52

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

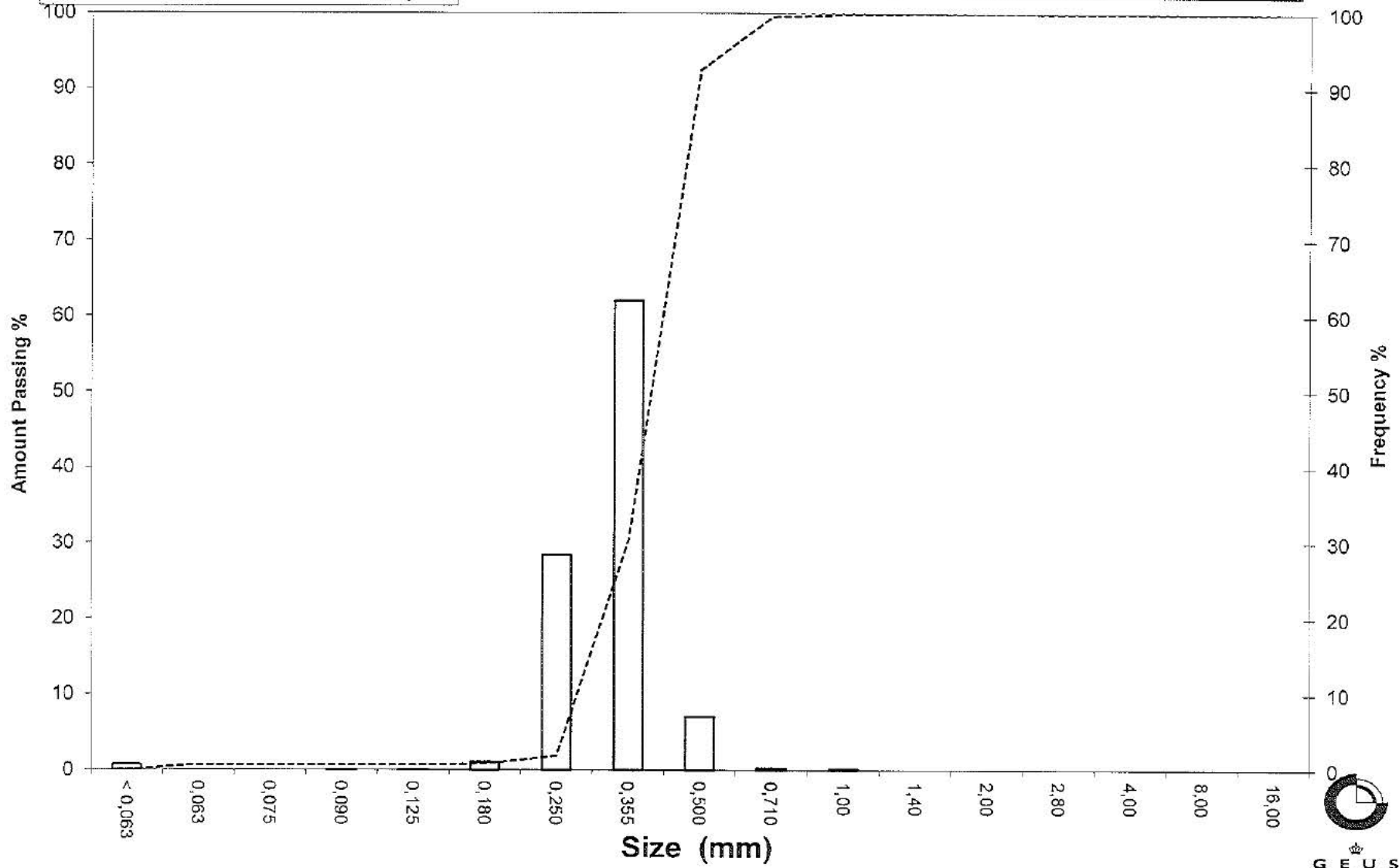
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542009-1 20-150 cm

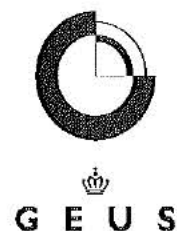
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542009-1 200-320 cm  
**Lab. Id:** 170214  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 184,49 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	4,72	2,56	97,44
8,00	-3,00	13,54	7,34	90,10
4,00	-2,00	19,09	10,35	79,76
2,80	-1,49	8,93	4,84	74,91
2,00	-1,00	7,21	3,91	71,01
1,40	-0,49	8,49	4,60	66,40
1,00	0,00	13,70	7,43	58,98
0,710	0,49	23,71	12,85	46,13
0,500	1,00	51,31	27,81	18,32
0,355	1,49	28,85	15,64	2,68
0,250	2,00	2,28	1,24	1,44
0,180	2,47	0,33	0,18	1,26
0,125	3,00	0,17	0,09	1,17
0,090	3,47	0,07	0,04	1,13
0,075	3,74	0,03	0,02	1,12
0,063	3,99	0,00	0,00	1,12
< 0,063	> 3,99	2,06	1,12	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,12
Sand, fine (0,063 mm - 0,200 mm):	0,20
Sand, medium (0,2 mm - 0,6 mm):	30,25
Sand, coarse (0,6 mm - 2 mm):	39,45
Gravel (> 2 mm):	28,99
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	13,34	-3,74
16%	84%	5,64	-2,50
25%	75%	2,82	-1,50
40%	60%	1,06	-0,08
Median 50%	50%	0,80	0,33
75%	25%	0,55	0,86
84%	16%	0,48	1,06
90%	10%	0,42	1,24
95%	5%	0,38	1,41

### Moments Statistics

Mean	-0,37
Sorting	1,67
Skewness	-0,58
Kurtosis	0,89
Uniformity Coefficient	2,49

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

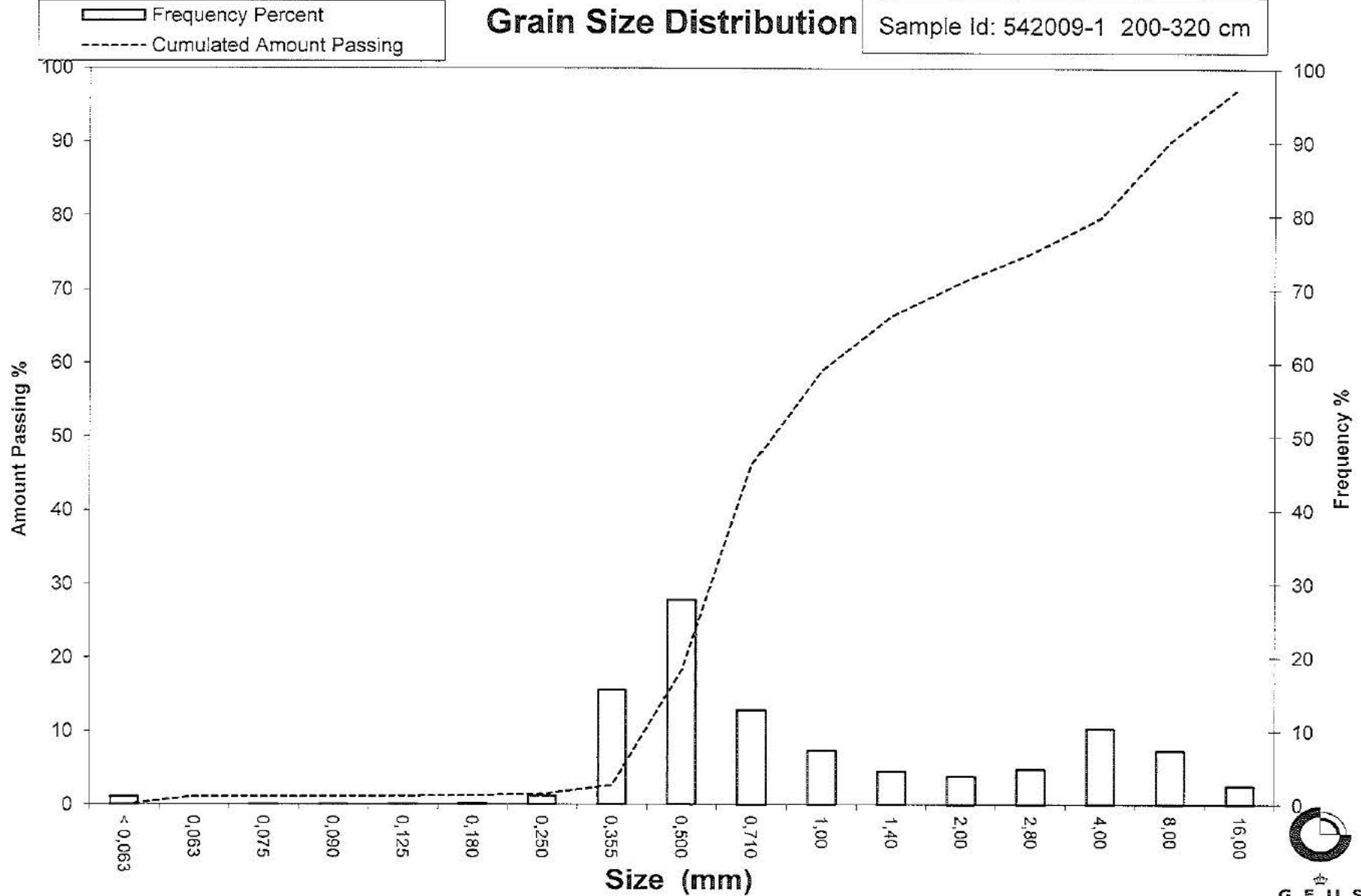
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

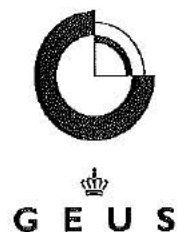
Sample Id: 542009-1 200-320 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542012-1 0-200 cm  
**Lab. Id:** 170173  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 237,11 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	2,24	0,94	99,06
2,80	-1,49	3,16	1,33	97,72
2,00	-1,00	5,36	2,26	95,46
1,40	-0,49	9,56	4,03	91,43
1,00	0,00	21,65	9,13	82,30
0,710	0,49	48,33	20,38	61,92
0,500	1,00	104,96	44,27	17,65
0,355	1,49	37,62	15,87	1,78
0,250	2,00	2,17	0,92	0,87
0,180	2,47	0,21	0,09	0,78
0,125	3,00	0,10	0,04	0,74
0,090	3,47	0,04	0,02	0,72
0,075	3,74	0,00	0,00	0,72
0,063	3,99	0,00	0,00	0,72
< 0,063	> 3,99	1,71	0,72	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,72
Sand, fine (0,063 mm - 0,200 mm):	0,08
Sand, medium (0,2 mm - 0,6 mm):	37,92
Sand, coarse (0,6 mm - 2 mm):	56,73
Gravel (> 2 mm):	4,54
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,93	-0,95
16%	84%	1,07	-0,10
25%	75%	0,90	0,16
40%	60%	0,70	0,51
Median 50%	50%	0,65	0,61
75%	25%	0,53	0,90
84%	16%	0,48	1,04
90%	10%	0,43	1,22
95%	5%	0,38	1,38

### Moments Statistics

Mean	0,52
Sorting	0,64
Skewness	-0,30
Kurtosis	1,28
Uniformity Coefficient	1,63

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

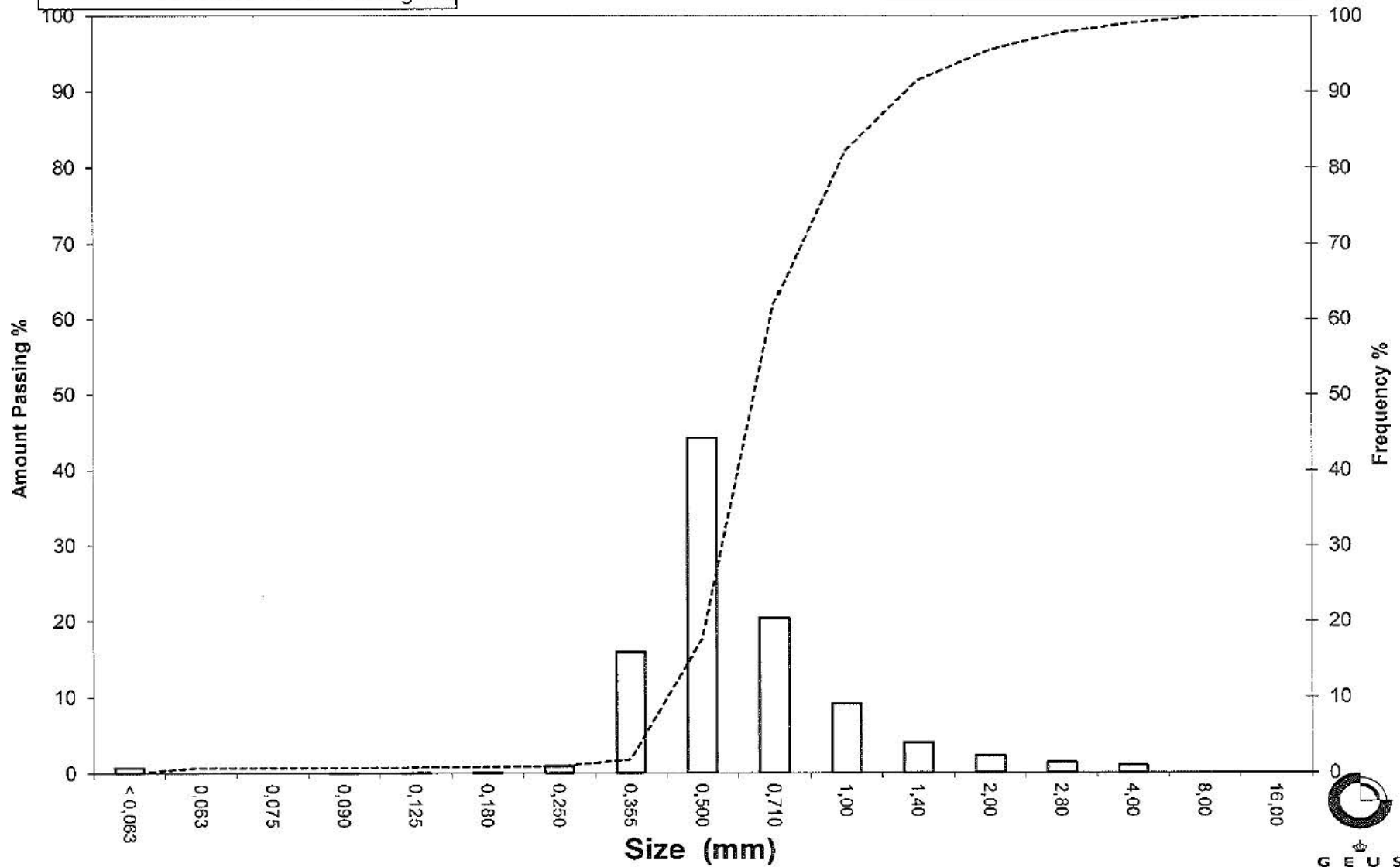
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# Grain Size Distribution

Sample Id: 542012-1 0-200 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542012-1 200-400 cm  
**Lab. Id:** 170174  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** > 4mm består af skaller



**Total Weight** 241,77 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,67	0,69	99,31
4,00	-2,00	3,15	1,30	98,01
2,80	-1,49	2,86	1,18	96,82
2,00	-1,00	3,74	1,55	95,28
1,40	-0,49	6,22	2,57	92,70
1,00	0,00	17,85	7,38	85,32
0,710	0,49	43,99	18,19	67,13
0,500	1,00	104,27	43,13	24,00
0,355	1,49	48,50	20,06	3,94
0,250	2,00	6,26	2,59	1,35
0,180	2,47	0,48	0,20	1,15
0,125	3,00	0,18	0,07	1,08
0,090	3,47	0,08	0,03	1,04
0,075	3,74	0,03	0,01	1,03
0,063	3,99	0,01	0,00	1,03
< 0,063	> 3,99	2,48	1,03	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,03
Sand, fine (0,063 mm - 0,200 mm):	0,18
Sand, medium (0,2 mm - 0,6 mm):	43,33
Sand, coarse (0,6 mm - 2 mm):	50,74
Gravel (> 2 mm):	4,72
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	1,94	-0,95
16%	84%	0,98	0,03
25%	75%	0,84	0,26
40%	60%	0,68	0,57
Median 50%	50%	0,63	0,67
75%	25%	0,50	0,99
84%	16%	0,44	1,18
90%	10%	0,40	1,33
95%	5%	0,36	1,46

### Moments Statistics

Mean	0,63
Sorting	0,65
Skewness	-0,23
Kurtosis	1,36
Uniformity Coefficient	1,69

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

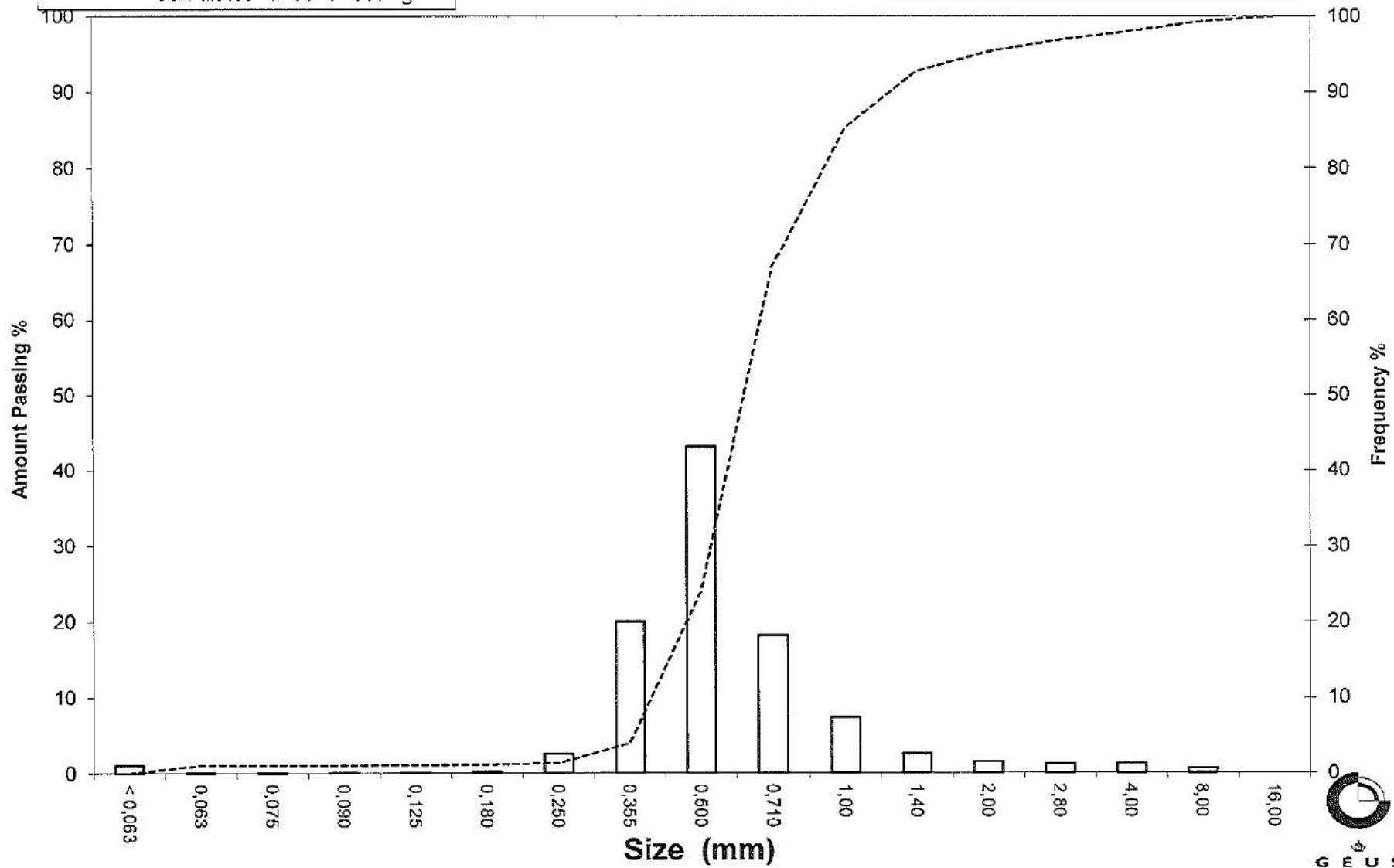
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542012-1 200-400 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542014-1 0-200 cm  
**Lab. Id:** 170175  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 102,07 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,24	0,24	99,76
2,80	-1,49	0,08	0,08	99,69
2,00	-1,00	0,21	0,21	99,48
1,40	-0,49	0,48	0,47	99,01
1,00	0,00	1,25	1,22	97,79
0,710	0,49	2,51	2,46	95,33
0,500	1,00	7,98	7,82	87,51
0,355	1,49	16,06	15,73	71,77
0,250	2,00	35,67	34,95	36,83
0,180	2,47	29,17	28,58	8,25
0,125	3,00	5,64	5,53	2,72
0,090	3,47	0,44	0,43	2,29
0,075	3,74	0,07	0,07	2,22
0,063	3,99	0,03	0,03	2,19
< 0,063	> 3,99	2,24	2,19	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,19
Sand, fine (0,063 mm - 0,200 mm):	14,22
Sand, medium (0,2 mm - 0,6 mm):	74,82
Sand, coarse (0,6 mm - 2 mm):	8,25
Gravel (> 2 mm):	0,52
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,70	0,51
16%	84%	0,47	1,10
25%	75%	0,38	1,38
40%	60%	0,32	1,65
Median 50%	50%	0,29	1,79
75%	25%	0,22	2,18
84%	16%	0,20	2,33
90%	10%	0,18	2,44
95%	5%	0,15	2,76

### Moments Statistics

Mean	1,74
Sorting	0,65
Skewness	-0,13
Kurtosis	1,15
Uniformity Coefficient	1,73

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

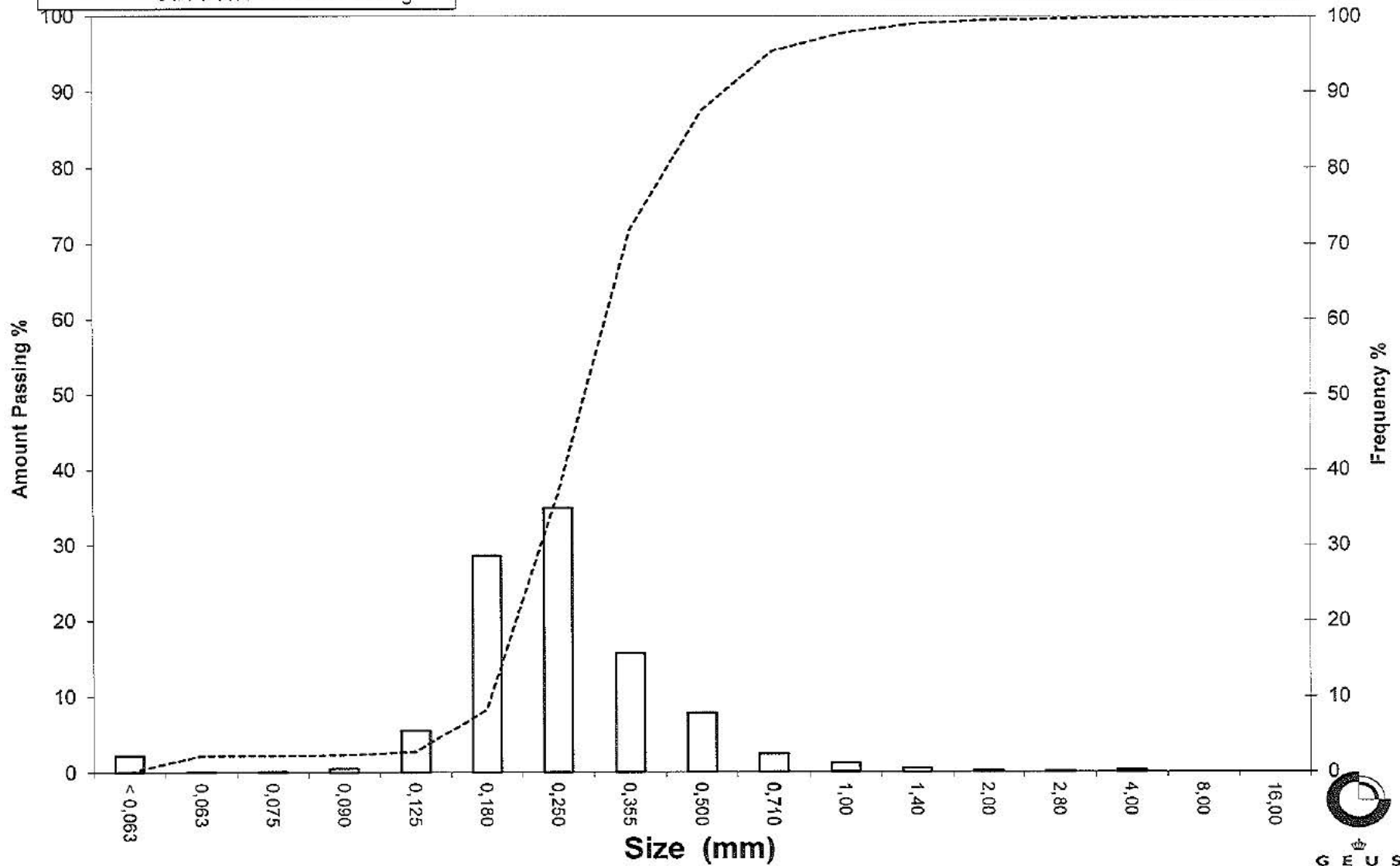
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542014-1 0-200 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 542014-1 200-400 cm  
 Lab. Id: 170176  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks: >2,8 mm består af skaller



GEUS

Total Weight 116,01 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,19	0,16	99,84
2,80	-1,49	0,26	0,22	99,61
2,00	-1,00	0,35	0,30	99,31
1,40	-0,49	0,54	0,47	98,84
1,00	0,00	2,49	2,15	96,70
0,710	0,49	4,08	3,52	93,18
0,500	1,00	12,83	11,06	82,12
0,355	1,49	26,92	23,20	58,92
0,250	2,00	36,32	31,31	27,61
0,180	2,47	21,28	18,34	9,27
0,125	3,00	6,22	5,36	3,90
0,090	3,47	0,65	0,56	3,34
0,075	3,74	0,10	0,09	3,26
0,063	3,99	0,04	0,03	3,22
< 0,063	> 3,99	3,74	3,22	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	3,22
Sand, fine (0,063 mm - 0,200 mm):	11,28
Sand, medium (0,2 mm - 0,6 mm):	72,88
Sand, coarse (0,6 mm - 2 mm):	11,92
Gravel (> 2 mm):	0,69
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,86	0,22
16%	84%	0,54	0,90
25%	75%	0,46	1,13
40%	60%	0,36	1,47
Median 50%	50%	0,33	1,62
75%	25%	0,24	2,06
84%	16%	0,21	2,28
90%	10%	0,18	2,45
95%	5%	0,14	2,88

## Moments Statistics

Mean	1,60
Sorting	0,75
Skewness	-0,05
Kurtosis	1,18
Uniformity Coefficient	1,98

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

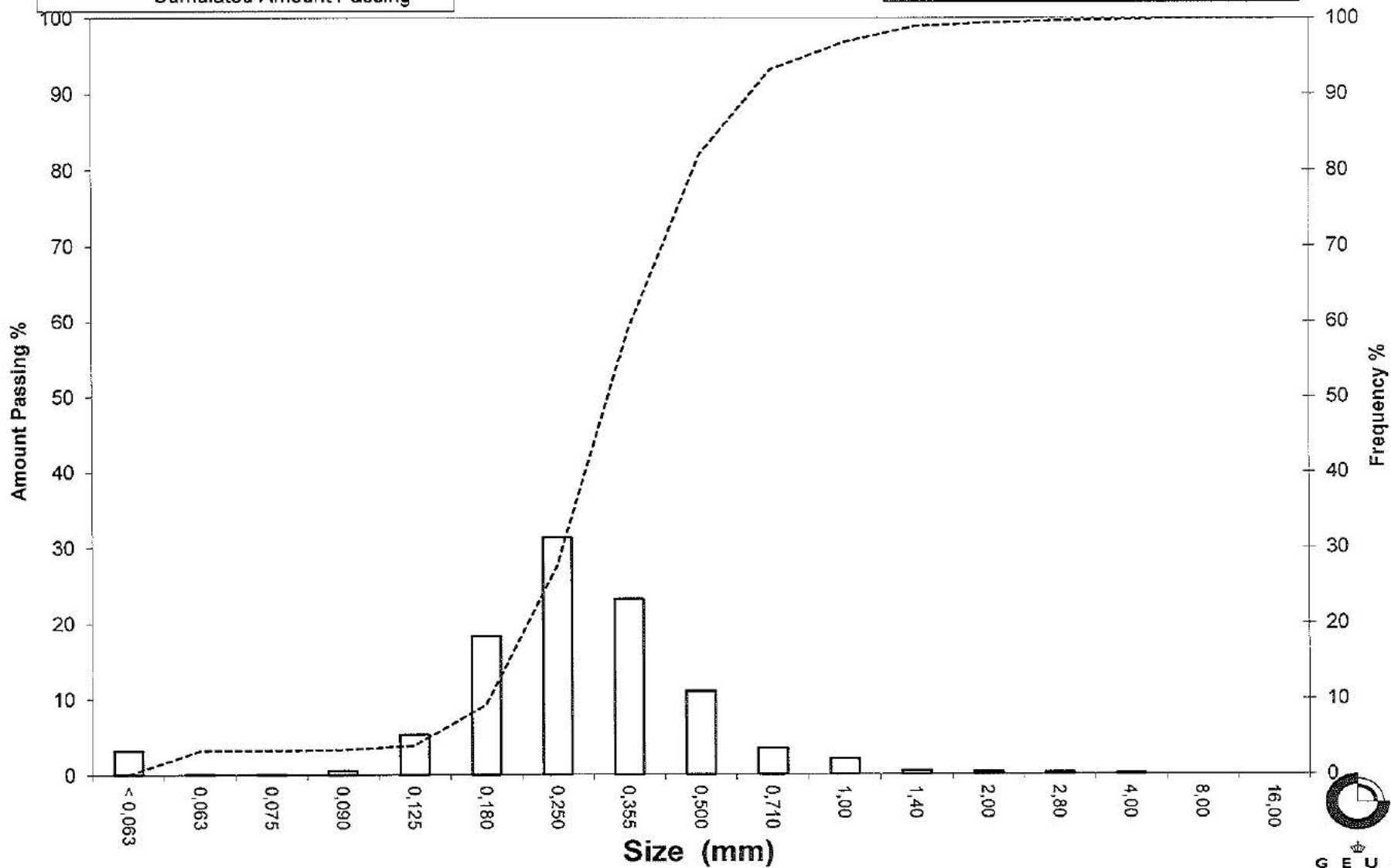
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542014-1 200-400 cm

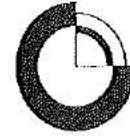
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542014-2 10-110 cm  
**Lab. Id:** 170215  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >2,8 mm består af skaller



**GEUS**

**Total Weight** 170,01 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,04	0,61	99,39
4,00	-2,00	2,50	1,47	97,92
2,80	-1,49	3,40	2,00	95,92
2,00	-1,00	4,69	2,76	93,16
1,40	-0,49	4,95	2,91	90,25
1,00	0,00	7,57	4,45	85,79
0,710	0,49	8,43	4,96	80,84
0,500	1,00	19,09	11,23	69,61
0,355	1,49	54,27	31,92	37,69
0,250	2,00	43,70	25,70	11,98
0,180	2,47	11,84	6,96	5,02
0,125	3,00	3,29	1,94	3,08
0,090	3,47	0,57	0,34	2,75
0,075	3,74	0,11	0,06	2,68
0,063	3,99	0,08	0,05	2,64
< 0,063	> 3,99	4,48	2,64	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	2,64
Sand, fine (0,063 mm - 0,200 mm):	4,37
Sand, medium (0,2 mm - 0,6 mm):	67,95
Sand, coarse (0,6 mm - 2 mm):	18,20
Gravel (> 2 mm):	6,84
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	2,53	-1,34
16%	84%	0,90	0,16
25%	75%	0,60	0,73
40%	60%	0,46	1,13
Median 50%	50%	0,41	1,28
75%	25%	0,30	1,72
84%	16%	0,27	1,91
90%	10%	0,23	2,12
95%	5%	0,18	2,48

### Moments Statistics

Mean	1,12
Sorting	1,02
Skewness	-0,33
Kurtosis	1,59
Uniformity Coefficient	1,98

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

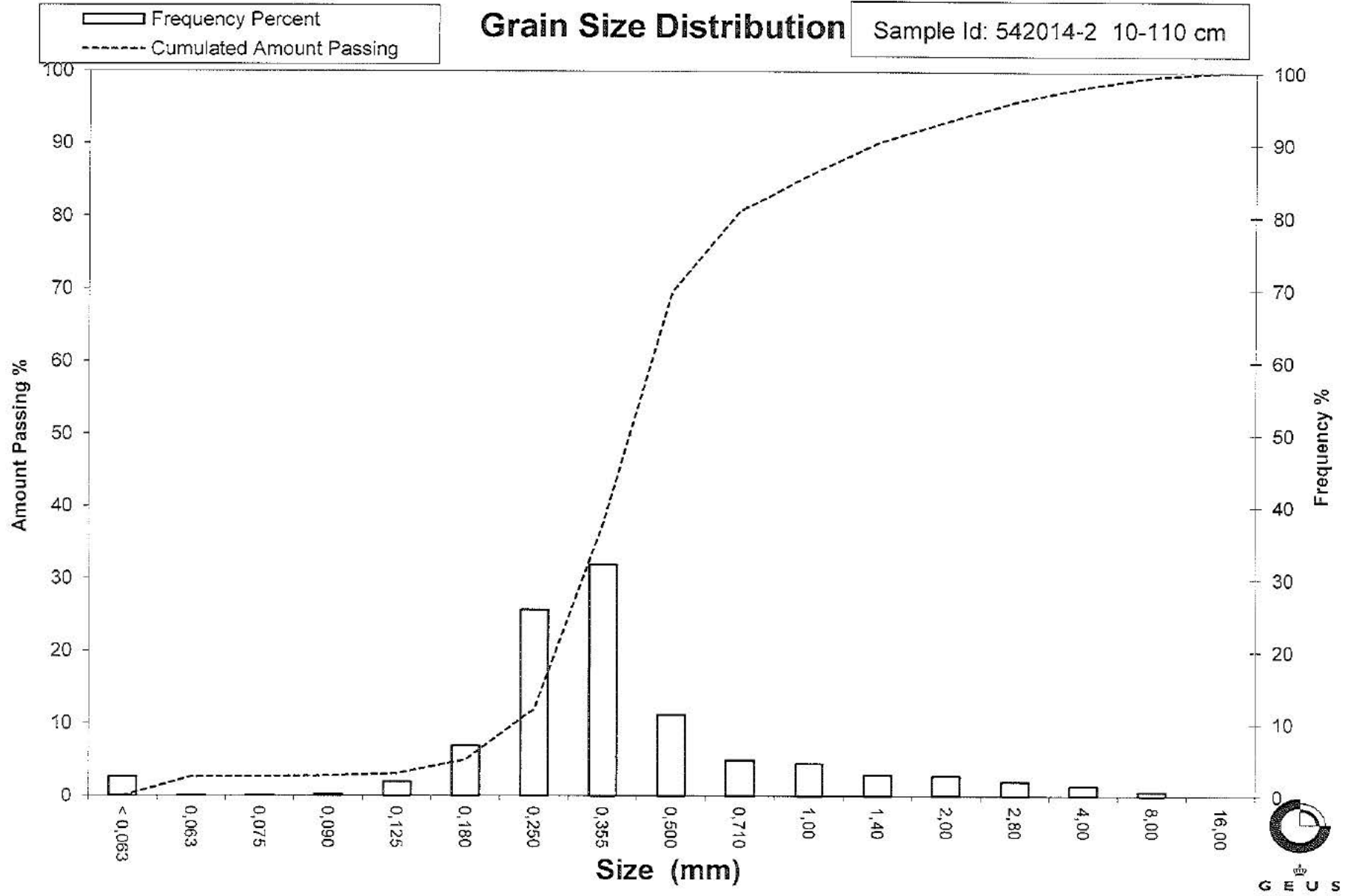
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542014-2 10-110 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542014-2 150-350 cm  
**Lab. Id:** 170216  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >1,4 mm består af skaller



**Total Weight** 344,58 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	15,68	4,55	95,45
8,00	-3,00	9,36	2,72	92,73
4,00	-2,00	7,24	2,10	90,63
2,80	-1,49	4,73	1,37	89,26
2,00	-1,00	4,84	1,40	87,85
1,40	-0,49	5,65	1,64	86,22
1,00	0,00	9,52	2,76	83,45
0,710	0,49	13,92	4,04	79,41
0,500	1,00	41,21	11,96	67,45
0,355	1,49	98,55	28,60	38,85
0,250	2,00	78,84	22,88	15,97
0,180	2,47	29,07	8,44	7,54
0,125	3,00	9,23	2,68	4,86
0,090	3,47	1,33	0,39	4,47
0,075	3,74	0,26	0,08	4,40
0,063	3,99	0,17	0,05	4,35
< 0,063	> 3,99	14,98	4,35	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	4,35
Sand, fine (0,063 mm - 0,200 mm)	5,60
Sand, medium (0,2 mm - 0,6 mm)	63,20
Sand, coarse (0,6 mm - 2 mm)	14,71
Gravel (> 2 mm)	12,15
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	14,68	-3,88
16%	84%	1,08	-0,11
25%	75%	0,63	0,66
40%	60%	0,46	1,11
Median 50%	50%	0,41	1,28
75%	25%	0,29	1,78
84%	16%	0,25	2,00
90%	10%	0,20	2,32
95%	5%	0,13	2,97

### Moments Statistics

Mean	1,08
Sorting	1,56
Skewness	-0,41
Kurtosis	2,51
Uniformity Coefficient	2,31

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

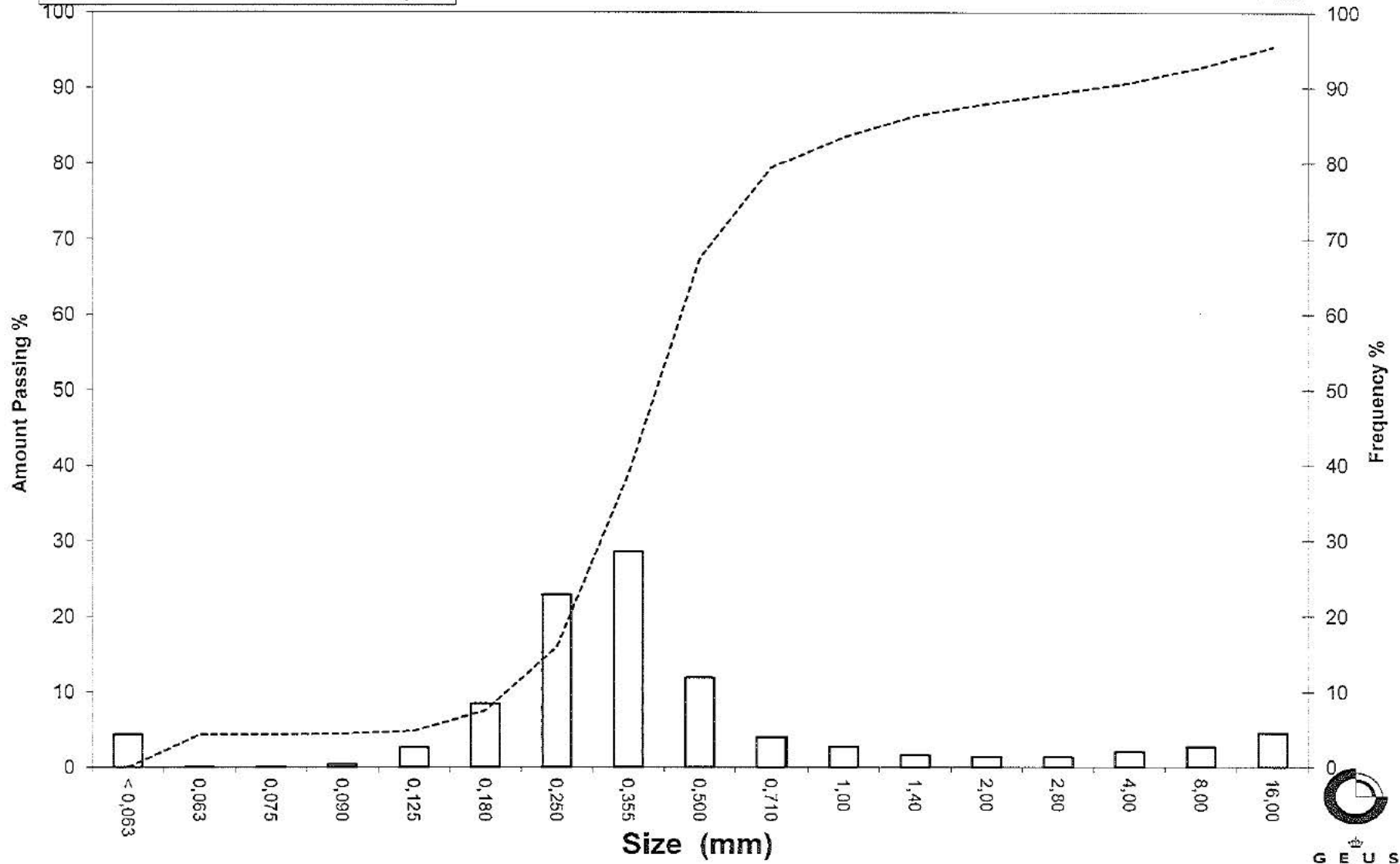
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542014-2 150-350 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542030-1 0-80 cm  
**Lab. Id:** 170177  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >1,4 mm består af skaller



**Total Weight** 123,26 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,16	0,13	99,87
2,00	-1,00	0,03	0,02	99,85
1,40	-0,49	0,18	0,15	99,70
1,00	0,00	0,96	0,78	98,92
0,710	0,49	5,00	4,06	94,86
0,500	1,00	21,44	17,39	77,47
0,355	1,49	35,79	29,04	48,43
0,250	2,00	34,04	27,62	20,82
0,180	2,47	17,78	14,42	6,39
0,125	3,00	5,20	4,22	2,17
0,090	3,47	0,62	0,50	1,67
0,075	3,74	0,11	0,09	1,58
0,063	3,99	0,07	0,06	1,53
< 0,063	> 3,99	1,88	1,53	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,53
Sand, fine (0,063 mm - 0,200 mm):	8,99
Sand, medium (0,2 mm - 0,6 mm):	75,24
Sand, coarse (0,6 mm - 2 mm):	14,09
Gravel (> 2 mm):	0,15
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,72	0,47
16%	84%	0,58	0,79
25%	75%	0,49	1,04
40%	60%	0,41	1,28
Median 50%	50%	0,36	1,46
75%	25%	0,27	1,91
84%	16%	0,23	2,14
90%	10%	0,20	2,34
95%	5%	0,16	2,63

### Moments Statistics

Mean	1,46
Sorting	0,86
Skewness	0,04
Kurtosis	1,01
Uniformity Coefficient	2,09

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

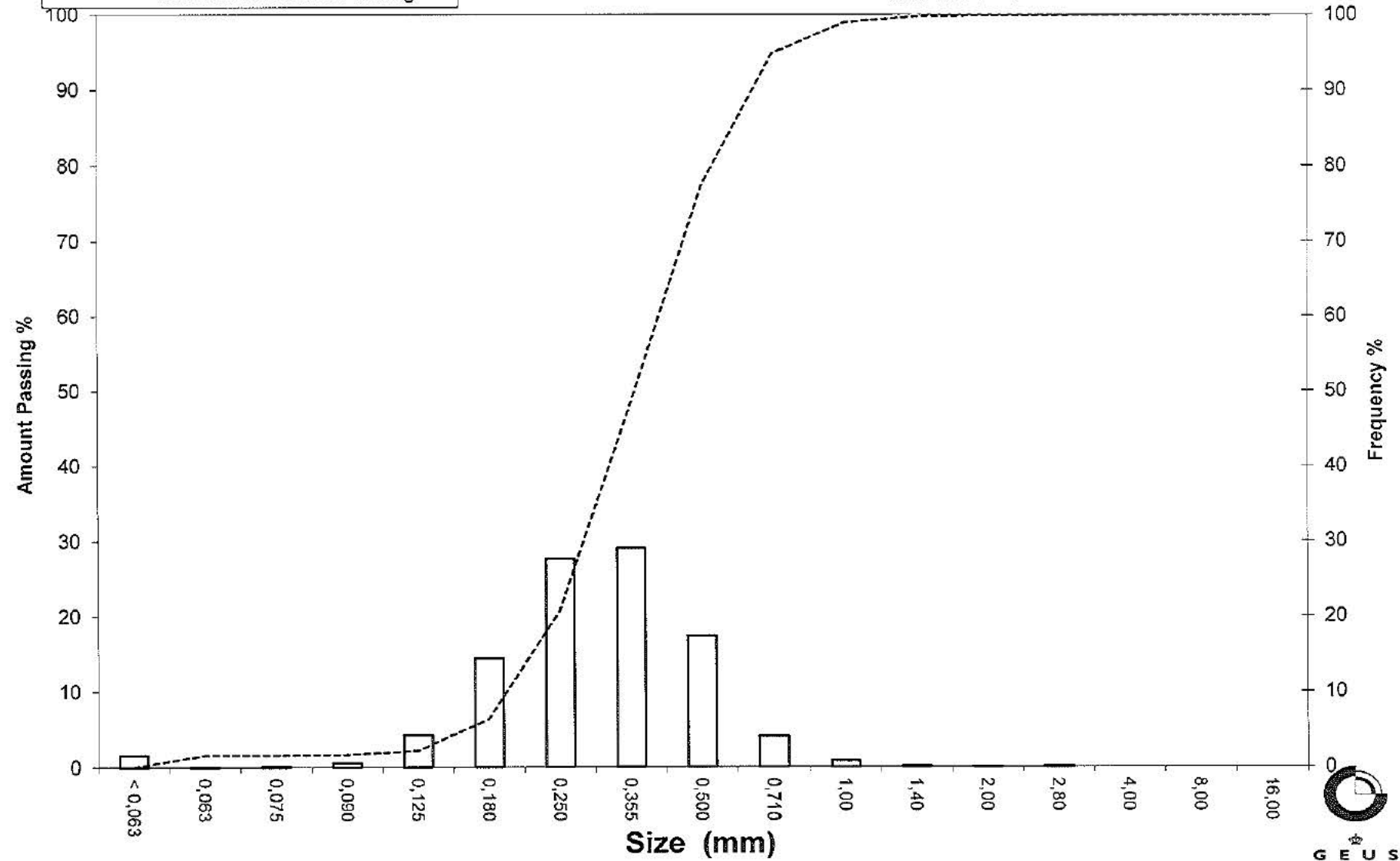
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542030-1 0-80 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542030-1 250-360 cm  
**Lab. Id:** 170178  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 115,47 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,31	0,27	99,73
2,80	-1,49	0,08	0,07	99,66
2,00	-1,00	0,18	0,16	99,51
1,40	-0,49	0,34	0,29	99,21
1,00	0,00	1,00	0,87	98,35
0,710	0,49	2,28	1,97	96,37
0,500	1,00	8,56	7,41	88,96
0,355	1,49	17,53	15,18	73,78
0,250	2,00	23,10	20,01	53,77
0,180	2,47	17,21	14,90	38,87
0,125	3,00	13,28	11,50	27,37
0,090	3,47	7,82	6,77	20,59
0,075	3,74	2,90	2,51	18,08
0,063	3,99	3,06	2,65	15,43
< 0,063	> 3,99	17,82	15,43	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	15,43
Sand, fine (0,063 mm - 0,200 mm):	27,69
Sand, medium (0,2 mm - 0,6 mm):	49,36
Sand, coarse (0,6 mm - 2 mm):	7,02
Gravel (> 2 mm):	0,49
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,67	0,58
16%	84%	0,45	1,14
25%	75%	0,37	1,45
40%	60%	0,28	1,82
Median 50%	50%	0,23	2,11
75%	25%	0,11	3,15
84%	16%	0,07	3,93
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,39
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

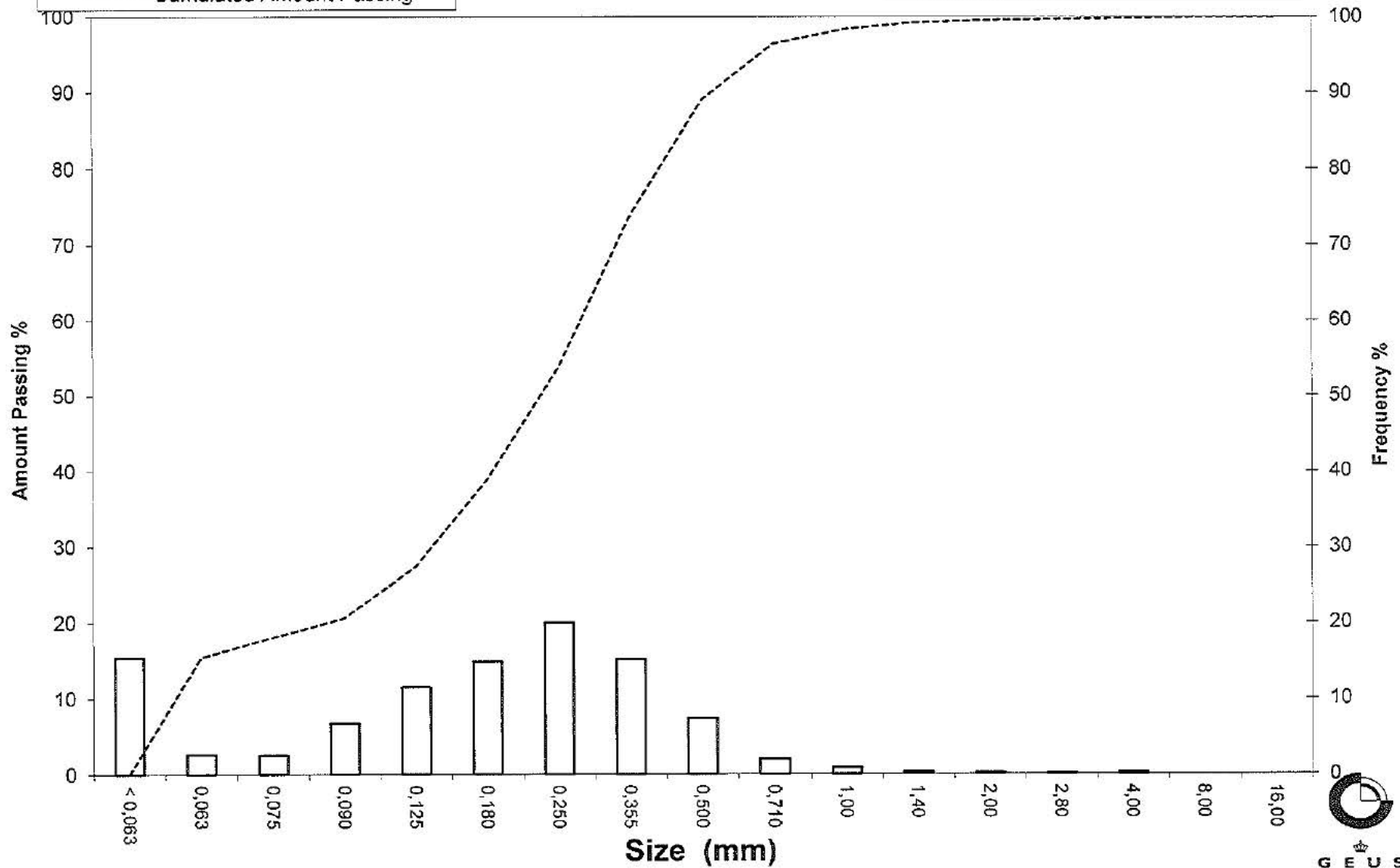
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542030-1 250-360 cm

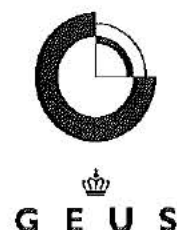
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542030-1 360-480 cm  
**Lab. Id:** 170179  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 118,05 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,09	0,08	99,92
2,00	-1,00	0,27	0,23	99,70
1,40	-0,49	0,26	0,22	99,47
1,00	0,00	0,55	0,47	99,01
0,710	0,49	1,39	1,18	97,83
0,500	1,00	5,69	4,82	93,01
0,355	1,49	11,87	10,06	82,96
0,250	2,00	17,21	14,58	68,38
0,180	2,47	15,72	13,32	55,06
0,125	3,00	20,92	17,72	37,34
0,090	3,47	15,36	13,01	24,33
0,075	3,74	5,59	4,74	19,59
0,063	3,99	5,64	4,78	14,82
< 0,063	> 3,99	17,49	14,82	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	14,82
Sand, fine (0,063 mm - 0,200 mm):	44,05
Sand, medium (0,2 mm - 0,6 mm):	36,44
Sand, coarse (0,6 mm - 2 mm):	4,39
Gravel (> 2 mm):	0,30
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,59	0,77
16%	84%	0,37	1,43
25%	75%	0,30	1,75
40%	60%	0,21	2,28
Median 50%	50%	0,16	2,61
75%	25%	0,09	3,45
84%	16%	0,07	3,92
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,65
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

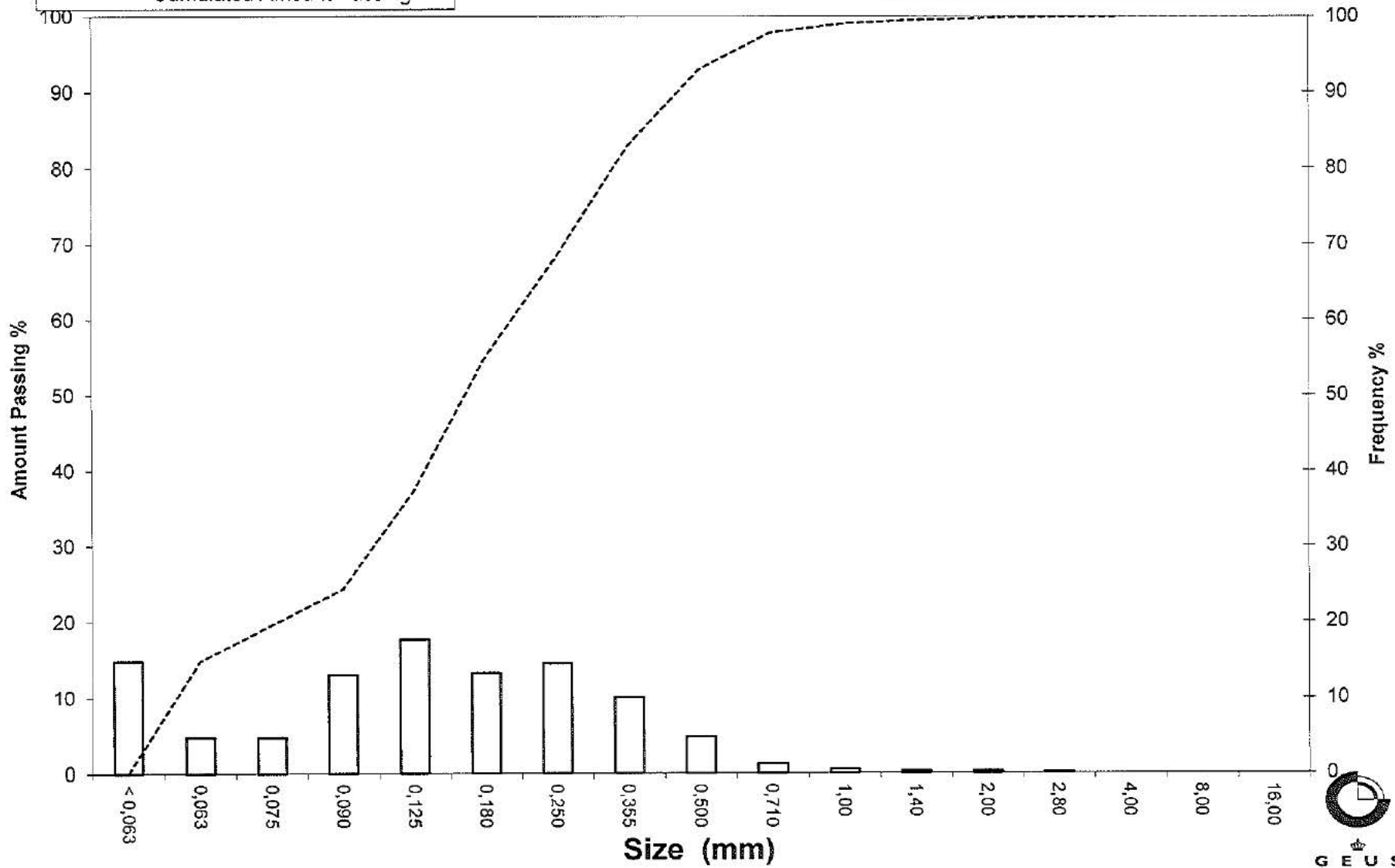
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# Grain Size Distribution

Sample Id: 542030-1 360-480 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542036-1 30-230 cm  
**Lab. Id:** 170180  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 103,35 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,07	0,07	99,93
0,710	0,49	0,06	0,06	99,87
0,500	1,00	0,38	0,37	99,51
0,355	1,49	4,68	4,53	94,98
0,250	2,00	23,77	23,00	71,98
0,180	2,47	34,61	33,49	38,49
0,125	3,00	25,33	24,51	13,98
0,090	3,47	7,83	7,58	6,41
0,075	3,74	1,54	1,49	4,92
0,063	3,99	0,96	0,93	3,99
< 0,063	> 3,99	4,12	3,99	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	3,99
Sand, fine (0,063 mm - 0,200 mm):	44,07
Sand, medium (0,2 mm - 0,6 mm):	51,62
Sand, coarse (0,6 mm - 2 mm):	0,32
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,36	1,49
16%	84%	0,30	1,71
25%	75%	0,26	1,92
40%	60%	0,22	2,15
Median 50%	50%	0,20	2,29
75%	25%	0,15	2,74
84%	16%	0,13	2,95
90%	10%	0,11	3,23
95%	5%	0,08	3,72

### Moments Statistics

Mean	2,32
Sorting	0,65
Skewness	0,17
Kurtosis	1,12
Uniformity Coefficient	2,11

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

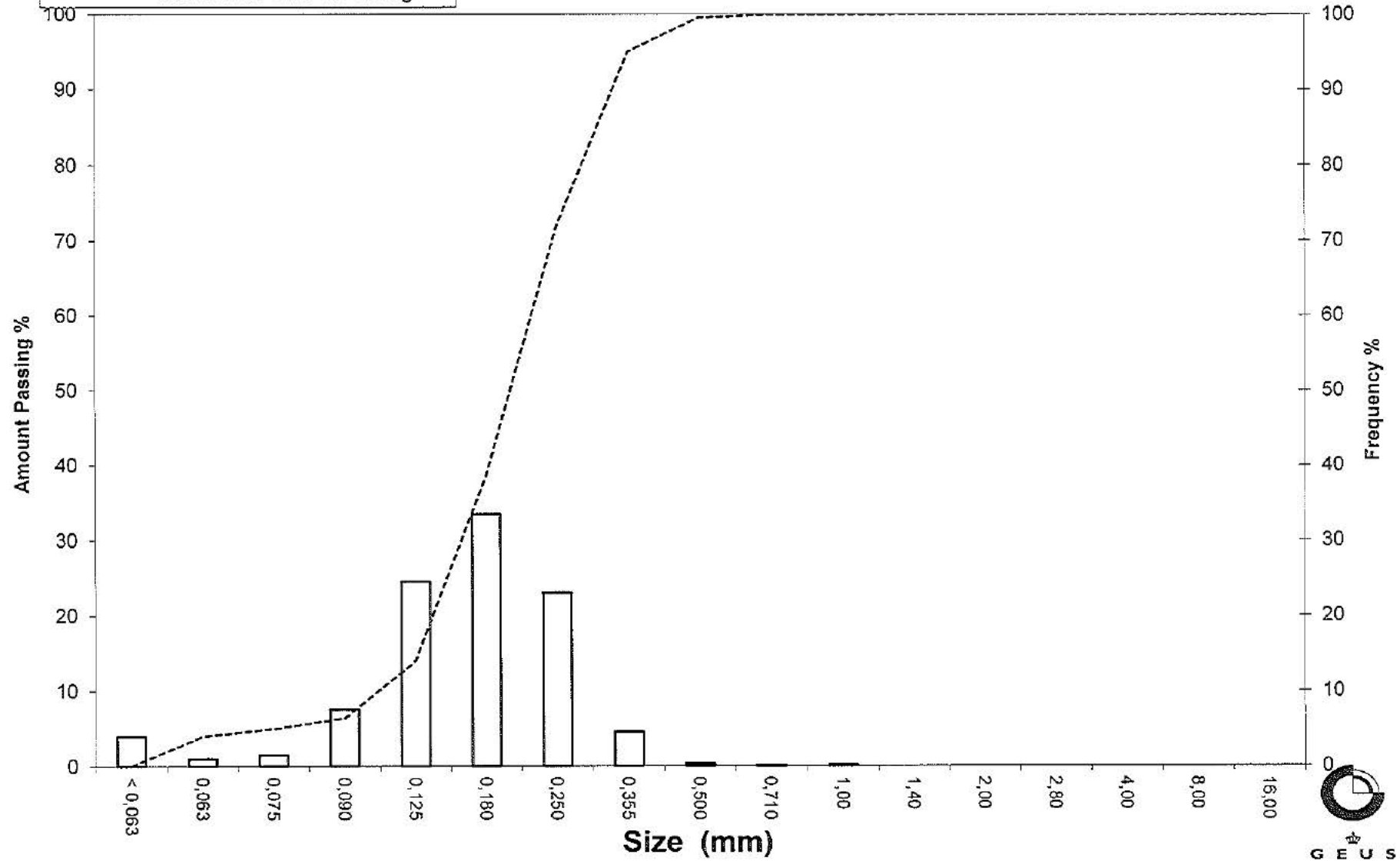
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542036-1 30-230 cm

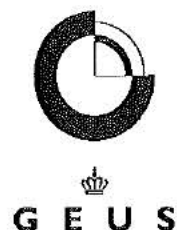
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542082-1 0-150 cm  
**Lab. Id:** 170181  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 138,39 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,89	0,64	99,36
1,40	-0,49	2,18	1,58	97,78
1,00	0,00	5,22	3,77	94,01
0,710	0,49	9,84	7,11	86,90
0,500	1,00	24,09	17,41	69,49
0,355	1,49	36,43	26,32	43,17
0,250	2,00	28,99	20,95	22,22
0,180	2,47	16,18	11,69	10,53
0,125	3,00	10,52	7,60	2,93
0,090	3,47	2,22	1,60	1,32
0,075	3,74	0,36	0,26	1,06
0,063	3,99	0,16	0,12	0,95
< 0,063	> 3,99	1,31	0,95	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,95
Sand, fine (0,063 mm - 0,200 mm):	12,92
Sand, medium (0,2 mm - 0,6 mm):	63,91
Sand, coarse (0,6 mm - 2 mm):	21,58
Gravel (> 2 mm):	0,64
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,11	-0,14
16%	84%	0,68	0,57
25%	75%	0,57	0,82
40%	60%	0,45	1,16
Median 50%	50%	0,39	1,35
75%	25%	0,26	1,92
84%	16%	0,21	2,23
90%	10%	0,18	2,50
95%	5%	0,14	2,84

### Moments Statistics

Mean	1,38
Sorting	0,87
Skewness	0,03
Kurtosis	1,11
Uniformity Coefficient	2,54

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

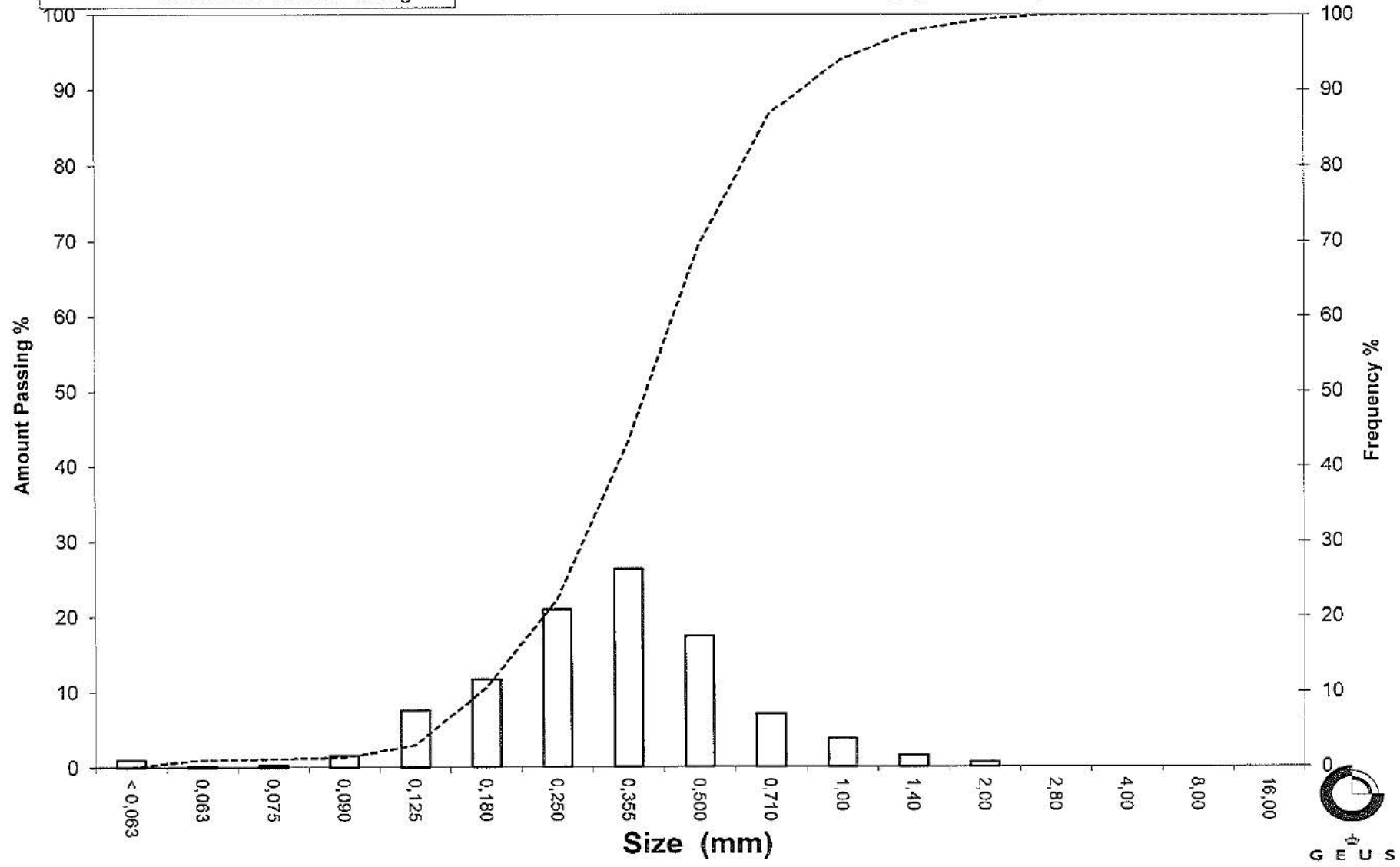
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542082-1 0-150 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542082-1 150-300 cm  
**Lab. Id:** 170182  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 122,71 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,25	0,20	99,80
2,80	-1,49	0,27	0,22	99,58
2,00	-1,00	0,43	0,35	99,23
1,40	-0,49	0,78	0,64	98,59
1,00	0,00	2,30	1,87	96,72
0,710	0,49	5,20	4,24	92,48
0,500	1,00	17,17	13,99	78,49
0,355	1,49	32,64	26,60	51,89
0,250	2,00	29,41	23,97	27,92
0,180	2,47	17,38	14,16	13,76
0,125	3,00	11,76	9,58	4,17
0,090	3,47	2,75	2,24	1,93
0,075	3,74	0,48	0,39	1,54
0,063	3,99	0,23	0,19	1,35
< 0,063	> 3,99	1,66	1,35	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	1,35
Sand, fine (0,063 mm - 0,200 mm):	16,45
Sand, medium (0,2 mm - 0,6 mm):	67,35
Sand, coarse (0,6 mm - 2 mm):	14,08
Gravel (> 2 mm):	0,77
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,88	0,18
16%	84%	0,58	0,78
25%	75%	0,48	1,06
40%	60%	0,40	1,32
Median 50%	50%	0,35	1,53
75%	25%	0,24	2,09
84%	16%	0,19	2,39
90%	10%	0,16	2,66
95%	5%	0,13	2,95

### Moments Statistics

Mean	1,56
Sorting	0,82
Skewness	0,05
Kurtosis	1,10
Uniformity Coefficient	2,52

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

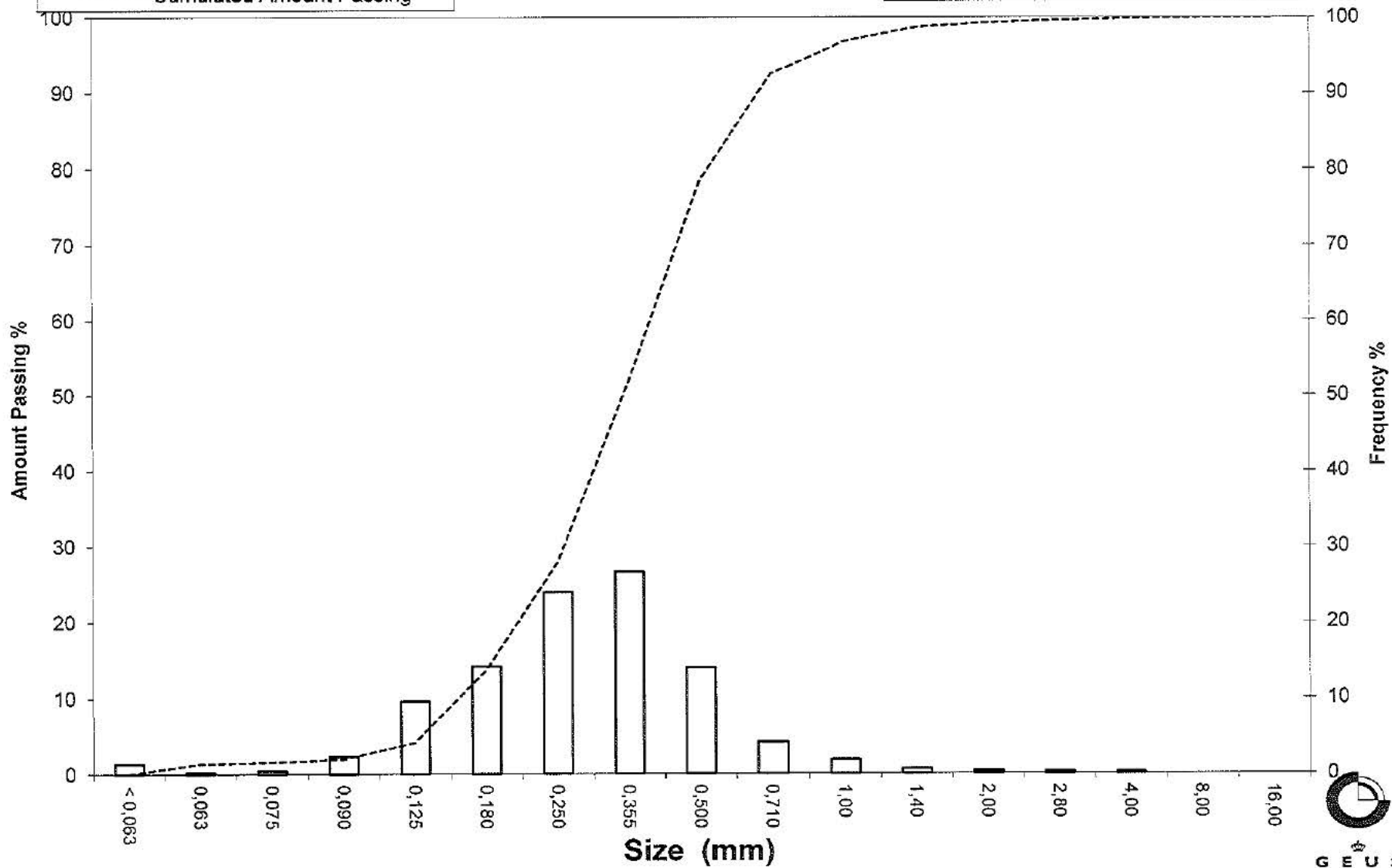
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 542082-1 150-300 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 542086-1 0-25 cm  
**Lab. Id:** 170183  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 133,22 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,19	0,14	99,86
2,80	-1,49	0,00	0,00	99,86
2,00	-1,00	0,13	0,10	99,76
1,40	-0,49	0,07	0,05	99,71
1,00	0,00	0,14	0,11	99,60
0,710	0,49	0,23	0,17	99,43
0,500	1,00	0,81	0,61	98,82
0,355	1,49	2,75	2,06	96,76
0,250	2,00	8,19	6,15	90,61
0,180	2,47	32,56	24,44	66,17
0,125	3,00	67,45	50,63	15,54
0,090	3,47	15,62	11,72	3,81
0,075	3,74	1,64	1,23	2,58
0,063	3,99	0,67	0,50	2,08
< 0,063	> 3,99	2,77	2,08	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	2,08
Sand, fine (0,063 mm - 0,200 mm)	71,07
Sand, medium (0,2 mm - 0,6 mm)	25,96
Sand, coarse (0,6 mm - 2 mm)	0,65
Gravel (> 2 mm)	0,24
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,32	1,62
16%	84%	0,23	2,11
25%	75%	0,21	2,28
40%	60%	0,17	2,53
Median 50%	50%	0,16	2,62
75%	25%	0,14	2,89
84%	16%	0,13	2,99
90%	10%	0,11	3,20
95%	5%	0,09	3,42

### Moments Statistics

Mean	2,58
Sorting	0,49
Skewness	-0,13
Kurtosis	1,22
Uniformity Coefficient	1,60

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

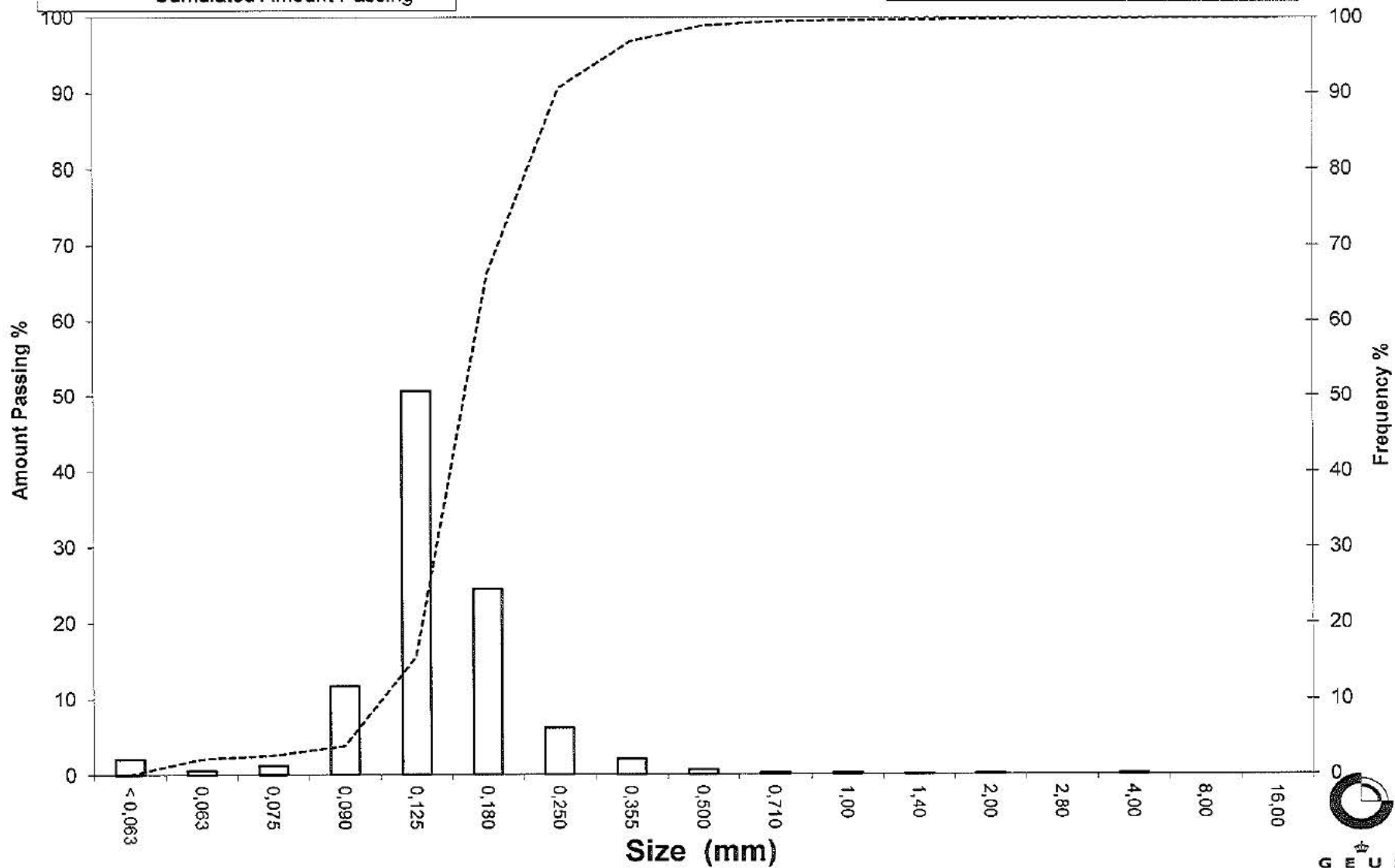
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# Grain Size Distribution

Sample Id: 542086-1 0-25 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

**Sample Id:** 544001-2 40-125 cm  
**Lab. Id:** 170184  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 136,48 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	2,56	1,88	98,12
4,00	-2,00	2,48	1,82	96,31
2,80	-1,49	2,21	1,62	94,69
2,00	-1,00	2,36	1,73	92,96
1,40	-0,49	2,65	1,94	91,02
1,00	0,00	6,64	4,87	86,15
0,710	0,49	8,57	6,28	79,87
0,500	1,00	18,11	13,27	66,60
0,355	1,49	27,92	20,46	46,15
0,250	2,00	26,75	19,60	26,55
0,180	2,47	13,80	10,11	16,43
0,125	3,00	10,33	7,57	8,87
0,090	3,47	3,75	2,75	6,12
0,075	3,74	0,87	0,64	5,48
0,063	3,99	0,63	0,46	5,02
< 0,063	> 3,99	6,85	5,02	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	5,02
Sand, fine (0,063 mm - 0,200 mm):	14,30
Sand, medium (0,2 mm - 0,6 mm):	53,60
Sand, coarse (0,6 mm - 2 mm):	20,04
Gravel (> 2 mm):	7,04
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,03	-1,60
16%	84%	0,90	0,15
25%	75%	0,63	0,66
40%	60%	0,45	1,14
Median 50%	50%	0,38	1,39
75%	25%	0,24	2,06
84%	16%	0,18	2,50
90%	10%	0,13	2,91
95%	5%	-----	-----

## Moments Statistics

Mean	1,35
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,40

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

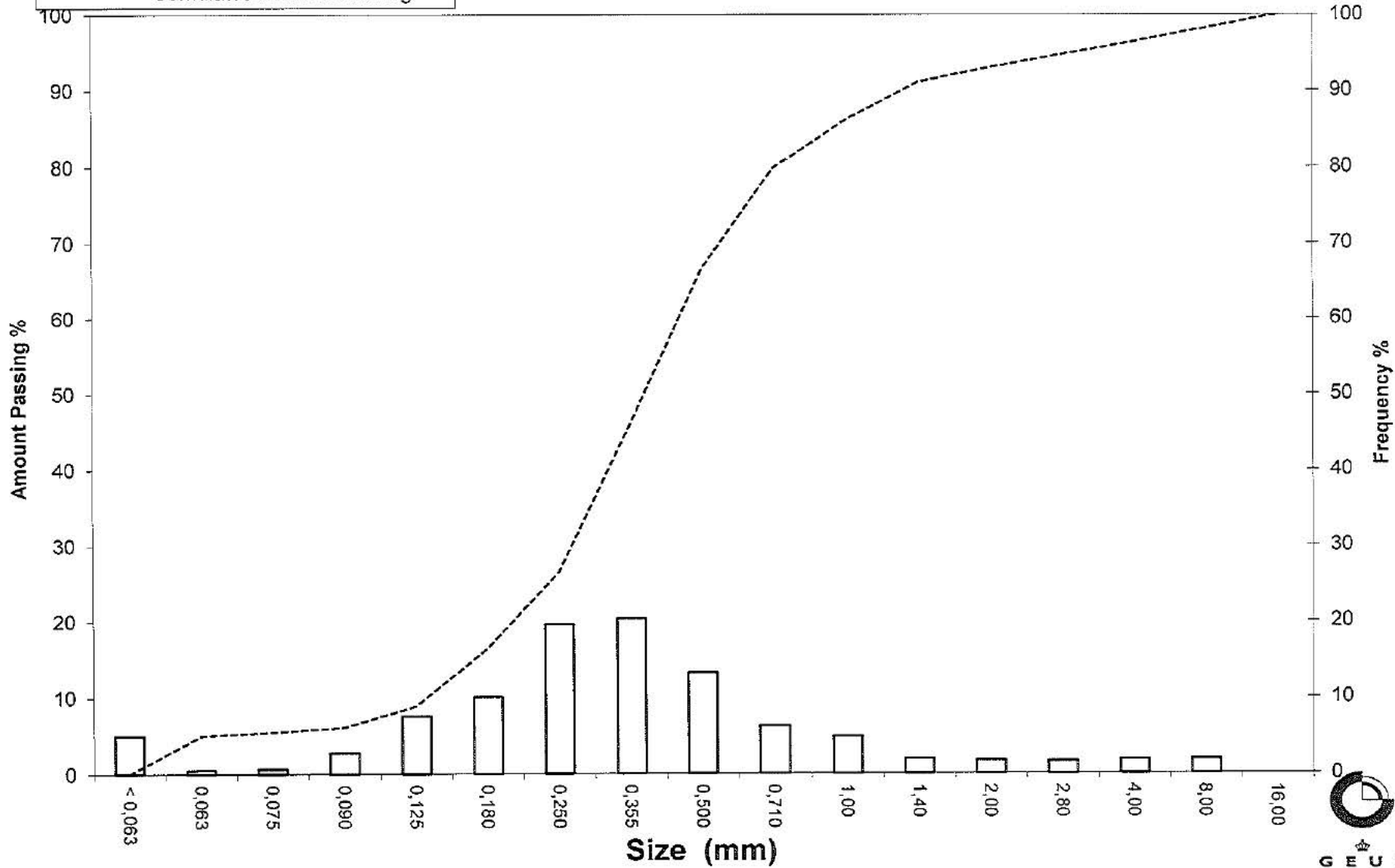
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 544001-2 40-125 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 544001-2 160-230 cm  
 Lab. Id: 170185  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 126,94 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	1,03	0,81	99,19
2,80	-1,49	0,52	0,41	98,78
2,00	-1,00	0,47	0,37	98,41
1,40	-0,49	0,86	0,68	97,73
1,00	0,00	1,76	1,39	96,34
0,710	0,49	3,22	2,54	93,81
0,500	1,00	10,18	8,02	85,79
0,355	1,49	23,47	18,49	67,30
0,250	2,00	38,03	29,96	37,34
0,180	2,47	23,90	18,83	18,51
0,125	3,00	16,81	13,24	5,27
0,090	3,47	3,40	2,68	2,59
0,075	3,74	0,54	0,43	2,17
0,063	3,99	0,28	0,22	1,95
< 0,063	> 3,99	2,47	1,95	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,95
Sand, fine (0,063 mm - 0,200 mm)	21,95
Sand, medium (0,2 mm - 0,6 mm)	65,72
Sand, coarse (0,6 mm - 2 mm)	8,80
Gravel (> 2 mm)	1,59
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,85	0,24
16%	84%	0,49	1,04
25%	75%	0,42	1,27
40%	60%	0,33	1,80
Median 50%	50%	0,29	1,76
75%	25%	0,20	2,29
84%	16%	0,17	2,56
90%	10%	0,14	2,79
95%	5%	0,12	3,04

## Moments Statistics

Mean	1,79
Sorting	0,80
Skewness	-0,02
Kurtosis	1,12
Uniformity Coefficient	2,28

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

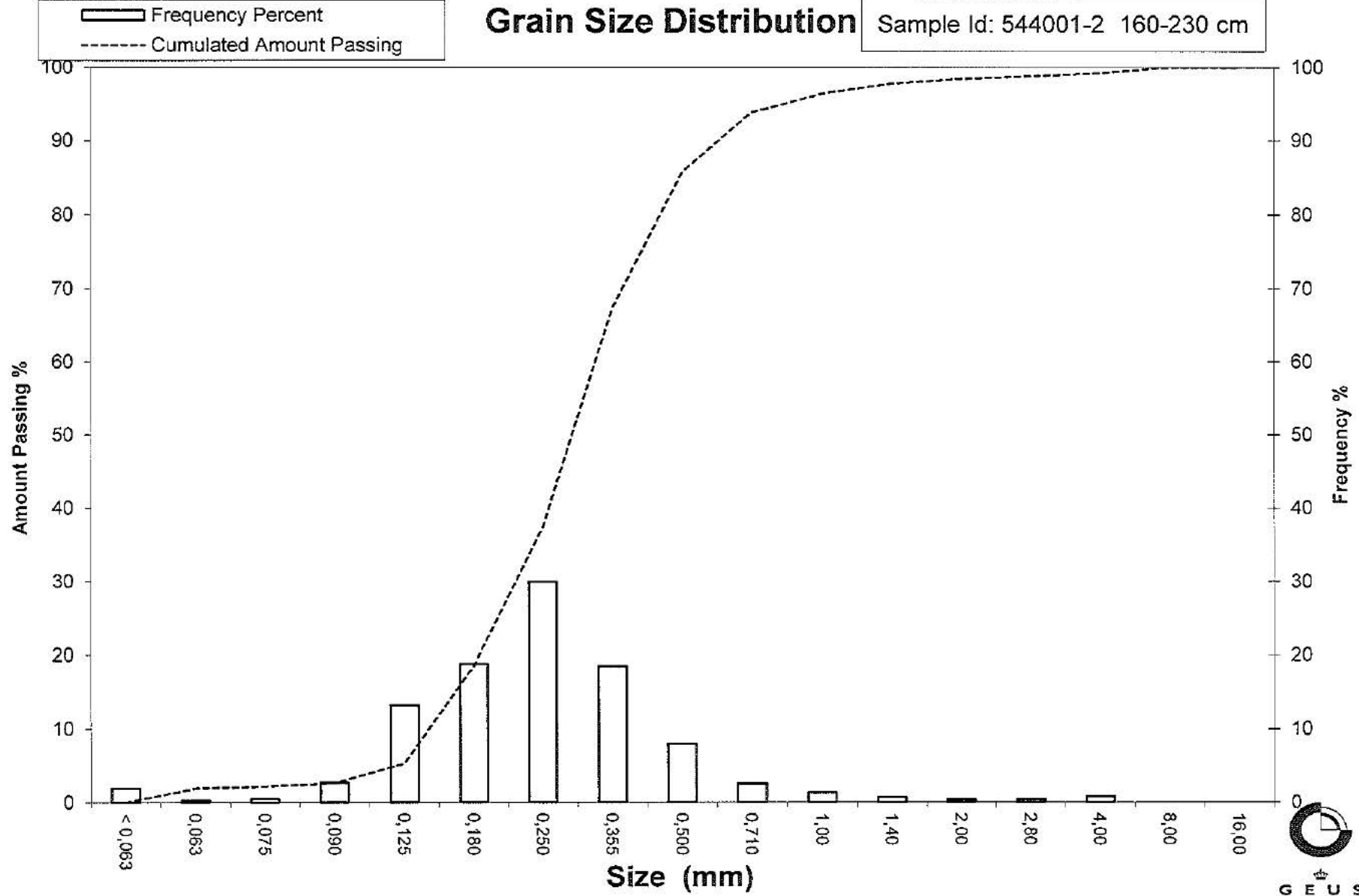
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 544001-2 160-230 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 544009-1 40-100 cm  
**Lab. Id:** 170154  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelses råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 149,91 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,44	0,29	99,71
2,80	-1,49	0,19	0,13	99,58
2,00	-1,00	1,59	1,06	98,52
1,40	-0,49	5,85	3,90	94,62
1,00	0,00	12,51	8,35	86,27
0,710	0,49	15,96	10,65	75,63
0,500	1,00	22,46	14,98	60,64
0,355	1,49	21,86	14,58	46,06
0,250	2,00	18,49	12,33	33,73
0,180	2,47	14,26	9,51	24,21
0,125	3,00	16,92	11,29	12,93
0,090	3,47	7,87	5,25	7,68
0,075	3,74	2,22	1,48	6,20
0,063	3,99	1,59	1,06	5,14
< 0,063	> 3,99	7,70	5,14	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	5,14
Sand, fine (0,063 mm - 0,200 mm):	21,80
Sand, medium (0,2 mm - 0,6 mm):	40,85
Sand, coarse (0,6 mm - 2 mm):	30,74
Gravel (> 2 mm):	1,48
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,46	-0,54
16%	84%	0,94	0,09
25%	75%	0,70	0,51
40%	60%	0,49	1,02
Median 50%	50%	0,39	1,34
75%	25%	0,19	2,43
84%	16%	0,14	2,84
90%	10%	0,11	3,24
95%	5%	-----	-----

### Moments Statistics

Mean	1,42
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	4,68

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

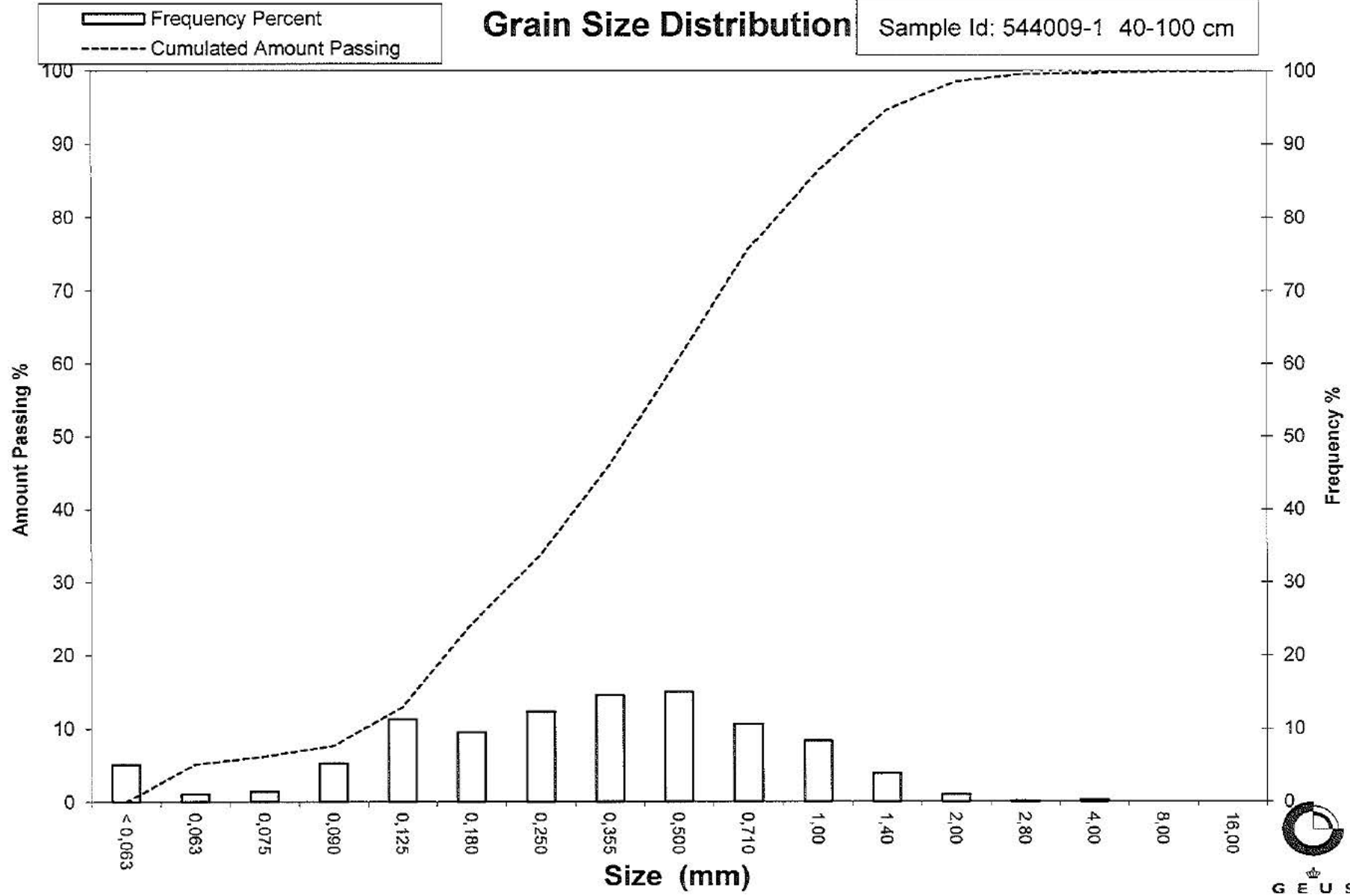
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

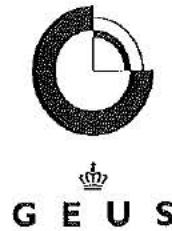
Sample Id: 544009-1 40-100 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 544020-1 420-510 cm  
**Lab. Id:** 170156  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 105,43 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,05	0,05	99,95
0,710	0,49	0,05	0,05	99,91
0,500	1,00	0,06	0,06	99,85
0,355	1,49	0,11	0,10	99,74
0,250	2,00	0,24	0,23	99,52
0,180	2,47	3,25	3,08	96,43
0,125	3,00	64,52	61,20	35,24
0,090	3,47	27,27	25,87	9,37
0,075	3,74	3,72	3,53	5,84
0,063	3,99	1,79	1,70	4,14
< 0,063	> 3,99	4,37	4,14	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	4,14
Sand, fine (0,063 mm - 0,200 mm)	93,17
Sand, medium (0,2 mm - 0,6 mm)	2,56
Sand, coarse (0,6 mm - 2 mm)	0,12
Gravel (> 2 mm)	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,18	2,48
16%	84%	0,17	2,57
25%	75%	0,16	2,64
40%	60%	0,15	2,76
Median 50%	50%	0,14	2,85
75%	25%	0,11	3,17
84%	16%	0,10	3,34
90%	10%	0,09	3,46
95%	5%	0,07	3,86

### Moments Statistics

Mean	2,92
Sorting	0,40
Skewness	0,36
Kurtosis	1,06
Uniformity Coefficient	1,62

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

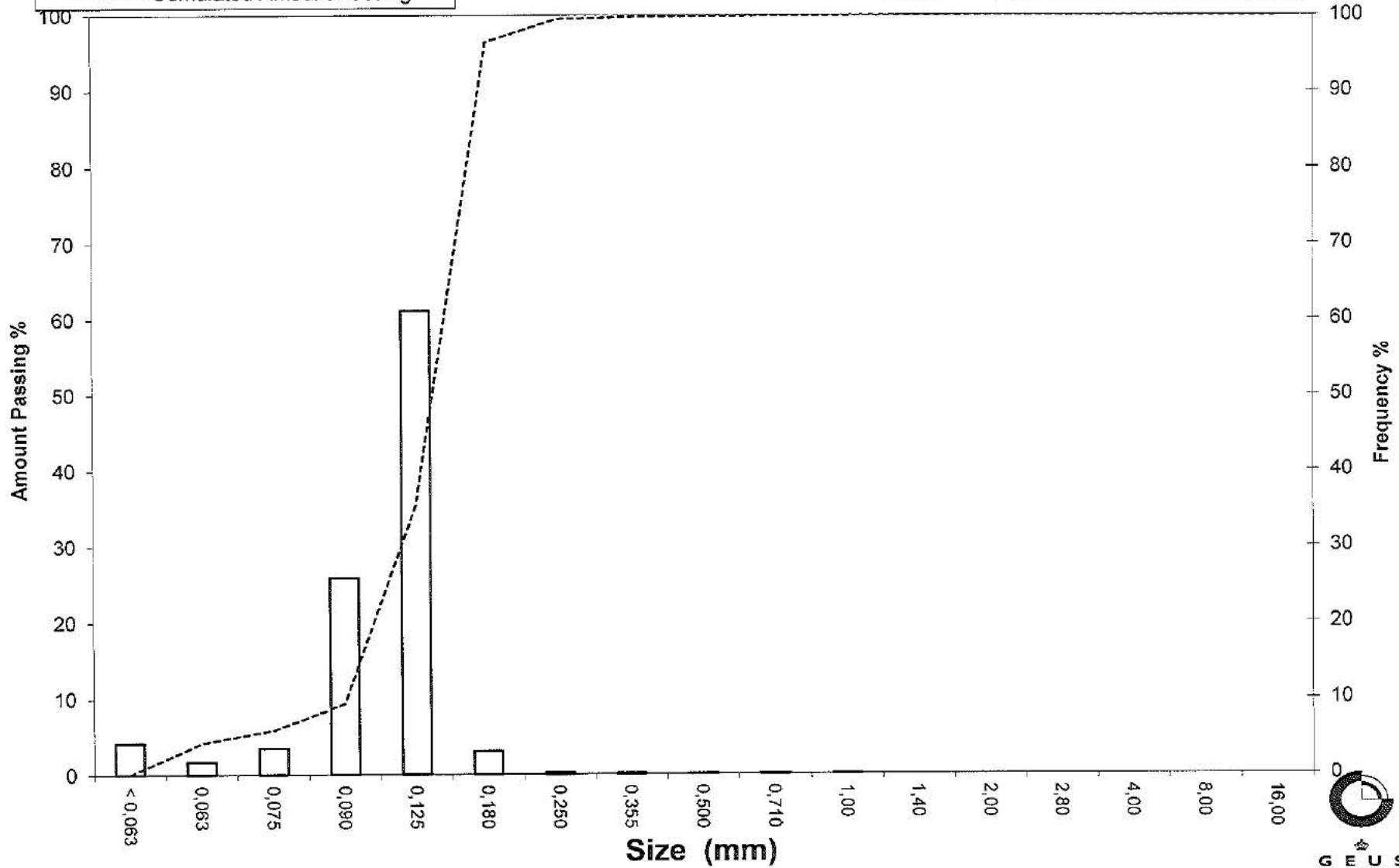
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# Grain Size Distribution

Sample Id: 544020-1 420-510 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 544025-1 50-110 cm  
**Lab. Id:** 170157  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 104,69 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,06	0,06	99,94
0,710	0,49	0,05	0,05	99,89
0,500	1,00	0,16	0,15	99,74
0,355	1,49	1,44	1,38	98,37
0,250	2,00	15,38	14,69	83,68
0,180	2,47	36,92	35,27	48,41
0,125	3,00	35,50	33,91	14,50
0,090	3,47	9,36	8,94	5,56
0,075	3,74	1,70	1,62	3,94
0,063	3,99	0,96	0,92	3,02
< 0,063	> 3,99	3,16	3,02	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	3,02
Sand, fine (0,063 mm - 0,200 mm):	55,47
Sand, medium (0,2 mm - 0,6 mm):	41,33
Sand, coarse (0,6 mm - 2 mm):	0,19
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,33	1,60
16%	84%	0,25	1,99
25%	75%	0,23	2,10
40%	60%	0,20	2,30
Median 50%	50%	0,18	2,46
75%	25%	0,14	2,82
84%	16%	0,13	2,97
90%	10%	0,11	3,22
95%	5%	0,08	3,56

### Moments Statistics

Mean	2,47
Sorting	0,54
Skewness	0,10
Kurtosis	1,13
Uniformity Coefficient	1,89

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

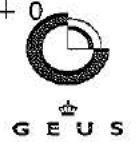
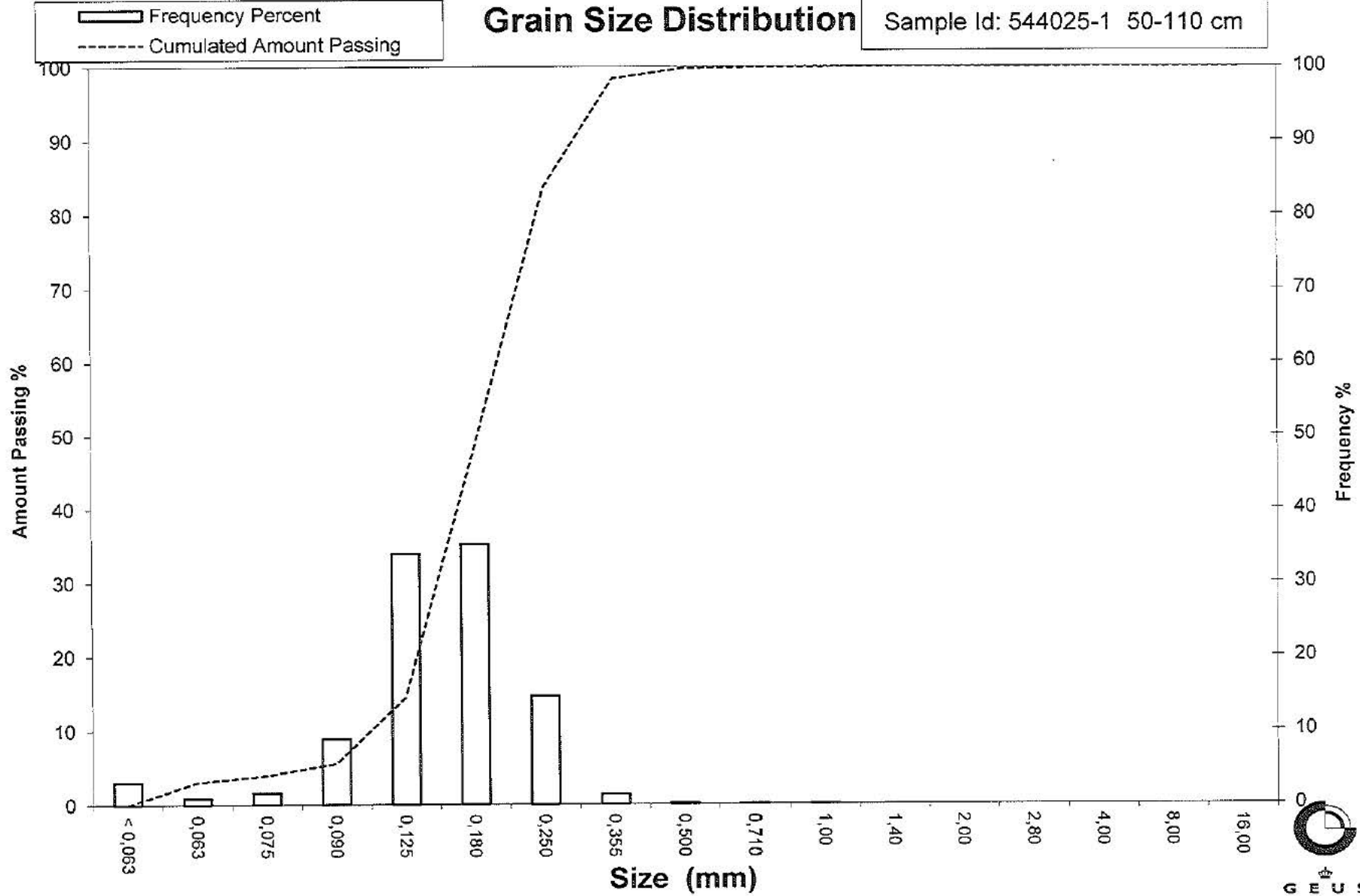
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

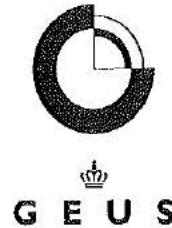
Sample Id: 544025-1 50-110 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 544028-1 5-55 cm  
**Lab. Id:** 170158  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 665,34 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	45,30	6,81	93,19
8,00	-3,00	53,26	8,00	85,19
4,00	-2,00	91,22	13,71	71,48
2,80	-1,49	45,67	6,86	64,61
2,00	-1,00	42,60	6,40	58,21
1,40	-0,49	46,93	7,05	51,16
1,00	0,00	53,44	8,03	43,12
0,710	0,49	51,08	7,68	35,45
0,500	1,00	58,75	8,83	26,62
0,355	1,49	52,64	7,91	18,70
0,250	2,00	42,16	6,34	12,37
0,180	2,47	31,62	4,75	7,62
0,125	3,00	27,60	4,15	3,47
0,090	3,47	6,96	1,05	2,42
0,075	3,74	1,43	0,21	2,21
0,063	3,99	0,97	0,15	2,06
< 0,063	> 3,99	13,71	2,06	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,06
Sand, fine (0,063 mm - 0,200 mm):	6,91
Sand, medium (0,2 mm - 0,6 mm):	21,85
Sand, coarse (0,6 mm - 2 mm):	27,39
Gravel (> 2 mm):	41,79
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%		
16%	84%	7,65	-2,94
25%	75%	5,03	-2,33
40%	60%	2,22	-1,15
Median 50%	50%	1,34	-0,42
75%	25%	0,47	1,09
84%	16%	0,31	1,69
90%	10%	0,22	2,22
95%	5%	0,15	2,78

### Moments Statistics

Mean	-0,56
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	10,34

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

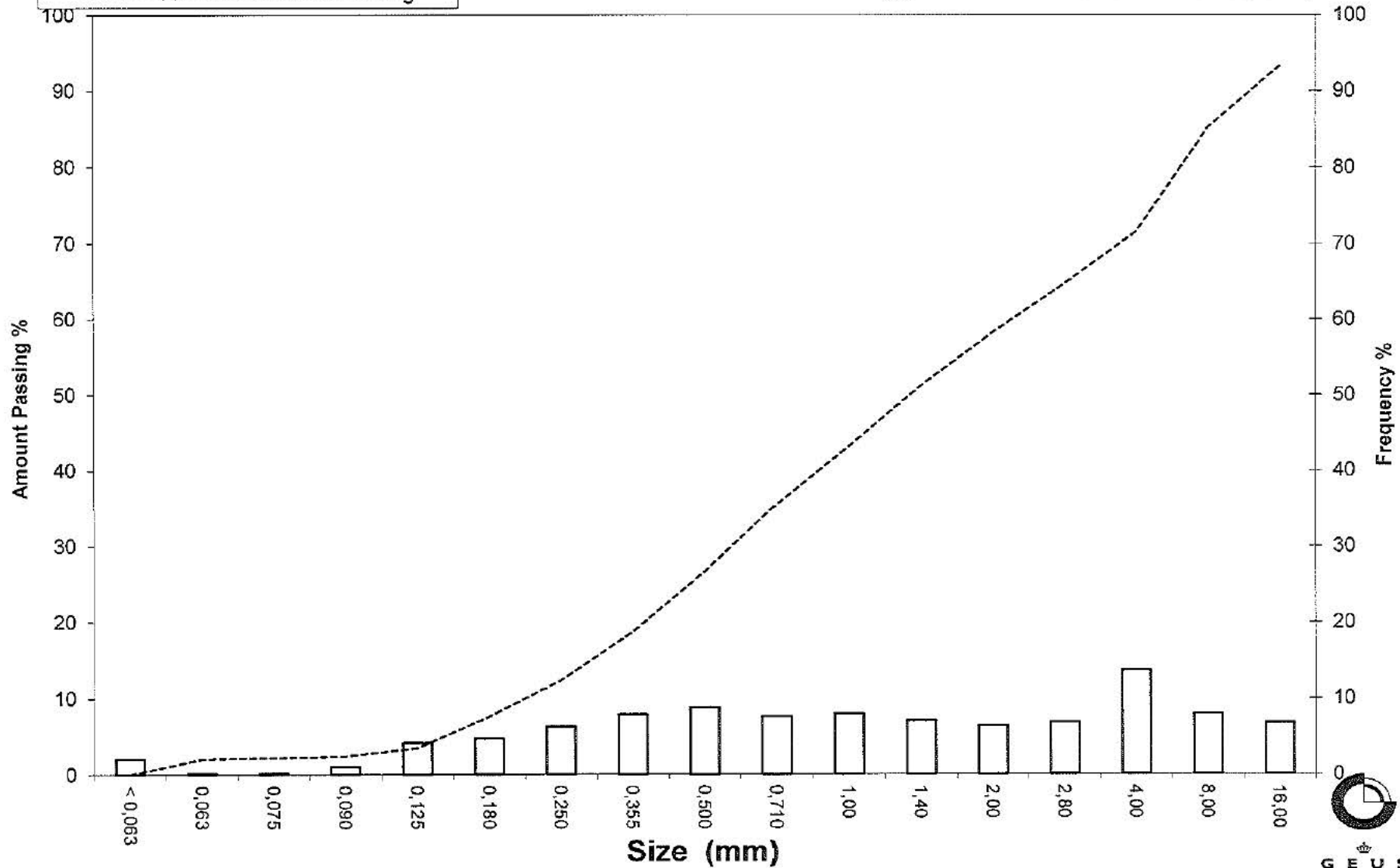
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 544028-1 5-55 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 544028-1 112-140 cm  
**Lab. Id:** 170155  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelses råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >32mm (73g) indgår i >16mm



**Total Weight** 643,84 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
16,00	-4,00	136,67	21,23	78,77
8,00	-3,00	64,05	9,95	68,82
4,00	-2,00	59,91	9,31	59,52
2,80	-1,49	37,37	5,80	53,72
2,00	-1,00	37,74	5,86	47,85
1,40	-0,49	42,46	6,59	41,26
1,00	0,00	62,64	9,73	31,53
0,710	0,49	59,86	9,30	22,23
0,500	1,00	57,86	8,99	13,25
0,355	1,49	36,00	5,59	7,65
0,250	2,00	14,49	2,25	5,40
0,180	2,47	5,96	0,93	4,48
0,125	3,00	4,70	0,73	3,75
0,090	3,47	3,45	0,54	3,21
0,075	3,74	1,35	0,21	3,00
0,063	3,99	1,25	0,19	2,81
< 0,063	> 3,99	18,08	2,81	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	2,81
Sand, fine (0,063 mm - 0,200 mm):	1,93
Sand, medium (0,2 mm - 0,6 mm):	12,78
Sand, coarse (0,6 mm - 2 mm):	30,33
Gravel (> 2 mm):	52,15
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	12,97	-3,70
40%	60%	4,21	-2,07
Median 50%	50%	2,29	-1,20
75%	25%	0,80	0,33
84%	16%	0,56	0,83
90%	10%	0,42	1,27
95%	5%	0,22	2,19

### Moments Statistics

Mean	-0,19
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	10,12

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

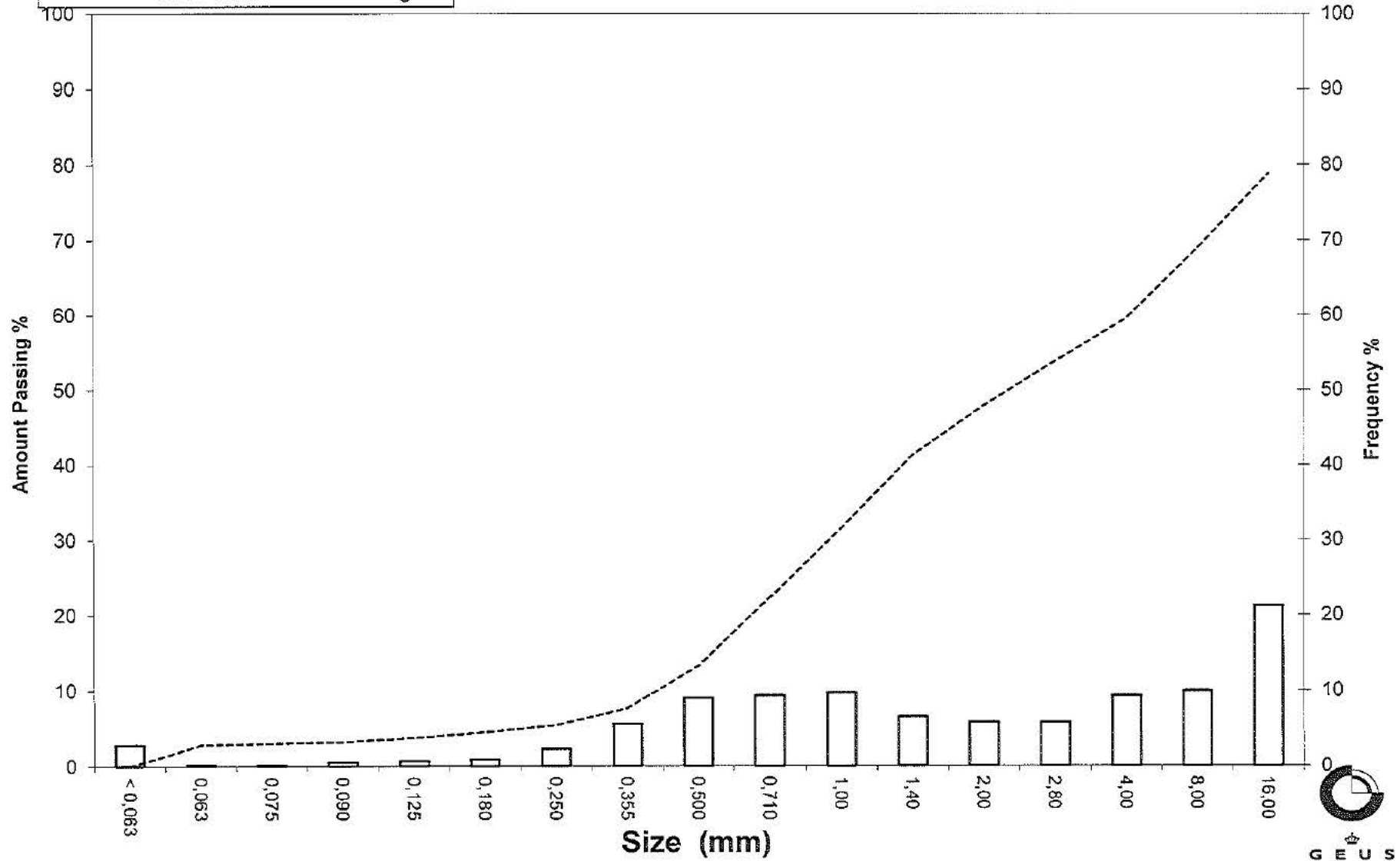
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 544028-1 112-140 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 548006-1 0-90 cm  
**Lab. Id:** 170249  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 103,07 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,03	0,03	99,97
0,710	0,49	0,07	0,07	99,90
0,500	1,00	0,37	0,36	99,54
0,355	1,49	4,80	4,66	94,89
0,250	2,00	20,30	19,70	75,19
0,180	2,47	13,77	13,36	61,83
0,125	3,00	18,33	17,78	44,05
0,090	3,47	14,69	14,25	29,80
0,075	3,74	5,73	5,56	24,24
0,063	3,99	7,55	7,33	16,91
< 0,063	> 3,99	17,43	16,91	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	16,91
Sand, fine (0,063 mm - 0,200 mm):	48,74
Sand, medium (0,2 mm - 0,6 mm):	34,07
Sand, coarse (0,6 mm - 2 mm):	0,29
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,36	1,48
16%	84%	0,30	1,75
25%	75%	0,25	2,01
40%	60%	0,17	2,52
Median 50%	50%	0,14	2,80
75%	25%	0,08	3,70
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,28
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

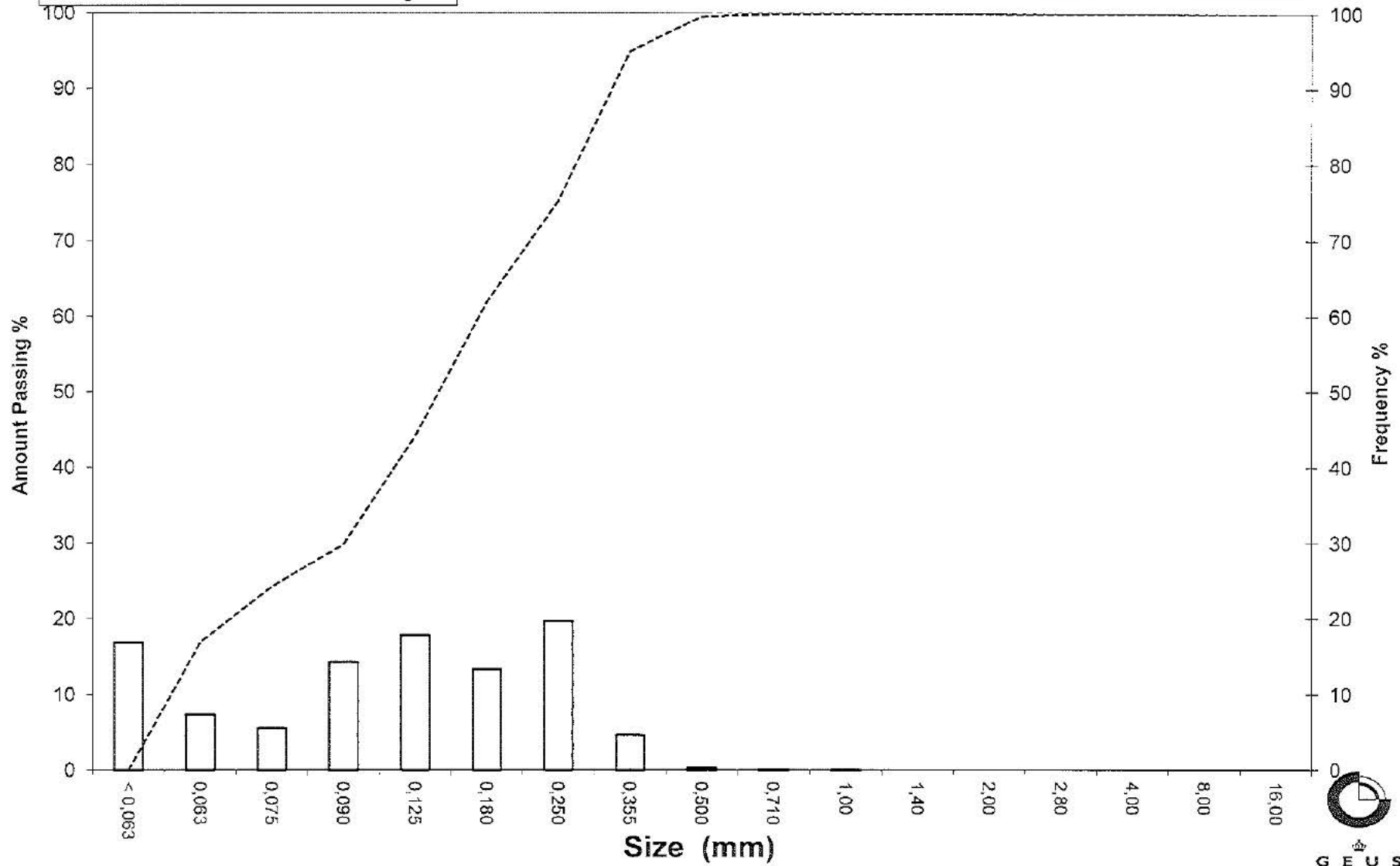
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# Grain Size Distribution

Sample Id: 548006-1 0-90 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 548006-1 100-210 cm  
**Lab. Id:** 170285  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 93,86 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,02	0,02	99,98
2,00	-1,00	0,00	0,00	99,98
1,40	-0,49	0,03	0,03	99,95
1,00	0,00	0,14	0,15	99,80
0,710	0,49	0,22	0,23	99,56
0,500	1,00	0,37	0,39	99,17
0,355	1,49	0,66	0,70	98,47
0,250	2,00	1,19	1,27	97,20
0,180	2,47	1,63	1,74	95,46
0,125	3,00	3,54	3,77	91,69
0,090	3,47	7,39	7,87	83,82
0,075	3,74	8,09	8,62	75,20
0,063	3,99	19,78	21,07	54,12
< 0,063	> 3,99	50,80	54,12	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	54,12
Sand, fine (0,063 mm - 0,200 mm):	41,83
Sand, medium (0,2 mm - 0,6 mm):	3,40
Sand, coarse (0,6 mm - 2 mm):	0,62
Gravel (> 2 mm):	0,02
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,17	2,53
16%	84%	0,09	3,46
25%	75%	0,07	3,74
40%	60%	0,07	3,91
Median 50%	50%	-----	-----
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,46
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

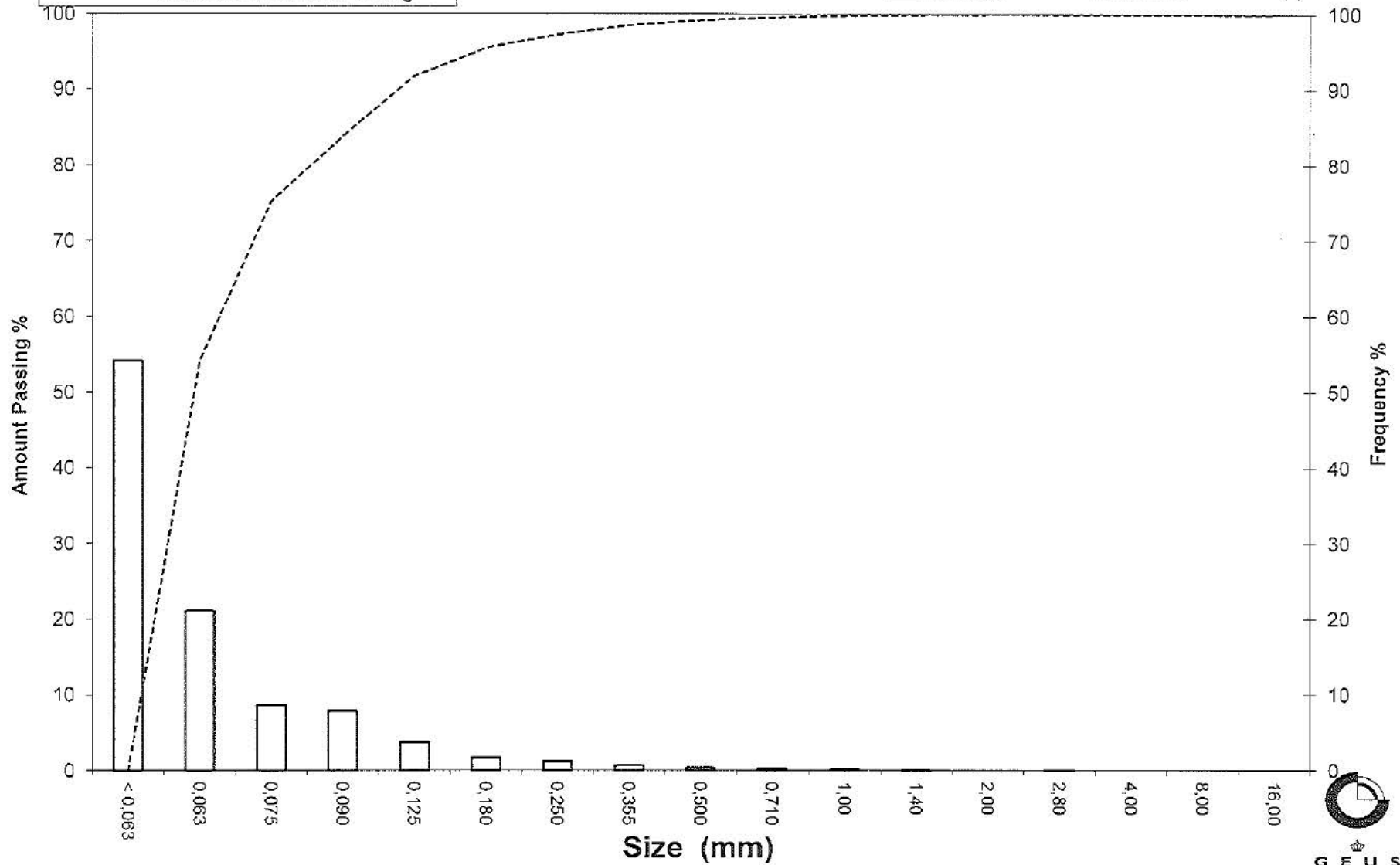
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548006-1 100-210 cm



# Grain Size Distribution

Geotechnical

Sample Id: 548018-1 0-120 cm  
 Lab. Id: 170250  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks: >2,0 mm består af skaller



GEUS

Total Weight 112,15 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,71	0,63	99,37
4,00	-2,00	0,54	0,48	98,89
2,80	-1,49	0,28	0,25	98,64
2,00	-1,00	0,17	0,15	98,48
1,40	-0,49	0,25	0,22	98,26
1,00	0,00	0,42	0,37	97,89
0,710	0,49	0,98	0,87	97,01
0,500	1,00	3,96	3,53	93,48
0,355	1,49	8,97	8,00	85,48
0,250	2,00	41,42	36,93	48,55
0,180	2,47	34,93	31,15	17,41
0,125	3,00	10,02	8,93	8,47
0,090	3,47	4,62	4,12	4,35
0,075	3,74	1,20	1,07	3,28
0,063	3,99	0,76	0,68	2,60
< 0,063	> 3,99	2,92	2,60	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	2,60
Sand, fine (0,063 mm - 0,200 mm):	23,70
Sand, medium (0,2 mm - 0,6 mm):	68,86
Sand, coarse (0,6 mm - 2 mm):	3,32
Gravel (> 2 mm):	1,52
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,59	0,76
16%	84%	0,35	1,51
25%	75%	0,33	1,62
40%	60%	0,28	1,82
Median 50%	50%	0,25	1,98
75%	25%	0,20	2,34
84%	16%	0,17	2,54
90%	10%	0,13	2,90
95%	5%	0,10	3,39

## Moments Statistics

Mean	2,01
Sorting	0,66
Skewness	0,09
Kurtosis	1,49
Uniformity Coefficient	2,10

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

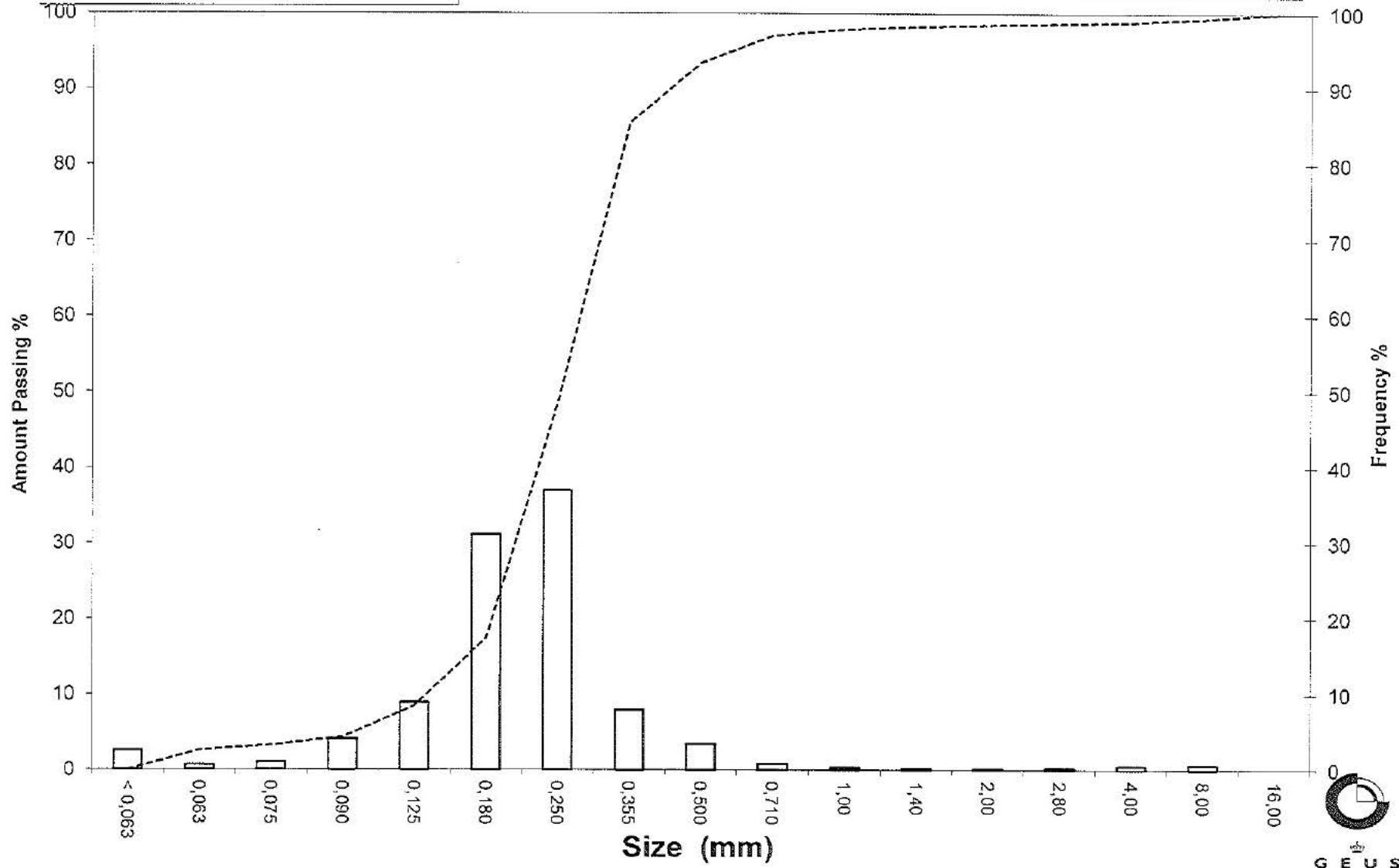
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548018-1 0-120 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 548018-1 120-300 cm  
**Lab. Id:** 170286  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 113,01 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,64	0,57	99,43
2,80	-1,49	0,32	0,28	99,15
2,00	-1,00	0,37	0,33	98,82
1,40	-0,49	1,08	0,96	97,87
1,00	0,00	1,63	1,44	96,43
0,710	0,49	2,23	1,97	94,45
0,500	1,00	5,31	4,70	89,75
0,355	1,49	16,37	14,49	75,27
0,250	2,00	41,26	36,51	38,76
0,180	2,47	27,74	24,55	14,21
0,125	3,00	7,37	6,52	7,69
0,090	3,47	3,16	2,80	4,89
0,075	3,74	0,89	0,79	4,11
0,063	3,99	0,52	0,46	3,65
< 0,063	> 3,99	4,12	3,65	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	3,65
Sand, fine (0,063 mm - 0,200 mm)	17,58
Sand, medium (0,2 mm - 0,6 mm)	70,77
Sand, coarse (0,6 mm - 2 mm)	6,83
Gravel (> 2 mm)	1,18
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,79	0,34
16%	84%	0,44	1,18
25%	75%	0,35	1,50
40%	60%	0,31	1,68
Median 50%	50%	0,28	1,82
75%	25%	0,21	2,25
84%	16%	0,19	2,43
90%	10%	0,14	2,79
95%	5%	0,09	3,45

### Moments Statistics

Mean	1,81
Sorting	0,79
Skewness	0,01
Kurtosis	1,70
Uniformity Coefficient	2,15

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

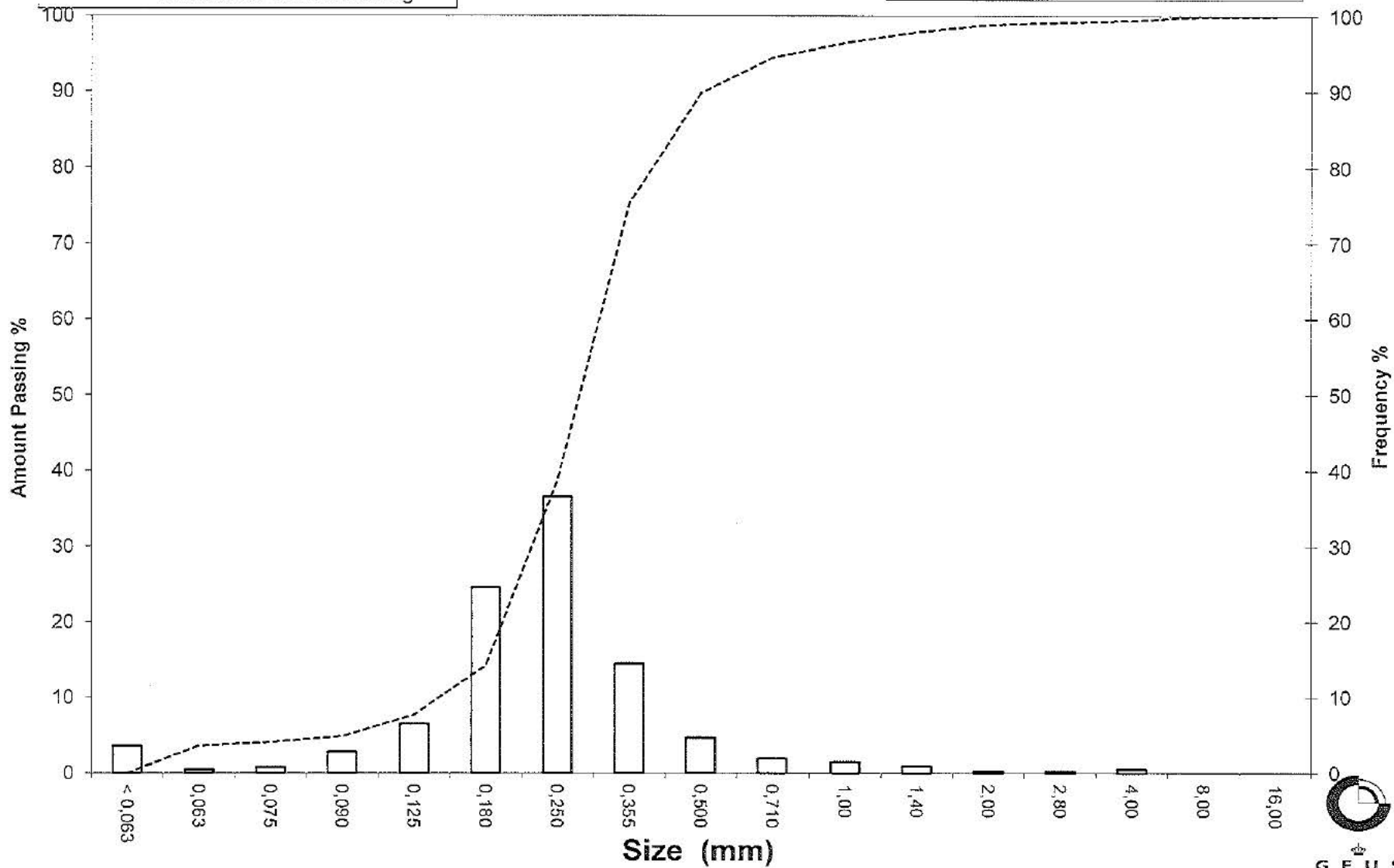
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548018-1 120-300 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 548019-1 0-100 cm  
**Lab. Id:** 170251  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 152,09 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	1,71	1,12	98,88
4,00	-2,00	1,61	1,06	97,82
2,80	-1,49	2,39	1,57	96,25
2,00	-1,00	3,36	2,21	94,04
1,40	-0,49	3,26	2,14	91,89
1,00	0,00	5,67	3,73	88,16
0,710	0,49	5,57	3,66	84,50
0,500	1,00	8,93	5,87	78,63
0,355	1,49	11,83	7,78	70,85
0,250	2,00	14,76	9,70	61,15
0,180	2,47	22,79	14,98	46,16
0,125	3,00	43,90	28,86	17,30
0,090	3,47	14,92	9,81	7,49
0,075	3,74	2,92	1,92	5,57
0,063	3,99	1,80	1,18	4,39
< 0,063	> 3,99	6,67	4,39	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	4,39
Sand, fine (0,063 mm - 0,200 mm):	46,06
Sand, medium (0,2 mm - 0,6 mm):	30,98
Sand, coarse (0,6 mm - 2 mm):	12,61
Gravel (> 2 mm):	5,96
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	2,35	-1,23
16%	84%	0,69	0,53
25%	75%	0,43	1,21
40%	60%	0,24	2,03
Median 50%	50%	0,20	2,34
75%	25%	0,14	2,84
84%	16%	0,12	3,05
90%	10%	0,10	3,34
95%	5%	0,07	3,85

### Moments Statistics

Mean	1,97
Sorting	1,40
Skewness	-0,42
Kurtosis	1,28
Uniformity Coefficient	2,47

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

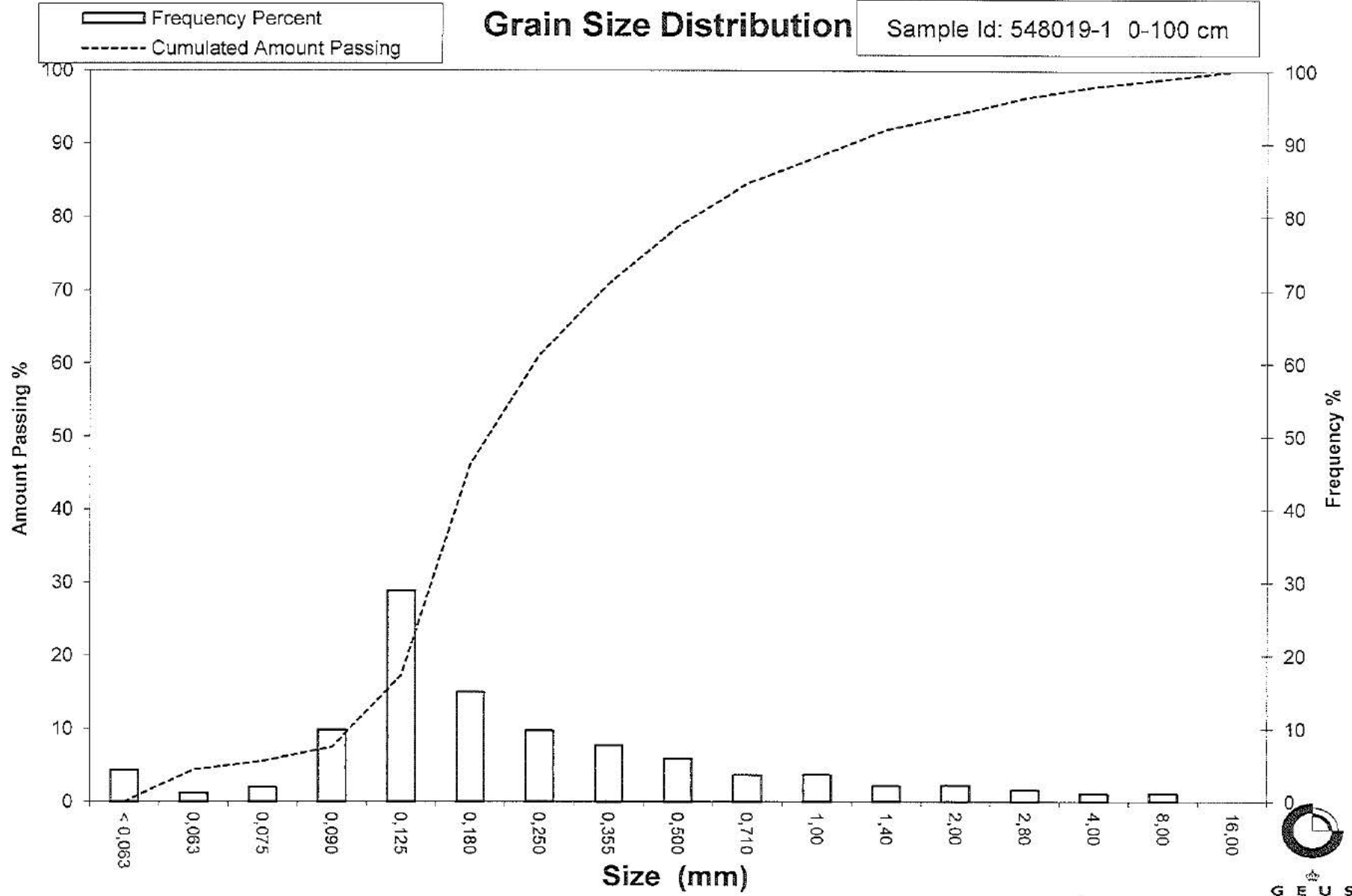
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548019-1 0-100 cm



# Grain Size Distribution

Geotechnical

Sample Id: 548019-2 0-340 cm  
 Lab. Id: 170252  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 110,65 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,20	0,18	99,82
2,00	-1,00	0,17	0,15	99,67
1,40	-0,49	0,37	0,33	99,33
1,00	0,00	0,79	0,71	98,62
0,710	0,49	1,16	1,05	97,57
0,500	1,00	2,90	2,62	94,95
0,355	1,49	25,59	23,13	71,82
0,250	2,00	55,51	50,17	21,65
0,180	2,47	13,67	12,35	9,30
0,125	3,00	5,84	5,28	4,02
0,090	3,47	2,23	2,02	2,01
0,075	3,74	0,51	0,46	1,55
0,063	3,99	0,27	0,24	1,30
< 0,063	> 3,99	1,44	1,30	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,30
Sand, fine (0,063 mm - 0,200 mm):	11,53
Sand, medium (0,2 mm - 0,6 mm):	83,37
Sand, coarse (0,6 mm - 2 mm):	3,47
Gravel (> 2 mm):	0,33
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,50	0,99
16%	84%	0,43	1,21
25%	75%	0,37	1,42
40%	60%	0,33	1,60
Median 50%	50%	0,31	1,69
75%	25%	0,26	1,96
84%	16%	0,22	2,20
90%	10%	0,18	2,44
95%	5%	0,14	2,89

## Moments Statistics

Mean	1,70
Sorting	0,53
Skewness	0,14
Kurtosis	1,43
Uniformity Coefficient	1,80

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

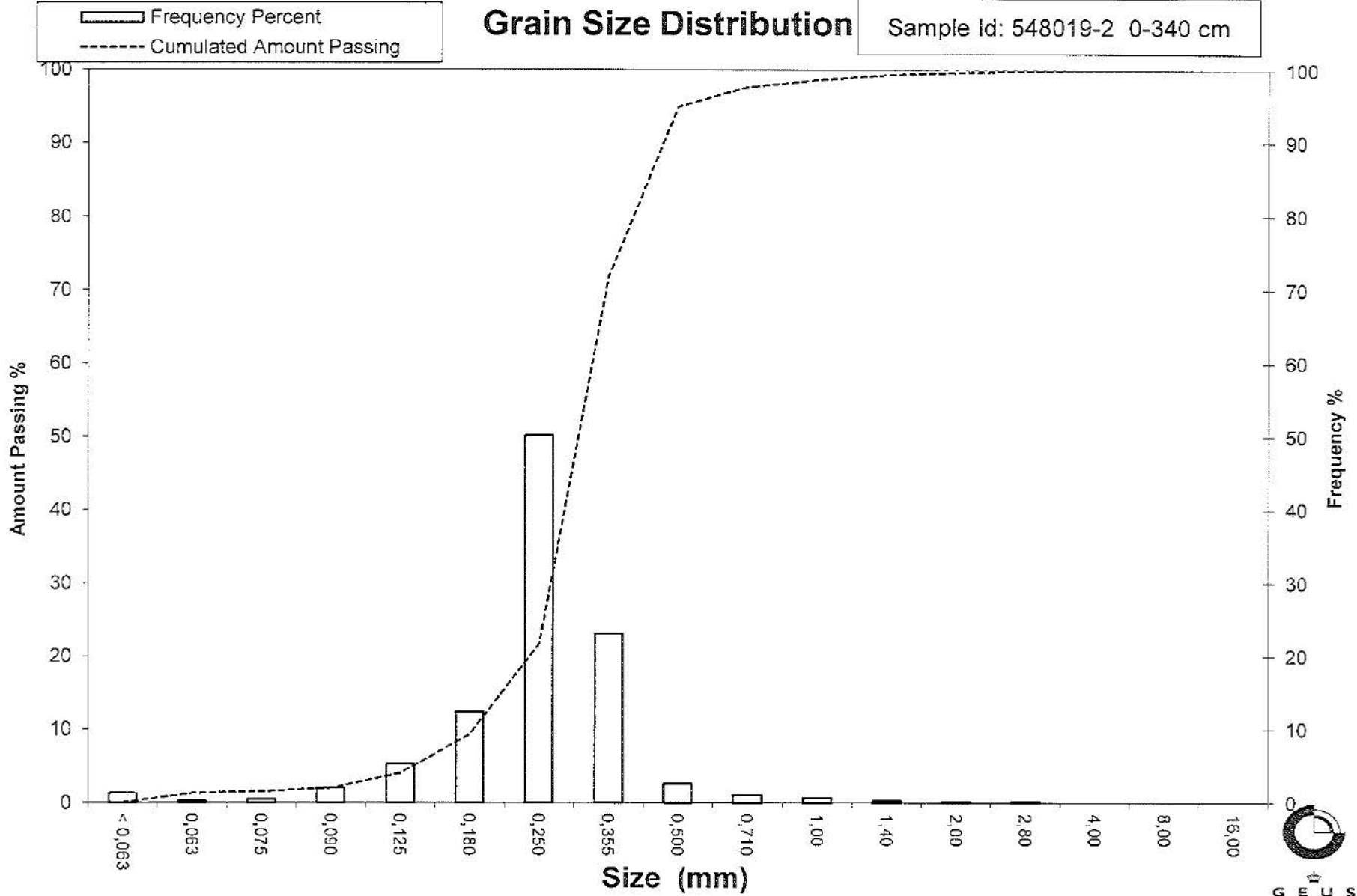
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548019-2 0-340 cm

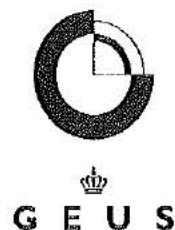


G E U S

# Grain Size Distribution

## Geotechnical

**Sample Id:** 548020-1 0-100 cm  
**Lab. Id:** 170253  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 102,4 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,02	0,02	99,98
1,00	0,00	0,11	0,11	99,87
0,710	0,49	0,15	0,15	99,73
0,500	1,00	0,39	0,38	99,35
0,355	1,49	0,76	0,74	98,60
0,250	2,00	1,71	1,67	96,93
0,180	2,47	2,42	2,36	94,57
0,125	3,00	18,81	18,37	76,20
0,090	3,47	60,07	58,66	17,54
0,075	3,74	8,61	8,41	9,13
0,063	3,99	4,41	4,31	4,82
< 0,063	> 3,99	4,94	4,82	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	4,82
Sand, fine (0,063 mm - 0,200 mm):	90,42
Sand, medium (0,2 mm - 0,6 mm):	4,28
Sand, coarse (0,6 mm - 2 mm):	0,47
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,19	2,38
16%	84%	0,15	2,75
25%	75%	0,12	3,01
40%	60%	0,12	3,12
Median 50%	50%	0,11	3,19
75%	25%	0,09	3,40
84%	16%	0,09	3,52
90%	10%	0,08	3,71
95%	5%	0,06	3,98

### Moments Statistics

Mean	3,15
Sorting	0,43
Skewness	-0,08
Kurtosis	1,66
Uniformity Coefficient	1,51

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

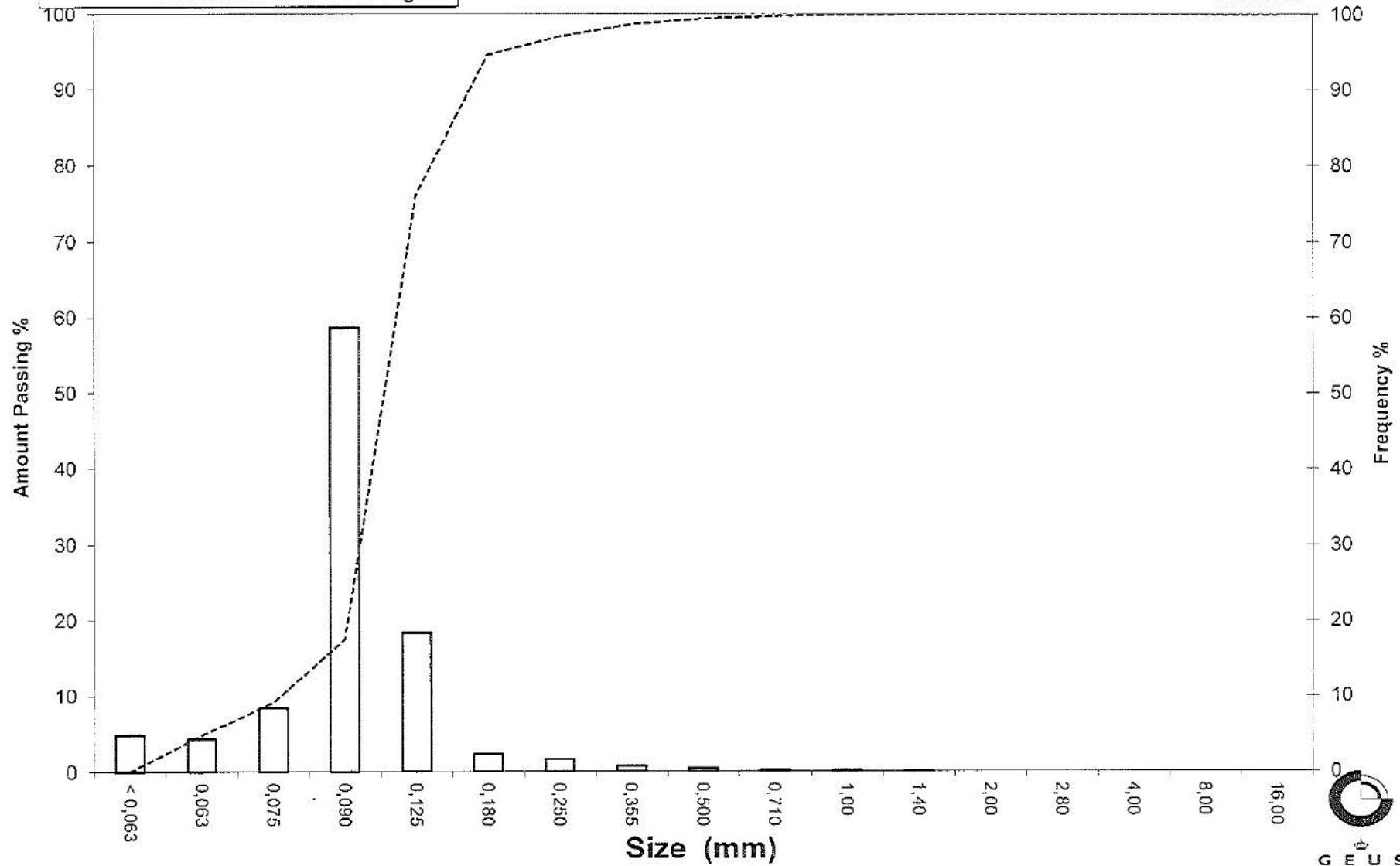
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548020-1 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 548021-1 420-480 cm  
**Lab. Id:** 170287  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 106,85 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,27	0,25	99,75
2,80	-1,49	0,89	0,83	98,91
2,00	-1,00	1,51	1,41	97,50
1,40	-0,49	2,55	2,39	95,11
1,00	0,00	3,50	3,28	91,84
0,710	0,49	4,54	4,25	87,59
0,500	1,00	7,89	7,38	80,21
0,355	1,49	10,52	9,85	70,36
0,250	2,00	17,93	16,78	53,58
0,180	2,47	24,79	23,20	30,38
0,125	3,00	9,80	9,17	21,21
0,090	3,47	3,85	3,60	17,60
0,075	3,74	3,16	2,96	14,65
0,063	3,99	2,80	2,62	12,03
< 0,063	> 3,99	12,85	12,03	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	12,03
Sand, fine (0,063 mm - 0,200 mm):	24,98
Sand, medium (0,2 mm - 0,6 mm):	46,71
Sand, coarse (0,6 mm - 2 mm):	13,78
Gravel (> 2 mm):	2,50
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,39	-0,47
16%	84%	0,61	0,72
25%	75%	0,42	1,24
40%	60%	0,29	1,79
Median 50%	50%	0,24	2,06
75%	25%	0,15	2,76
84%	16%	0,08	3,61
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,13
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

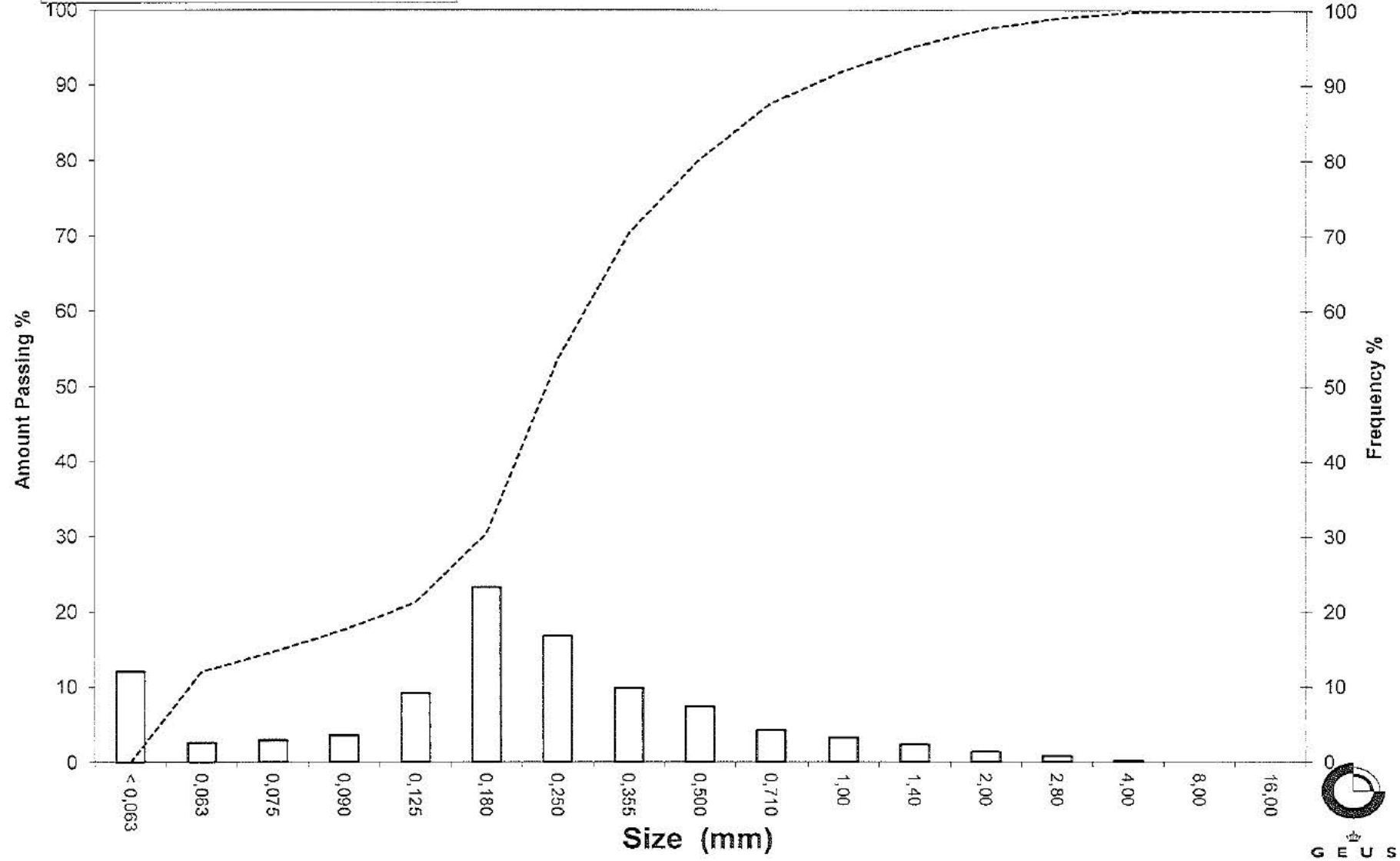
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 548021-1 420-480 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 548024-1 0-35 cm  
**Lab. Id:** 170288  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 88,74 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,07	0,08	99,92
0,710	0,49	0,06	0,07	99,85
0,500	1,00	0,08	0,09	99,76
0,355	1,49	0,33	0,37	99,39
0,250	2,00	1,48	1,67	97,72
0,180	2,47	2,32	2,61	95,11
0,125	3,00	4,42	4,98	90,13
0,090	3,47	15,06	16,97	73,16
0,075	3,74	13,03	14,68	58,47
0,063	3,99	17,48	19,70	38,78
< 0,063	> 3,99	34,41	38,78	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	38,78
Sand, fine (0,063 mm - 0,200 mm):	57,08
Sand, medium (0,2 mm - 0,6 mm):	3,95
Sand, coarse (0,6 mm - 2 mm):	0,19
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,18	2,48
16%	84%	0,11	3,15
25%	75%	0,09	3,41
40%	60%	0,08	3,71
Median 50%	50%	0,07	3,84
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,50
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

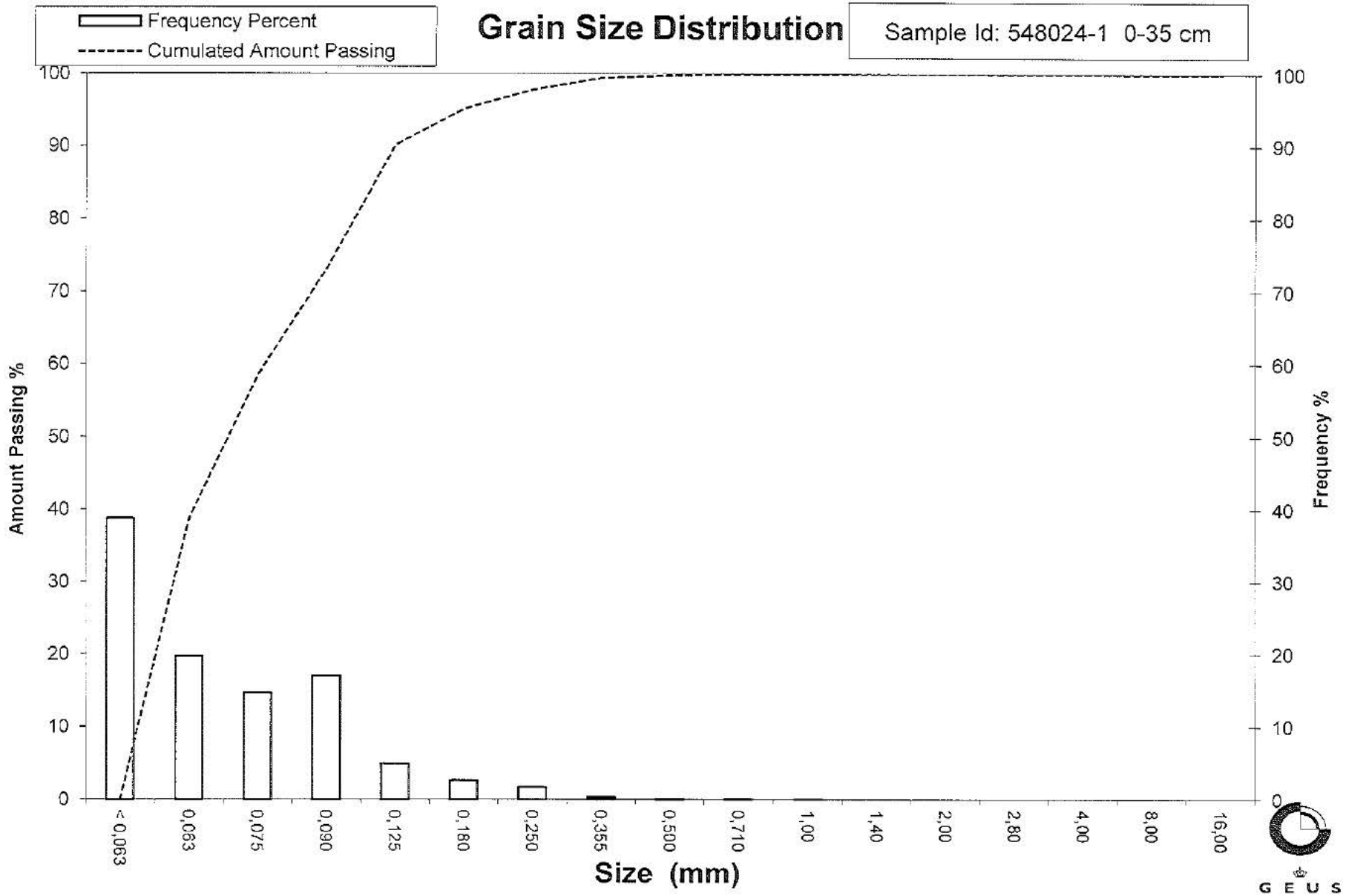
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

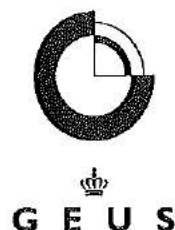
Sample Id: 548024-1 0-35 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 550009-2 0-15 cm  
**Lab. Id:** 170161  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 111,14 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,34	0,31	99,69
2,80	-1,49	0,22	0,20	99,50
2,00	-1,00	0,33	0,30	99,20
1,40	-0,49	0,94	0,85	98,35
1,00	0,00	1,73	1,56	96,80
0,710	0,49	2,70	2,43	94,37
0,500	1,00	9,09	8,18	86,19
0,355	1,49	30,72	27,64	58,55
0,250	2,00	39,95	35,95	22,60
0,180	2,47	16,15	14,53	8,07
0,125	3,00	5,84	5,25	2,82
0,090	3,47	1,16	1,04	1,77
0,075	3,74	0,24	0,22	1,56
0,063	3,99	0,16	0,14	1,41
< 0,063	> 3,99	1,57	1,41	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,41
Sand, fine (0,063 mm - 0,200 mm)	10,81
Sand, medium (0,2 mm - 0,6 mm)	77,86
Sand, coarse (0,6 mm - 2 mm)	9,12
Gravel (> 2 mm)	0,80
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,79	0,35
16%	84%	0,49	1,03
25%	75%	0,44	1,18
40%	60%	0,36	1,46
Median 50%	50%	0,33	1,60
75%	25%	0,26	1,96
84%	16%	0,22	2,20
90%	10%	0,19	2,40
95%	5%	0,15	2,76

### Moments Statistics

Mean	1,61
Sorting	0,66
Skewness	-0,01
Kurtosis	1,27
Uniformity Coefficient	1,92

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

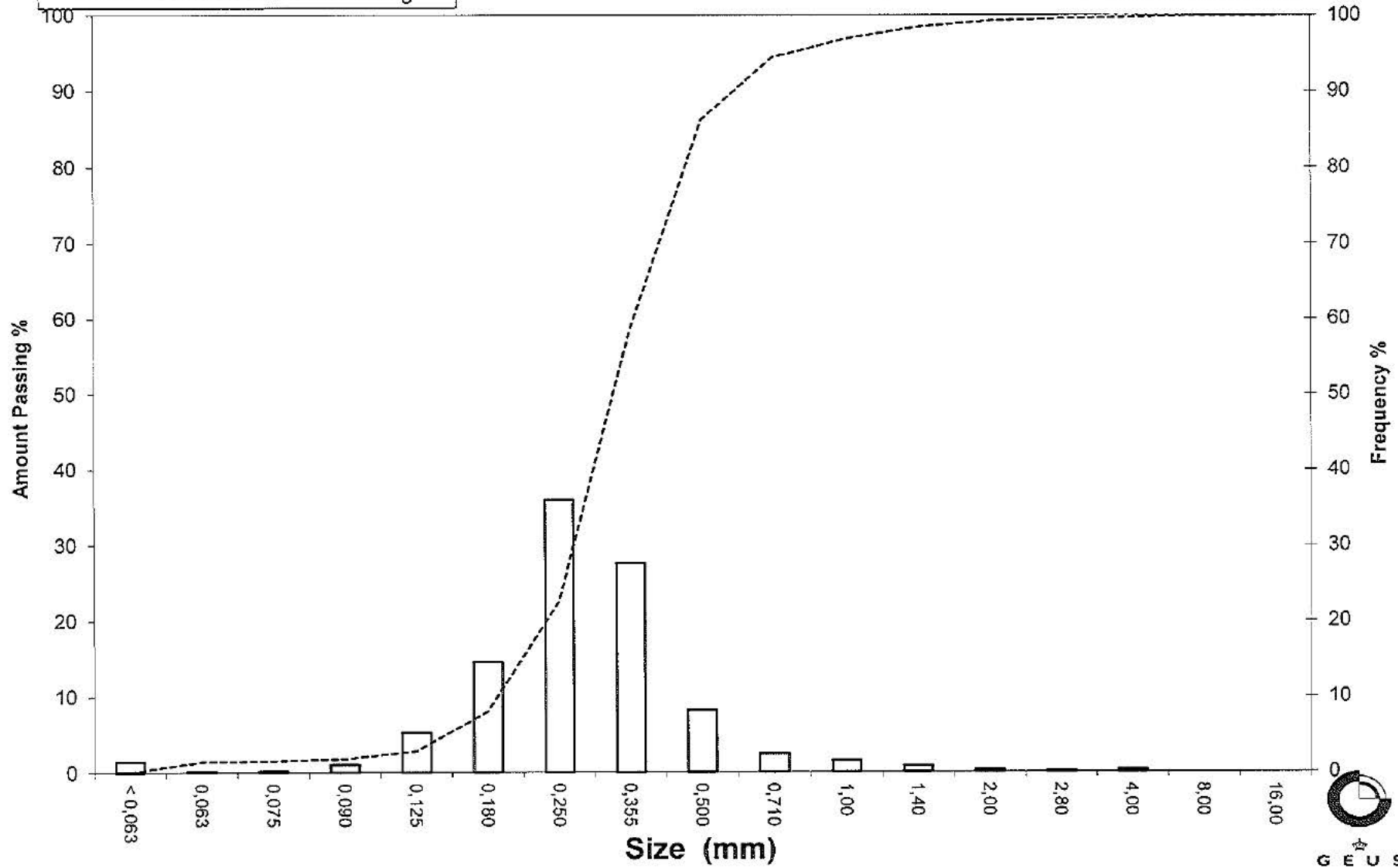
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 550009-2 0-15 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 550009-2 20-120 cm  
**Lab. Id:** 170162  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 101,25 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,05	0,05	99,95
1,40	-0,49	0,04	0,04	99,91
1,00	0,00	0,25	0,25	99,66
0,710	0,49	0,56	0,55	99,11
0,500	1,00	3,78	3,73	95,38
0,355	1,49	19,46	19,22	76,16
0,250	2,00	28,93	28,57	47,59
0,180	2,47	16,75	16,54	31,04
0,125	3,00	13,96	13,79	17,25
0,090	3,47	6,14	6,06	11,19
0,075	3,74	1,67	1,65	9,54
0,063	3,99	1,30	1,28	8,26
< 0,063	> 3,99	8,36	8,26	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	8,26
Sand, fine (0,063 mm - 0,200 mm):	27,51
Sand, medium (0,2 mm - 0,6 mm):	61,39
Sand, coarse (0,6 mm - 2 mm):	2,80
Gravel (> 2 mm):	0,05
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,50	1,01
16%	84%	0,41	1,27
25%	75%	0,35	1,51
40%	60%	0,30	1,76
Median 50%	50%	0,26	1,95
75%	25%	0,16	2,68
84%	16%	0,12	3,09
90%	10%	0,08	3,66
95%	5%	-----	-----

### Moments Statistics

Mean	2,10
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	3,73

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

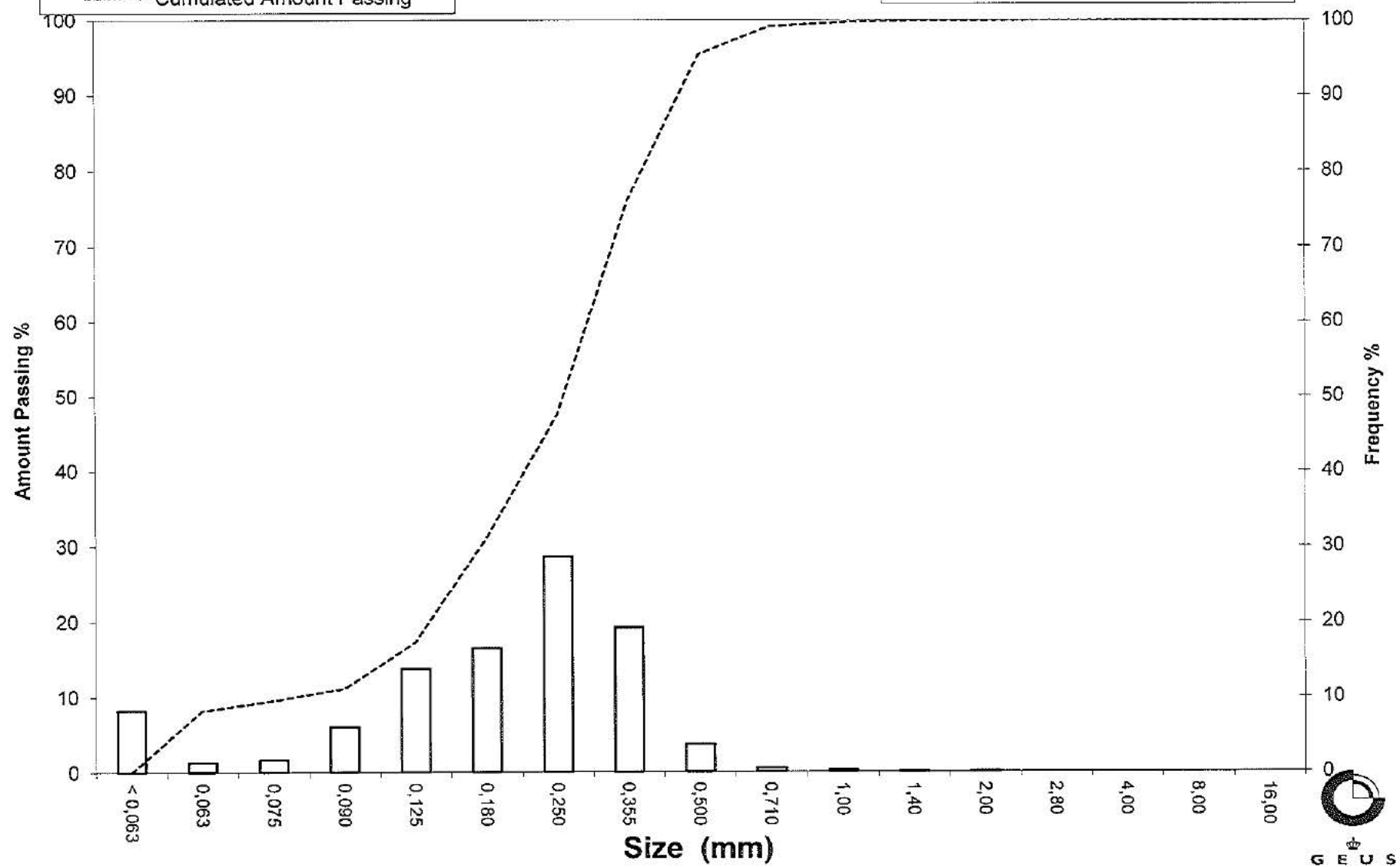
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 550009-2 20-120 cm

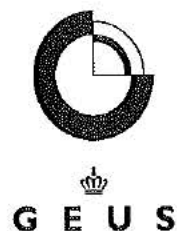
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 550009-2 210-275 cm  
 Lab. Id: 170164  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



Total Weight 108,07 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,07	0,06	99,94
0,710	0,49	0,12	0,11	99,82
0,500	1,00	2,07	1,92	97,91
0,355	1,49	22,60	20,91	77,00
0,250	2,00	48,75	45,11	31,89
0,180	2,47	25,01	23,14	8,74
0,125	3,00	7,46	6,90	1,84
0,090	3,47	0,81	0,75	1,09
0,075	3,74	0,11	0,10	0,99
0,063	3,99	0,04	0,04	0,95
< 0,063	> 3,99	1,03	0,95	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	0,95
Sand, fine (0,063 mm - 0,200 mm):	14,40
Sand, medium (0,2 mm - 0,6 mm):	83,46
Sand, coarse (0,6 mm - 2 mm):	1,18
Gravel (> 2 mm):	0,00
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,48	1,06
16%	84%	0,40	1,31
25%	75%	0,35	1,51
40%	60%	0,32	1,66
Median 50%	50%	0,29	1,78
75%	25%	0,23	2,13
84%	16%	0,20	2,31
90%	10%	0,18	2,44
95%	5%	0,15	2,74

## Moments Statistics

Mean	1,80
Sorting	0,50
Skewness	0,11
Kurtosis	1,12
Uniformity Coefficient	1,72

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

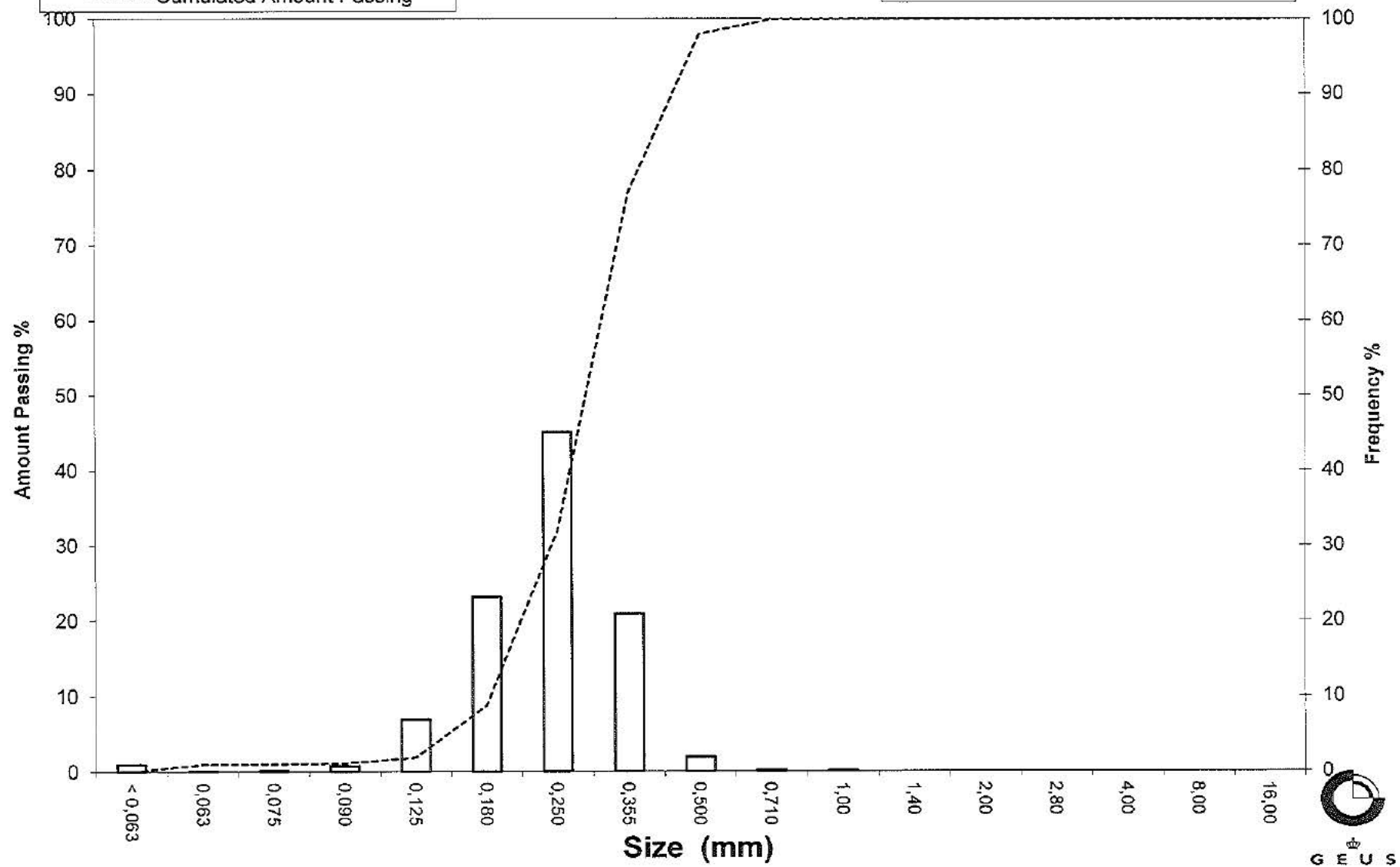
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 550009-2 210-275 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552004-2 0-170 cm  
**Lab. Id:** 170289  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 89,23 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,05	0,06	99,94
0,710	0,49	0,06	0,07	99,88
0,500	1,00	0,15	0,17	99,71
0,355	1,49	0,35	0,39	99,32
0,250	2,00	0,81	0,91	98,41
0,180	2,47	1,08	1,21	97,20
0,125	3,00	9,48	10,62	86,57
0,090	3,47	49,28	55,23	31,35
0,075	3,74	13,58	15,22	16,13
0,063	3,99	7,66	8,58	7,54
< 0,063	> 3,99	6,73	7,54	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	7,54
Sand, fine (0,063 mm - 0,200 mm):	90,00
Sand, medium (0,2 mm - 0,6 mm):	2,24
Sand, coarse (0,6 mm - 2 mm):	0,21
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,17	2,57
16%	84%	0,12	3,02
25%	75%	0,12	3,09
40%	60%	0,11	3,21
Median 50%	50%	0,10	3,30
75%	25%	0,08	3,58
84%	16%	0,07	3,74
90%	10%	0,07	3,91
95%	5%	-----	-----

### Moments Statistics

Mean	3,35
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	1,63

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

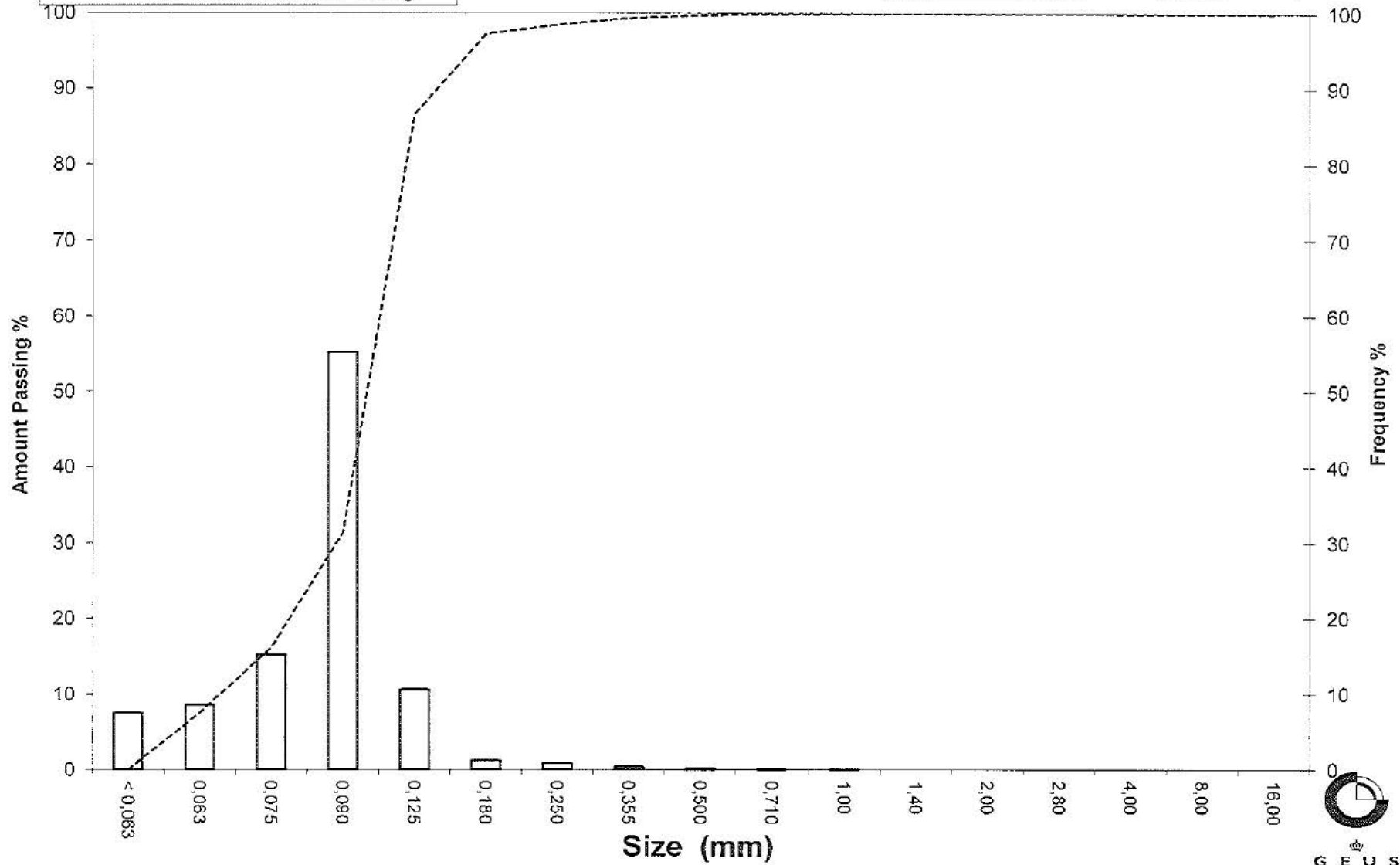
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# Grain Size Distribution

Sample Id: 552004-2 0-170 cm

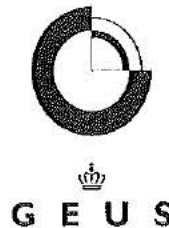
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552004-2 250-340 cm  
**Lab. Id:** 170290  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 85,94 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,30	0,35	99,65
2,80	-1,49	0,03	0,03	99,62
2,00	-1,00	0,02	0,02	99,59
1,40	-0,49	0,02	0,02	99,57
1,00	0,00	0,08	0,09	99,48
0,710	0,49	0,15	0,17	99,30
0,500	1,00	0,32	0,37	98,93
0,355	1,49	0,94	1,09	97,84
0,250	2,00	1,50	1,75	96,09
0,180	2,47	1,31	1,52	94,57
0,125	3,00	8,61	10,02	84,55
0,090	3,47	32,66	38,00	46,54
0,075	3,74	11,66	13,57	32,98
0,063	3,99	10,47	12,18	20,79
< 0,063	> 3,99	17,87	20,79	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	20,79
Sand, fine (0,063 mm - 0,200 mm)	74,21
Sand, medium (0,2 mm - 0,6 mm)	4,11
Sand, coarse (0,6 mm - 2 mm)	0,49
Gravel (> 2 mm)	0,41
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,20	2,32
16%	84%	0,12	3,01
25%	75%	0,12	3,11
40%	60%	0,10	3,29
Median 50%	50%	0,09	3,42
75%	25%	0,07	3,90
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,21
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgr-Bulletin 1988)

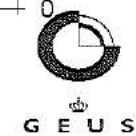
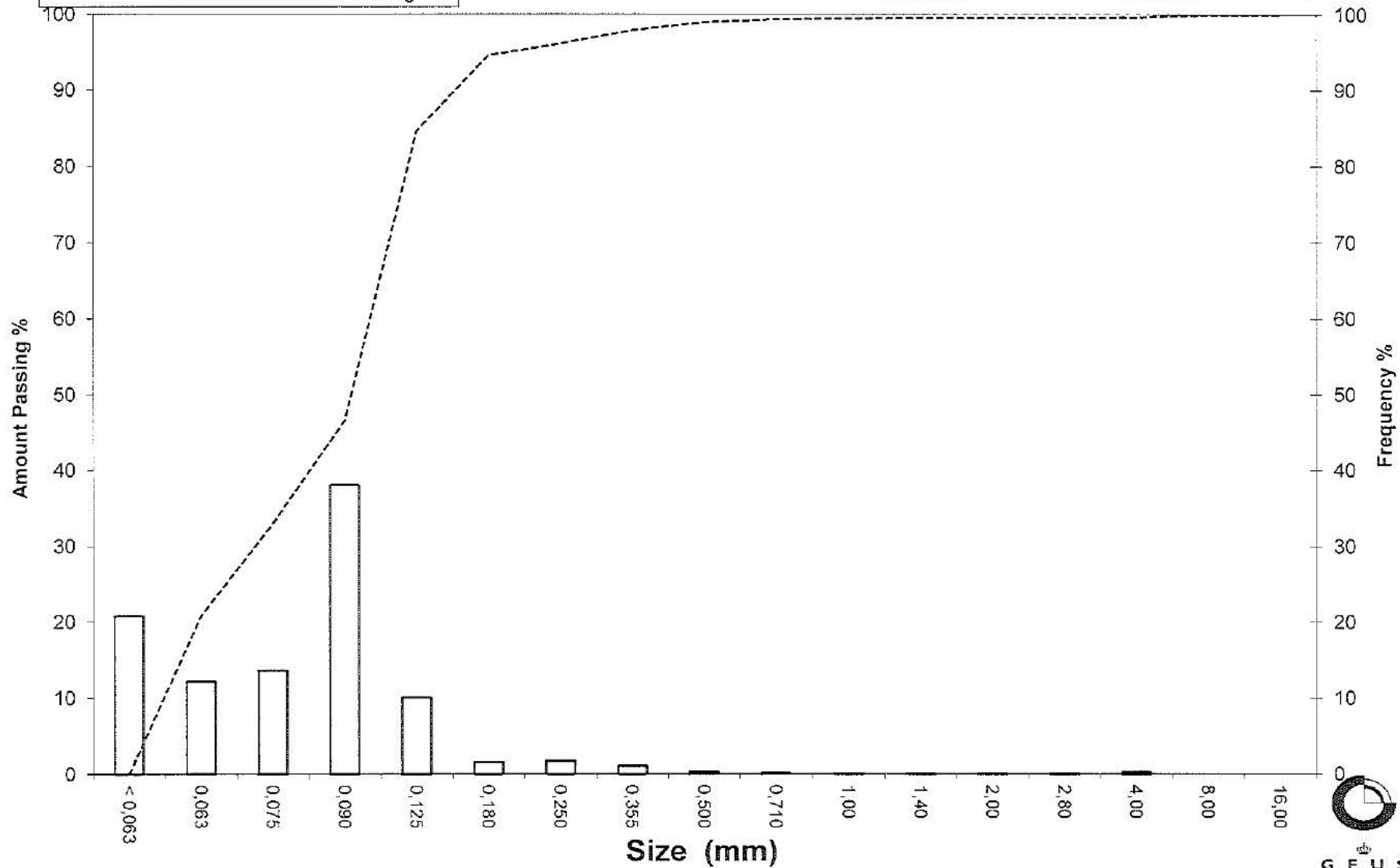
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552004-2 250-340 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-1 0-100 cm  
**Lab. Id:** 170291  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 104,07 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,81	0,78	99,22
2,80	-1,49	0,97	0,93	98,29
2,00	-1,00	1,24	1,19	97,10
1,40	-0,49	1,66	1,60	95,50
1,00	0,00	2,17	2,09	93,42
0,710	0,49	2,28	2,19	91,23
0,500	1,00	4,21	4,05	87,18
0,355	1,49	13,96	13,41	73,77
0,250	2,00	44,06	42,34	31,43
0,180	2,47	25,47	24,47	6,96
0,125	3,00	5,65	5,43	1,53
0,090	3,47	0,47	0,45	1,08
0,075	3,74	0,07	0,07	1,01
0,063	3,99	0,03	0,03	0,98
< 0,063	> 3,99	1,02	0,98	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,98
Sand, fine (0,063 mm - 0,200 mm)	12,97
Sand, medium (0,2 mm - 0,6 mm)	75,16
Sand, coarse (0,6 mm - 2 mm)	7,99
Gravel (> 2 mm)	2,90
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	1,30	-0,38
16%	84%	0,47	1,10
25%	75%	0,37	1,44
40%	60%	0,32	1,64
Median 50%	50%	0,30	1,76
75%	25%	0,23	2,11
84%	16%	0,21	2,28
90%	10%	0,19	2,41
95%	5%	0,16	2,64

### Moments Statistics

Mean	1,71
Sorting	0,75
Skewness	-0,26
Kurtosis	1,85
Uniformity Coefficient	1,70

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

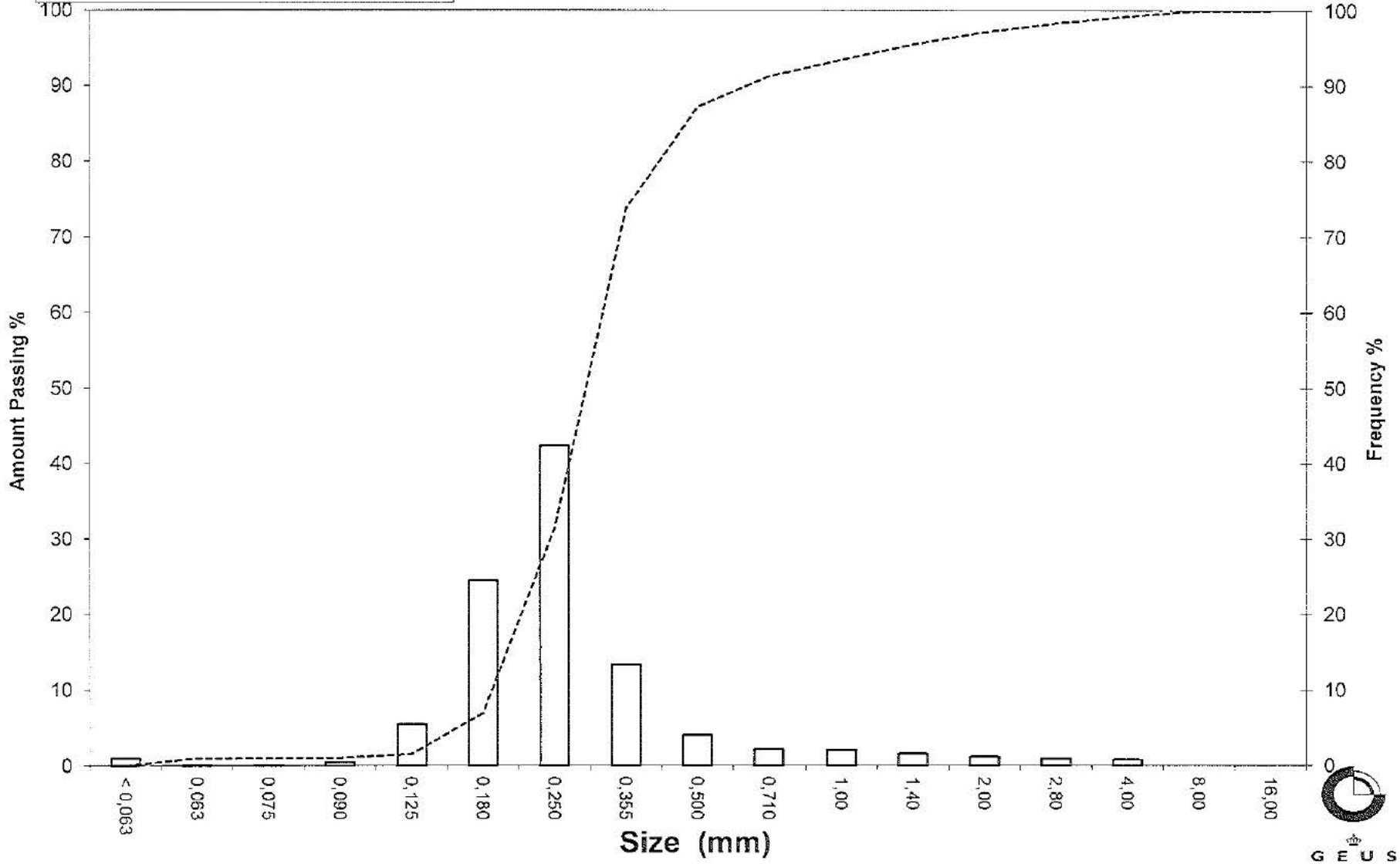
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552006-1 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-1 100-160 cm  
**Lab. Id:** 170292  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 599,25 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	55,83	9,32	90,68
8,00	-3,00	60,96	10,17	80,51
4,00	-2,00	30,19	5,04	75,47
2,80	-1,49	14,20	2,37	73,10
2,00	-1,00	10,09	1,68	71,42
1,40	-0,49	8,71	1,45	69,97
1,00	0,00	9,65	1,61	68,36
0,710	0,49	9,57	1,60	66,76
0,500	1,00	16,97	2,83	63,93
0,355	1,49	57,66	9,62	54,30
0,250	2,00	190,21	31,74	22,56
0,180	2,47	107,54	17,95	4,62
0,125	3,00	21,90	3,65	0,96
0,090	3,47	1,96	0,33	0,64
0,075	3,74	0,35	0,06	0,58
0,063	3,99	0,20	0,03	0,54
< 0,063	> 3,99	3,26	0,54	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Slit and clay (< 0,063 mm):	0,54
Sand, fine (0,063 mm - 0,200 mm):	9,20
Sand, medium (0,2 mm - 0,6 mm):	55,53
Sand, coarse (0,6 mm - 2 mm):	6,14
Gravel (> 2 mm):	28,58
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	10,74	-3,43
25%	75%	3,76	-1,91
40%	60%	0,44	1,18
Median 50%	50%	0,34	1,55
75%	25%	0,26	1,95
84%	16%	0,22	2,16
90%	10%	0,20	2,31
95%	5%	0,18	2,46

### Moments Statistics

Mean	0,09
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,19

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

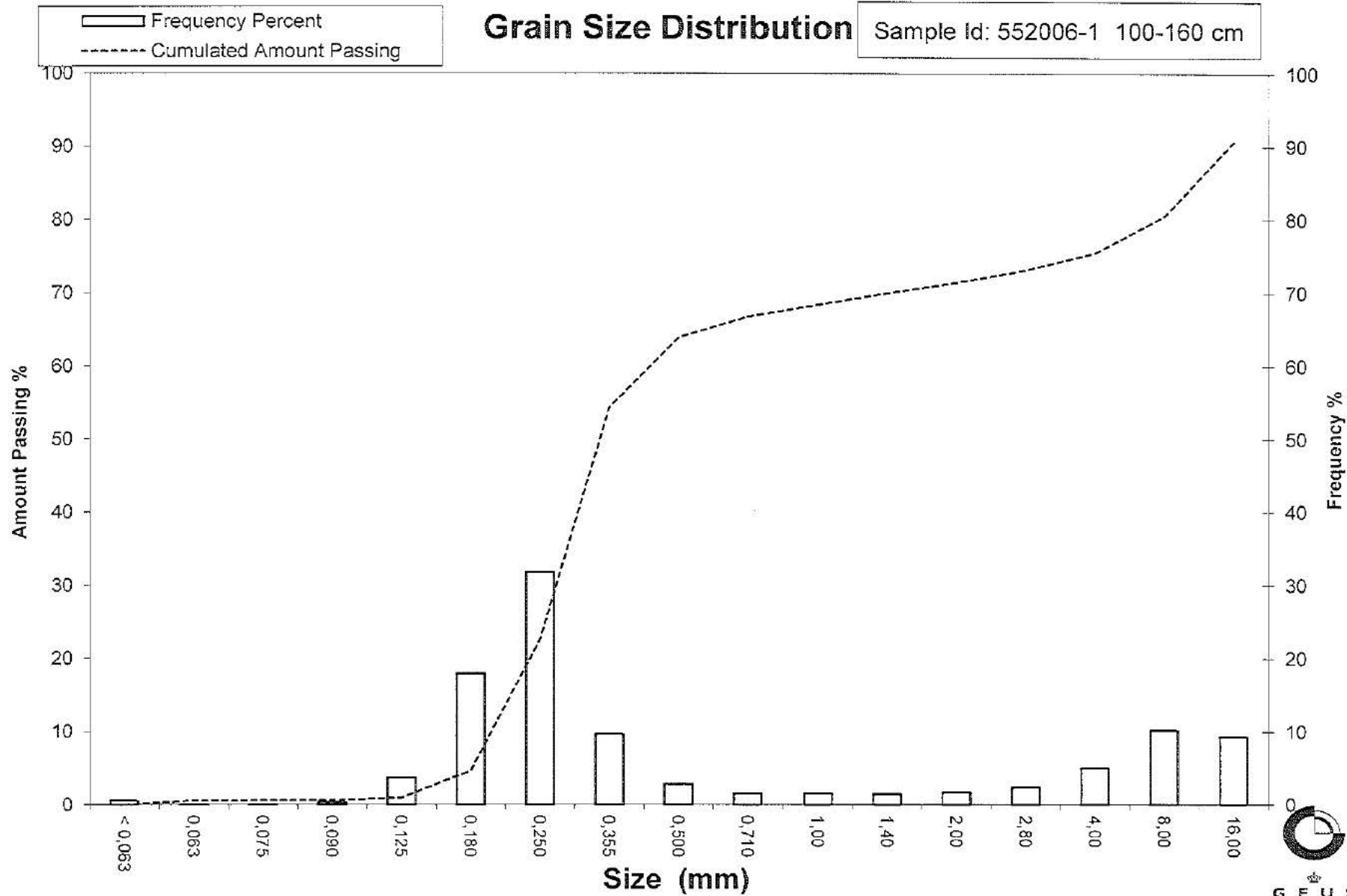
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

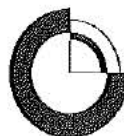
Sample Id: 552006-1 100-160 cm



# Grain Size Distribution

Geotechnical

**Sample Id:** 552006-1 180-280 cm  
**Lab. Id:** 170293  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**GEUS**

**Total Weight** 340,98 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	3,59	1,05	98,95
8,00	-3,00	15,37	4,51	94,44
4,00	-2,00	8,63	2,53	91,91
2,80	-1,49	7,58	2,22	89,69
2,00	-1,00	7,19	2,11	87,58
1,40	-0,49	6,88	2,02	85,56
1,00	0,00	10,62	3,11	82,44
0,710	0,49	9,56	2,80	79,64
0,500	1,00	16,29	4,78	74,86
0,355	1,49	47,02	13,79	61,07
0,250	2,00	131,42	38,54	22,53
0,180	2,47	64,19	18,83	3,71
0,125	3,00	10,19	2,99	0,72
0,090	3,47	0,85	0,19	0,53
0,075	3,74	0,08	0,02	0,50
0,063	3,99	0,03	0,01	0,50
< 0,063	> 3,99	1,69	0,50	0,00

Sieve Analysis

Gravel  
Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,50
Sand, fine (0,063 mm - 0,200 mm)	8,59
Sand, medium (0,2 mm - 0,6 mm)	68,05
Sand, coarse (0,6 mm - 2 mm)	10,44
Gravel (> 2 mm)	12,42
<b>Sum:</b>	<b>100,00</b>

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	8,99	-3,17
16%	84%	1,20	-0,26
25%	75%	0,51	0,98
40%	60%	0,35	1,51
Median 50%	50%	0,32	1,62
75%	25%	0,26	1,96
84%	16%	0,23	2,15
90%	10%	0,20	2,30
95%	5%	0,18	2,44

## Moments Statistics

Mean	1,17
Sorting	1,45
Skewness	-0,64
Kurtosis	2,35
Uniformity Coefficient	1,73

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

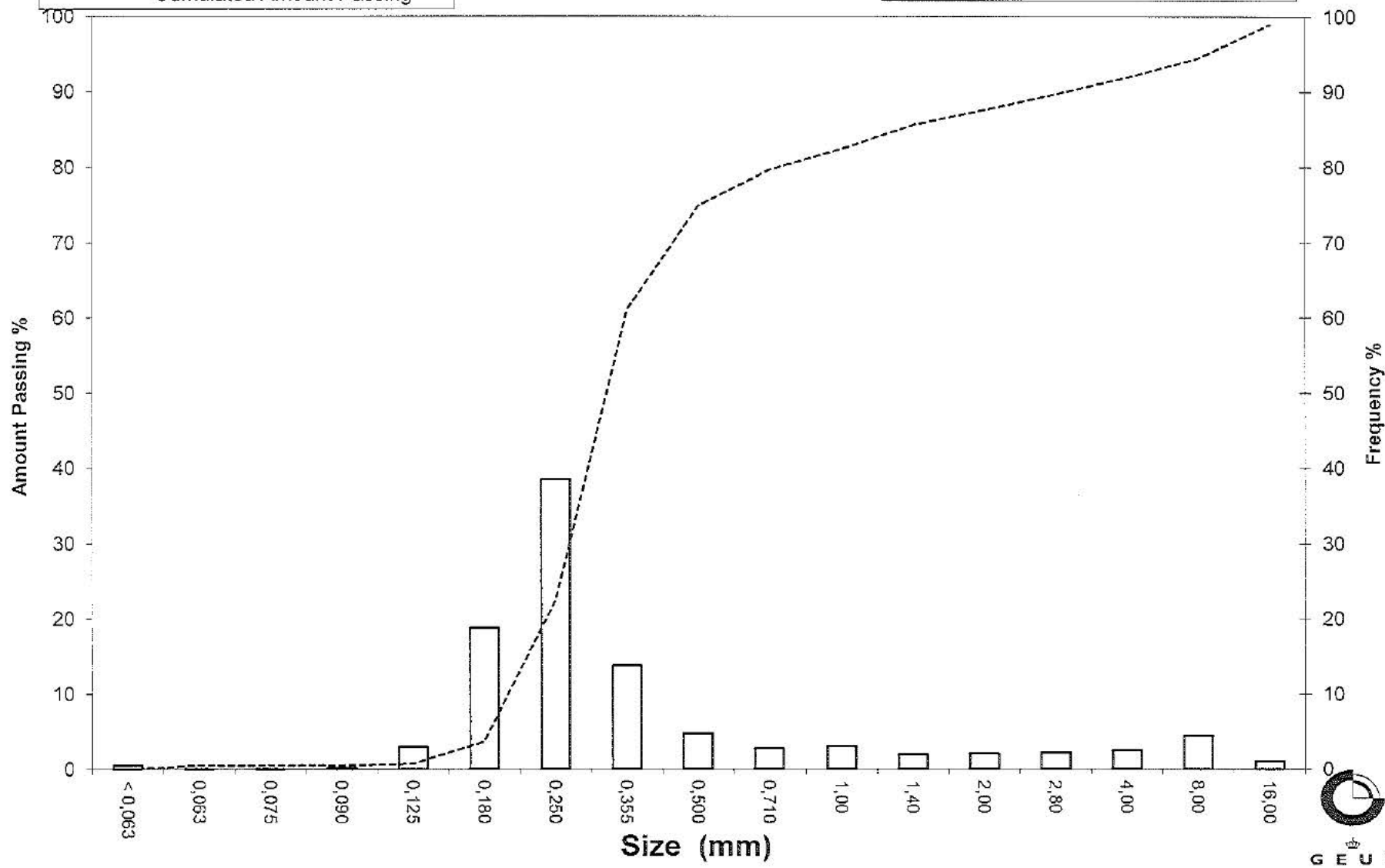
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# Grain Size Distribution

Sample Id: 552006-1 180-280 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-2 0-70 cm  
**Lab. Id:** 170254  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 117,34 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,23	0,20	99,80
2,00	-1,00	0,88	0,75	99,05
1,40	-0,49	2,07	1,76	97,29
1,00	0,00	5,22	4,45	92,84
0,710	0,49	7,13	6,08	86,76
0,500	1,00	9,03	7,70	79,07
0,355	1,49	13,77	11,74	67,33
0,250	2,00	26,11	22,25	45,08
0,180	2,47	26,39	22,49	22,59
0,125	3,00	22,93	19,54	3,05
0,090	3,47	1,92	1,64	1,41
0,075	3,74	0,31	0,26	1,15
0,063	3,99	0,20	0,17	0,98
< 0,063	> 3,99	1,15	0,98	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,98
Sand, fine (0,063 mm - 0,200 mm):	28,04
Sand, medium (0,2 mm - 0,6 mm):	53,72
Sand, coarse (0,6 mm - 2 mm):	16,32
Gravel (> 2 mm):	0,95
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,19	-0,26
16%	84%	0,63	0,66
25%	75%	0,45	1,15
40%	60%	0,32	1,64
Median 50%	50%	0,27	1,87
75%	25%	0,19	2,42
84%	16%	0,16	2,63
90%	10%	0,14	2,79
95%	5%	0,13	2,94

### Moments Statistics

Mean	1,72
Sorting	0,98
Skewness	-0,28
Kurtosis	1,04
Uniformity Coefficient	2,22

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

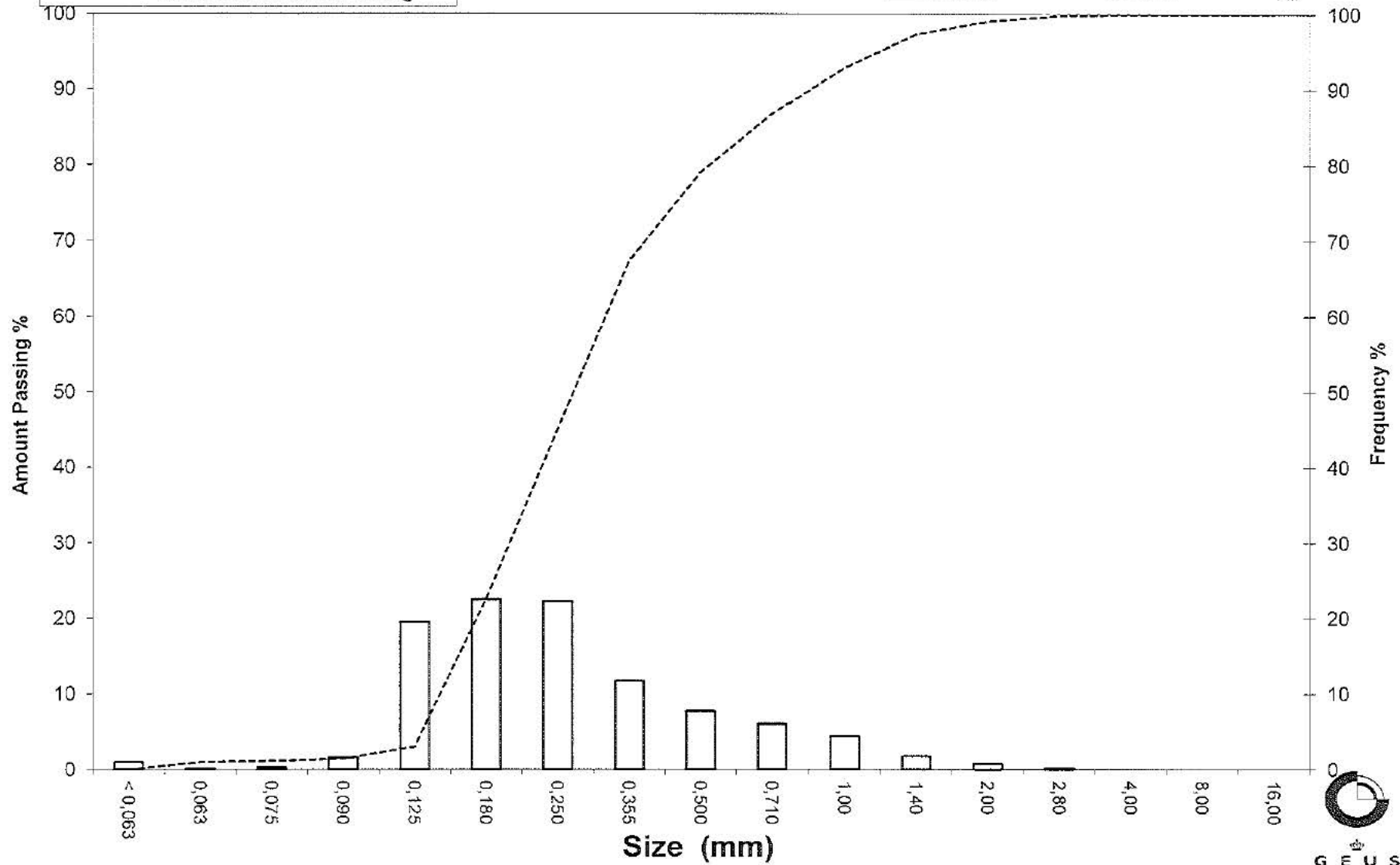
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552006-2 0-70 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-2 80-180 cm  
**Lab. Id:** 170255  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 673,44 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	
16,00	-4,00	70,87	10,52	89,48
8,00	-3,00	117,41	17,43	72,04
4,00	-2,00	121,55	18,05	53,99
2,80	-1,49	52,30	7,77	46,23
2,00	-1,00	38,14	5,66	40,56
1,40	-0,49	27,48	4,08	36,48
1,00	0,00	24,03	3,57	32,91
0,710	0,49	17,61	2,61	30,30
0,500	1,00	19,12	2,84	27,46
0,355	1,49	27,47	4,08	23,38
0,250	2,00	53,02	7,87	15,51
0,180	2,47	52,34	7,77	7,74
0,125	3,00	44,15	6,56	1,18
0,090	3,47	3,82	0,57	0,61
0,075	3,74	0,59	0,09	0,53
0,063	3,99	0,39	0,06	0,47
< 0,063	> 3,99	3,15	0,47	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,47
Sand, fine (0,063 mm - 0,200 mm)	9,49
Sand, medium (0,2 mm - 0,6 mm)	18,86
Sand, coarse (0,6 mm - 2 mm)	11,75
Gravel (> 2 mm)	59,44
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	13,49	-3,75
25%	75%	9,36	-3,23
40%	60%	5,33	-2,41
Median 50%	50%	3,38	-1,76
75%	25%	0,41	1,28
84%	16%	0,26	1,96
90%	10%	0,20	2,32
95%	5%	0,16	2,67

### Moments Statistics

Mean	-1,18
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	26,60

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

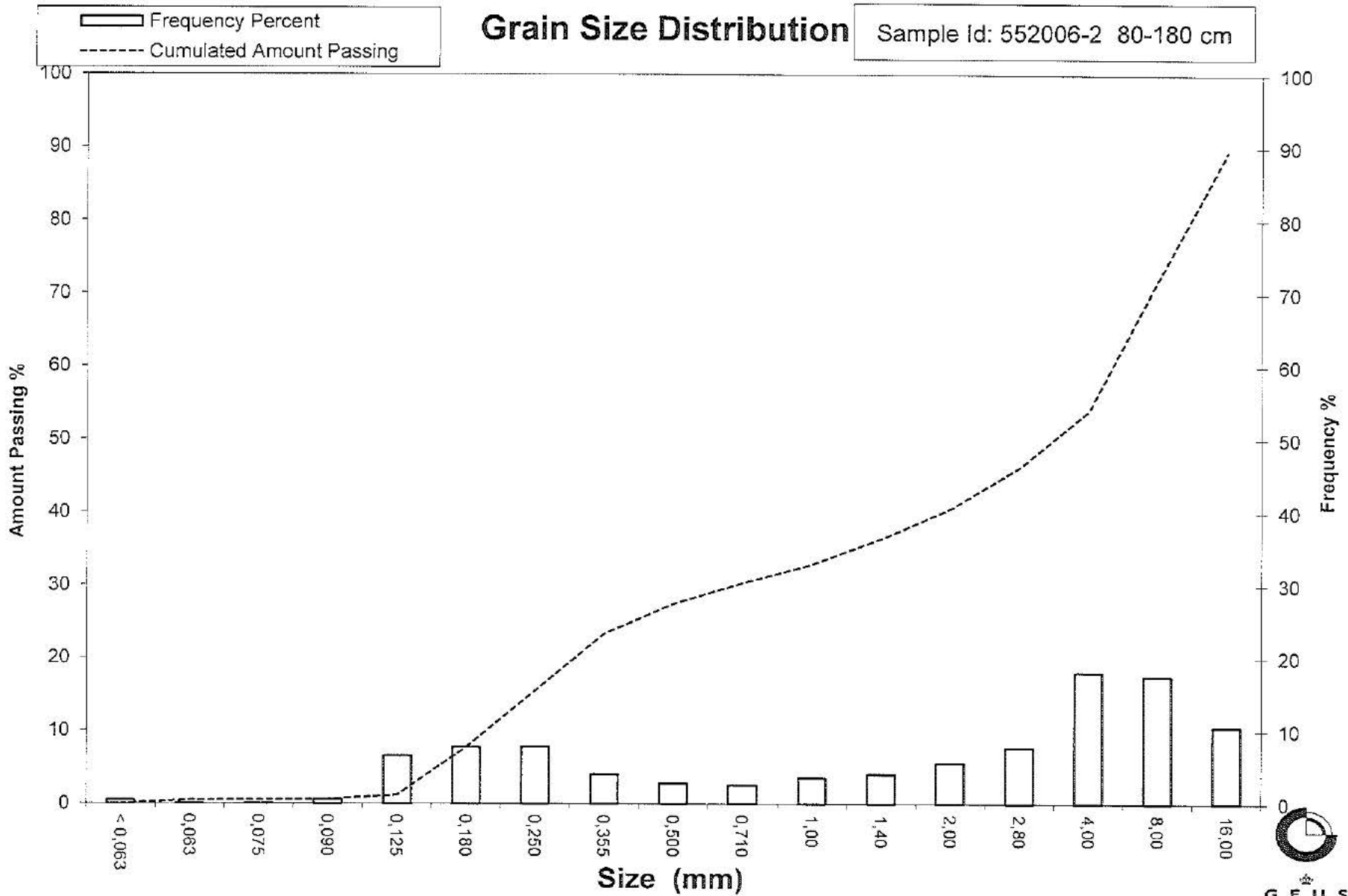
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

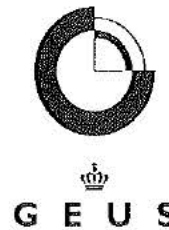
Sample Id: 552006-2 80-180 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-3 0-80 cm  
**Lab. Id:** 170256  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 119,4 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,03	0,03	99,97
2,00	-1,00	0,00	0,00	99,97
1,40	-0,49	0,08	0,07	99,91
1,00	0,00	1,25	1,05	98,86
0,710	0,49	3,34	2,80	96,06
0,500	1,00	7,72	6,47	89,60
0,355	1,49	17,13	14,35	75,25
0,250	2,00	52,74	44,17	31,08
0,180	2,47	26,79	22,44	8,64
0,125	3,00	8,86	7,42	1,22
0,090	3,47	0,90	0,75	0,47
0,075	3,74	0,10	0,08	0,39
0,063	3,99	0,05	0,04	0,34
< 0,063	> 3,99	0,41	0,34	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,34
Sand, fine (0,063 mm - 0,200 mm)	14,71
Sand, medium (0,2 mm - 0,6 mm)	77,62
Sand, coarse (0,6 mm - 2 mm)	7,30
Gravel (> 2 mm)	0,03
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,68	0,57
16%	84%	0,44	1,17
25%	75%	0,35	1,50
40%	60%	0,32	1,65
Median 50%	50%	0,29	1,76
75%	25%	0,23	2,11
84%	16%	0,20	2,30
90%	10%	0,18	2,44
95%	5%	0,15	2,71

### Moments Statistics

Mean	1,75
Sorting	0,61
Skewness	-0,08
Kurtosis	1,42
Uniformity Coefficient	1,73

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

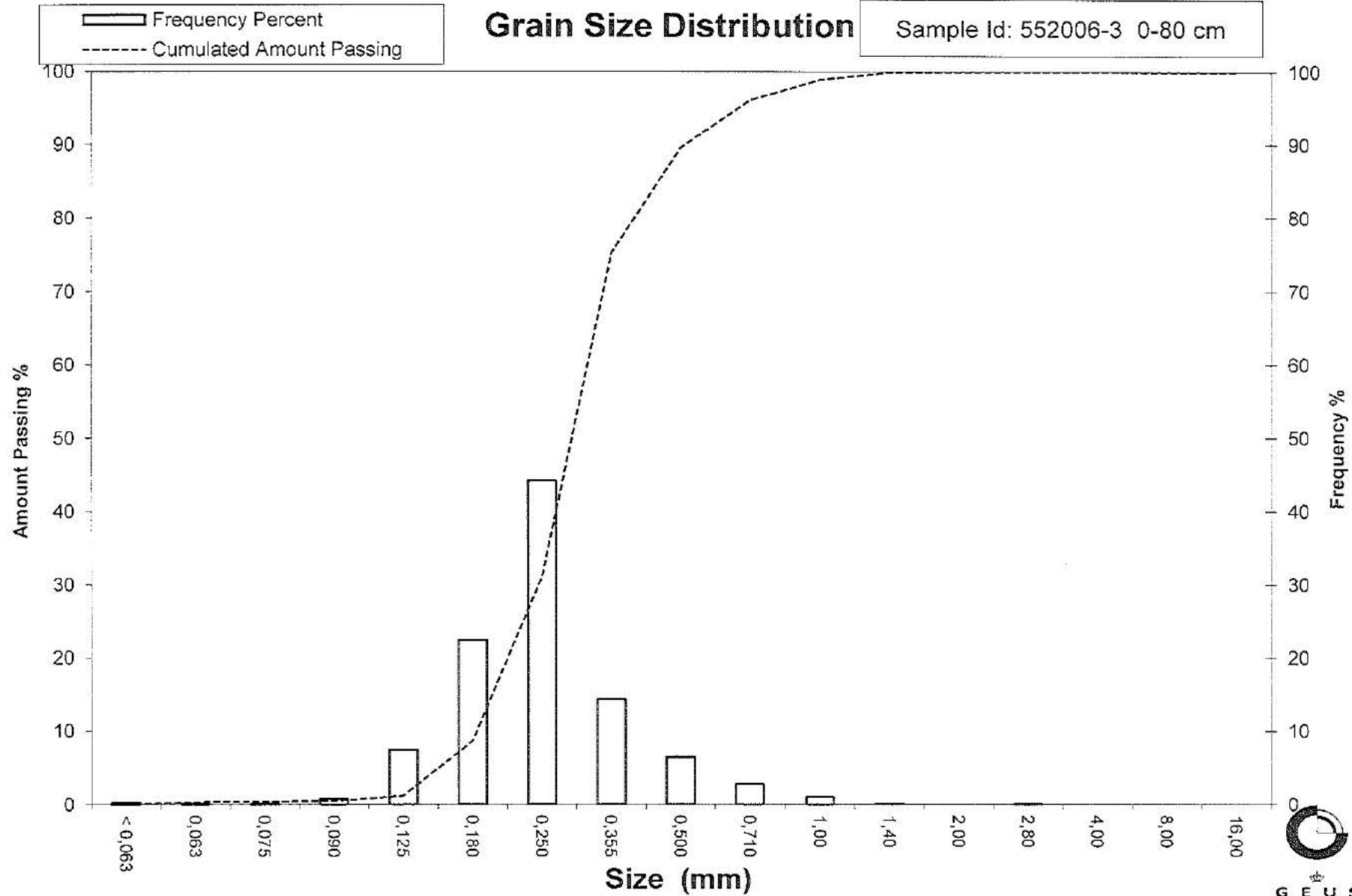
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552006-3 0-80 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-3 240-300 cm  
**Lab. Id:** 170294  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 91,42 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,03	0,03	99,97
2,00	-1,00	0,04	0,04	99,92
1,40	-0,49	0,06	0,07	99,86
1,00	0,00	0,12	0,13	99,73
0,710	0,49	0,06	0,07	99,66
0,500	1,00	0,18	0,20	99,46
0,355	1,49	0,93	1,02	98,45
0,250	2,00	10,28	11,24	87,20
0,180	2,47	23,62	25,84	61,37
0,125	3,00	37,06	40,54	20,83
0,090	3,47	16,18	17,70	3,13
0,075	3,74	1,29	1,41	1,72
0,063	3,99	0,45	0,49	1,23
< 0,063	> 3,99	1,12	1,23	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bullefin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,23
Sand, fine (0,063 mm - 0,200 mm):	67,52
Sand, medium (0,2 mm - 0,6 mm):	30,81
Sand, coarse (0,6 mm - 2 mm):	0,37
Gravel (> 2 mm):	0,08
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,32	1,63
16%	84%	0,24	2,05
25%	75%	0,22	2,20
40%	60%	0,18	2,49
Median 50%	50%	0,16	2,60
75%	25%	0,13	2,94
84%	16%	0,12	3,11
90%	10%	0,10	3,27
95%	5%	0,09	3,42

### Moments Statistics

Mean	2,59
Sorting	0,54
Skewness	-0,06
Kurtosis	1,00
Uniformity Coefficient	1,72

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

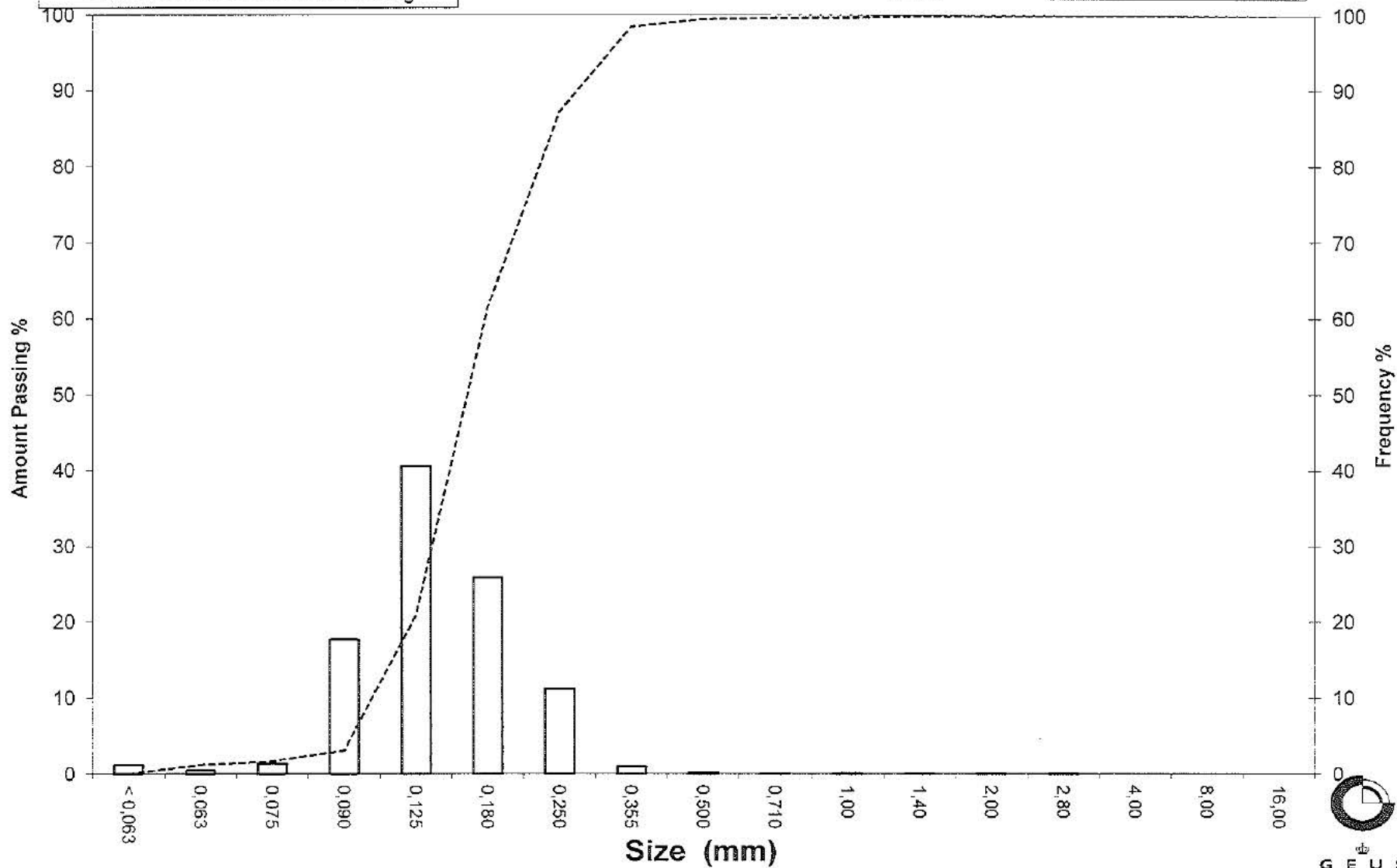
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# Grain Size Distribution

Sample Id: 552006-3 240-300 cm

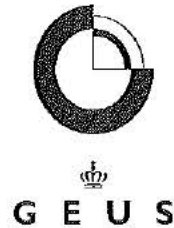
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-4 0-250 cm  
**Lab. Id:** 170257  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 110,24 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,26	0,24	99,76
2,00	-1,00	0,55	0,50	99,27
1,40	-0,49	1,92	1,74	97,52
1,00	0,00	3,15	2,86	94,67
0,710	0,49	2,82	2,56	92,11
0,500	1,00	4,10	3,72	88,39
0,355	1,49	13,63	12,36	76,03
0,250	2,00	36,91	33,48	42,54
0,180	2,47	25,37	23,01	19,53
0,125	3,00	16,42	14,89	4,64
0,090	3,47	4,03	3,66	0,98
0,075	3,74	0,28	0,25	0,73
0,063	3,99	0,11	0,10	0,63
< 0,063	> 3,99	0,69	0,63	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,63
Sand, fine (0,063 mm - 0,200 mm):	25,48
Sand, medium (0,2 mm - 0,6 mm):	64,05
Sand, coarse (0,6 mm - 2 mm):	9,11
Gravel (> 2 mm):	0,73
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,05	-0,07
16%	84%	0,45	1,16
25%	75%	0,35	1,51
40%	60%	0,30	1,71
Median 50%	50%	0,27	1,87
75%	25%	0,20	2,35
84%	16%	0,17	2,58
90%	10%	0,14	2,79
95%	5%	0,13	2,98

### Moments Statistics

Mean	1,87
Sorting	0,82
Skewness	-0,14
Kurtosis	1,49
Uniformity Coefficient	2,10

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

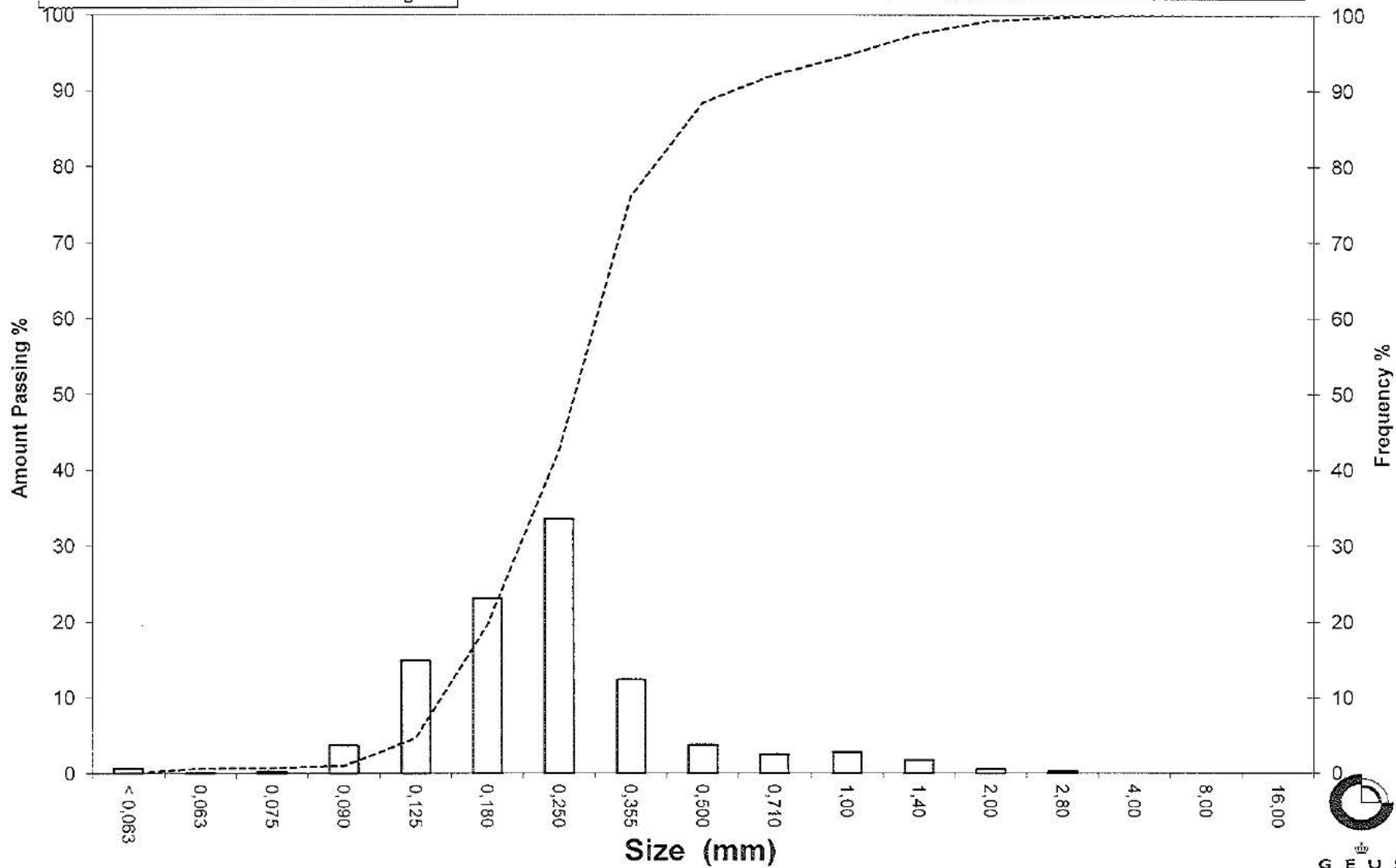
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552006-4 0-250 cm

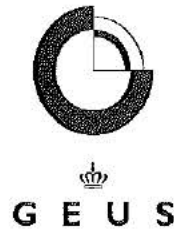
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552006-4 300-340 cm  
**Lab. Id:** 170258  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >32 mm (38 g) indgår i >16 mm



**Total Weight** 720,4 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	114,10	15,84	84,16
8,00	-3,00	118,06	16,39	67,77
4,00	-2,00	164,68	22,86	44,91
2,80	-1,49	89,94	12,48	32,43
2,00	-1,00	50,64	7,03	25,40
1,40	-0,49	26,32	3,65	21,75
1,00	0,00	14,12	1,96	19,79
0,710	0,49	5,34	0,74	19,04
0,500	1,00	4,13	0,57	18,47
0,355	1,49	11,11	1,54	16,93
0,250	2,00	34,54	4,79	12,13
0,180	2,47	33,81	4,69	7,44
0,125	3,00	37,18	5,16	2,28
0,090	3,47	13,30	1,85	0,43
0,075	3,74	1,01	0,14	0,29
0,063	3,99	0,47	0,07	0,23
< 0,063	> 3,99	1,65	0,23	0,00

**Sieve Analysis**  
 Gravel  
 Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,23
Sand, fine (0,063 mm - 0,200 mm)	8,55
Sand, medium (0,2 mm - 0,6 mm)	9,96
Sand, coarse (0,6 mm - 2 mm)	6,66
Gravel (> 2 mm)	74,60
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	15,92	-3,99
25%	75%	11,53	-3,53
40%	60%	6,64	-2,73
Median 50%	50%	4,89	-2,29
75%	25%	1,93	-0,95
84%	16%	0,33	1,58
90%	10%	0,22	2,20
95%	5%	0,15	2,70

### Moments Statistics

Mean	-1,57
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	30,44

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

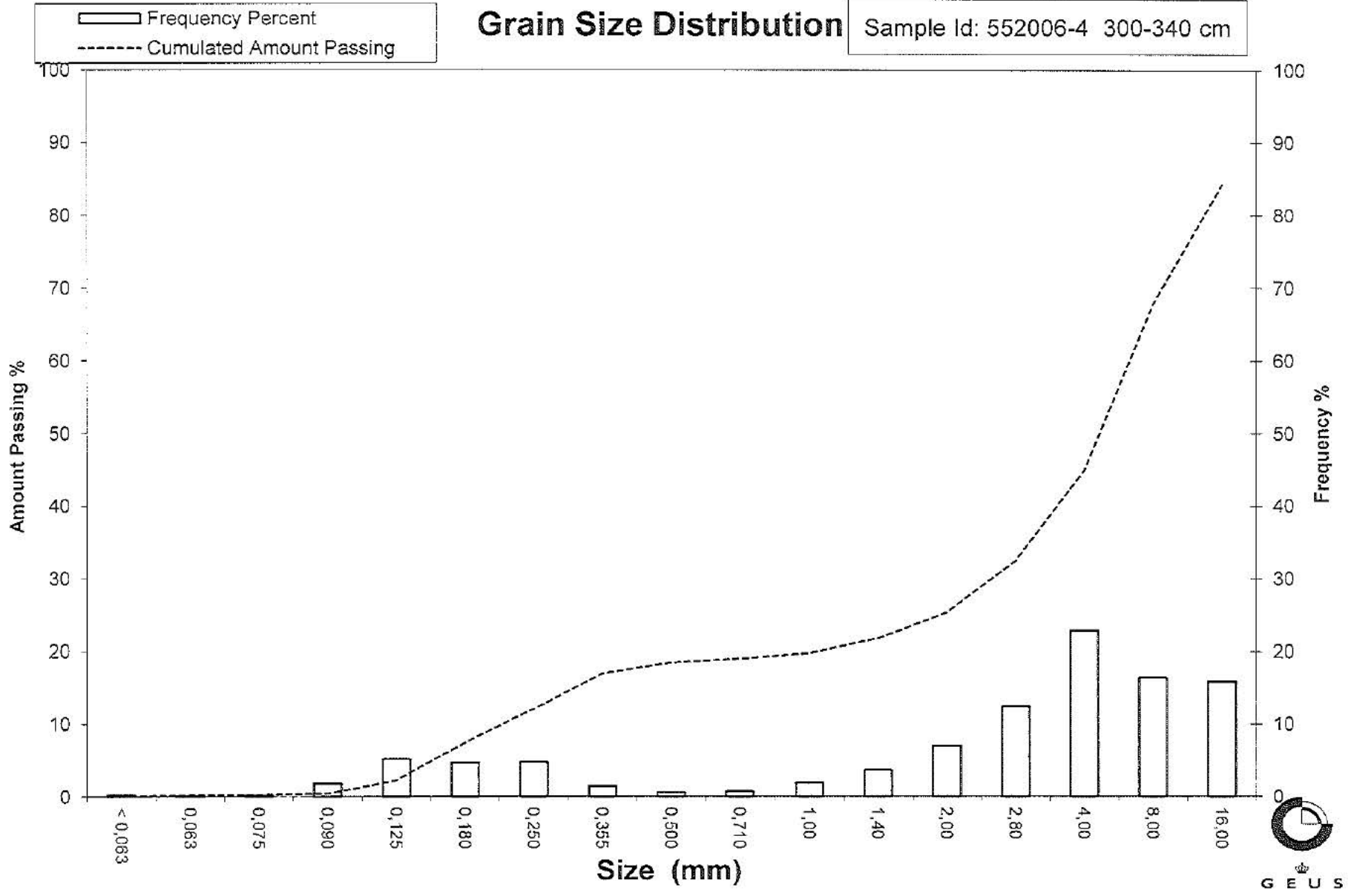
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

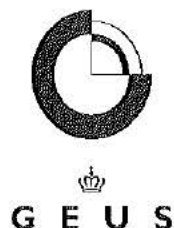
Sample Id: 552006-4 300-340 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552007-1 0-150 cm  
**Lab. Id:** 170259  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 109,41 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,12	0,11	99,89
2,80	-1,49	0,15	0,14	99,75
2,00	-1,00	0,63	0,58	99,18
1,40	-0,49	0,39	0,36	98,82
1,00	0,00	1,48	1,35	97,47
0,710	0,49	1,55	1,42	96,05
0,500	1,00	3,30	3,02	93,04
0,355	1,49	13,22	12,08	80,95
0,250	2,00	53,21	48,63	32,32
0,180	2,47	30,12	27,53	4,79
0,125	3,00	3,54	3,24	1,55
0,090	3,47	0,70	0,64	0,91
0,075	3,74	0,25	0,23	0,69
0,063	3,99	0,14	0,13	0,56
< 0,063	> 3,99	0,61	0,56	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,56
Sand, fine (0,063 mm - 0,200 mm)	12,10
Sand, medium (0,2 mm - 0,6 mm)	81,82
Sand, coarse (0,6 mm - 2 mm)	4,71
Gravel (> 2 mm)	0,82
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,64	0,65
16%	84%	0,39	1,35
25%	75%	0,34	1,55
40%	60%	0,31	1,69
Median 50%	50%	0,29	1,79
75%	25%	0,23	2,11
84%	16%	0,21	2,26
90%	10%	0,19	2,37
95%	5%	0,18	2,47

### Moments Statistics

Mean	1,80
Sorting	0,50
Skewness	-0,12
Kurtosis	1,32
Uniformity Coefficient	1,60

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

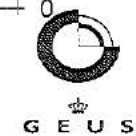
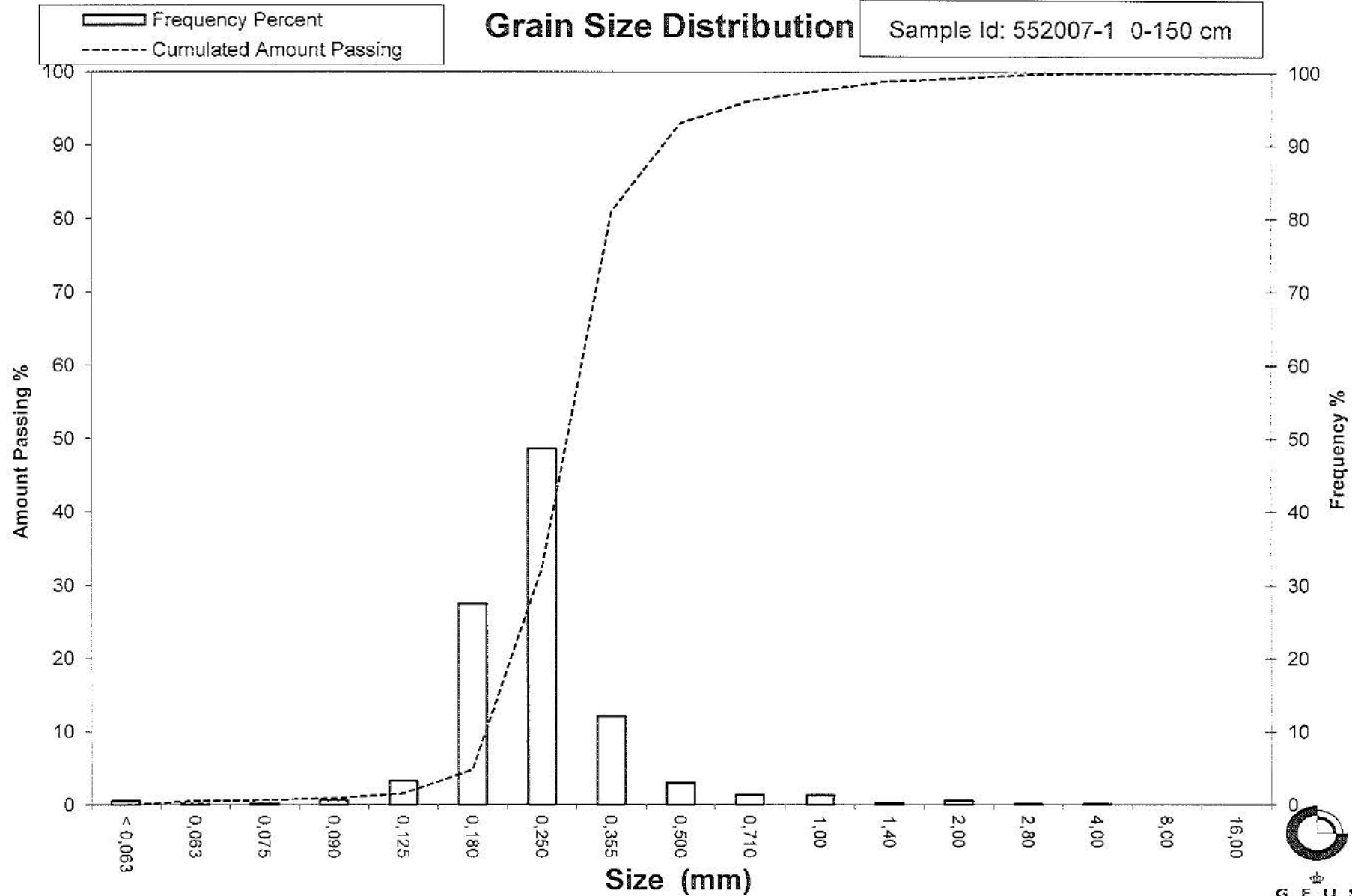
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552007-1 0-150 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552007-1 190-220 cm  
**Lab. Id:** 170295  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 495,42 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing
16,00	-4,00	83,94	16,94	83,06
8,00	-3,00	80,54	16,26	66,80
4,00	-2,00	46,40	9,37	57,43
2,80	-1,49	14,23	2,87	54,56
2,00	-1,00	7,40	1,49	53,07
1,40	-0,49	5,16	1,04	52,03
1,00	0,00	5,73	1,16	50,87
0,710	0,49	4,67	0,94	49,93
0,500	1,00	8,39	1,69	48,23
0,355	1,49	32,59	6,58	41,66
0,250	2,00	127,98	25,83	15,82
0,180	2,47	65,90	13,30	2,52
0,125	3,00	8,04	1,62	0,90
0,090	3,47	1,63	0,33	0,57
0,075	3,74	0,65	0,13	0,44
0,063	3,99	0,40	0,08	0,36
< 0,063	> 3,99	1,77	0,36	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	0,36
Sand, fine (0,063 mm - 0,200 mm):	5,96
Sand, medium (0,2 mm - 0,6 mm):	42,72
Sand, coarse (0,6 mm - 2 mm):	4,03
Gravel (> 2 mm):	46,93
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	12,04	-3,59
40%	60%	5,10	-2,35
Median 50%	50%	0,73	0,45
75%	25%	0,29	1,80
84%	16%	0,25	2,00
90%	10%	0,22	2,19
95%	5%	0,19	2,37

### Moments Statistics

Mean	1,22
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	23,23

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

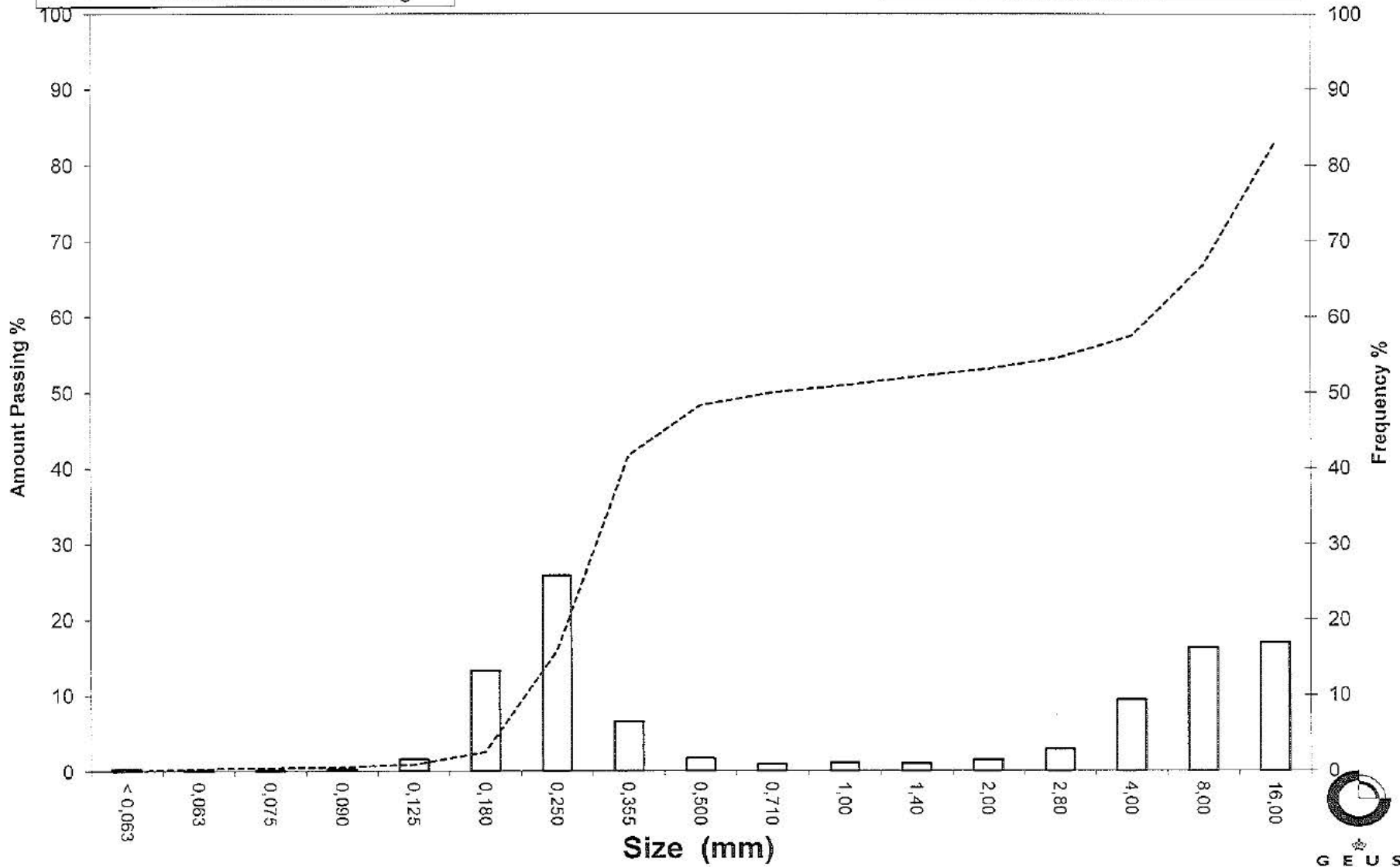
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

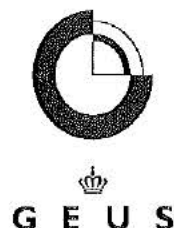
Sample Id: 552007-1 190-220 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552007-1 320-380 cm  
**Lab. Id:** 170296  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 153,09 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	3,83	2,50	97,50
4,00	-2,00	3,11	2,03	95,47
2,80	-1,49	2,81	1,84	93,63
2,00	-1,00	3,01	1,97	91,67
1,40	-0,49	4,29	2,80	88,86
1,00	0,00	5,12	3,34	85,52
0,710	0,49	4,97	3,25	82,27
0,500	1,00	9,43	6,16	76,11
0,355	1,49	27,36	17,87	58,24
0,250	2,00	55,98	36,57	21,67
0,180	2,47	26,28	17,17	4,51
0,125	3,00	4,27	2,79	1,72
0,090	3,47	0,90	0,59	1,13
0,075	3,74	0,38	0,25	0,88
0,063	3,99	0,22	0,14	0,74
< 0,063	> 3,99	1,13	0,74	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,74
Sand, fine (0,063 mm - 0,200 mm):	8,67
Sand, medium (0,2 mm - 0,6 mm):	69,63
Sand, coarse (0,6 mm - 2 mm):	12,62
Gravel (> 2 mm):	8,33
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	3,69	-1,89
16%	84%	0,86	0,21
25%	75%	0,49	1,03
40%	60%	0,37	1,44
Median 50%	50%	0,33	1,59
75%	25%	0,26	1,95
84%	16%	0,23	2,14
90%	10%	0,20	2,30
95%	5%	0,18	2,46

### Moments Statistics

Mean	1,31
Sorting	1,14
Skewness	-0,52
Kurtosis	1,94
Uniformity Coefficient	1,82

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

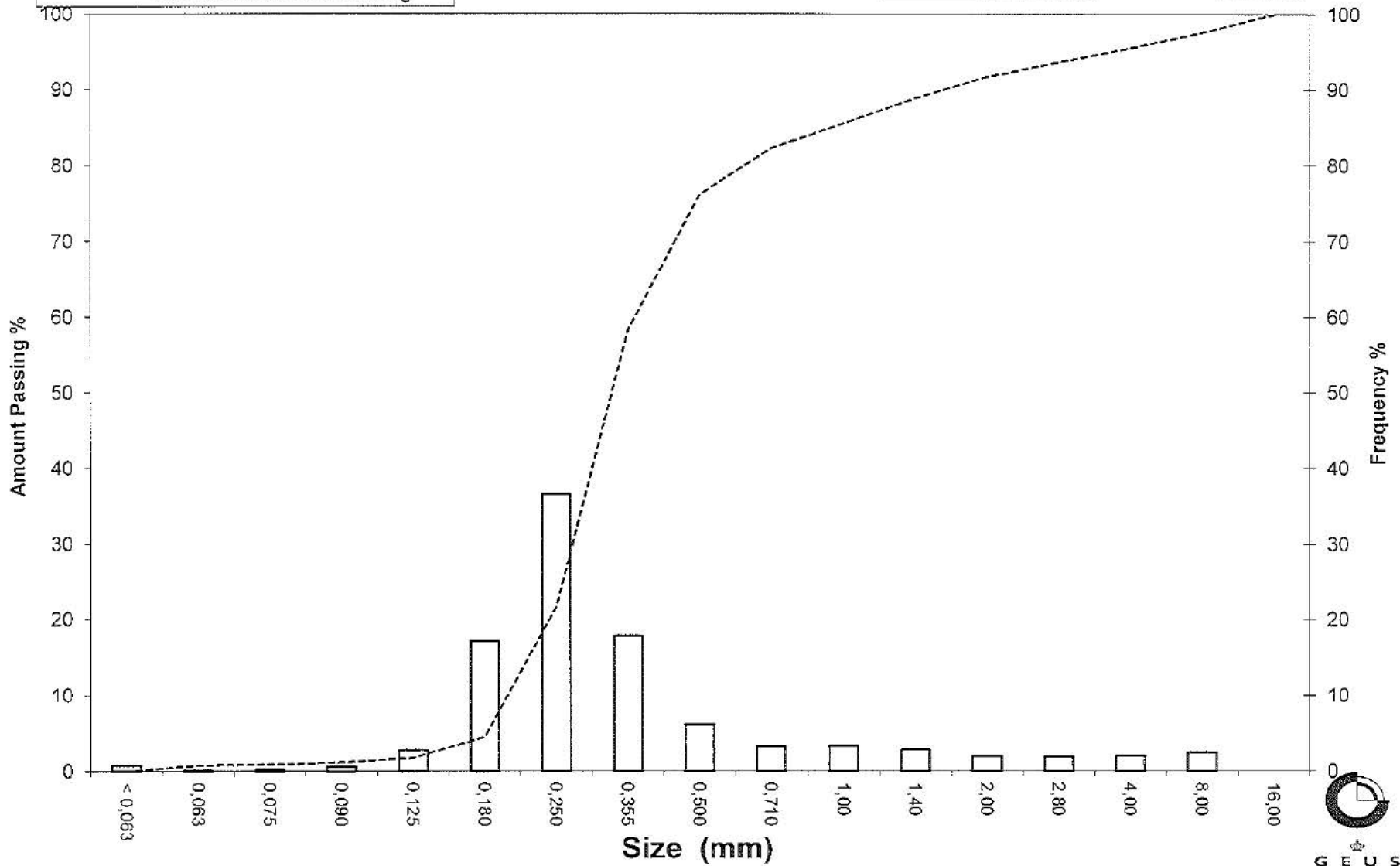
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

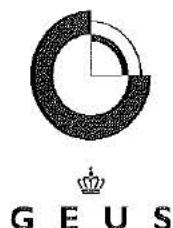
Sample Id: 552007-1 320-380 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552007-2 0-200 cm  
**Lab. Id:** 170260  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 110,43 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,03	0,03	99,97
2,00	-1,00	0,06	0,05	99,92
1,40	-0,49	0,41	0,37	99,55
1,00	0,00	1,67	1,51	98,03
0,710	0,49	2,40	2,17	95,86
0,500	1,00	3,67	3,32	92,54
0,355	1,49	10,44	9,45	83,08
0,250	2,00	35,40	32,06	51,03
0,180	2,47	29,88	27,06	23,97
0,125	3,00	22,27	20,17	3,80
0,090	3,47	2,99	2,71	1,10
0,075	3,74	0,31	0,28	0,81
0,063	3,99	0,14	0,13	0,69
< 0,063	> 3,99	0,76	0,69	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,69
Sand, fine (0,063 mm - 0,200 mm)	31,01
Sand, medium (0,2 mm - 0,6 mm)	62,42
Sand, coarse (0,6 mm - 2 mm)	5,80
Gravel (> 2 mm)	0,08
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,66	0,61
16%	84%	0,37	1,44
25%	75%	0,33	1,61
40%	60%	0,28	1,84
Median 50%	50%	0,25	2,02
75%	25%	0,18	2,45
84%	16%	0,16	2,66
90%	10%	0,14	2,82
95%	5%	0,13	2,96

### Moments Statistics

Mean	2,04
Sorting	0,66
Skewness	-0,07
Kurtosis	1,14
Uniformity Coefficient	1,97

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

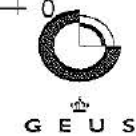
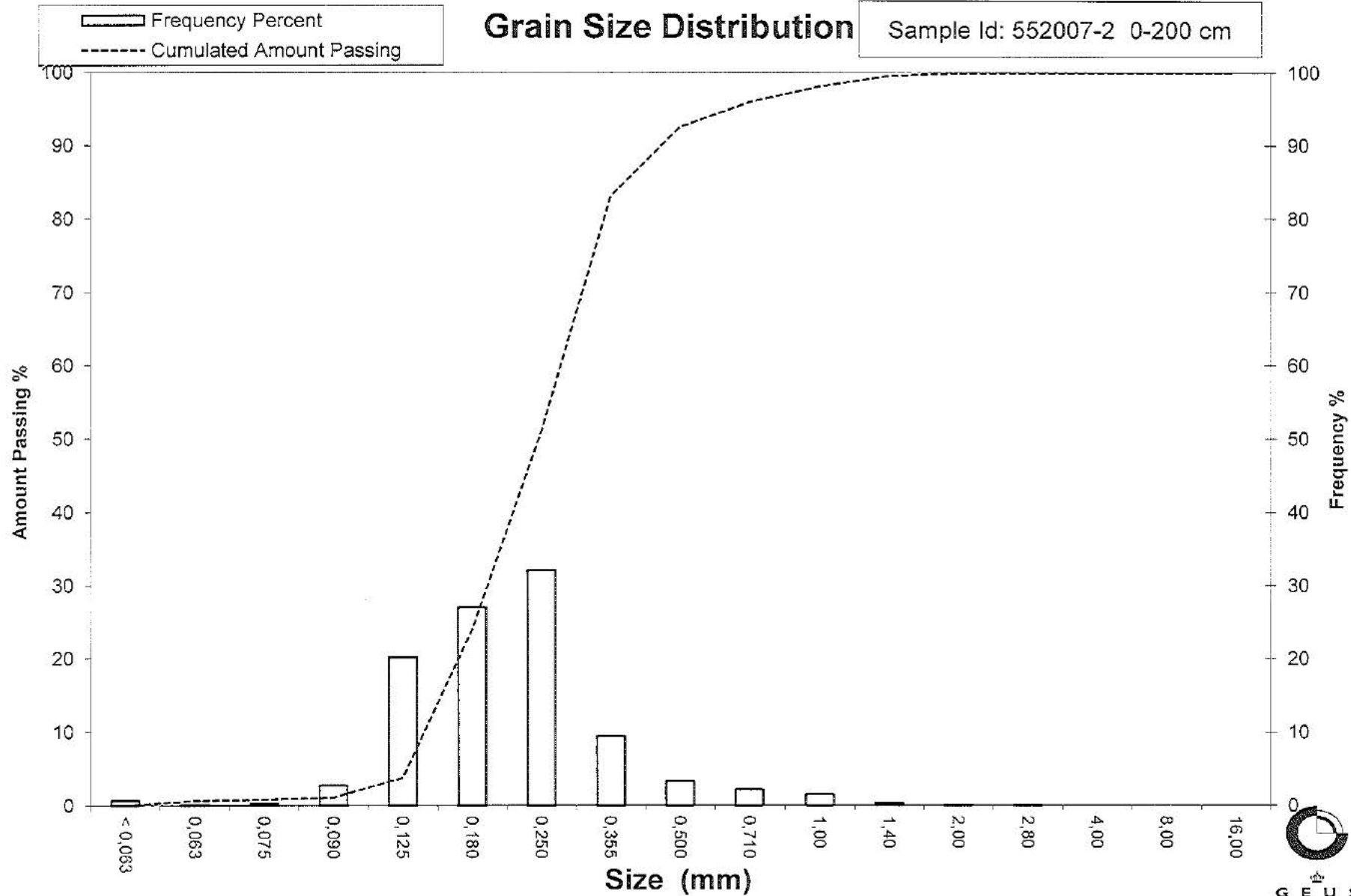
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552007-2 0-200 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552007-2 270-400 cm  
**Lab. Id:** 170297  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 96,12 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,07	0,07	99,93
2,00	-1,00	0,00	0,00	99,93
1,40	-0,49	0,09	0,09	99,83
1,00	0,00	0,34	0,35	99,48
0,710	0,49	0,62	0,65	98,83
0,500	1,00	1,76	1,83	97,00
0,355	1,49	5,53	5,75	91,25
0,250	2,00	12,37	12,87	78,38
0,180	2,47	20,40	21,22	57,16
0,125	3,00	33,66	35,02	22,14
0,090	3,47	16,77	17,45	4,69
0,075	3,74	2,17	2,26	2,43
0,063	3,99	0,91	0,95	1,49
< 0,063	> 3,99	1,43	1,49	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,49
Sand, fine (0,063 mm - 0,200 mm)	61,73
Sand, medium (0,2 mm - 0,6 mm)	34,65
Sand, coarse (0,6 mm - 2 mm)	2,05
Gravel (> 2 mm)	0,07
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,45	1,15
16%	84%	0,30	1,76
25%	75%	0,24	2,07
40%	60%	0,19	2,40
Median 50%	50%	0,17	2,57
75%	25%	0,13	2,95
84%	16%	0,11	3,15
90%	10%	0,10	3,31
95%	5%	0,09	3,48

### Moments Statistics

Mean	2,49
Sorting	0,70
Skewness	-0,19
Kurtosis	1,07
Uniformity Coefficient	1,88

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

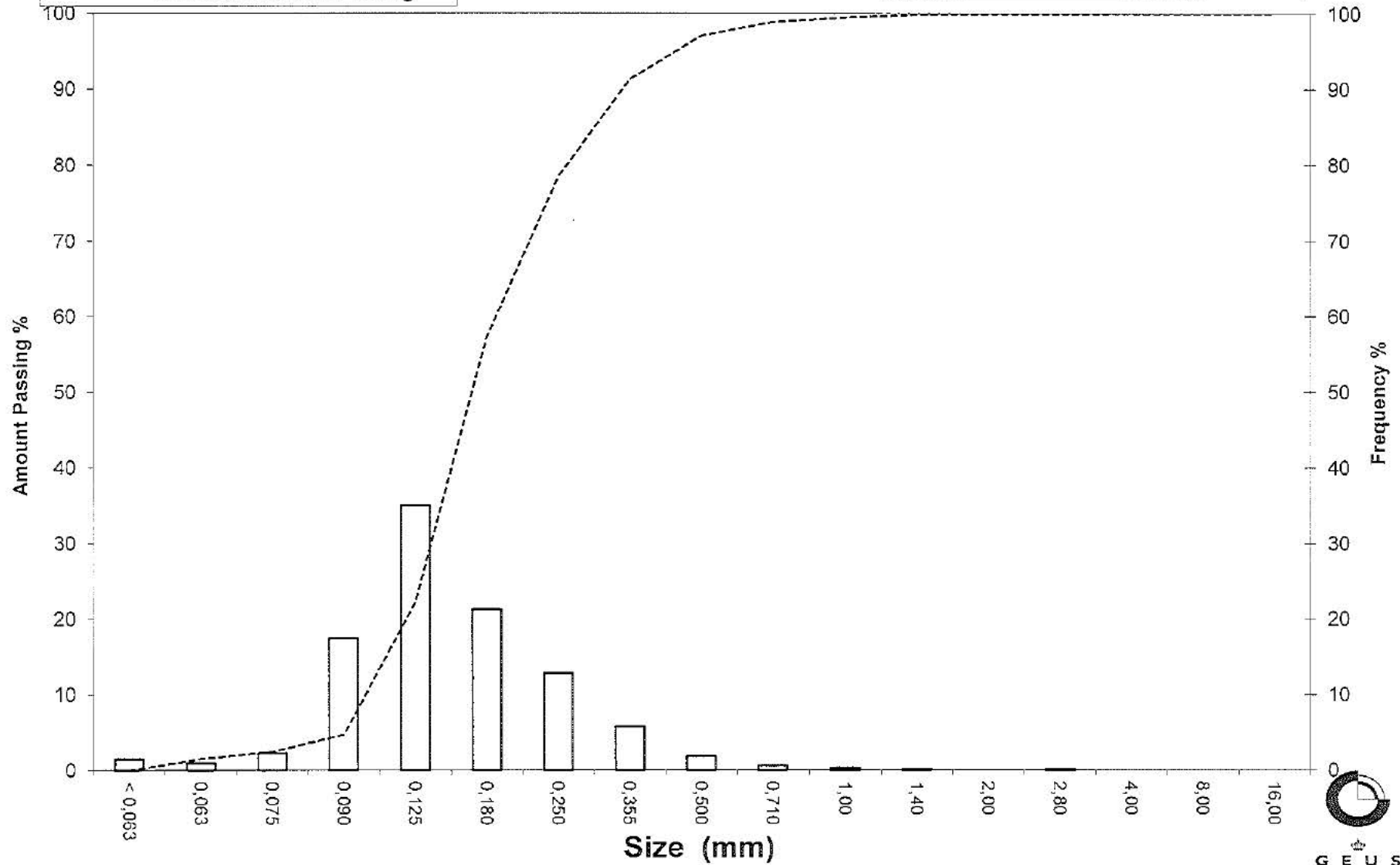
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552007-2 270-400 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552008-1 0-200 cm  
**Lab. Id:** 170261  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 109,63 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,46	0,42	99,58
2,80	-1,49	0,20	0,18	99,40
2,00	-1,00	0,41	0,37	99,02
1,40	-0,49	0,49	0,45	98,58
1,00	0,00	1,25	1,14	97,44
0,710	0,49	1,39	1,27	96,17
0,500	1,00	2,68	2,44	93,72
0,355	1,49	9,88	9,01	84,71
0,250	2,00	47,53	43,35	41,36
0,180	2,47	38,40	35,03	6,33
0,125	3,00	5,95	5,43	0,90
0,090	3,47	0,37	0,34	0,57
0,075	3,74	0,06	0,05	0,51
0,063	3,99	0,04	0,04	0,47
< 0,063	> 3,99	0,52	0,47	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	0,47
Sand, fine (0,063 mm - 0,200 mm):	15,86
Sand, medium (0,2 mm - 0,6 mm):	78,55
Sand, coarse (0,6 mm - 2 mm):	4,14
Gravel (> 2 mm):	0,98
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,61	0,71
16%	84%	0,35	1,50
25%	75%	0,33	1,59
40%	60%	0,30	1,76
Median 50%	50%	0,27	1,88
75%	25%	0,22	2,20
84%	16%	0,20	2,33
90%	10%	0,19	2,42
95%	5%	0,17	2,59

### Moments Statistics

Mean	1,90
Sorting	0,49
Skewness	-0,09
Kurtosis	1,26
Uniformity Coefficient	1,58

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

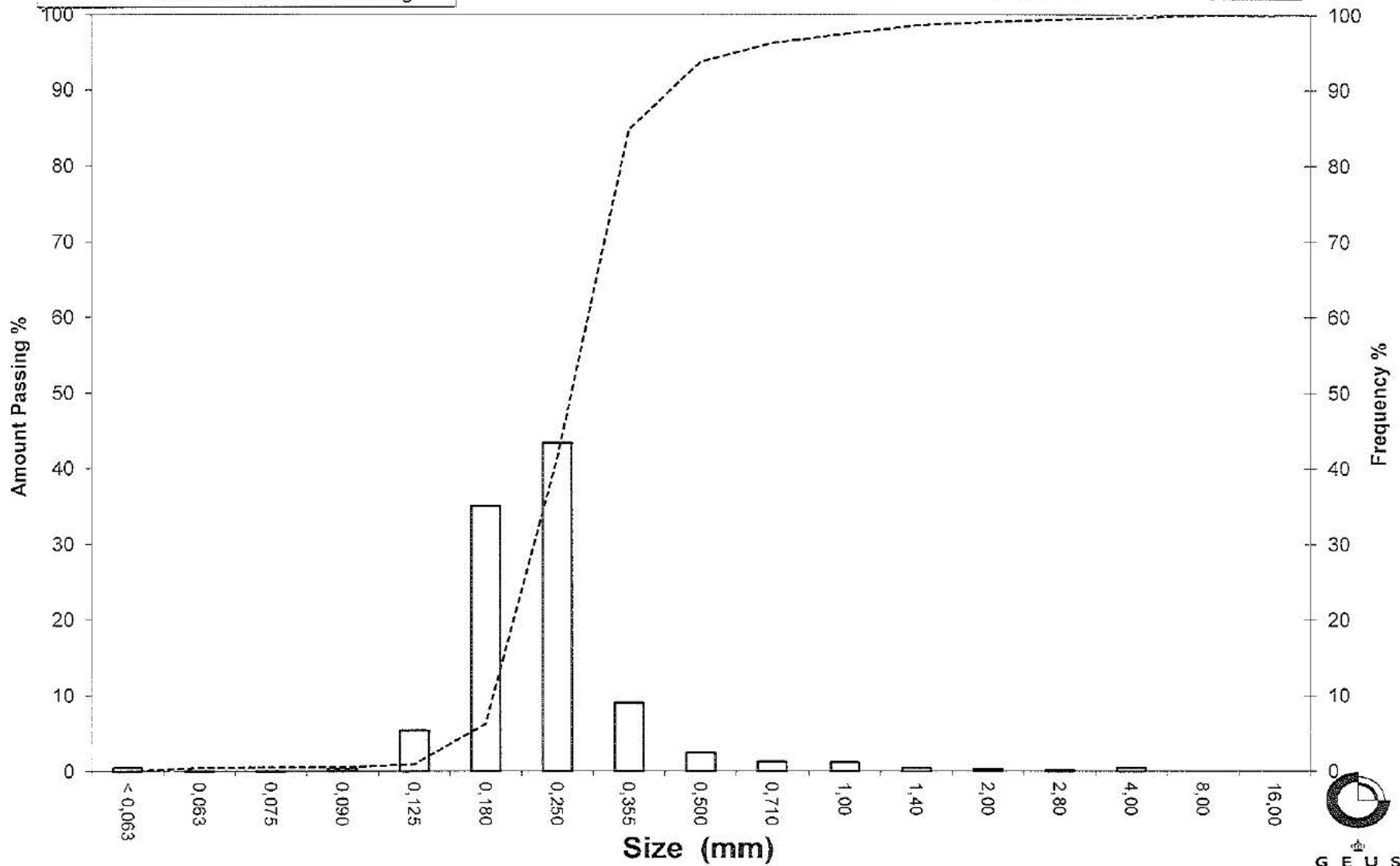
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# Grain Size Distribution

Sample Id: 552008-1 0-200 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552008-1 300-400 cm  
**Lab. Id:** 170339  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 96,1 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,20	0,21	99,79
2,00	-1,00	0,09	0,09	99,70
1,40	-0,49	0,18	0,19	99,51
1,00	0,00	0,37	0,39	99,13
0,710	0,49	0,48	0,50	98,63
0,500	1,00	1,14	1,19	97,44
0,355	1,49	4,40	4,58	92,86
0,250	2,00	32,59	33,91	58,95
0,180	2,47	44,16	45,95	13,00
0,125	3,00	10,92	11,36	1,63
0,090	3,47	0,78	0,81	0,82
0,075	3,74	0,14	0,15	0,68
0,063	3,99	0,07	0,07	0,60
< 0,063	> 3,99	0,58	0,60	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,60
Sand, fine (0,063 mm - 0,200 mm)	25,52
Sand, medium (0,2 mm - 0,6 mm)	71,88
Sand, coarse (0,6 mm - 2 mm)	1,69
Gravel (> 2 mm)	0,30
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,42	1,24
16%	84%	0,33	1,61
25%	75%	0,30	1,74
40%	60%	0,25	1,98
<b>Median 50%</b>	<b>50%</b>	<b>0,24</b>	<b>2,08</b>
75%	25%	0,20	2,33
84%	16%	0,18	2,44
90%	10%	0,17	2,60
95%	5%	0,14	2,82

### Moments Statistics

Mean	2,04
Sorting	0,45
Skewness	-0,10
Kurtosis	1,09
Uniformity Coefficient	1,53

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

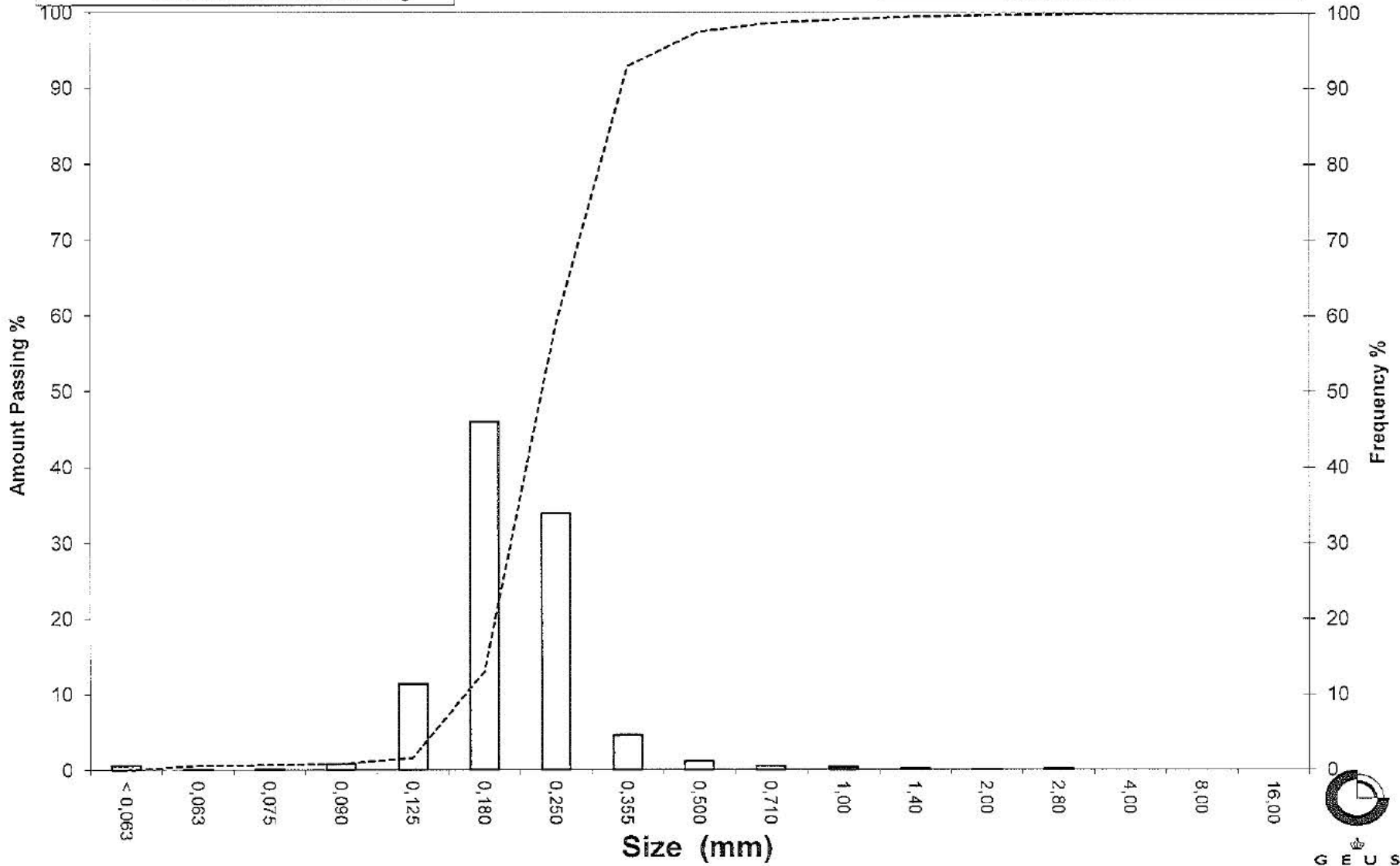
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552008-1 300-400 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552008-2 0-90 cm  
**Lab. Id:** 170262  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >2,0 mm består af skaller



**Total Weight** 104,88 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,08	0,08	99,92
2,00	-1,00	0,33	0,31	99,61
1,40	-0,49	1,32	1,26	98,35
1,00	0,00	3,38	3,22	95,13
0,710	0,49	4,66	4,44	90,68
0,500	1,00	7,74	7,38	83,30
0,355	1,49	19,58	18,67	64,64
0,250	2,00	46,37	44,21	20,42
0,180	2,47	17,23	16,43	4,00
0,125	3,00	3,67	3,50	0,50
0,090	3,47	0,26	0,25	0,25
0,075	3,74	0,04	0,04	0,21
0,063	3,99	0,02	0,02	0,19
< 0,063	> 3,99	0,20	0,19	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	0,19
Sand, fine (0,063 mm - 0,200 mm):	8,50
Sand, medium (0,2 mm - 0,6 mm):	78,13
Sand, coarse (0,6 mm - 2 mm):	12,79
Gravel (> 2 mm):	0,39
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,99	0,01
16%	84%	0,52	0,94
25%	75%	0,44	1,20
40%	60%	0,34	1,54
Median 50%	50%	0,32	1,64
75%	25%	0,26	1,94
84%	16%	0,23	2,11
90%	10%	0,21	2,28
95%	5%	0,18	2,44

### Moments Statistics

Mean	1,57
Sorting	0,66
Skewness	-0,27
Kurtosis	1,35
Uniformity Coefficient	1,67

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

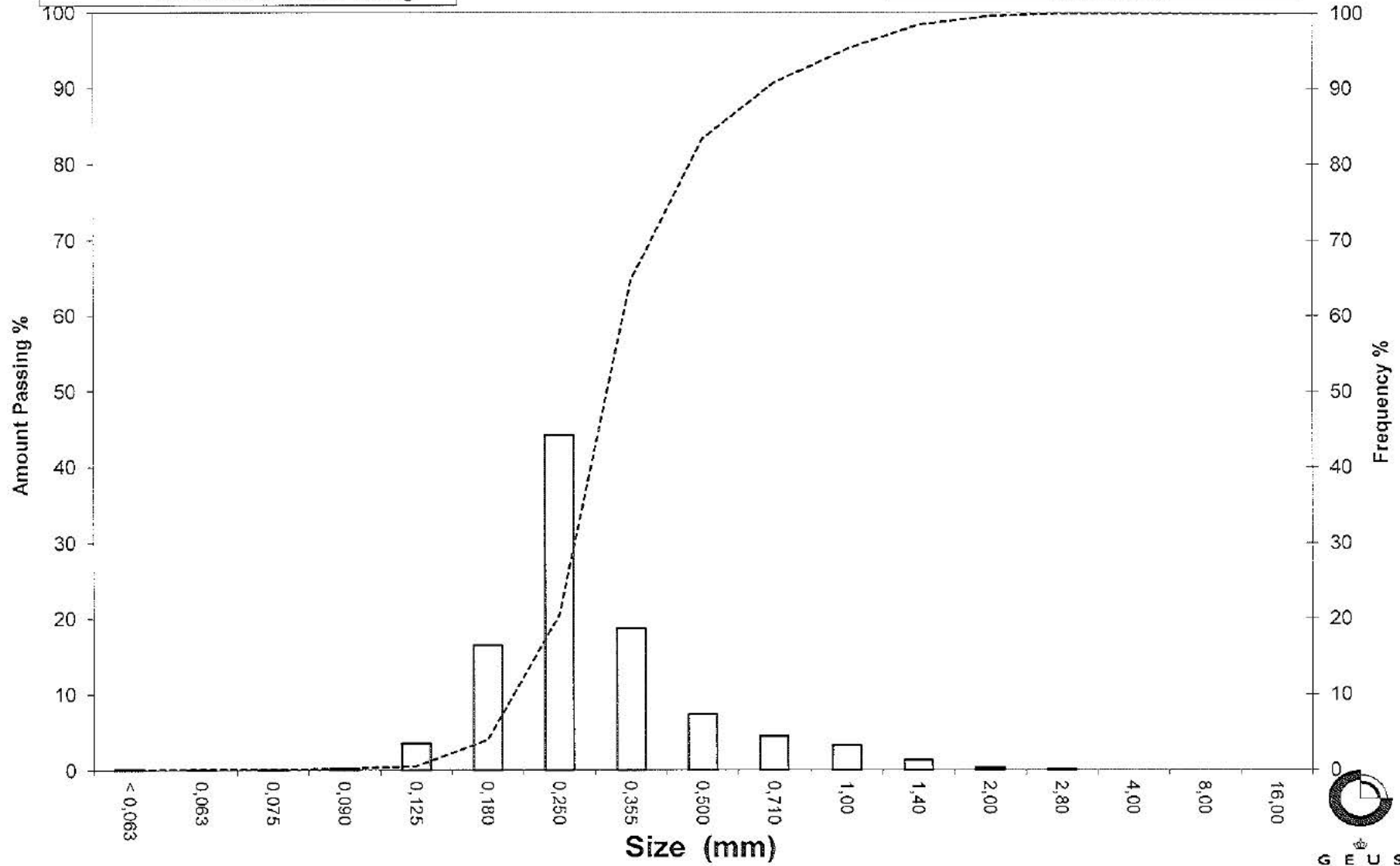
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

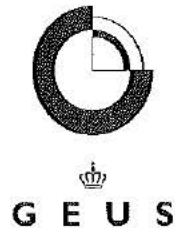
Sample Id: 552008-2 0-90 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552008-2 95-160 cm  
**Lab. Id:** 170263  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >32 mm (35 g) indgår i >16 mm



**Total Weight** 760,62 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	
16,00	-4,00	125,87	16,55	83,45
8,00	-3,00	211,84	27,85	55,60
4,00	-2,00	127,92	16,82	38,78
2,80	-1,49	48,22	6,34	32,44
2,00	-1,00	38,04	5,00	27,44
1,40	-0,49	27,11	3,56	23,88
1,00	0,00	14,39	1,89	21,99
0,710	0,49	5,89	0,77	21,21
0,500	1,00	7,46	0,98	20,23
0,355	1,49	24,90	3,27	16,96
0,250	2,00	76,61	10,07	6,89
0,180	2,47	38,09	5,01	1,88
0,125	3,00	10,06	1,32	0,55
0,090	3,47	1,10	0,14	0,41
0,075	3,74	0,31	0,04	0,37
0,063	3,99	0,23	0,03	0,34
< 0,063	> 3,99	2,58	0,34	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,34
Sand, fine (0,063 mm - 0,200 mm)	2,97
Sand, medium (0,2 mm - 0,6 mm)	17,39
Sand, coarse (0,6 mm - 2 mm)	6,74
Gravel (> 2 mm)	72,56
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	-----	-----
25%	75%	13,57	-3,76
40%	60%	9,26	-3,21
Median 50%	50%	6,67	-2,74
75%	25%	1,59	-0,67
84%	16%	0,35	1,54
90%	10%	0,28	1,82
95%	5%	0,22	2,16

### Moments Statistics

Mean	-0,60
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	32,80

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

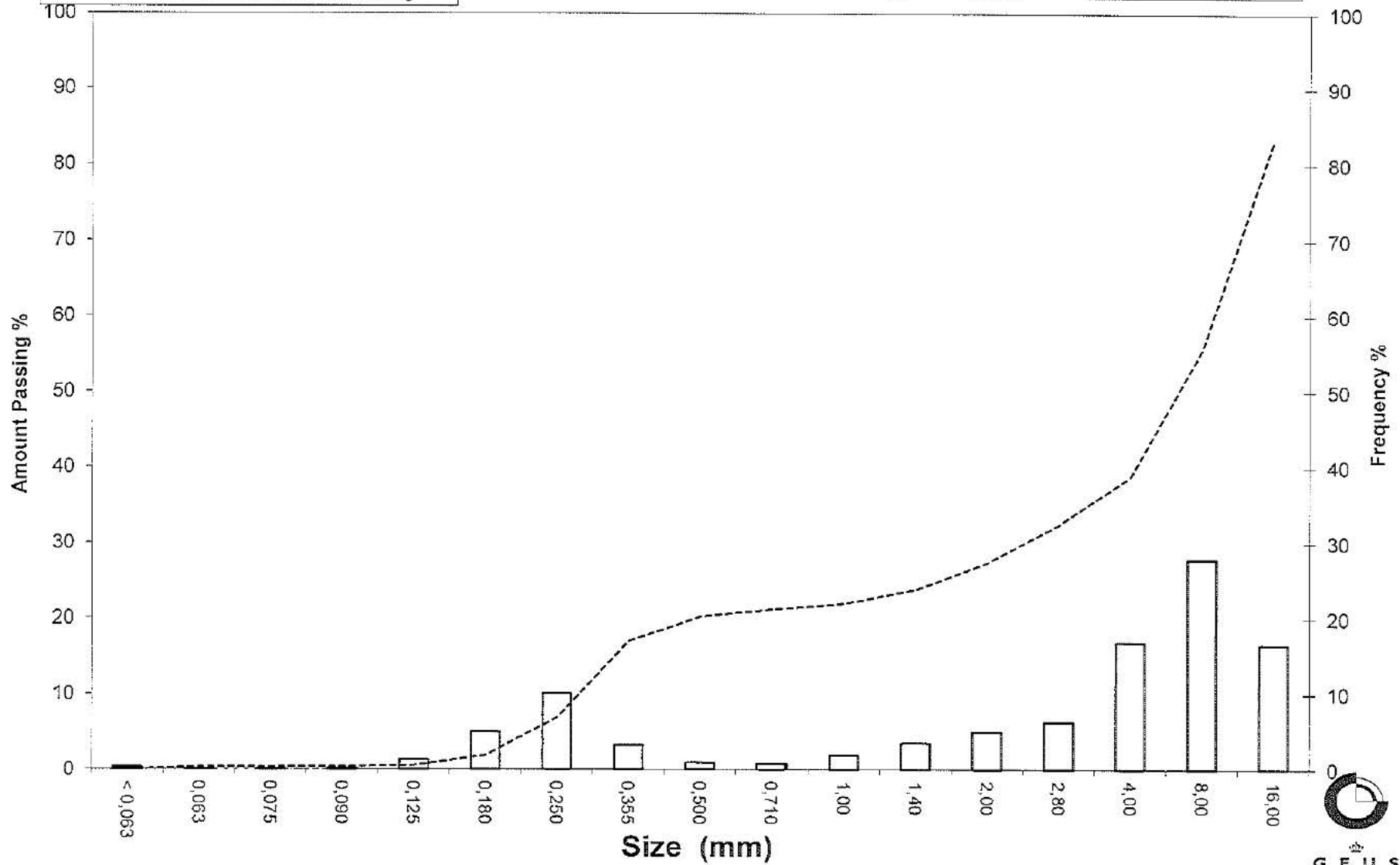
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552008-2 95-160 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552008-2 300-580 cm  
**Lab. Id:** 170340  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 98,02 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,03	0,03	99,97
1,00	0,00	0,08	0,08	99,89
0,710	0,49	0,15	0,15	99,73
0,500	1,00	0,64	0,65	99,08
0,355	1,49	5,69	5,80	93,28
0,250	2,00	32,69	33,35	59,93
0,180	2,47	34,78	35,48	24,44
0,125	3,00	19,58	19,98	4,47
0,090	3,47	3,25	3,32	1,15
0,075	3,74	0,35	0,36	0,80
0,063	3,99	0,14	0,14	0,65
< 0,063	> 3,99	0,64	0,65	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	0,65
Sand, fine (0,063 mm - 0,200 mm)	33,93
Sand, medium (0,2 mm - 0,6 mm)	64,81
Sand, coarse (0,6 mm - 2 mm)	0,81
Gravel (> 2 mm)	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,40	1,33
16%	84%	0,33	1,62
25%	75%	0,30	1,75
40%	60%	0,25	2,00
Median 50%	50%	0,23	2,12
75%	25%	0,18	2,47
84%	16%	0,16	2,67
90%	10%	0,14	2,83
95%	5%	0,13	2,98

### Moments Statistics

Mean	2,14
Sorting	0,51
Skewness	0,05
Kurtosis	0,95
Uniformity Coefficient	1,78

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

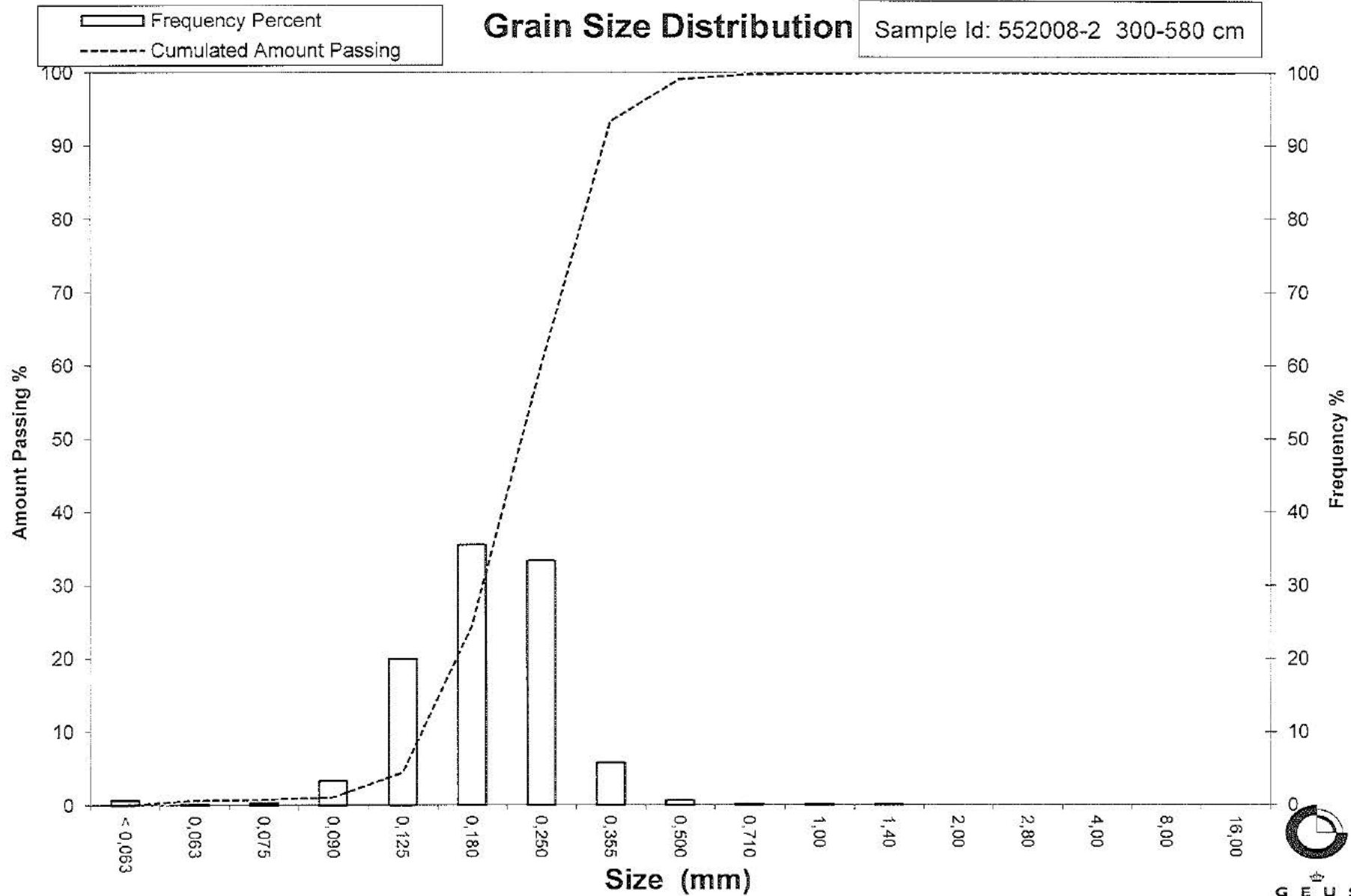
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552008-2 300-580 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552008-3 0-110 cm  
**Lab. Id:** 170341  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 111,53 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,20	0,18	99,82
2,00	-1,00	0,30	0,27	99,55
1,40	-0,49	0,92	0,82	98,73
1,00	0,00	1,43	1,28	97,44
0,710	0,49	1,82	1,63	95,81
0,500	1,00	3,63	3,25	92,56
0,355	1,49	18,45	16,54	76,02
0,250	2,00	70,48	63,19	12,82
0,180	2,47	12,60	11,30	1,52
0,125	3,00	0,92	0,82	0,70
0,090	3,47	0,10	0,09	0,61
0,075	3,74	0,01	0,01	0,60
0,063	3,99	0,00	0,00	0,60
< 0,063	> 3,99	0,67	0,60	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	0,60
Sand, fine (0,063 mm - 0,200 mm):	4,15
Sand, medium (0,2 mm - 0,6 mm):	89,36
Sand, coarse (0,6 mm - 2 mm):	5,44
Gravel (> 2 mm):	0,45
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,66	0,60
16%	84%	0,42	1,23
25%	75%	0,35	1,50
40%	60%	0,33	1,61
Median 50%	50%	0,31	1,68
75%	25%	0,27	1,89
84%	16%	0,26	1,97
90%	10%	0,23	2,10
95%	5%	0,20	2,31

### Moments Statistics

Mean	1,63
Sorting	0,44
Skewness	-0,24
Kurtosis	1,81
Uniformity Coefficient	1,41

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

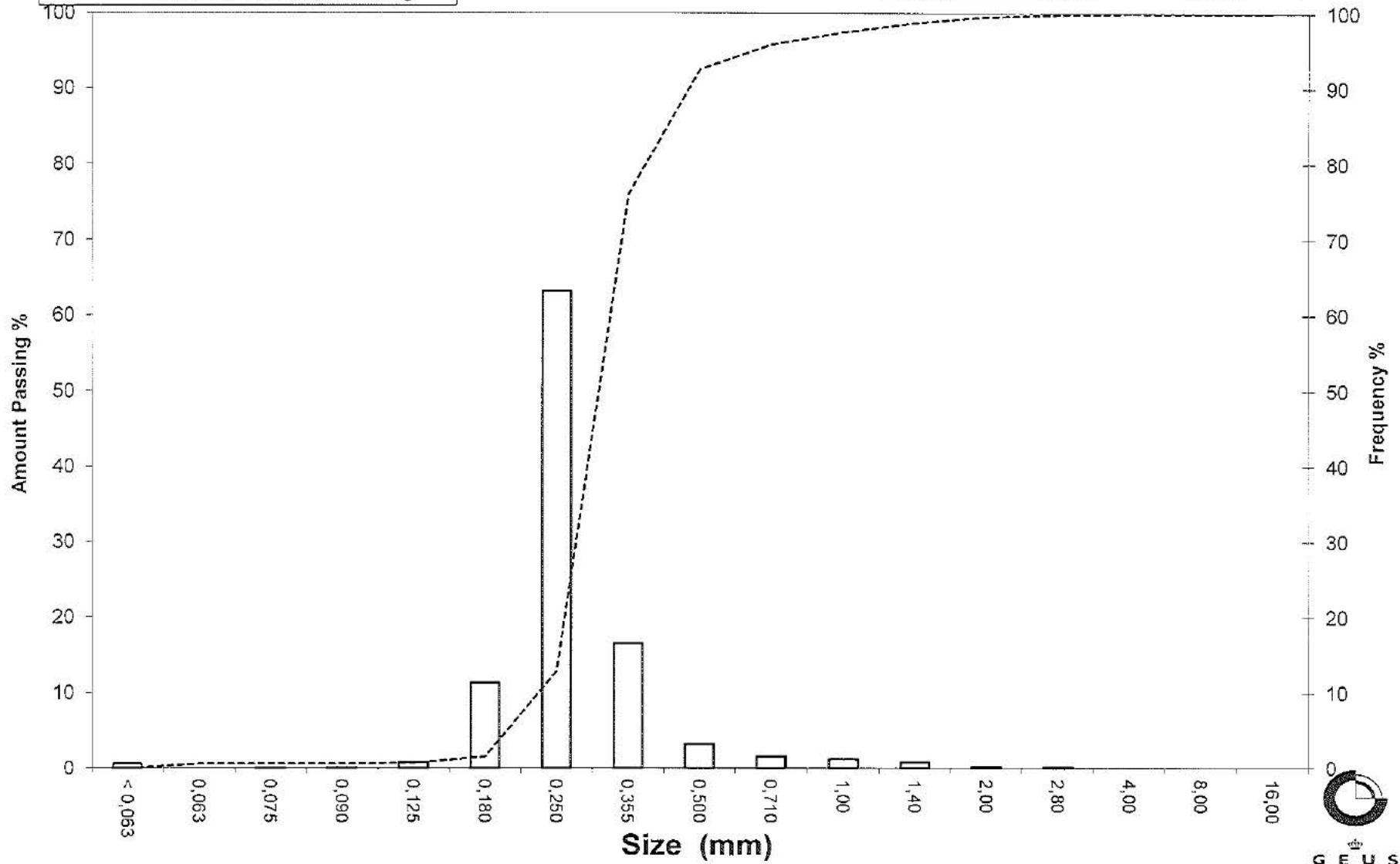
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552008-3 0-110 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 552011-1 0-100 cm  
**Lab. Id:** 170264  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 106,09 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount
mm	Φ	g	%	amount passing %
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,22	0,21	99,79
2,80	-1,49	0,08	0,08	99,72
2,00	-1,00	0,33	0,31	99,41
1,40	-0,49	0,26	0,25	99,16
1,00	0,00	0,74	0,70	98,46
0,710	0,49	0,59	0,56	97,91
0,500	1,00	1,03	0,97	96,94
0,355	1,49	3,83	3,61	93,33
0,250	2,00	28,51	26,87	66,45
0,180	2,47	49,56	46,72	19,74
0,125	3,00	19,40	18,29	1,45
0,090	3,47	0,66	0,62	0,83
0,075	3,74	0,04	0,04	0,79
0,063	3,99	0,02	0,02	0,77
< 0,063	> 3,99	0,82	0,77	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	0,77
Sand, fine (0,063 mm - 0,200 mm):	32,31
Sand, medium (0,2 mm - 0,6 mm):	64,31
Sand, coarse (0,6 mm - 2 mm):	2,01
Gravel (> 2 mm):	0,59
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,42	1,24
16%	84%	0,32	1,65
25%	75%	0,28	1,82
40%	60%	0,24	2,06
Median 50%	50%	0,23	2,15
75%	25%	0,19	2,41
84%	16%	0,17	2,57
90%	10%	0,15	2,73
95%	5%	0,14	2,88

### Moments Statistics

Mean	2,12
Sorting	0,48
Skewness	-0,10
Kurtosis	1,13
Uniformity Coefficient	1,59

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

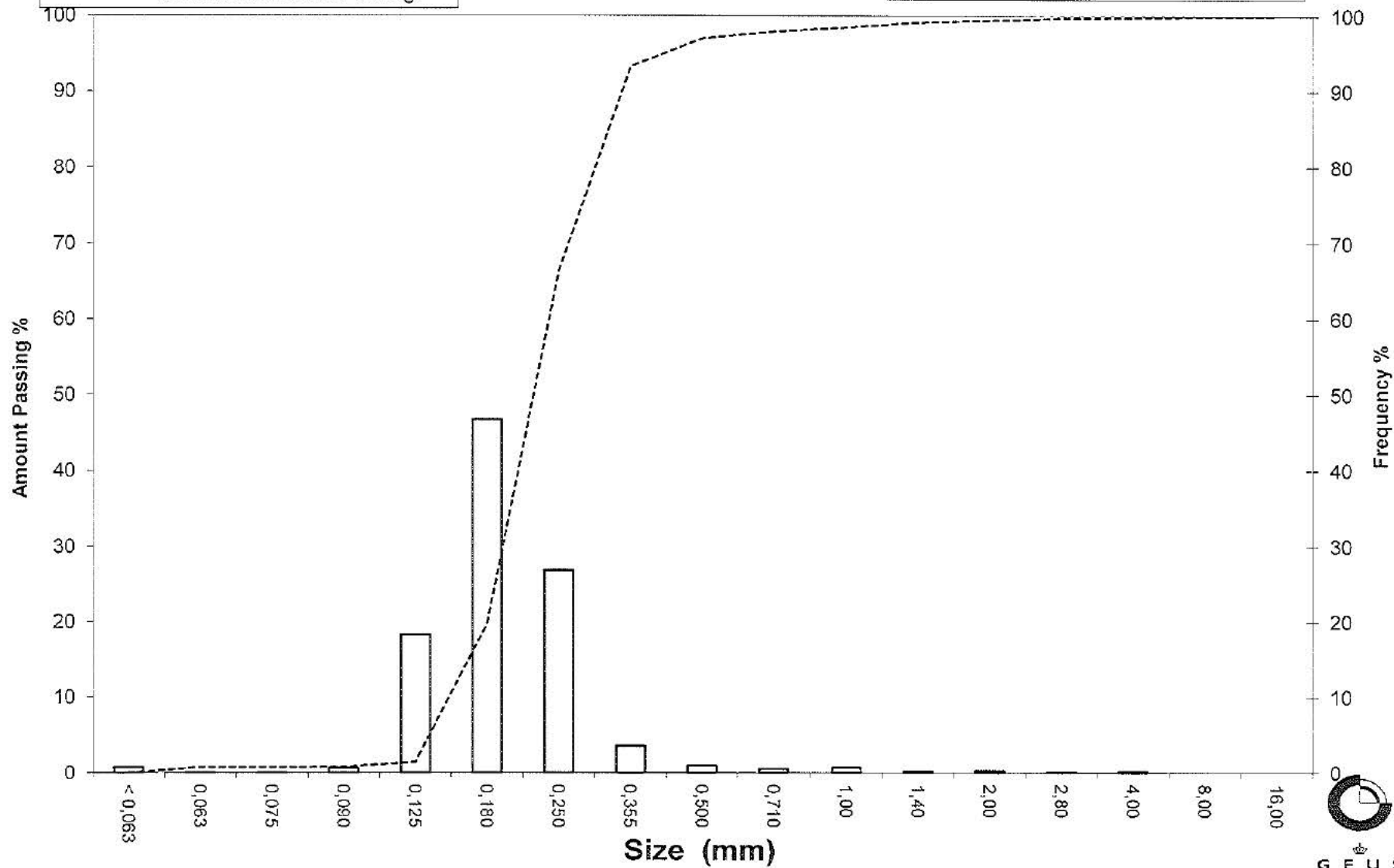
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 552011-1 0-100 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 560001-1 0-50 cm  
**Lab. Id:** 170342  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 97,21 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,12	0,12	99,88
2,00	-1,00	0,20	0,21	99,67
1,40	-0,49	0,03	0,03	99,64
1,00	0,00	0,97	1,00	98,64
0,710	0,49	5,31	5,46	93,18
0,500	1,00	19,43	19,99	73,19
0,355	1,49	6,17	6,35	66,84
0,250	2,00	5,81	5,98	60,87
0,180	2,47	10,62	10,92	49,94
0,125	3,00	11,97	12,31	37,63
0,090	3,47	11,39	11,72	25,91
0,075	3,74	7,62	7,84	18,07
0,063	3,99	6,76	6,95	11,12
< 0,063	> 3,99	10,81	11,12	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	11,12
Sand, fine (0,063 mm - 0,200 mm):	41,94
Sand, medium (0,2 mm - 0,6 mm):	29,65
Sand, coarse (0,6 mm - 2 mm):	16,96
Gravel (> 2 mm):	0,33
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,81	0,31
16%	84%	0,61	0,70
25%	75%	0,52	0,95
40%	60%	0,24	2,03
Median 50%	50%	0,18	2,47
75%	25%	0,09	3,50
84%	16%	0,07	3,81
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,33
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

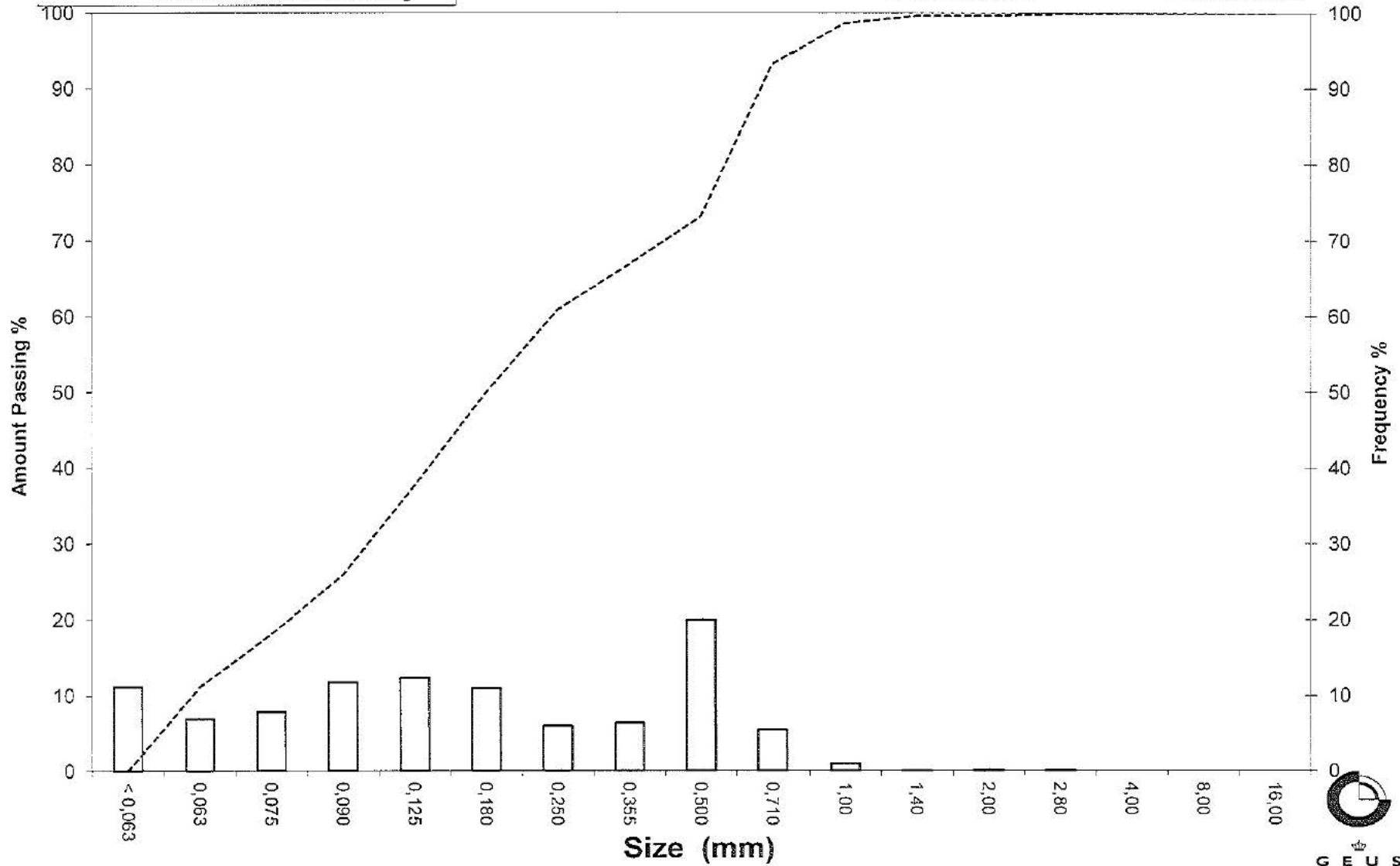
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 560001-1 0-50 cm

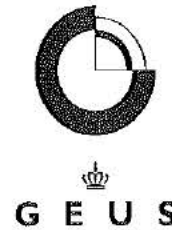
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 560003-1 0-100 cm  
**Lab. Id:** 170343  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >2,8 mm består af skaller



**Total Weight** 125,37 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,77	0,61	99,39
4,00	-2,00	0,43	0,34	99,04
2,80	-1,49	0,58	0,46	98,58
2,00	-1,00	1,09	0,87	97,71
1,40	-0,49	2,03	1,62	96,09
1,00	0,00	4,14	3,30	92,79
0,710	0,49	9,53	7,60	85,19
0,500	1,00	13,02	10,39	74,80
0,355	1,49	16,93	13,50	61,30
0,250	2,00	14,69	11,72	49,58
0,180	2,47	18,96	15,12	34,46
0,125	3,00	30,56	24,38	10,08
0,090	3,47	8,46	6,75	3,33
0,075	3,74	0,84	0,67	2,66
0,063	3,99	0,41	0,33	2,34
< 0,063	> 3,99	2,93	2,34	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	2,34
Sand, fine (0,063 mm - 0,200 mm):	36,44
Sand, medium (0,2 mm - 0,6 mm):	40,97
Sand, coarse (0,6 mm - 2 mm):	17,96
Gravel (> 2 mm):	2,29
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,27	-0,34
16%	84%	0,69	0,54
25%	75%	0,50	0,99
40%	60%	0,34	1,54
Median 50%	50%	0,25	1,98
75%	25%	0,16	2,66
84%	16%	0,14	2,85
90%	10%	0,12	3,00
95%	5%	0,10	3,34

### Moments Statistics

Mean	1,79
Sorting	1,14
Skewness	-0,25
Kurtosis	0,91
Uniformity Coefficient	2,76

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

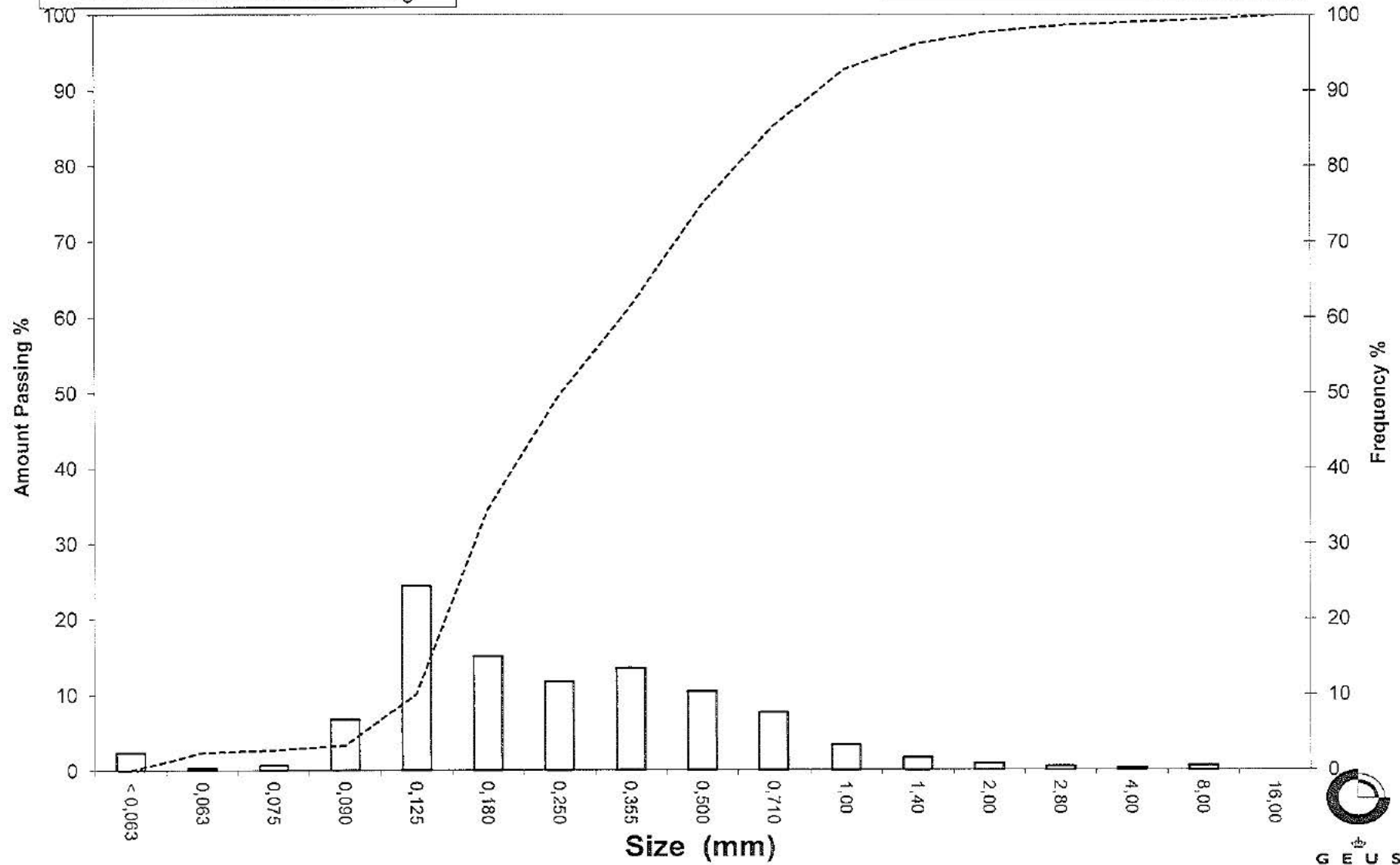
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

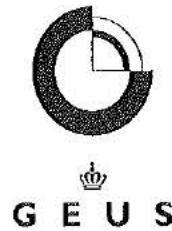
Sample Id: 560003-1 0-100 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 560003-1 160-200 cm  
**Lab. Id:** 170344  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 630,47 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	72,45	11,49	88,51
8,00	-3,00	92,03	14,60	73,91
4,00	-2,00	99,44	15,77	58,14
2,80	-1,49	41,81	6,63	51,51
2,00	-1,00	34,24	5,43	46,08
1,40	-0,49	30,47	4,83	41,24
1,00	0,00	34,06	5,40	35,84
0,710	0,49	37,81	6,00	29,84
0,500	1,00	64,34	10,21	19,64
0,355	1,49	66,28	10,51	9,13
0,250	2,00	19,83	3,15	5,98
0,180	2,47	4,03	0,64	5,34
0,125	3,00	11,97	1,90	3,44
0,090	3,47	11,32	1,80	1,65
0,075	3,74	1,59	0,25	1,40
0,063	3,99	0,89	0,14	1,25
< 0,063	> 3,99	7,91	1,25	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	1,25
Sand, fine (0,063 mm - 0,200 mm)	4,27
Sand, medium (0,2 mm - 0,6 mm)	18,97
Sand, coarse (0,6 mm - 2 mm)	21,58
Gravel (> 2 mm)	53,92
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	-----	-----
16%	84%	13,53	-3,76
25%	75%	8,60	-3,10
40%	60%	4,47	-2,16
Median 50%	50%	2,58	-1,37
75%	25%	0,61	0,71
84%	16%	0,45	1,15
90%	10%	0,37	1,45
95%	5%	0,17	2,56

### Moments Statistics

Mean	-1,32
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	12,18

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

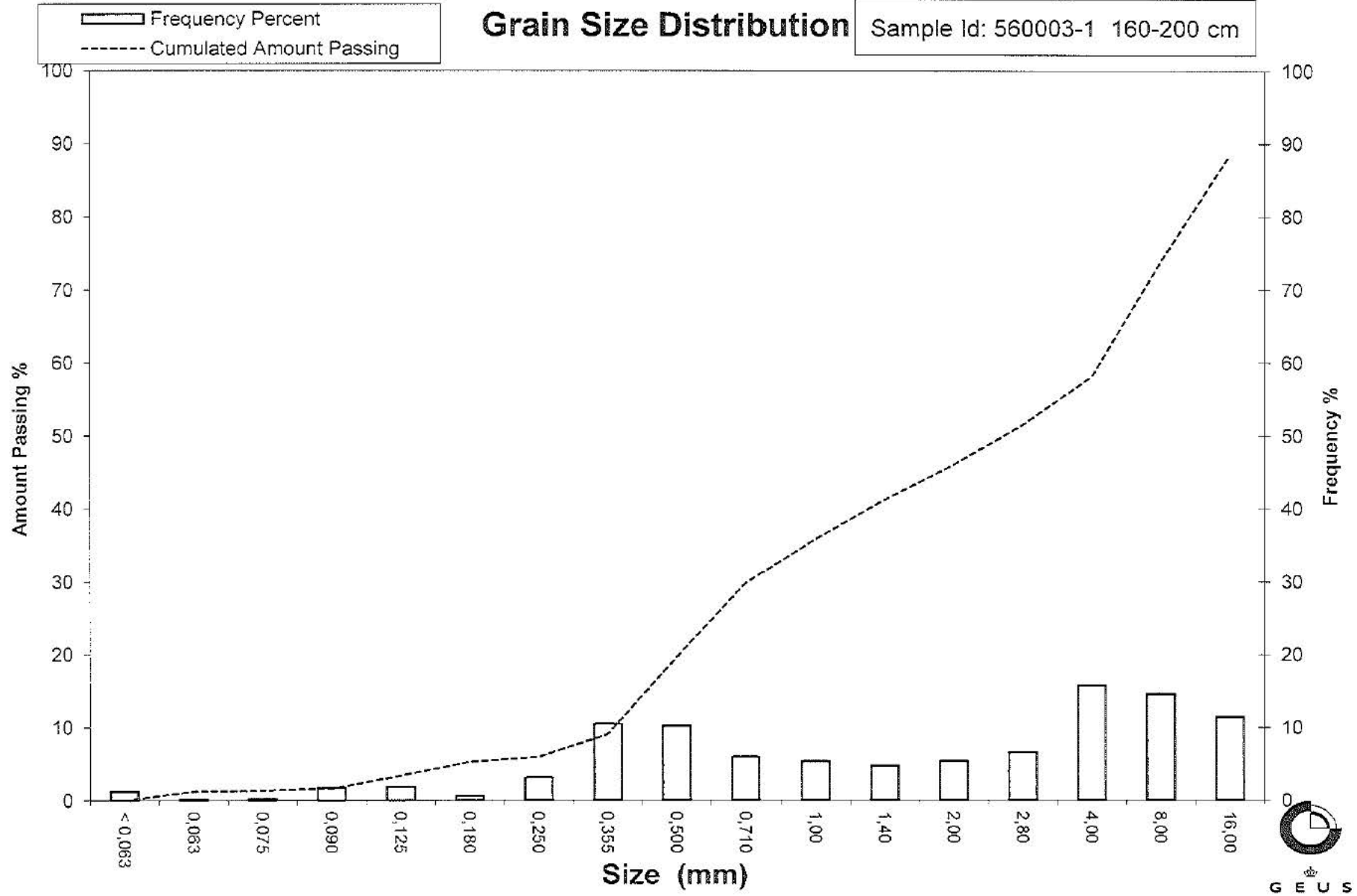
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 560003-1 160-200 cm



# Grain Size Distribution

Geotechnical

Sample Id: 560005b-1 0-120 cm  
 Lab. Id: 170345  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 116,11 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,02	0,02	99,98
1,40	-0,49	0,04	0,03	99,95
1,00	0,00	0,70	0,60	99,35
0,710	0,49	1,41	1,21	98,13
0,500	1,00	3,42	2,95	95,19
0,355	1,49	7,12	6,13	89,05
0,250	2,00	14,14	12,18	76,88
0,180	2,47	21,88	18,84	58,03
0,125	3,00	35,56	30,63	27,41
0,090	3,47	22,75	19,59	7,81
0,075	3,74	3,37	2,90	4,91
0,063	3,99	1,72	1,48	3,43
< 0,063	> 3,99	3,98	3,43	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	3,43
Sand, fine (0,063 mm - 0,200 mm)	59,99
Sand, medium (0,2 mm - 0,6 mm)	33,17
Sand, coarse (0,6 mm - 2 mm)	3,39
Gravel (> 2 mm)	0,02
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,50	1,01
16%	84%	0,31	1,68
25%	75%	0,24	2,04
40%	60%	0,19	2,42
Median 50%	50%	0,17	2,59
75%	25%	0,12	3,05
84%	16%	0,10	3,26
90%	10%	0,09	3,41
95%	5%	0,08	3,73

## Moments Statistics

Mean	2,51
Sorting	0,80
Skewness	-0,16
Kurtosis	1,10
Uniformity Coefficient	1,99

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

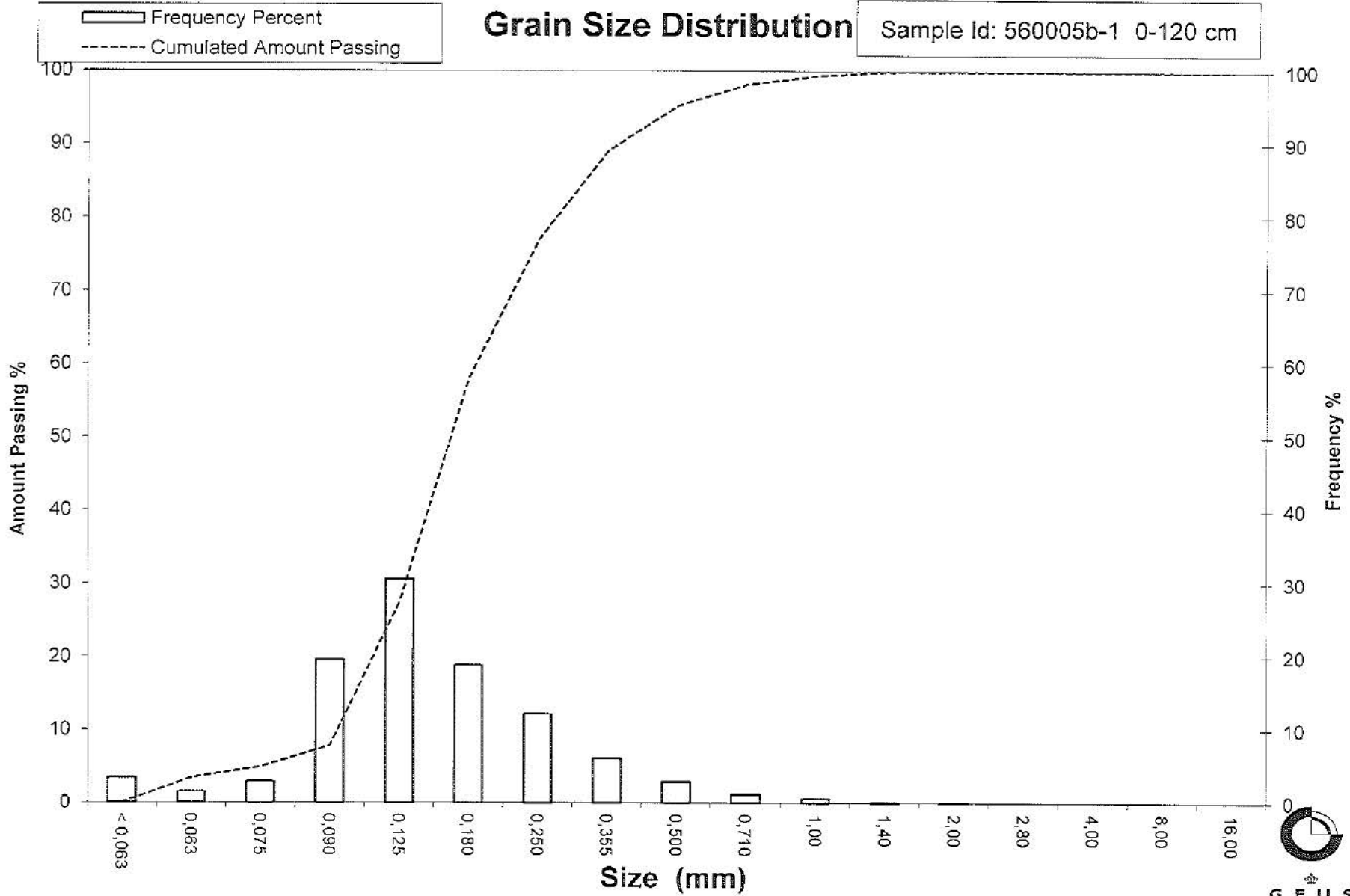
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

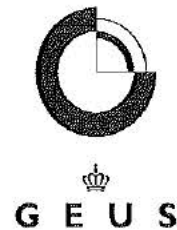
Sample Id: 560005b-1 0-120 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 564002-1 0-150 cm  
**Lab. Id:** 170265  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 107,34 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,13	0,12	99,88
2,00	-1,00	0,00	0,00	99,88
1,40	-0,49	0,13	0,12	99,76
1,00	0,00	0,81	0,75	99,00
0,710	0,49	3,73	3,47	95,53
0,500	1,00	7,76	7,23	88,30
0,355	1,49	11,44	10,66	77,64
0,250	2,00	16,47	15,34	62,30
0,180	2,47	16,62	15,48	46,81
0,125	3,00	23,74	22,12	24,70
0,090	3,47	14,40	13,42	11,28
0,075	3,74	3,67	3,42	7,86
0,063	3,99	2,71	2,52	5,34
< 0,063	> 3,99	5,73	5,34	0,00

Sieve Analysis

Gravel  
Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	5,34
Sand, fine (0,063 mm - 0,200 mm)	45,90
Sand, medium (0,2 mm - 0,6 mm)	40,50
Sand, coarse (0,6 mm - 2 mm)	8,14
Gravel (> 2 mm)	0,12
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,69	0,53
16%	84%	0,44	1,18
25%	75%	0,34	1,57
40%	60%	0,24	2,08
Median 50%	50%	0,19	2,36
75%	25%	0,13	2,99
84%	16%	0,10	3,29
90%	10%	0,08	3,57
95%	5%	-----	-----

### Moments Statistics

Mean	2,28
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,84

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

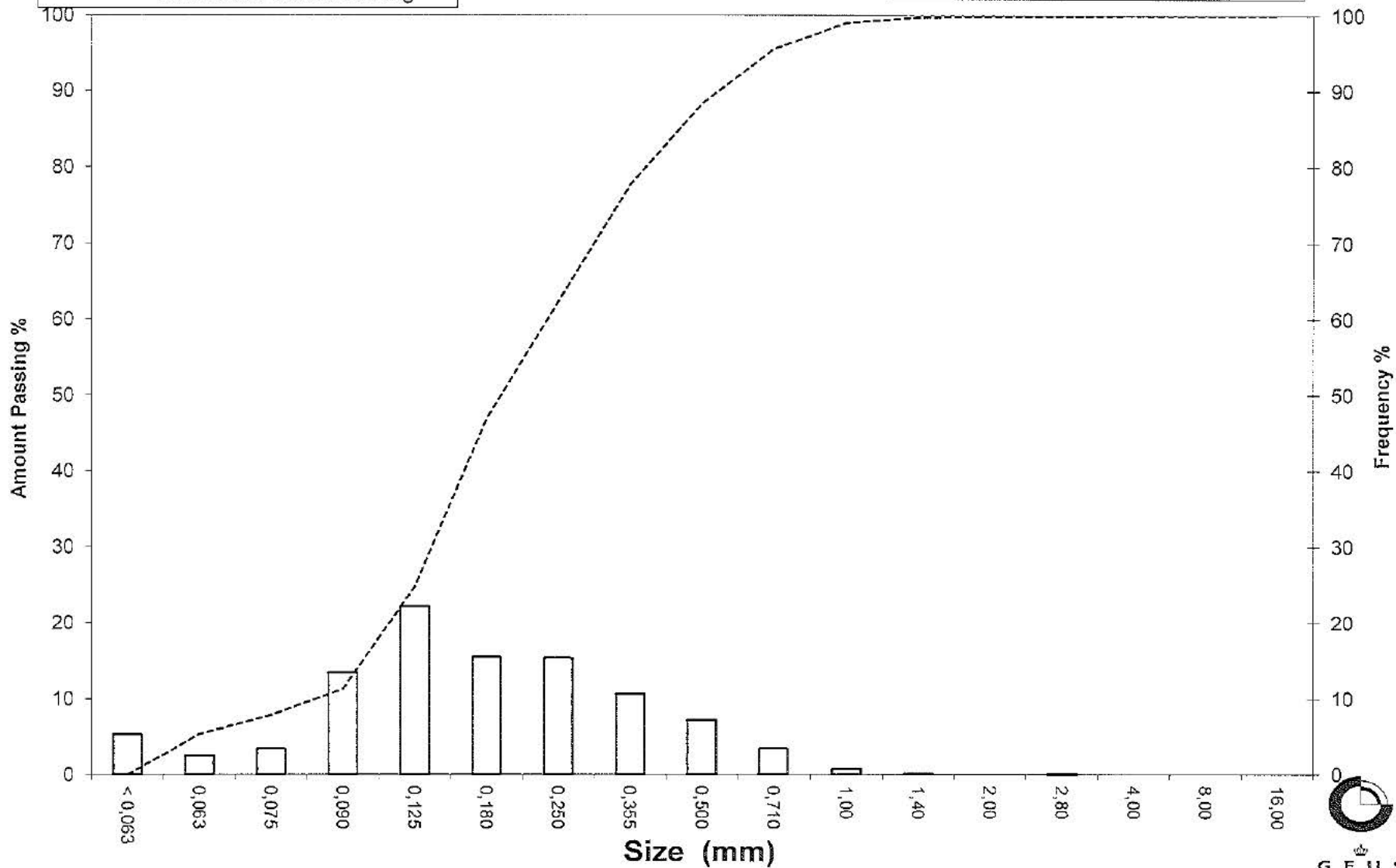
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 564002-1 0-150 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 564002-1 200-300 cm  
**Lab. Id:** 170346  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 98,02 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,09	0,09	99,91
0,710	0,49	0,03	0,03	99,88
0,500	1,00	0,05	0,05	99,83
0,355	1,49	0,23	0,23	99,59
0,250	2,00	1,93	1,97	97,62
0,180	2,47	7,29	7,44	90,19
0,125	3,00	25,56	26,08	64,11
0,090	3,47	24,91	25,41	38,70
0,075	3,74	8,62	8,79	29,90
0,063	3,99	7,89	8,05	21,85
< 0,063	> 3,99	21,42	21,85	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	21,85
Sand, fine (0,063 mm - 0,200 mm):	70,46
Sand, medium (0,2 mm - 0,6 mm):	7,54
Sand, coarse (0,6 mm - 2 mm):	0,15
Gravel (> 2 mm):	0,00
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,23	2,15
16%	84%	0,17	2,58
25%	75%	0,15	2,76
40%	60%	0,12	3,07
Median 50%	50%	0,11	3,24
75%	25%	0,07	3,88
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,91
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

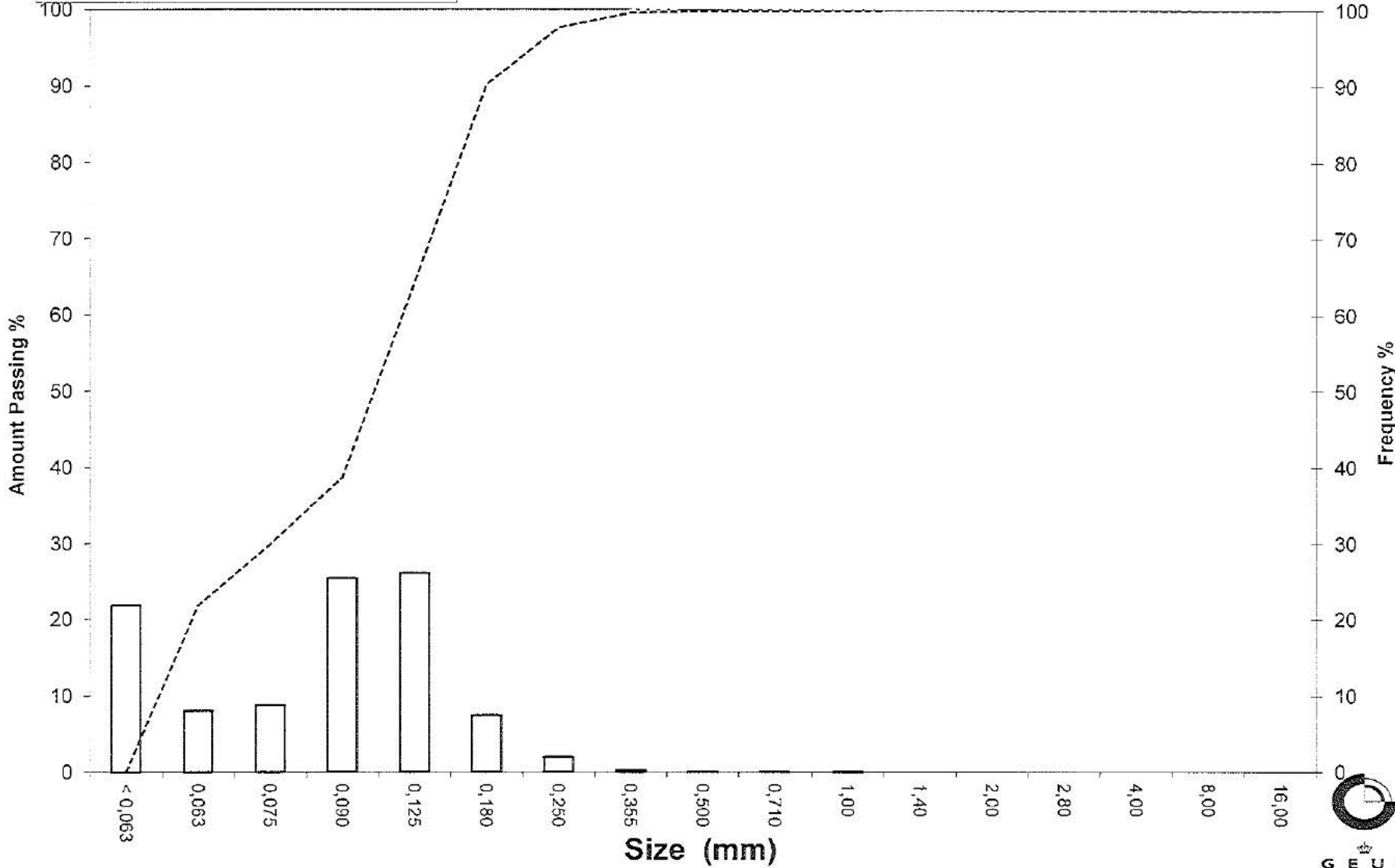
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# Grain Size Distribution

Sample Id: 564002-1 200-300 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 564002-2 0-250 cm  
**Lab. Id:** 170266  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >1,4 mm består af skaller



**Total Weight** 120,58 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,10	0,08	99,92
2,00	-1,00	0,13	0,11	99,81
1,40	-0,49	0,34	0,28	99,53
1,00	0,00	1,76	1,46	98,07
0,710	0,49	4,28	3,55	94,52
0,500	1,00	10,23	8,48	86,03
0,355	1,49	19,21	15,93	70,10
0,250	2,00	35,88	29,76	40,35
0,180	2,47	31,93	26,48	13,87
0,125	3,00	11,20	9,29	4,58
0,090	3,47	2,38	1,97	2,60
0,075	3,74	0,62	0,51	2,09
0,063	3,99	0,48	0,40	1,69
< 0,063	> 3,99	2,04	1,69	0,00

**Sieve Analysis**  
 Gravel  
 Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,69
Sand, fine (0,063 mm - 0,200 mm):	19,74
Sand, medium (0,2 mm - 0,6 mm):	68,64
Sand, coarse (0,6 mm - 2 mm):	9,74
Gravel (> 2 mm):	0,19
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,75	0,42
16%	84%	0,48	1,05
25%	75%	0,40	1,32
40%	60%	0,32	1,65
Median 50%	50%	0,28	1,82
75%	25%	0,21	2,26
84%	16%	0,19	2,43
90%	10%	0,16	2,67
95%	5%	0,13	2,97

### Moments Statistics

Mean	1,77
Sorting	0,73
Skewness	-0,10
Kurtosis	1,12
Uniformity Coefficient	2,03

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)  
 Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)  
 Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)  
 Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)  
 Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

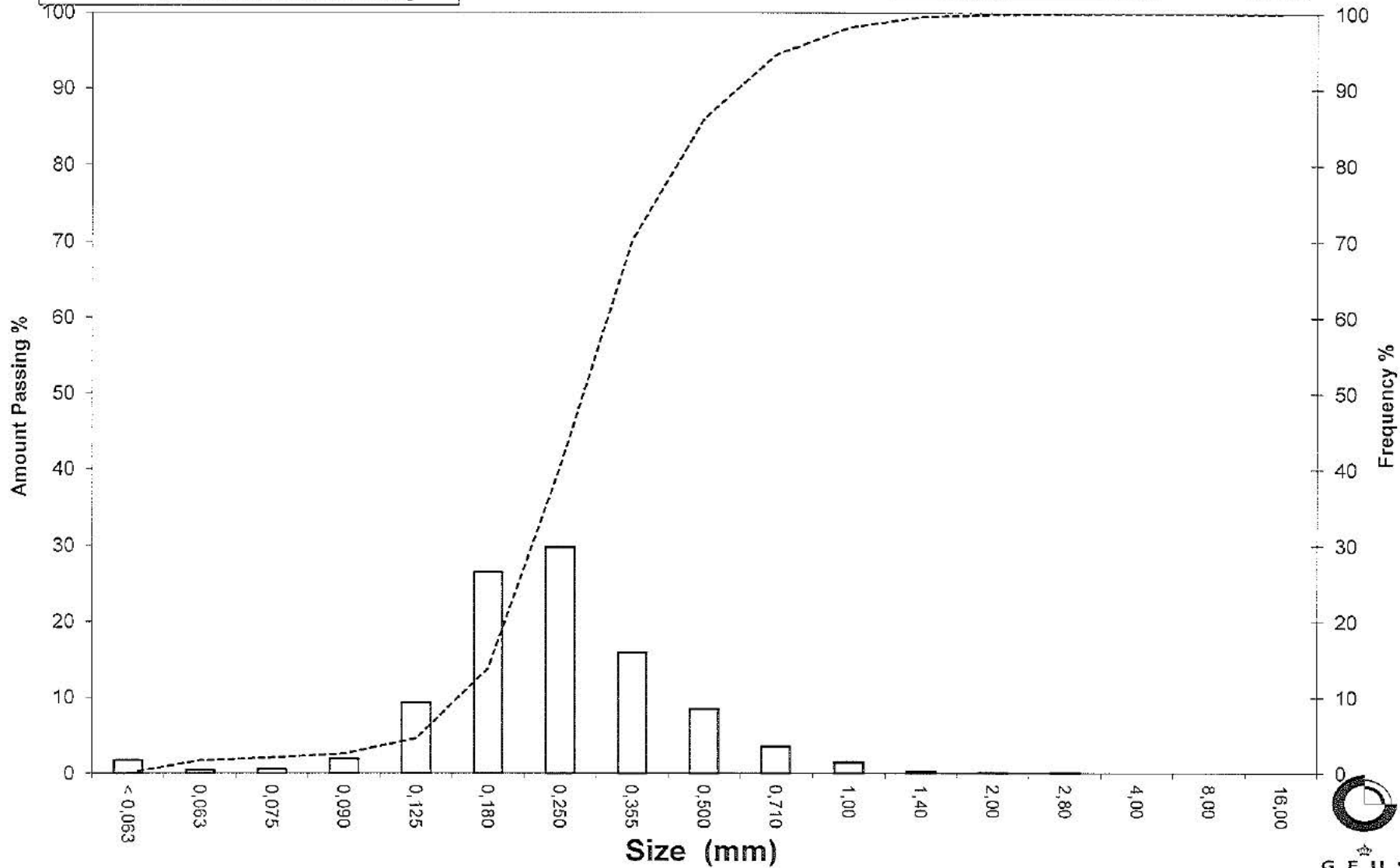
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 564002-2 0-250 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 566040-1 40-80 cm  
**Lab. Id:** 170186  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 122,53 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,62	0,51	99,49
2,80	-1,49	0,13	0,11	99,39
2,00	-1,00	0,67	0,55	98,84
1,40	-0,49	1,56	1,27	97,57
1,00	0,00	4,03	3,29	94,28
0,710	0,49	6,28	5,13	89,15
0,500	1,00	9,15	7,47	81,69
0,355	1,49	9,02	7,36	74,32
0,250	2,00	16,62	13,56	60,76
0,180	2,47	26,99	22,03	38,73
0,125	3,00	32,77	26,74	11,99
0,090	3,47	7,03	5,74	6,25
0,075	3,74	1,14	0,93	5,32
0,063	3,99	0,61	0,50	4,82
< 0,063	> 3,99	5,91	4,82	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	4,82
Sand, fine (0,063 mm - 0,200 mm):	40,20
Sand, medium (0,2 mm - 0,6 mm):	40,22
Sand, coarse (0,6 mm - 2 mm):	13,60
Gravel (> 2 mm):	1,16
Sum:	100,00

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,09	-0,12
16%	84%	0,57	0,82
25%	75%	0,37	1,44
40%	60%	0,25	2,01
Median 50%	50%	0,22	2,21
75%	25%	0,15	2,72
84%	16%	0,13	2,91
90%	10%	0,11	3,15
95%	5%	0,07	3,89

### Moments Statistics

Mean	1,98
Sorting	1,13
Skewness	-0,25
Kurtosis	1,29
Uniformity Coefficient	2,19

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

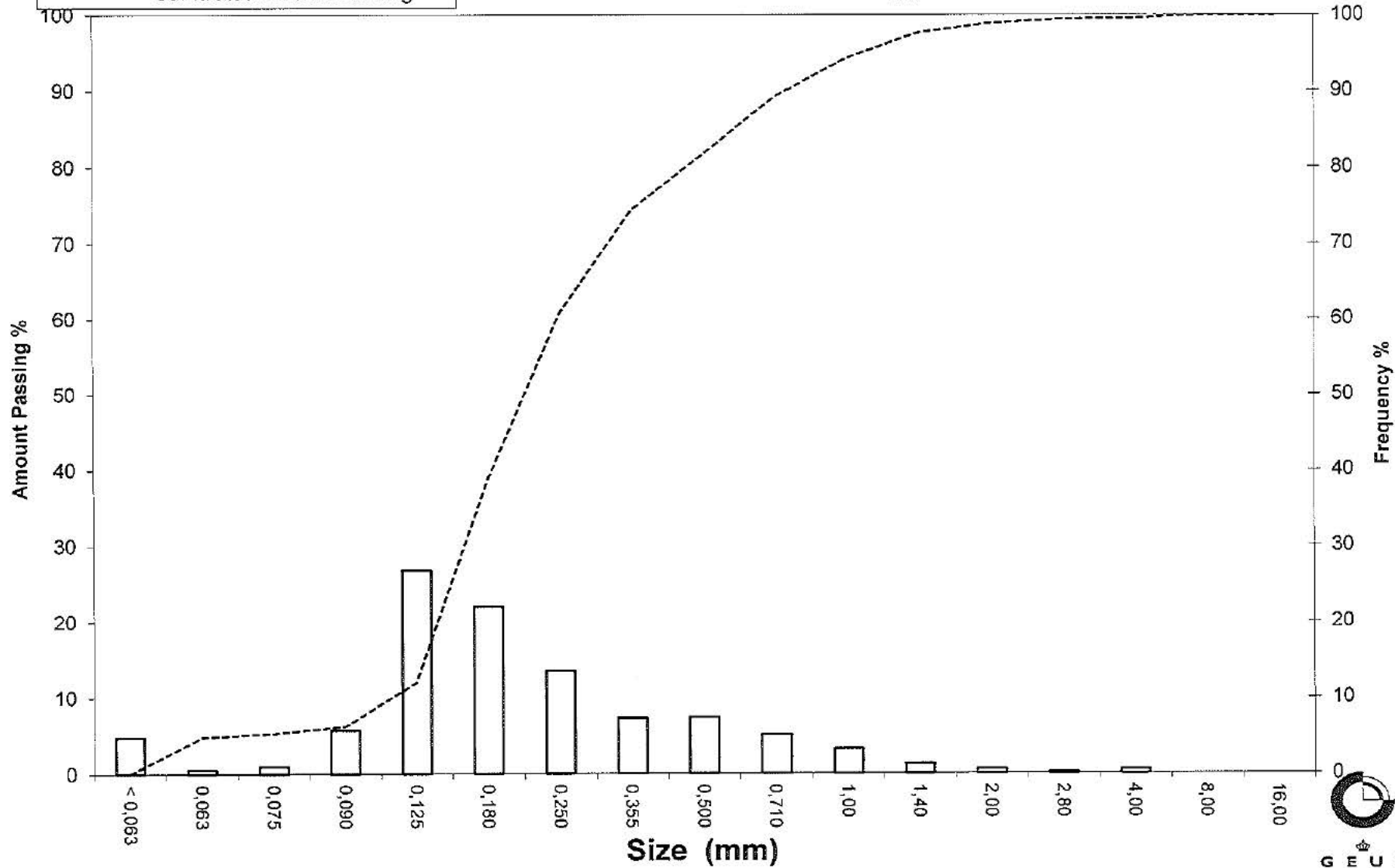
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 566040-1 40-80 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 566041-1 415-450 cm  
 Lab. Id: 170187  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 127,33 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,61	0,48	99,52
2,80	-1,49	0,31	0,24	99,28
2,00	-1,00	0,28	0,22	99,06
1,40	-0,49	0,51	0,40	98,66
1,00	0,00	1,22	0,96	97,70
0,710	0,49	3,08	2,42	95,28
0,500	1,00	10,41	8,18	87,10
0,355	1,49	24,17	18,98	68,12
0,250	2,00	32,60	25,60	42,52
0,180	2,47	25,67	20,16	22,36
0,125	3,00	15,74	12,36	10,00
0,090	3,47	4,66	3,66	6,34
0,075	3,74	1,34	1,05	5,29
0,063	3,99	0,89	0,70	4,59
< 0,063	> 3,99	5,84	4,59	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	4,59
Sand, fine (0,063 mm - 0,200 mm)	23,53
Sand, medium (0,2 mm - 0,6 mm)	62,88
Sand, coarse (0,6 mm - 2 mm)	8,06
Gravel (> 2 mm)	0,94
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,70	0,51
16%	84%	0,48	1,07
25%	75%	0,41	1,29
40%	60%	0,32	1,64
Median 50%	50%	0,28	1,83
75%	25%	0,19	2,40
84%	16%	0,15	2,72
90%	10%	0,13	3,00
95%	5%	0,07	3,83

## Moments Statistics

Mean	1,87
Sorting	0,92
Skewness	0,14
Kurtosis	1,23
Uniformity Coefficient	2,57

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

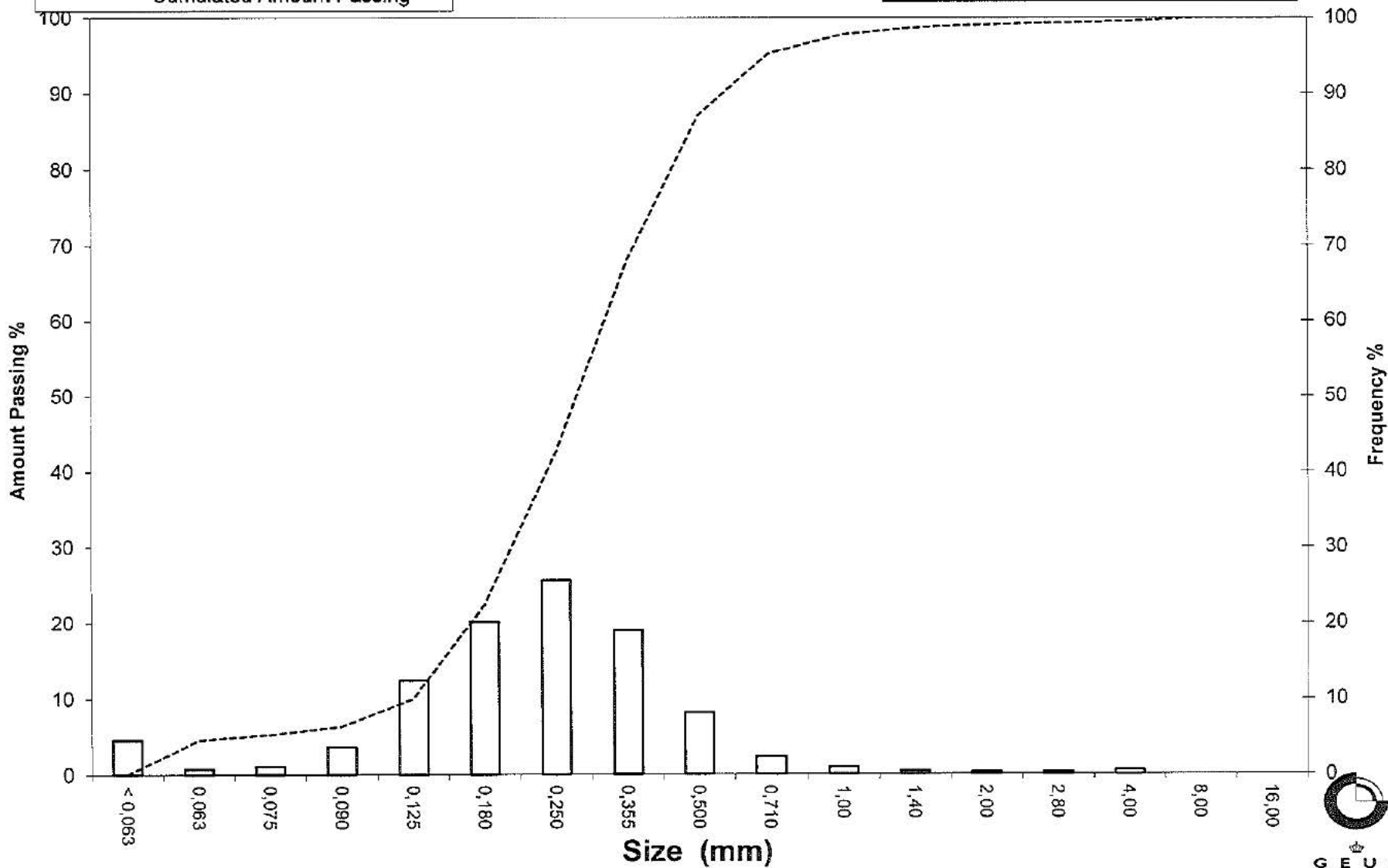
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 566041-1 415-450 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 568019-1 60-110 cm  
**Lab. Id:** 170165  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 114,12 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,04	0,04	99,96
0,710	0,49	0,10	0,09	99,88
0,500	1,00	0,30	0,28	99,61
0,355	1,49	0,80	0,70	98,91
0,250	2,00	1,93	1,69	97,22
0,180	2,47	5,36	4,70	92,53
0,125	3,00	40,66	35,63	56,90
0,090	3,47	41,89	36,71	20,19
0,075	3,74	8,30	7,27	12,92
0,063	3,99	4,08	3,58	9,34
< 0,063	> 3,99	10,66	9,34	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	9,34
Sand, fine (0,063 mm - 0,200 mm):	84,53
Sand, medium (0,2 mm - 0,6 mm):	5,87
Sand, coarse (0,6 mm - 2 mm):	0,26
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,22	2,21
16%	84%	0,17	2,58
25%	75%	0,15	2,71
40%	60%	0,13	2,95
Median 50%	50%	0,12	3,08
75%	25%	0,09	3,40
84%	16%	0,08	3,62
90%	10%	0,07	3,94
95%	5%	-----	-----

### Moments Statistics

Mean	3,09
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	1,99

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

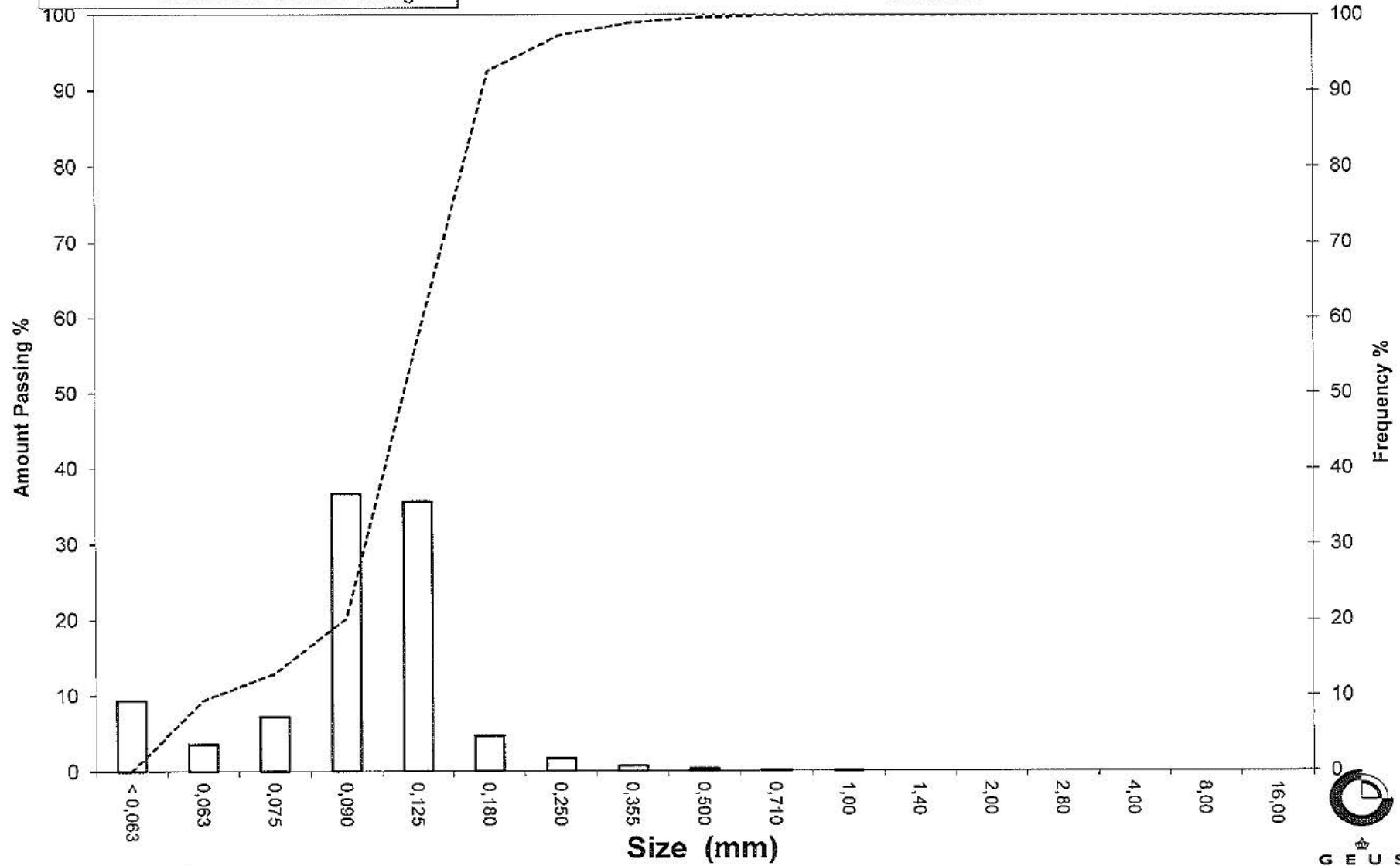
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# Grain Size Distribution

Sample Id: 568019-1 60-110 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 568019-2 21-40 cm  
**Lab. Id:** 170166  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 99,01 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,05	0,05	99,95
2,00	-1,00	0,06	0,06	99,89
1,40	-0,49	0,21	0,21	99,68
1,00	0,00	0,81	0,82	98,86
0,710	0,49	1,49	1,50	97,35
0,500	1,00	3,95	3,99	93,36
0,355	1,49	7,76	7,84	85,53
0,250	2,00	14,41	14,55	70,97
0,180	2,47	14,55	14,70	56,28
0,125	3,00	21,43	21,64	34,63
0,090	3,47	14,49	14,63	20,00
0,075	3,74	2,17	2,19	17,81
0,063	3,99	1,32	1,33	16,47
< 0,063	> 3,99	16,31	16,47	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	16,47
Sand, fine (0,063 mm - 0,200 mm):	44,00
Sand, medium (0,2 mm - 0,6 mm):	34,79
Sand, coarse (0,6 mm - 2 mm):	4,62
Gravel (> 2 mm):	0,11
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,59	0,77
16%	84%	0,34	1,54
25%	75%	0,28	1,84
40%	60%	0,20	2,34
Median 50%	50%	0,16	2,61
75%	25%	0,10	3,29
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,07
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

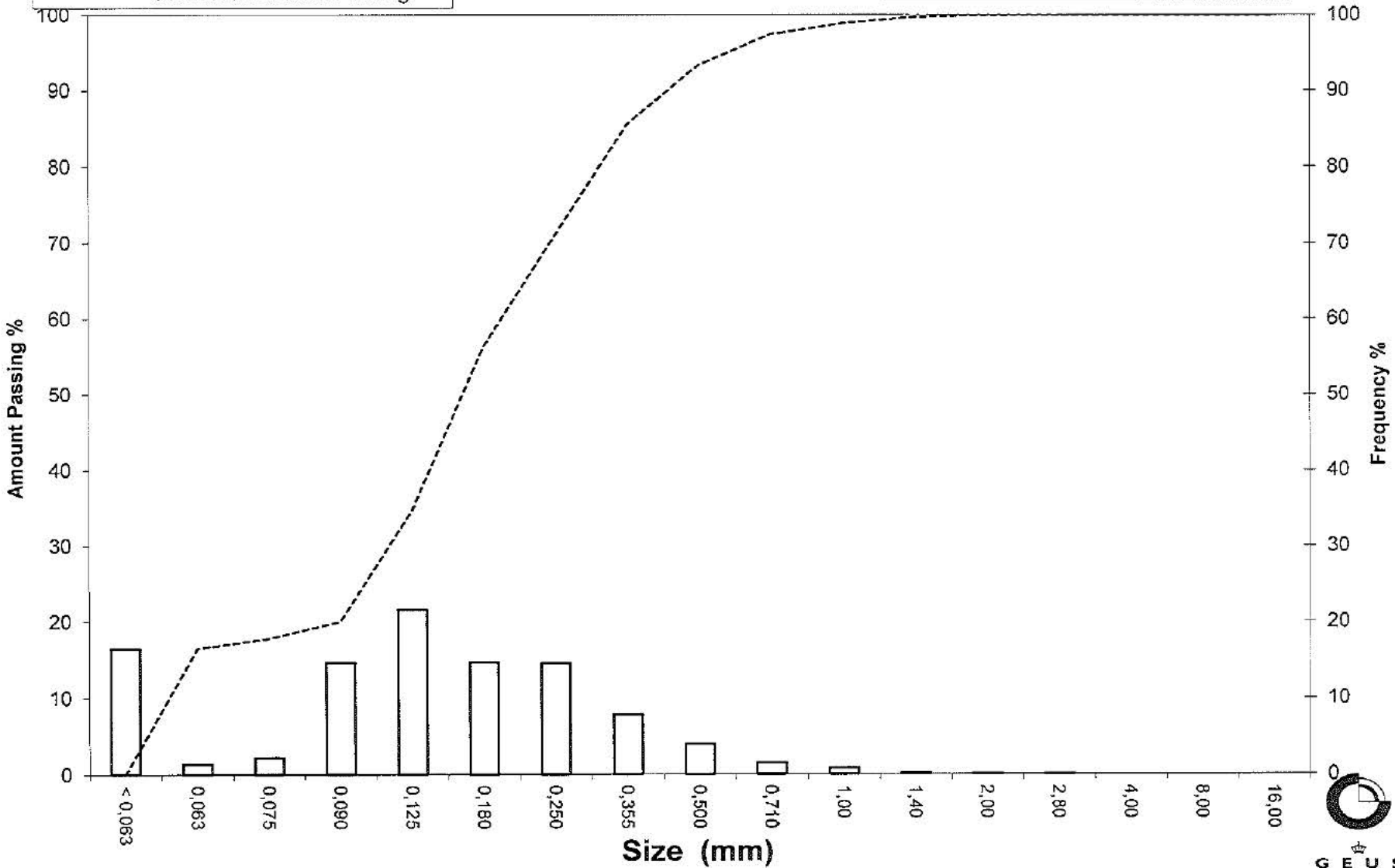
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 568019-2 21-40 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: 574011-1 0-140 cm  
 Lab. Id: 170234  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



GEUS

Total Weight 116,12 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,19	0,16	99,84
2,80	-1,49	0,30	0,26	99,58
2,00	-1,00	0,49	0,42	99,16
1,40	-0,49	0,35	0,30	98,85
1,00	0,00	0,55	0,47	98,38
0,710	0,49	0,65	0,56	97,82
0,500	1,00	1,92	1,65	96,17
0,355	1,49	5,12	4,41	91,76
0,250	2,00	13,20	11,37	80,39
0,180	2,47	23,99	20,66	59,73
0,125	3,00	17,16	14,78	44,95
0,090	3,47	27,29	23,50	21,45
0,075	3,74	10,23	8,81	12,64
0,063	3,99	5,79	4,99	7,66
< 0,063	> 3,99	8,89	7,66	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	7,66
Sand, fine (0,063 mm - 0,200 mm)	57,98
Sand, medium (0,2 mm - 0,6 mm)	31,32
Sand, coarse (0,6 mm - 2 mm)	2,20
Gravel (> 2 mm)	0,84
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,46	1,12
16%	84%	0,28	1,82
25%	75%	0,23	2,11
40%	60%	0,18	2,47
Median 50%	50%	0,14	2,80
75%	25%	0,10	3,39
84%	16%	0,08	3,63
90%	10%	0,07	3,86
95%	5%	-----	-----

## Moments Statistics

Mean	2,75
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	2,64

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

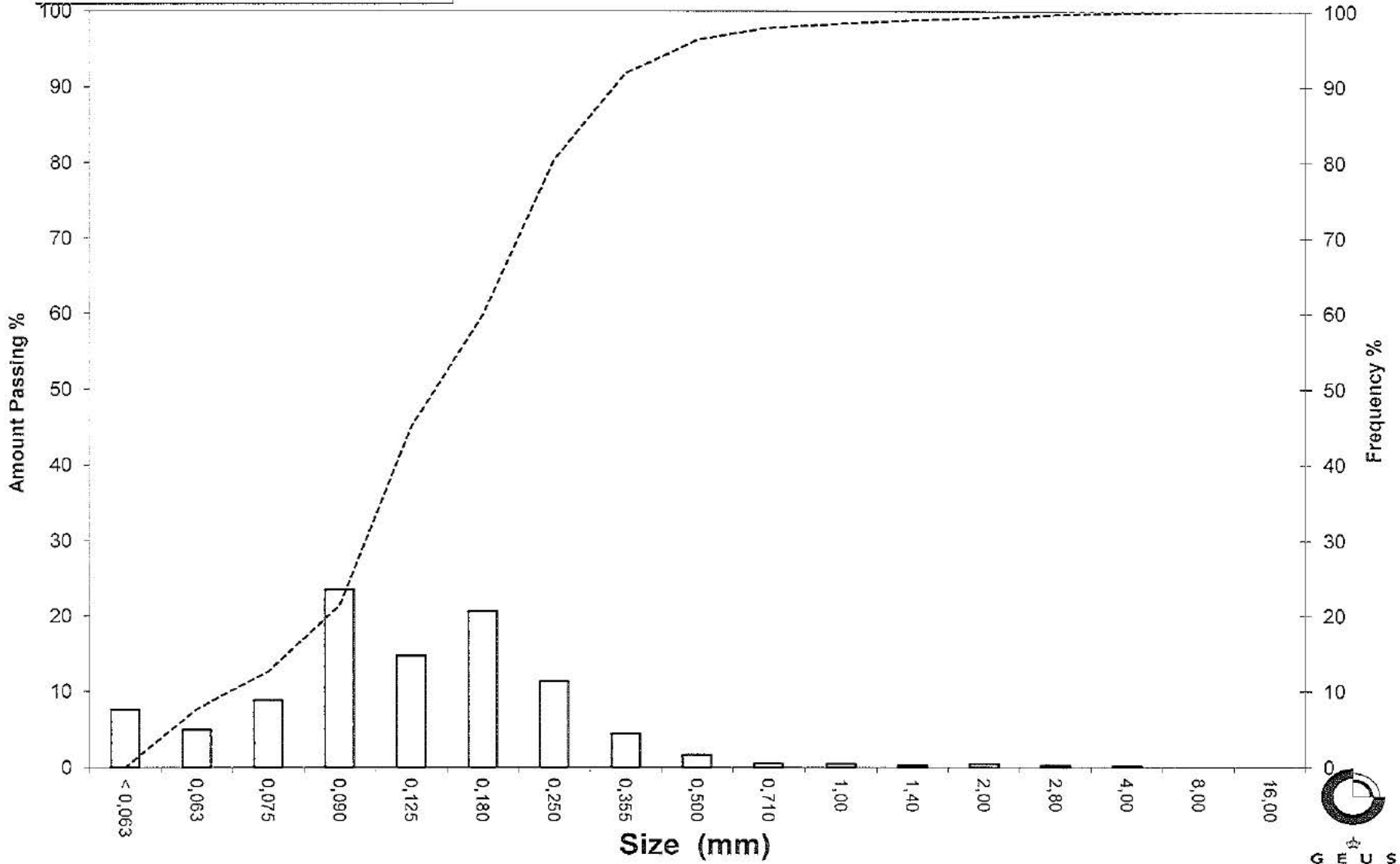
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 574011-1 0-140 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 574012-2 0-45 cm  
**Lab. Id:** 170235  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 224,54 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	13,83	6,16	93,84
4,00	-2,00	15,58	6,94	86,90
2,80	-1,49	8,30	3,70	83,21
2,00	-1,00	7,16	3,19	80,02
1,40	-0,49	6,45	2,87	77,14
1,00	0,00	9,67	4,31	72,84
0,710	0,49	11,35	5,05	67,78
0,500	1,00	19,83	8,83	58,95
0,355	1,49	28,46	12,67	46,28
0,250	2,00	34,87	15,53	30,75
0,180	2,47	31,04	13,82	16,92
0,125	3,00	20,01	8,91	8,01
0,090	3,47	6,14	2,73	5,28
0,075	3,74	2,42	1,08	4,20
0,063	3,99	1,78	0,79	3,41
< 0,063	> 3,99	7,65	3,41	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	3,41
Sand, fine (0,063 mm - 0,200 mm)	17,47
Sand, medium (0,2 mm - 0,6 mm)	42,28
Sand, coarse (0,6 mm - 2 mm)	16,86
Gravel (> 2 mm)	19,98
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	9,51	-3,25
16%	84%	3,06	-1,61
25%	75%	1,20	-0,26
40%	60%	0,52	0,93
Median 50%	50%	0,40	1,33
75%	25%	0,22	2,18
84%	16%	0,17	2,52
90%	10%	0,14	2,86
95%	5%	0,09	3,54

### Moments Statistics

Mean	0,75
Sorting	2,06
Skewness	-0,39
Kurtosis	1,14
Uniformity Coefficient	3,82

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

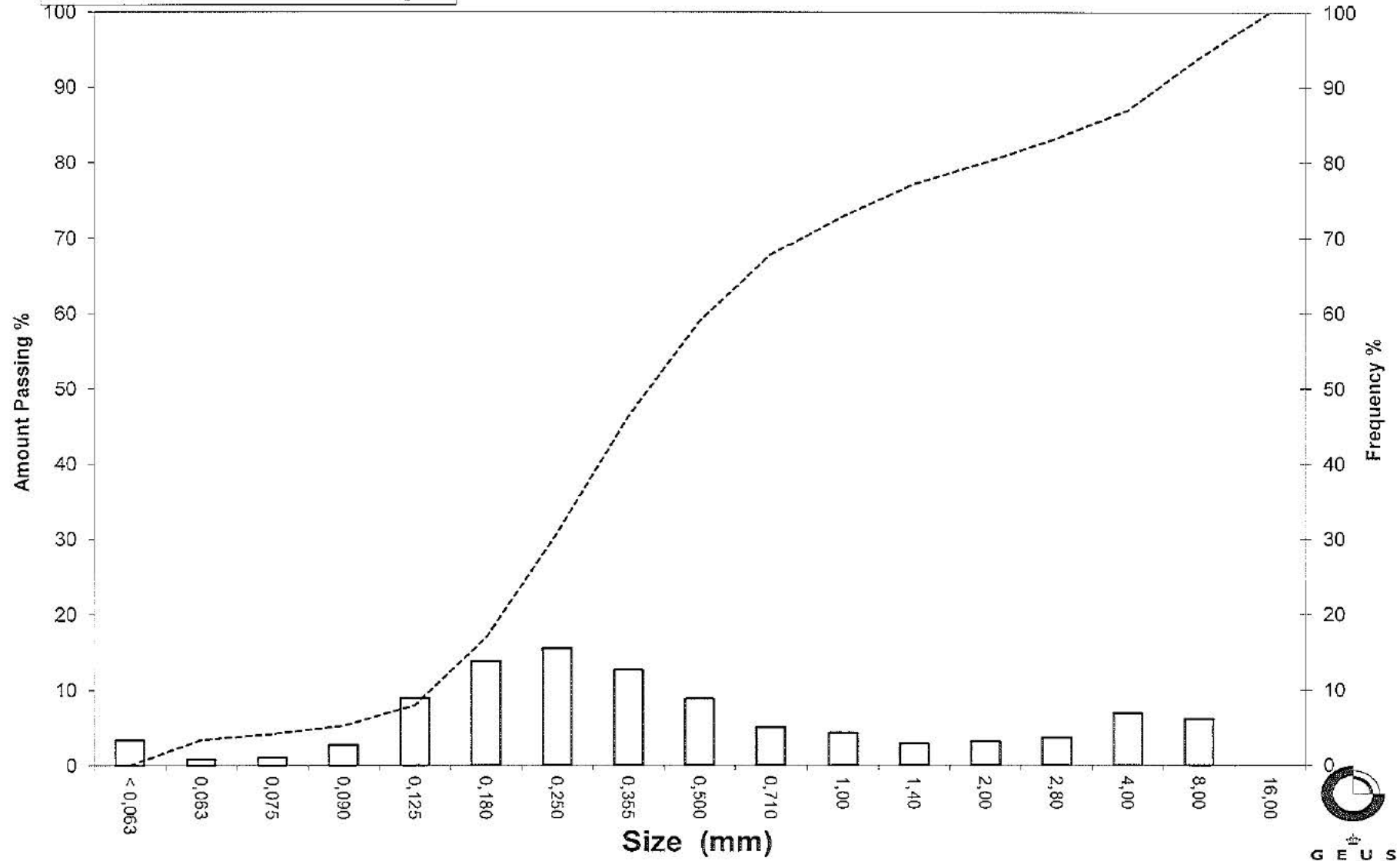
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 574012-2 0-45 cm

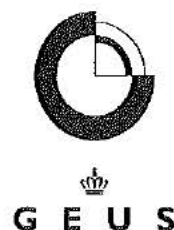
Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 574012-2 46-80 cm  
**Lab. Id:** 170236  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 111,15 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,80	0,72	99,28
2,80	-1,49	0,88	0,79	98,49
2,00	-1,00	0,81	0,73	97,76
1,40	-0,49	1,35	1,21	96,55
1,00	0,00	1,86	1,67	94,87
0,710	0,49	2,66	2,39	92,48
0,500	1,00	5,33	4,80	87,68
0,355	1,49	7,56	6,80	80,88
0,250	2,00	8,03	7,22	73,66
0,180	2,47	5,36	4,82	68,83
0,125	3,00	6,20	5,58	63,26
0,090	3,47	21,09	18,97	44,28
0,075	3,74	12,48	11,23	33,05
0,063	3,99	10,37	9,33	23,72
< 0,063	> 3,99	26,37	23,72	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	23,72
Sand, fine (0,063 mm - 0,200 mm)	46,49
Sand, medium (0,2 mm - 0,6 mm)	19,75
Sand, coarse (0,6 mm - 2 mm)	7,79
Gravel (> 2 mm)	2,24
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	1,03	-0,04
16%	84%	0,42	1,25
25%	75%	0,27	1,89
40%	60%	0,12	3,07
Median 50%	50%	0,10	3,31
75%	25%	0,06	3,95
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,28
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 + (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 \cdot \phi_{50\%}) / (2 \cdot (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 \cdot \phi_{50\%}) / (2 \cdot (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

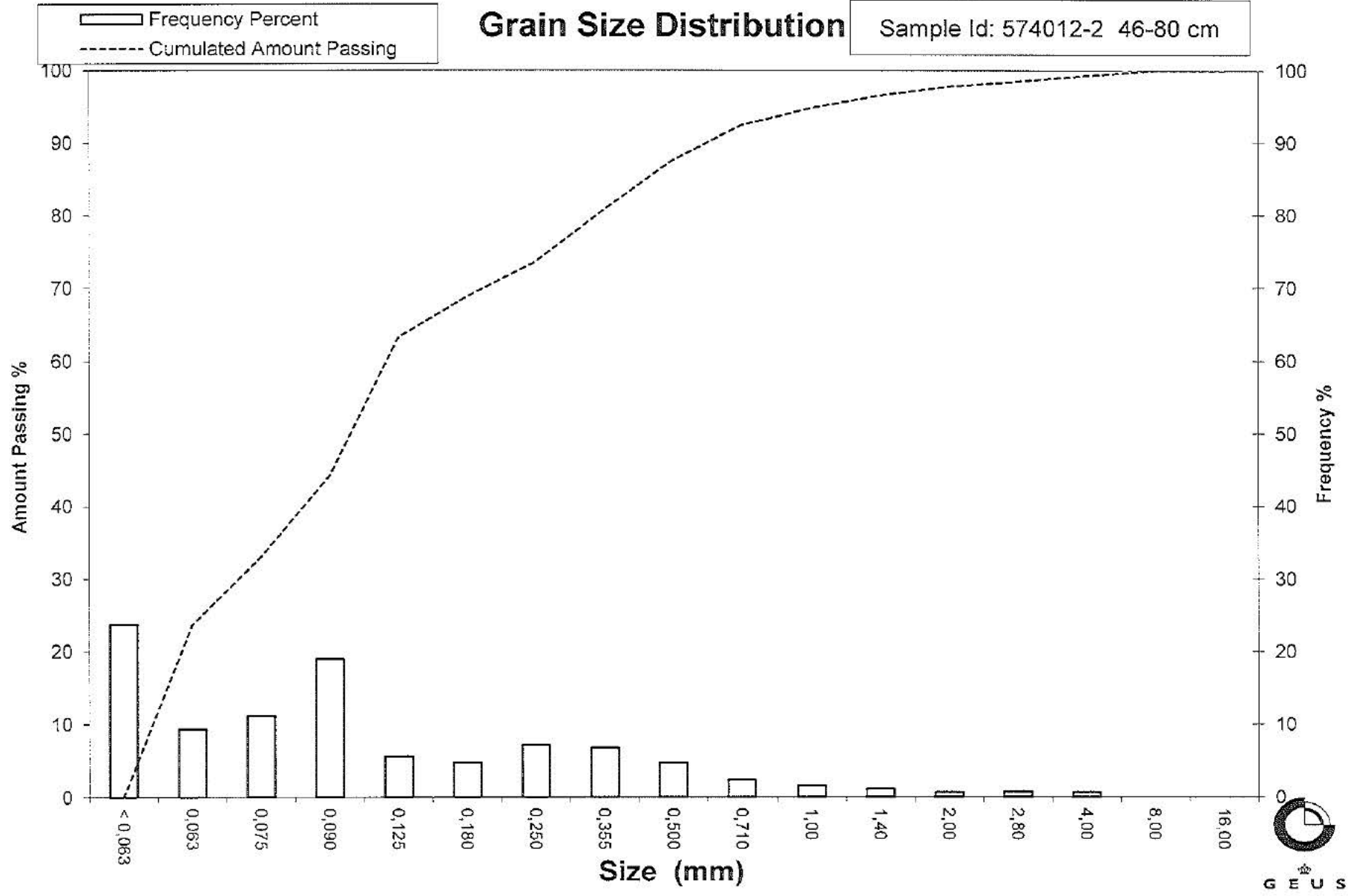
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 574012-2 46-80 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** 574012-2 100-180 cm  
**Lab. Id:** 170237  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 108,22 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,12	0,11	99,89
0,710	0,49	0,10	0,09	99,80
0,500	1,00	0,04	0,04	99,76
0,355	1,49	0,09	0,08	99,68
0,250	2,00	0,09	0,08	99,59
0,180	2,47	0,47	0,43	99,16
0,125	3,00	11,42	10,55	88,61
0,090	3,47	31,90	29,48	59,13
0,075	3,74	16,02	14,80	44,33
0,063	3,99	14,83	13,70	30,62
< 0,063	> 3,99	33,14	30,62	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

	Weight %
Silt and clay (< 0,063 mm):	30,62
Sand, fine (0,063 mm - 0,200 mm):	68,66
Sand, medium (0,2 mm - 0,6 mm):	0,49
Sand, coarse (0,6 mm - 2 mm):	0,22
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,16	2,66
16%	84%	0,12	3,06
25%	75%	0,11	3,20
40%	60%	0,09	3,46
Median 50%	50%	0,08	3,63
75%	25%	-----	-----
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,35
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

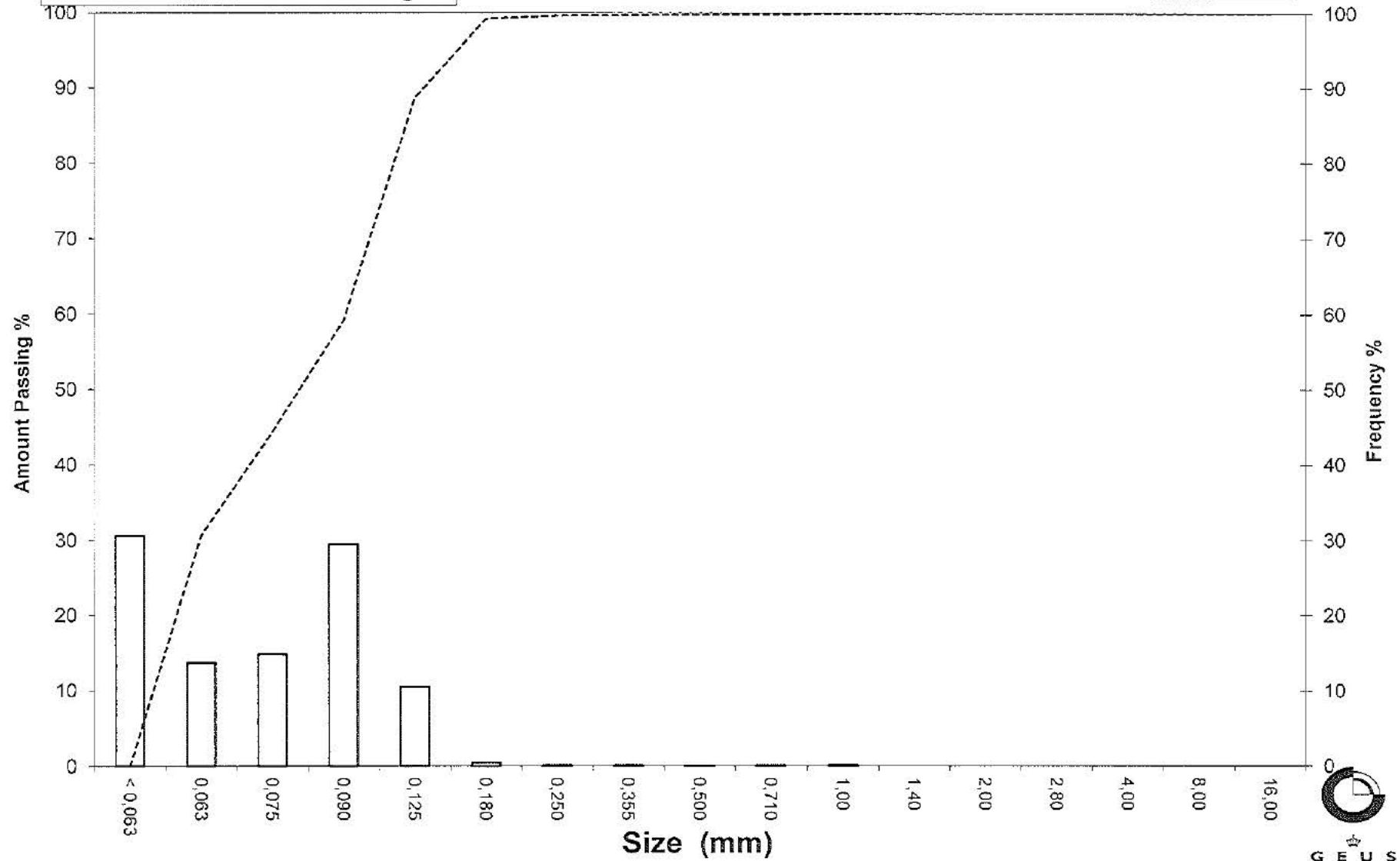
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 574012-2 100-180 cm

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** 598021-1 90-190 cm  
**Lab. Id:** 170347  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 96,73 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,01	0,01	99,99
1,40	-0,49	0,15	0,16	99,83
1,00	0,00	0,38	0,39	99,44
0,710	0,49	0,48	0,50	98,95
0,500	1,00	1,14	1,18	97,77
0,355	1,49	1,75	1,81	95,96
0,250	2,00	3,35	3,46	92,49
0,180	2,47	7,89	8,16	84,34
0,125	3,00	16,57	17,13	67,21
0,090	3,47	24,04	24,85	42,36
0,075	3,74	11,21	11,59	30,77
0,063	3,99	7,20	7,44	23,32
< 0,063	> 3,99	22,56	23,32	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	23,32
Sand, fine (0,063 mm - 0,200 mm):	63,35
Sand, medium (0,2 mm - 0,6 mm):	11,66
Sand, coarse (0,6 mm - 2 mm):	1,66
Gravel (> 2 mm):	0,01
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,33	1,62
16%	84%	0,18	2,48
25%	75%	0,15	2,74
40%	60%	0,11	3,12
Median 50%	50%	0,10	3,31
75%	25%	0,07	3,93
84%	16%	-----	-----
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	2,90
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

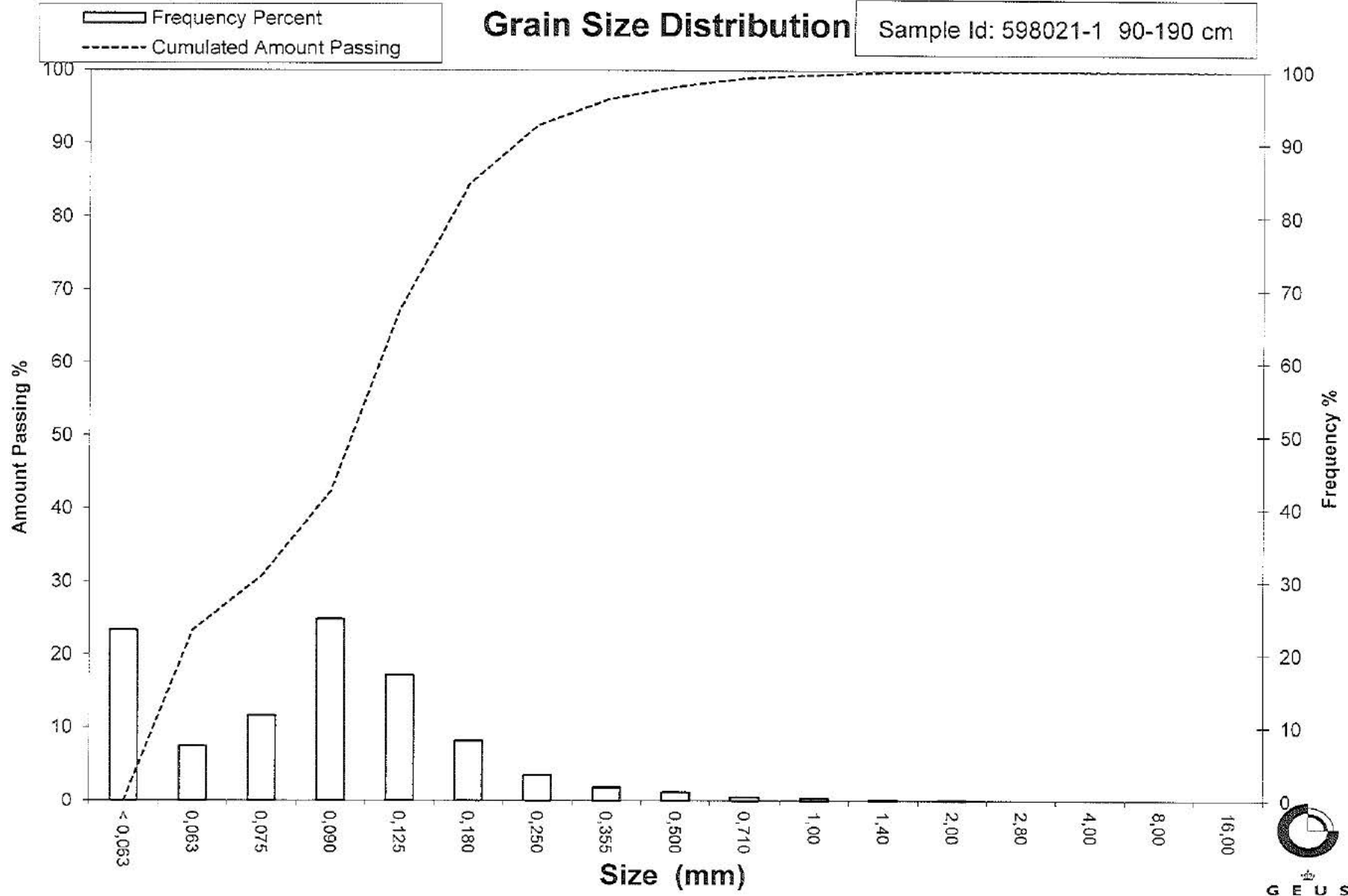
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: 598021-1 90-190 cm



# Grain Size Distribution

## Geotechnical

**Sample Id:** AAB-HS-11-1 20-120 cm  
**Lab. Id:** 170217  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:**



**Total Weight** 119,56 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,08	0,07	99,93
0,710	0,49	0,02	0,02	99,92
0,500	1,00	0,05	0,04	99,87
0,355	1,49	1,45	1,21	98,66
0,250	2,00	27,87	23,31	75,35
0,180	2,47	45,76	38,27	37,08
0,125	3,00	35,04	29,31	7,77
0,090	3,47	6,42	5,37	2,40
0,075	3,74	0,74	0,62	1,78
0,063	3,99	0,32	0,27	1,51
< 0,063	> 3,99	1,81	1,51	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,51
Sand, fine (0,063 mm - 0,200 mm):	46,50
Sand, medium (0,2 mm - 0,6 mm):	51,88
Sand, coarse (0,6 mm - 2 mm):	0,11
Gravel (> 2 mm):	0,00
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,34	1,56
16%	84%	0,29	1,79
25%	75%	0,25	2,00
40%	60%	0,22	2,17
Median 50%	50%	0,20	2,30
75%	25%	0,16	2,67
84%	16%	0,14	2,83
90%	10%	0,13	2,95
95%	5%	0,11	3,23

### Moments Statistics

Mean	2,31
Sorting	0,51
Skewness	0,07
Kurtosis	1,03
Uniformity Coefficient	1,72

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)  
 Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)  
 Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)  
 Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)  
 Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

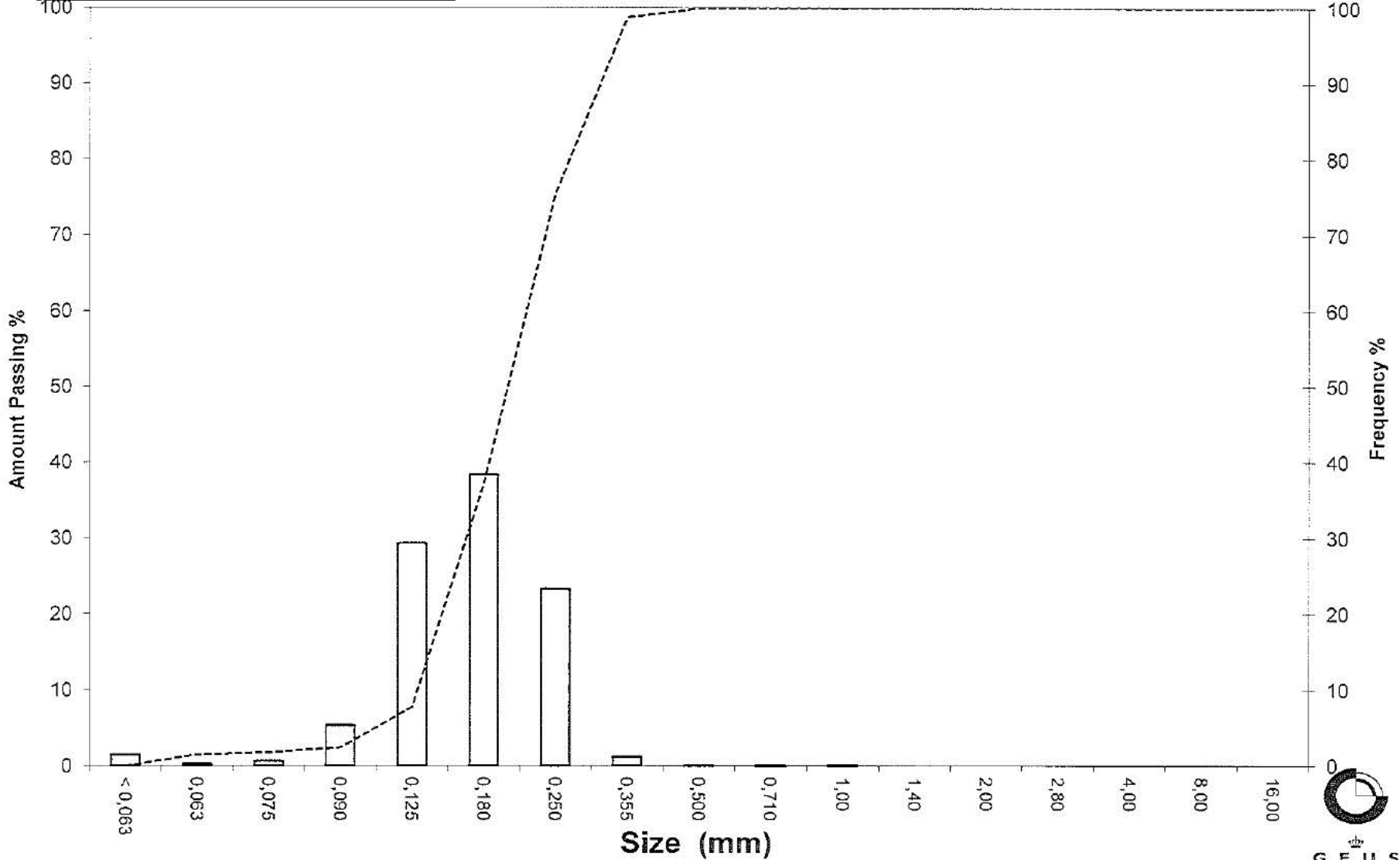
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: AAB-HS-11-1 20-120

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

Geotechnical

Sample Id: AAB-HS-11-1 200-300 cm  
 Lab. Id: 170218  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks: >0,5 mm består af skaller



GEUS

Total Weight 101,81 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,02	0,02	99,98
2,80	-1,49	0,12	0,12	99,86
2,00	-1,00	0,12	0,12	99,74
1,40	-0,49	0,04	0,04	99,71
1,00	0,00	0,13	0,13	99,58
0,710	0,49	0,09	0,09	99,49
0,500	1,00	0,08	0,08	99,41
0,355	1,49	0,24	0,24	99,17
0,250	2,00	0,67	0,66	98,52
0,180	2,47	3,42	3,36	95,16
0,125	3,00	31,60	31,04	64,12
0,090	3,47	39,55	38,85	25,27
0,075	3,74	8,94	8,78	16,49
0,063	3,99	4,30	4,22	12,27
< 0,063	> 3,99	12,49	12,27	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	12,27
Sand, fine (0,063 mm - 0,200 mm)	83,85
Sand, medium (0,2 mm - 0,6 mm)	3,33
Sand, coarse (0,6 mm - 2 mm)	0,30
Gravel (> 2 mm)	0,26
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,18	2,48
16%	84%	0,16	2,64
25%	75%	0,14	2,79
40%	60%	0,12	3,04
Median 50%	50%	0,11	3,15
75%	25%	0,09	3,48
84%	16%	0,07	3,76
90%	10%	-----	-----
95%	5%	-----	-----

## Moments Statistics

Mean	3,19
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

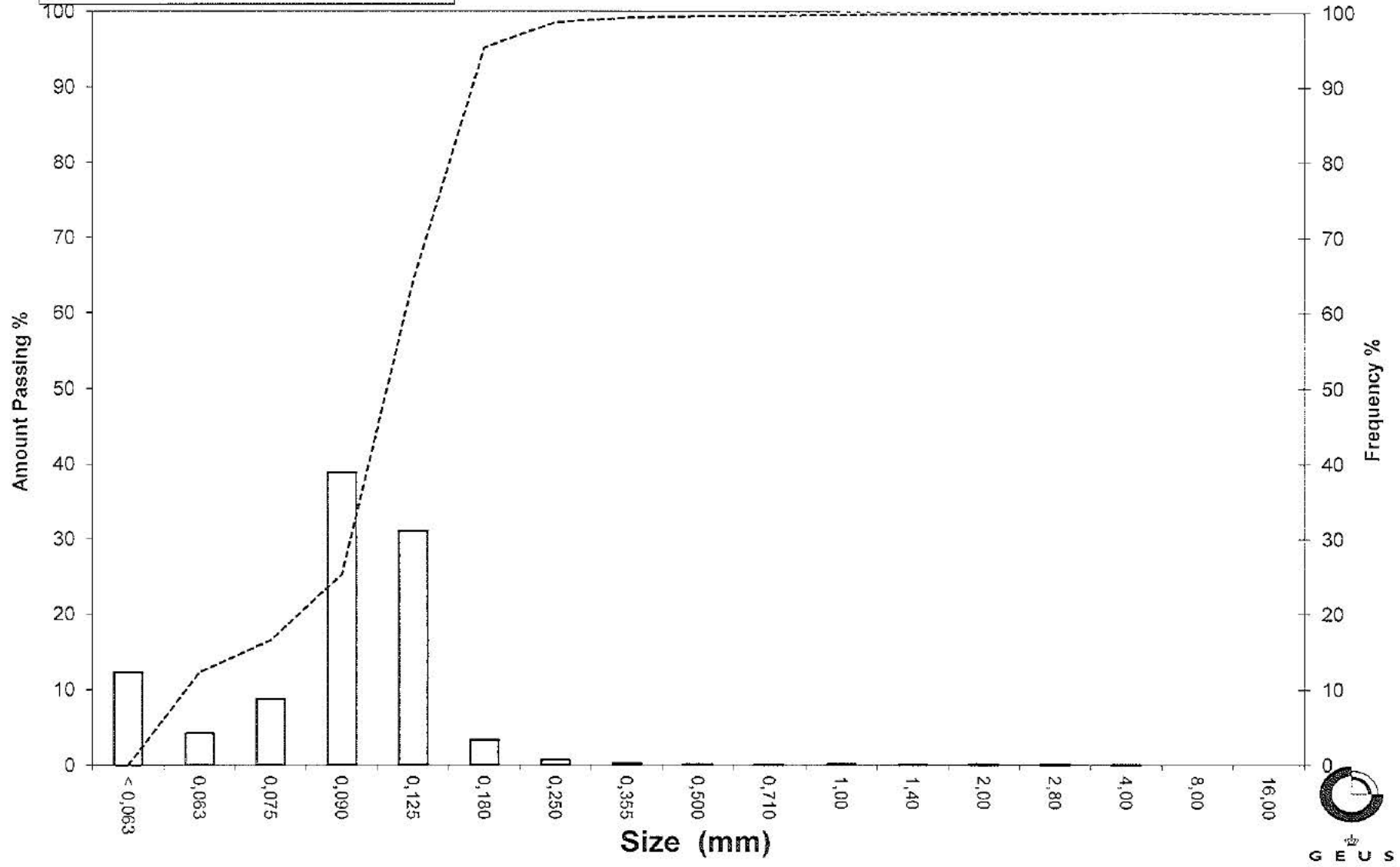
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# Grain Size Distribution

Sample Id: AAB-HS-11-1 200-300

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** AAB-HS-11-3 0-250 cm  
**Lab. Id:** 170238  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** >0,500 mm består af skaller



**Total Weight** 107,03 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,15	0,14	99,86
4,00	-2,00	0,10	0,09	99,77
2,80	-1,49	0,04	0,04	99,73
2,00	-1,00	0,14	0,13	99,60
1,40	-0,49	0,15	0,14	99,46
1,00	0,00	0,17	0,16	99,30
0,710	0,49	0,10	0,09	99,21
0,500	1,00	0,14	0,13	99,08
0,355	1,49	0,33	0,31	98,77
0,250	2,00	1,32	1,23	97,53
0,180	2,47	10,49	9,80	87,73
0,125	3,00	47,34	44,23	43,50
0,090	3,47	31,92	29,82	13,68
0,075	3,74	3,89	3,63	10,04
0,063	3,99	1,63	1,52	8,52
< 0,063	> 3,99	9,12	8,52	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	8,52
Sand, fine (0,063 mm - 0,200 mm)	82,01
Sand, medium (0,2 mm - 0,6 mm)	8,60
Sand, coarse (0,6 mm - 2 mm)	0,46
Gravel (> 2 mm)	0,40
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,23	2,11
16%	84%	0,18	2,51
25%	75%	0,16	2,61
40%	60%	0,15	2,78
Median 50%	50%	0,13	2,91
75%	25%	0,10	3,28
84%	16%	0,09	3,43
90%	10%	0,07	3,74
95%	5%	-----	-----

### Moments Statistics

Mean	2,95
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	1,95

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

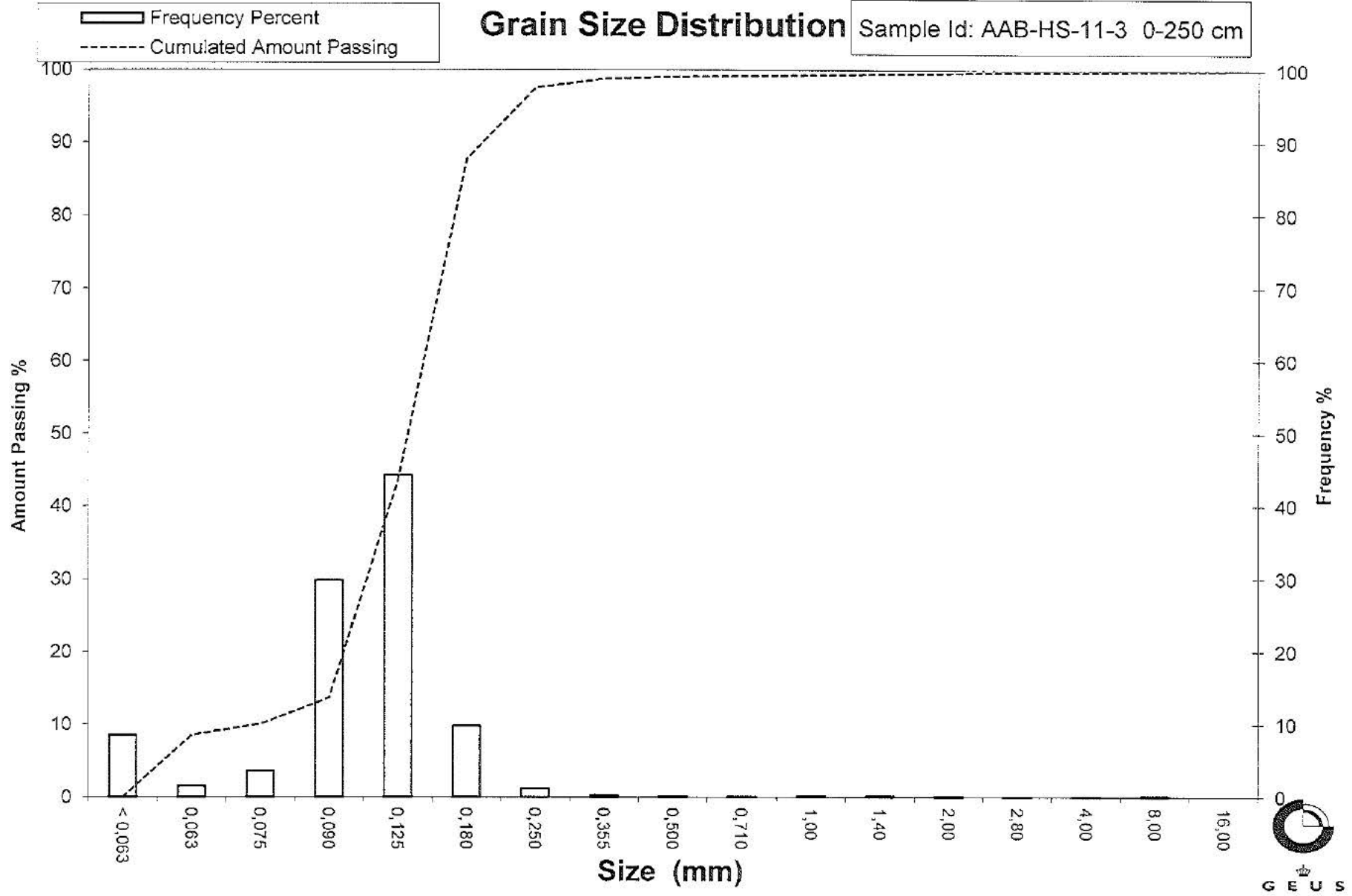
Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dGF-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

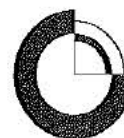
Sample Id: AAB-HS-11-3 0-250 cm



# Grain Size Distribution

Geotechnical

Sample Id: AAB-HS-13-2 12-116 cm  
 Lab. Id: 170239  
 Submitter: Miljøstyrelsen  
 Subject: Miljøstyrelsens råstofundersøgelser 2017  
 Date: 19-10-2017  
 Executed: PS  
 Remarks:



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Total Weight 117,04 g

## Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	φ	g	%	%
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,00	0,00	100,00
2,80	-1,49	0,00	0,00	100,00
2,00	-1,00	0,00	0,00	100,00
1,40	-0,49	0,00	0,00	100,00
1,00	0,00	0,15	0,13	99,87
0,710	0,49	0,12	0,10	99,77
0,500	1,00	0,24	0,21	99,56
0,355	1,49	2,52	2,15	97,41
0,250	2,00	13,31	11,37	86,04
0,180	2,47	30,84	26,35	59,69
0,125	3,00	58,05	49,60	10,09
0,090	3,47	9,49	8,11	1,98
0,075	3,74	0,67	0,57	1,41
0,063	3,99	0,32	0,27	1,14
< 0,063	> 3,99	1,33	1,14	0,00

Sieve Analysis

Gravel

Sand

## Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm):	1,14
Sand, fine (0,063 mm - 0,200 mm):	66,08
Sand, medium (0,2 mm - 0,6 mm):	32,44
Sand, coarse (0,6 mm - 2 mm):	0,34
Gravel (> 2 mm):	0,00
Sum:	100,00

## Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	φ
Amount in sieve	Amount passing		
5%	95%	0,33	1,59
16%	84%	0,24	2,03
25%	75%	0,22	2,18
40%	60%	0,18	2,47
Median 50%	50%	0,17	2,56
75%	25%	0,14	2,82
84%	16%	0,13	2,93
90%	10%	0,12	3,00
95%	5%	0,10	3,28

## Moments Statistics

Mean	2,51
Sorting	0,48
Skewness	-0,17
Kurtosis	1,08
Uniformity Coefficient	1,45

The analysis is executed according to DS 405.9 extended by sieves to the 1/2 phi scale

Size Classes and Percentiles are found by linear interpolation

## Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

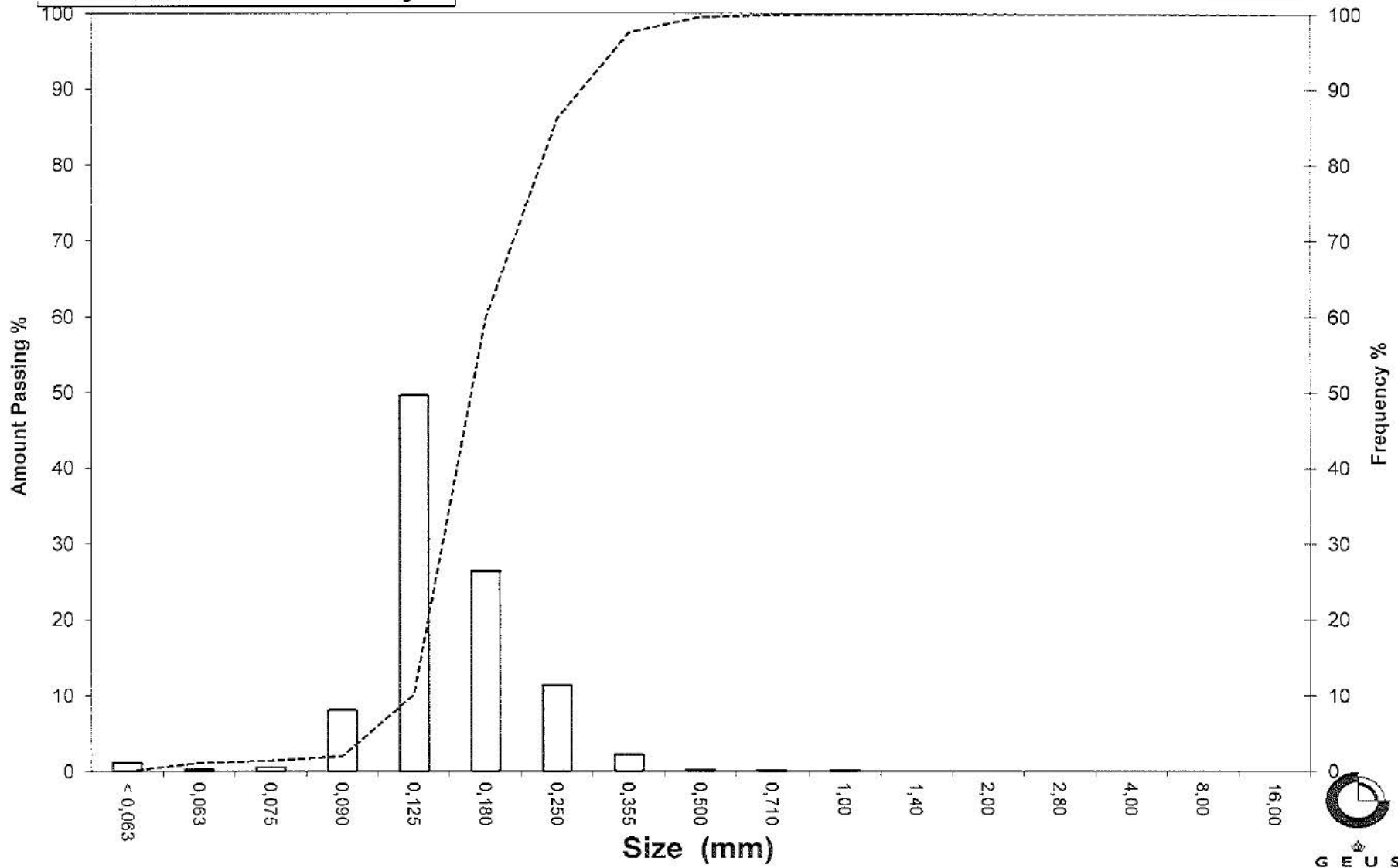
Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: AAB-HS-13-2 12-116

Frequency Percent  
Cumulated Amount Passing



# Grain Size Distribution

## Geotechnical

**Sample Id:** AAB-HS-13-2 128-250 cm  
**Lab. Id:** 170267  
**Submitter:** Miljøstyrelsen  
**Subject:** Miljøstyrelsens råstofundersøgelser 2017  
**Date:** 19-10-2017  
**Executed:** PS  
**Remarks:** > 1,0 mm består af skaller



**Total Weight** 102,21 g

### Size Fractions

Size	Size	Weight	Weight	Cumulated amount passing
mm	Φ	g	%	
16,00	-4,00	0,00	0,00	100,00
8,00	-3,00	0,00	0,00	100,00
4,00	-2,00	0,21	0,21	99,79
2,80	-1,49	0,00	0,00	99,79
2,00	-1,00	0,08	0,08	99,72
1,40	-0,49	0,02	0,02	99,70
1,00	0,00	0,11	0,11	99,59
0,710	0,49	0,14	0,14	99,45
0,500	1,00	0,20	0,20	99,26
0,355	1,49	0,48	0,47	98,79
0,250	2,00	1,19	1,16	97,62
0,180	2,47	4,73	4,63	92,99
0,125	3,00	36,99	36,19	56,80
0,090	3,47	35,12	34,36	22,44
0,075	3,74	7,19	7,03	15,41
0,063	3,99	3,07	3,00	12,41
< 0,063	> 3,99	12,68	12,41	0,00

Sieve Analysis

Gravel

Sand

### Size Classes (DGF-Bulletin 1 1988)

Size Class	Weight %
Silt and clay (< 0,063 mm)	12,41
Sand, fine (0,063 mm - 0,200 mm)	81,91
Sand, medium (0,2 mm - 0,6 mm)	5,03
Sand, coarse (0,6 mm - 2 mm)	0,37
Gravel (> 2 mm)	0,28
<b>Sum:</b>	<b>100,00</b>

### Moments Measures (Folk and Wards)

Percentile	Percentile	d(mm)	Φ
Amount in sieve	Amount passing		
5%	95%	0,21	2,25
16%	84%	0,17	2,59
25%	75%	0,15	2,71
40%	60%	0,13	2,95
Median 50%	50%	0,12	3,08
75%	25%	0,09	3,43
84%	16%	0,08	3,71
90%	10%	-----	-----
95%	5%	-----	-----

### Moments Statistics

Mean	3,13
Sorting	-----
Skewness	-----
Kurtosis	-----
Uniformity Coefficient	-----

The analysis is executed according to DS 405.9 extended by sieves to the ½ phi scale

Size Classes and Percentiles are found by linear interpolation

### Formulas

Mean  $(\phi_{16\%} + \phi_{84\%} + \phi_{50\%}) / 3$  (Folk and Ward 1957)

Sorting  $(\phi_{84\%} - \phi_{16\%}) / 4 + (\phi_{95\%} - \phi_{5\%}) / 6,6$  (Folk and Ward 1957)

Kurtosis  $(\phi_{95\%} - \phi_{5\%}) / (2,44 * (\phi_{75\%} - \phi_{25\%}))$  (Folk and Ward 1957)

Skewness  $(\phi_{16\%} + \phi_{84\%} - 2 * \phi_{50\%}) / (2 * (\phi_{84\%} - \phi_{16\%})) + (\phi_{5\%} + \phi_{95\%} - 2 * \phi_{50\%}) / (2 * (\phi_{95\%} - \phi_{5\%}))$  (Folk and Ward 1957)

Uniformity Coefficient  $(d_{60\%} / d_{10\%})$  (dgf-Bulletin 1988)

Mean, sorting, skewness and kurtosis are based on "Amount in sieve". Uniformity coefficient is based on "Amount passing".

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# Grain Size Distribution

Sample Id: AAB-HS-13-2 128-250

