

Task:**Application field:** Environmental / Recycling**Material:** Activated carbon, 2 samples**Feed size:** 3 mm**Feed quantity:** 50 g**Material specification(s):** dry, medium hard, brittle**Customer requirements(s):** Determination of ball-pan hardness acc. to ASTM D3802**Subsequent analysis:** Ball-Pan Hardness acc. to ASTM D3802**Solution****Selected Instrument(s):** Tap Sieve Shaker AS 200 tap
EasySieve / EasySieve CFR Evaluation Software

Configuration(s) Item nos.:

- 1 x AS 200 tap 230 V, 50 Hz, incl. sound enclosure cabinet, CE-marked, incl. EasySieve
- 1 x Ball-pan hardness test kit
- 1 x Collecting pan stainless steel, ø 8"x2"
- 1 x Test Sieve, ISO 3310/1, 8"x2", 355µm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 600µm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 710µm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 850µm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 1.18mm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 1.70mm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 2.00mm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Test Sieve, ISO 3310/1, 8"x2", 2.36mm, stainless steel, with compliance certificate acc. EN 10204 2.1
- 1 x Evaluation software EasySieve, version 5 / USB stick, incl. adapter USB-RS232, for Windows 10 64 Bit

Bitte beachten: Weitere Spannungsvarianten des Gerätes/der Geräte sind unter anderen Artikelnummern bestellbar.

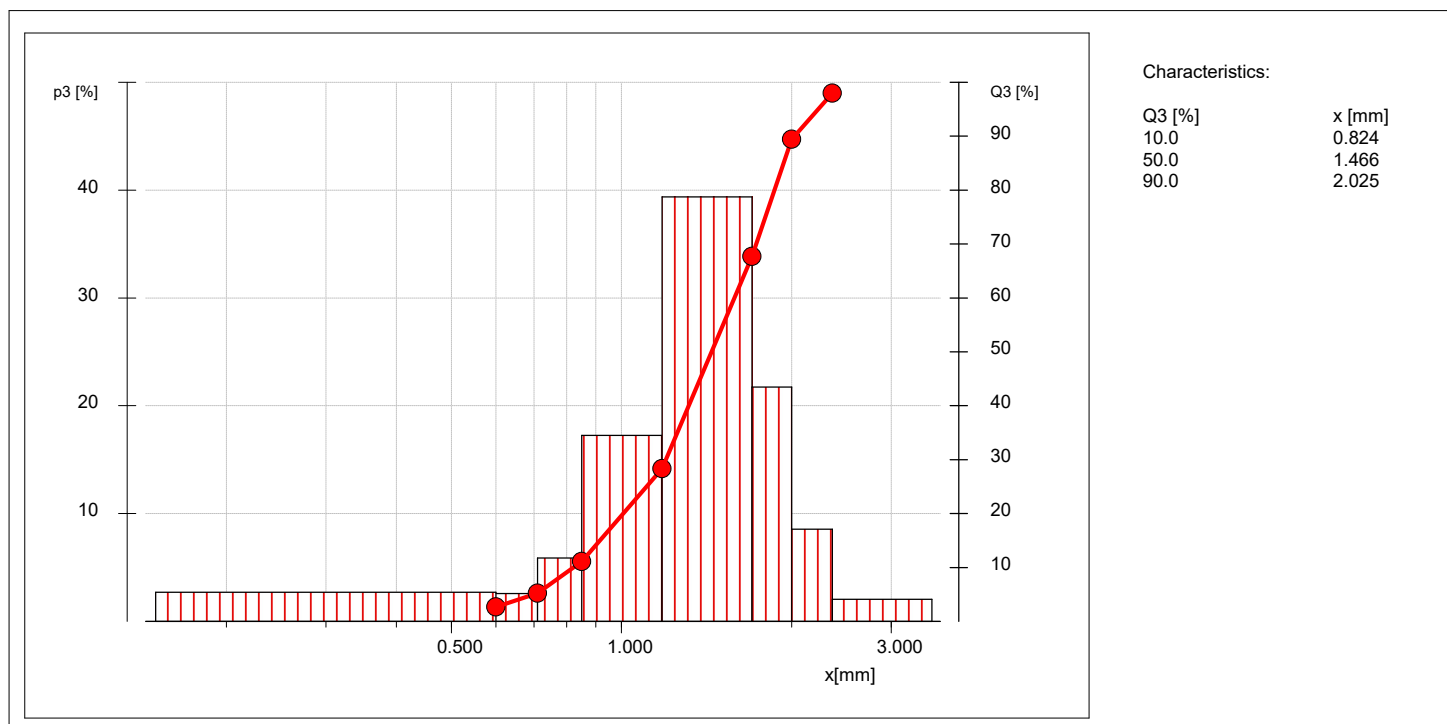
Parameter(s): Revolution speed 280 U/min, 150 Taps/min**Time:** 10 min for sieving, 30 min for hardness testing

Achieved result(s):	Particle size distribution of original samples: see test report EasySieve Sample 2: Fraction for hardness testing 710 µm - 2.36 mm, Sieved on 355 µm H = 90.98 Sample 1: Fraction for hardness testing 710 µm - 2.36 mm, Sieved on 355 µm H = 89.6
Remark(s):	The testing is performed acc. to ASTM D3802-16. After determination of the particle size distribution a representative sub sample of 100 ml of the core fraction (about 90%) is used for hardness testing. The received material afterwards is sieved on half of the samples' smallest particle size. The percentual residue is giving the ball-pan hardness H.
Recommendation:	The Tap Sieve Shaker AS 200 tap is suitable to analyse the sample material under the above mentioned conditions.

Retsch sieve analysis

Company:	Customer		
User:	GBE		
Result file:	...C:\EasySieve\SIEVEDAT\33921 activated carbon\33921 activated carbon_001.rdf		
Task file:	33921 activated carbon.afg	GKL file:	33921 activated carbon.gkl
Date:	15.08.2025 08:43	Sieving duration [mm:ss]:	10:00
Sieve shaker:	AS 200 tap		
Manual input:	Yes		
Material:	sample 1		
Sample quantity [g]:	72.43	Backweighing [g]:	72.04
Sieve loss [%]:	0.54		
Sampling:	by customer	Sample preparation:	No sample preparation
Sieving method:	horizontal with taps AS 200 tap	Test sieve size:	8" x 2"
Test sieves according to standard:	ASTM E11-24	Sieving aids:	No sieving aids
Comment:			

Size class	[mm]	p3 [%]	Q3 [%]
<	0.600	2.7	2.7
0.600 -	0.710	2.6	5.2
0.710 -	0.850	5.9	11.1
0.850 -	1.180	17.2	28.3
1.180 -	1.700	39.4	67.7
1.700 -	2.000	21.7	89.4
2.000 -	2.360	8.6	98.0
> 2.360		2.0	100.0

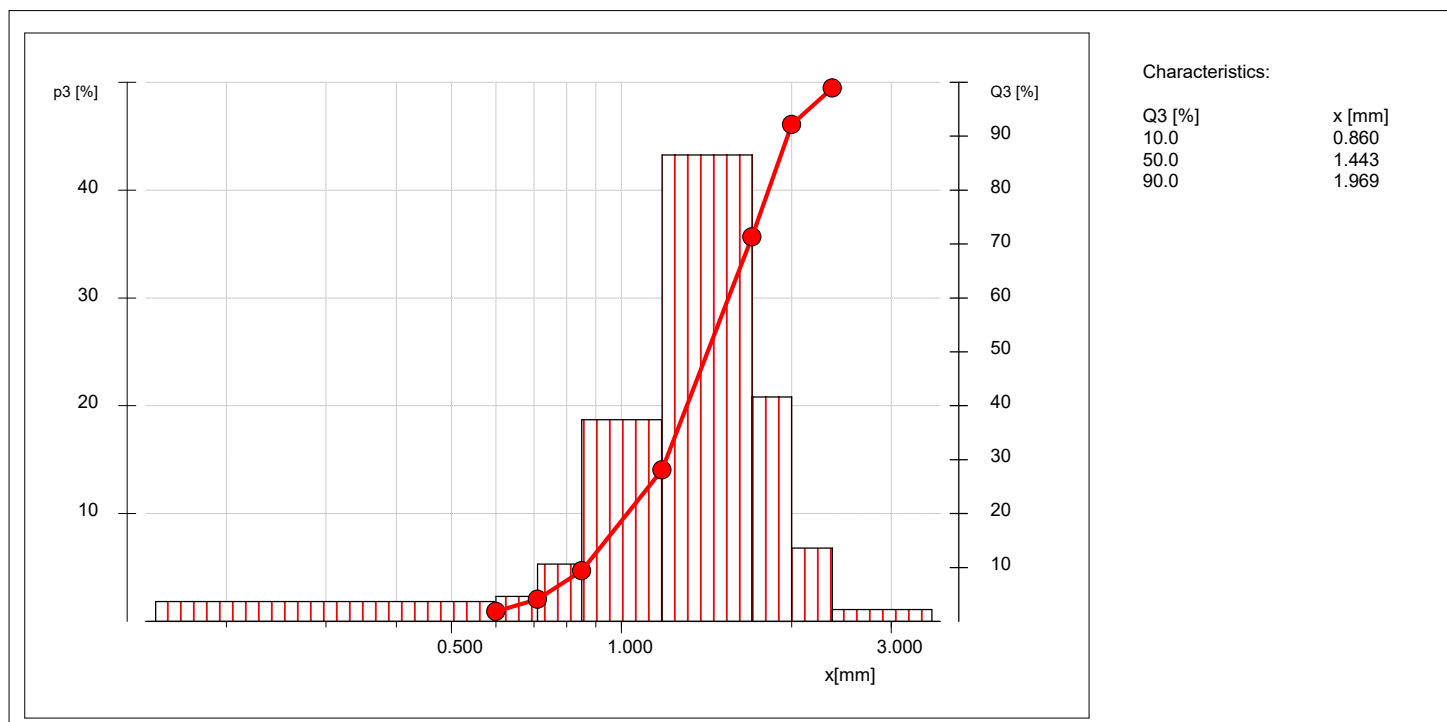


User: _____

Retsch sieve analysis

Company:	Customer		
User:	GBE		
Result file:	...C:\EasySieve\SIEVEDAT\33921 activated carbon\33921 activated carbon_002.rdf		
Task file:	33921 activated carbon.afg	GKL file:	33921 activated carbon.gkl
Date:	15.08.2025 08:44	Sieving duration [mm:ss]:	10:00
Sieve shaker:	AS 200 tap		
Manual input:	Yes		
Material:	sample 2		
Sample quantity [g]:	83.04	Backweighing [g]:	82.69
Sieve loss [%]:	0.42		
Sampling:	by customer		
Sieving method:	horizontal with taps AS 200 tap		
Test sieves according to standard:	ASTM E11-24		
Comment:		Sample preparation:	No sample preparation
		Test sieve size:	8" x 2"
		Sieving aids:	No sieving aids

Size class	[mm]	p3 [%]	Q3 [%]
<	0.600	1.8	1.8
0.600 -	0.710	2.3	4.1
0.710 -	0.850	5.3	9.4
0.850 -	1.180	18.7	28.1
1.180 -	1.700	43.2	71.3
1.700 -	2.000	20.8	92.2
2.000 -	2.360	6.8	98.9
> 2.360		1.1	100.0



User: _____