Test Report.

Report No.: **11521**

Task:

Application field:	Ceramics / Glass
Material:	**Alumina**
Feed size:	**0-150 µm**
Feed quantity:	12 g
Material specification(s):	medium-hard, dry
Customer requirement(s):	Sieving; fractions < 45 µm; 45 - 75 µm; 75 - 150 µm; > 150 µm
Subsequent analysis:	not defined

Solution:

Selected instrument(s):	**Sieve Shaker AS 200 control**
Configuration(s):	Analytical sieves according to DIN ISO 3310-1 with 200 mm ø; 50 mm height: 45 µm / 75 µm / 150 µm; Collecting pan stainless steel, 200 mm ø, height 50 mm; Clamping device „comfort" AS 200 for test sieves 200/203 mm ø; 15 x balls of steatite (each sieve)
Parameter(s):	Amplitude: 1.2 mm Intervall: 10 s
Time:	8 min.
Achieved result(s):	Sample A: 6.2 % < 45 µm; 45 - 75 µm: 19.5 %; 75 - 150 µm: 72.6 %; 1.8 % > 150 µm Sample B: 21.6 % < 45 µm; 45 - 75 µm: 23.3 %; 75 - 150 µm: 53.4 %; 1.7 % > 150 µm Sample C: 14.4 % < 45 µm; 45 - 75 µm: 20.3 %; 75 - 150 µm: 62.7 %; 2.5 % > 150 µm

Remark(s):	The sieve analysis was supported by using balls of steatite for each sieve as a sieving aid.
Recommendation:	For the sieving of alumina the Sieve Shaker AS 200 control is suitable according to the above mentioned conditions.

Report No.: 11521

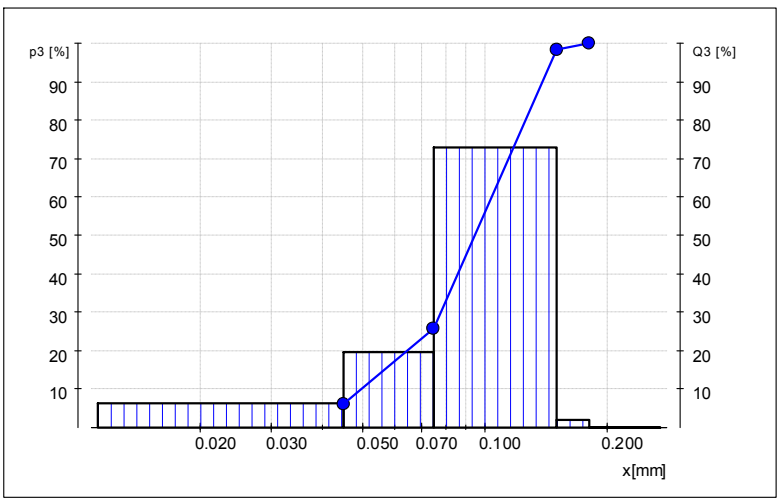
EasySieve®

Retsch Solutions in Milling & Sieving

11521-Aluminium oxide

Company:			
User:	Kunz		
Result file:	C:\Program Files\EasySieve_E\SIEVEDAT\11521\11521_001.rdf		
Task file:	11521.afg	Size classes file:	11521.gkl
Date:	28. 9.2006 13:30	Sieving duration [min]:	8
Sieve machine:	AS 200 control	Amplitude [mm]:	1.21
		Sieve insert acceleration [g]:	7.4
Interval working		Interval time[s]:	10.0
Material:	Aluminium oxide		
Sample quantity [g]:	11.40	Sum loaded sieve weights [g]	11.30
Sieve loss [%]:	0.88		
Sampling:		Sample preparation:	
Sieve method:	three-dimensional AS200	Sieve diameter:	200 x 50 mm
Sieves according to standard	DIN ISO 3310-1	Sieving aids:	Spheres
Comment:	Sample A		

Size class [mm]	p3 [%]	Q3 [%]
< 0.045	6.2	6.2
0.045 - 0.075	19.5	25.7
0.075 - 0.150	72.6	98.2
0.150 - 0.180	1.8	100.0
> 0.180	0.0	100.0



Characteristics:

Q3 [%]	x [mm]
10.0	0.051
50.0	0.100
90.0	0.141

User:

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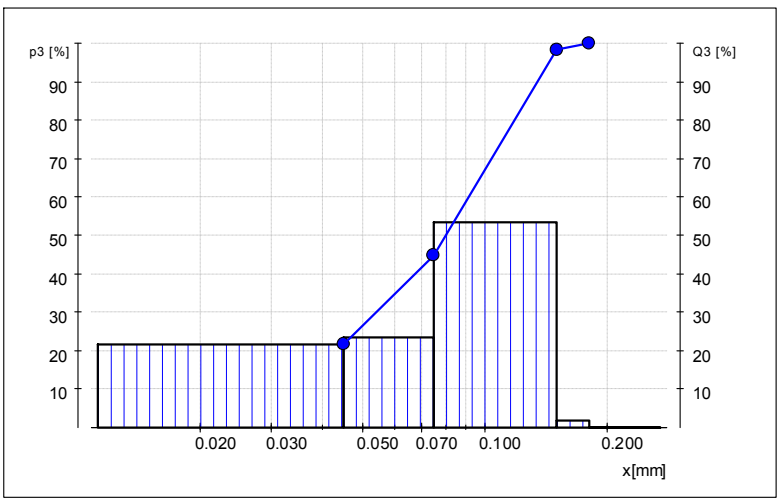
11521-Aluminium oxide

Company:			
User:	Kunz		
Result file:	C:\Program Files\EasySieve_E\SIEVEDAT\11521\11521_002.rdf		
Task file:	11521.afg	Size classes file:	11521.gkl
Date:	28. 9.2006 13:49	Sieving duration [min]:	8
Sieve machine:	AS 200 control	Amplitude [mm]:	1.21
		Sieve insert acceleration [g]:	7.4
Interval working		Interval time[s]:	10.0
Material:	Aluminium oxide		
Sample quantity [g]:	11.30	Sum loaded sieve weights [g]	11.60
Sieve loss [%]:	-2.65		
Sampling:		Sample preparation:	
Sieve method:	three-dimensional AS200	Sieve diameter:	200 x 50 mm
Sieves according to standard	DIN ISO 3310-1	Sieving aids:	Spheres
Comment:	Sample B		

Size class [mm]	p3 [%]	Q3 [%]
< 0.045	21.6	21.6
0.045 - 0.075	23.3	44.8
0.075 - 0.150	53.4	98.3
0.150 - 0.180	1.7	100.0
> 0.180	0.0	100.0



Characteristics:

Q3 [%]	x [mm]
10.0	0.021
50.0	0.082
90.0	0.138

User:

Report No.: 11521

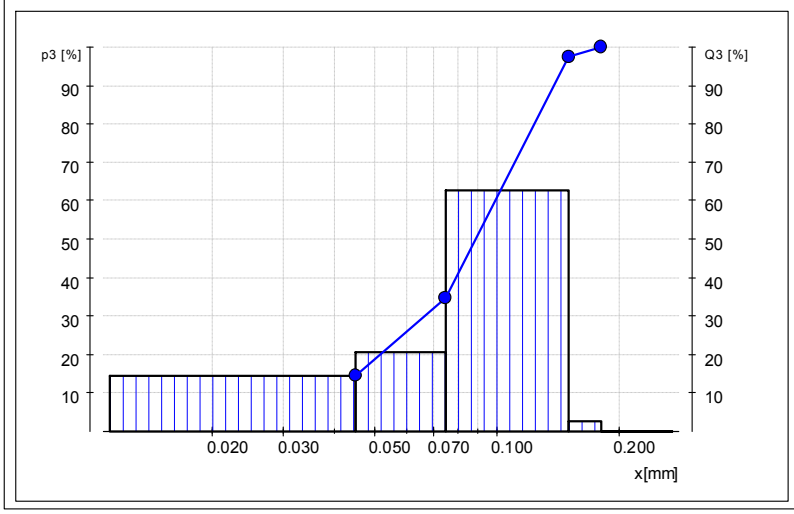
EasySieve®

Retsch Solutions in Milling & Sieving

11521-Aluminium oxide

Company:			
User:	Kunz		
Result file:	C:\Program Files\EasySieve_E\SIEVEDAT\11521\11521_003.rdf		
Task file:	11521.afg	Size classes file:	11521.gkl
Date:	28. 9.2006 14:12	Sieving duration [min]:	8
Sieve machine:	AS 200 control	Amplitude [mm]:	1.20
		Sieve insert acceleration [g]:	7.3
Interval w orking		Interval time[s]:	10.0
Manuel input			
Material:	Aluminium oxide		
Sample quantity [g]:	11.60	Sum loaded sieve w eights [g]	11.80
Sieve loss [%]:	-1.72		
Sampling:		Sample preparation:	
Sieve method:	three-dimensional AS200	Sieve diameter:	200 x 50 mm
Sieves according to standard	DIN ISO 3310-1	Sieving aids:	Spheres
Comment:	Sample C		

Size class [mm]			p3 [%]	Q3 [%]
	<	0.045	14.4	14.4
0.045	-	0.075	20.3	34.7
0.075	-	0.150	62.7	97.5
0.150	-	0.180	2.5	100.0
> 0.180			0.0	100.0



Characteristics:

Q3 [%]	x [mm]
10.0	0.031
50.0	0.093
90.0	0.141

User:

Report No.: 11521

Graph:
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