

.....

1	.....	1
2	.....	1
3	.....	1
4	.....	1
	.....	1
	.....	2
	.....	3
	
	
10	.....
11	.....	12
12	.....	13
13	.....	14

201 12 24
2020 3 24

/ 003.1 1
/ 00
13
/ 1

2

2 0.0 3

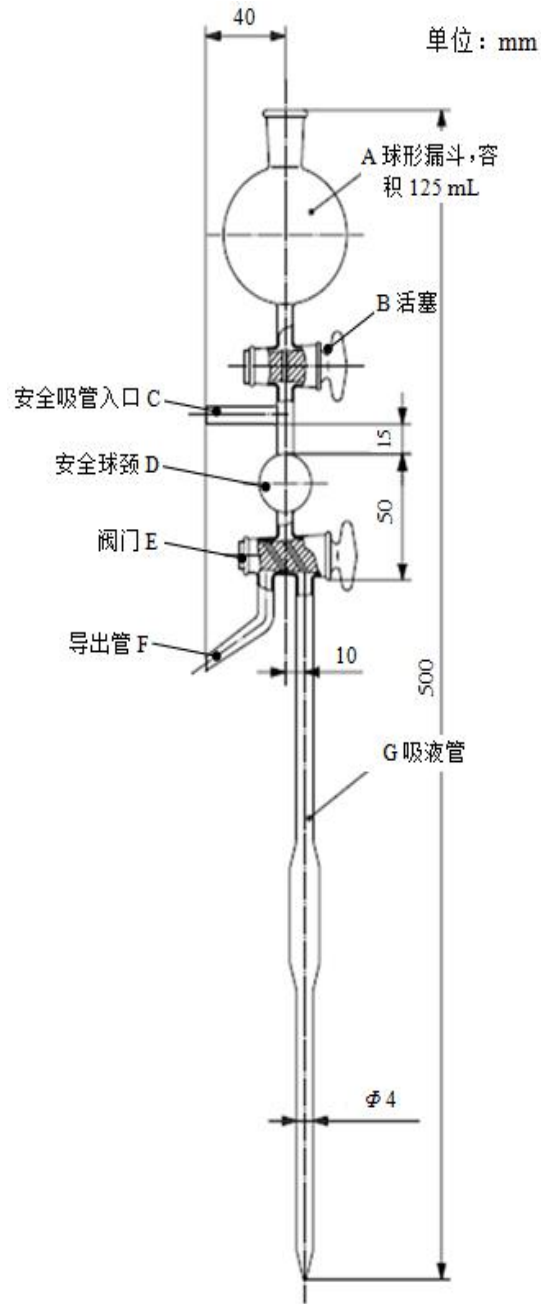
3

$2^2 \cdot 2^2 \cdot 30\%$
 $1.1 /$
 2^3
 $2- \quad 3(2) \quad () \quad 3 \quad 3 \quad 2$
 $(\quad 3)$
 $2^2 \cdot 3$
 $2^2 \cdot 2^4$
 2
 $2^2 \cdot 2^4$
 3
 $1 /$
 $.2 \quad 1000$
 $1+3$
 $1/2 \cdot 2^2 \cdot 2^4 \cdot 0. /$
33. $. \quad 00 \quad 1000$
 $0. /$
20 $. \quad 1000$
33 $. \quad . \quad 1000$
 1
 $. \quad 2 \cdot 00 \quad .14 \quad 2 \cdot 00$
 $.1$
 $2 \cdot 1 /$
111 $. \quad 1000$
 $2^2 \cdot 2^4 \cdot 40 /$
40 $.10 \quad 1000$
 $3 \quad 0.3 /$
24. 2 $.11 \quad 1000$

1

2

.1



.12

0.0001

0.0

1

3

$$V_c = \frac{m_c}{\rho}$$

1

/ 2

20 30 0.

30 2 /

10 110

1000 /

0.0001

0.0 3 / 00 / 003.1

2 0. 0 0.212 / 00

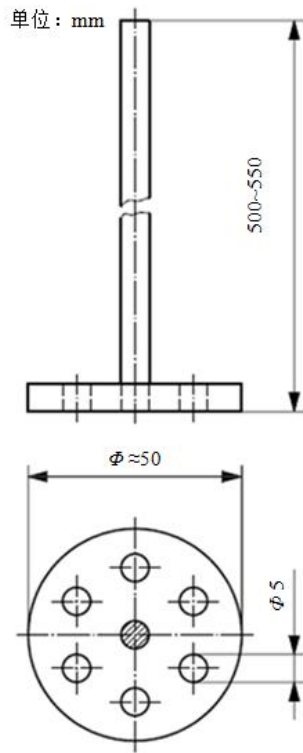
/ 003.1

1000 .14

0

00 1000

2



0 / 0 / 0. /

/ 1

/ 1

2 3

2

.10

2

0.01
0 20

.2

.13

.1

.3.2

2

1

30

30

.1

.4

1 0

200

1

1000 /

2

.1

2 0

1

1000 /

2 0

2

30

30

.1

.4

.

.4

			.1					
			1 0	200		1		1
			.3.2.1	2 0				.3
1	1		1000 /					
	40.0 /							
			.3.2.2	1 40				.1
	.1		.3	3.		1		
1000 /								
			.12	2 0	0	1		
	1			1000 /				
	40.0 /							
	.12							.2
			.13					
	2		.12				40	
	.12					0		.12
			.12				1 0	
200	2 .00		.1				.	
1								
					2			
					.3	1		
							.1	
							1000	
	1000							
						10	110	
			0. 0	0.212		.		

0.0001

1000 .2 30 / .2 1
 1 30 2
 1 2 .4

2 .00 .1 . 1000
 .2 1 .1
 .11 10 110
 0.0001

.2 1 .1

	0.0 3		0.020		0.00		0.002		
20	0	2	4	3	1	3		44	1
21	0	2	4	32	0	21		33	
22	0	2	4	2	4	10		22	30
23	0	2	4	1	4	2		12	1
24	0	2	4	13	4	4		2	
2	0	2	4		4	2		2	1
2	0	24	4	2	44	1		43	3
2	0	24	3		43	2		34	4
2	0	23	3	2	42	3		2	
2	0	23	3	4	41			1	3
30	0	22	3	42	41				4

1 100 1
 10 10
 .11
 10 110
 0.0001
 0.0001 1
 2 .00 .1 .10 1000
 .2
 .1 0. 1 2 4 .2
 .4.2.1
 30
 24
 13
 1000 2 4

$$m_{0.020 \sim 0.063} = \frac{1000(m_{s1} - m_{s2})}{V_c}$$

$$m_{0.002 \sim 0.020} = \frac{1000(m_{s2} - m_{s3})}{V_c} \quad 3$$

$$m_{<0.002} = \frac{1000(m_{s3} - m_r)}{V_c} \quad 4$$

0.020 0.0 3
 0.002 0.020
 0.002
 1 2

11

$$w_{0.60 \sim 2.00} = \frac{m_{0.60 \sim 2.00}}{m_t} \times 100\%$$

$$w_{0.212 \sim 0.60} = \frac{m_{0.212 \sim 0.60}}{m_t} \times 100\%$$

$$w_{0.063 \sim 0.212} = \frac{m_{0.063 \sim 0.212}}{m_t} \times 100\%$$

$$w_{0.020 \sim 0.063} = \frac{m_{0.020 \sim 0.063}}{m_t} \times 100\%$$

~~$$w_{0.002 \sim 0.020} = \frac{m_{0.002 \sim 0.020}}{m_t} \times 100\%$$~~

$$w_{<0.002} = \frac{m_{<0.002}}{m_t} \times 100\% \quad 10$$

~~$$m_t = m_{0.60 \sim 2.00} + m_{0.212 \sim 0.60} + \dots + m_{<0.002}$$~~ \quad 11

0.0	2.00	%
0.212	0.0	%
0.0 3	0.212	%
0.020	0.0 3	%

0.002	0.020	%
0.002		%
0.0	2.00	
0.212	0.0	
0.03	0.212	
	0.03	

.3.1

12 1

$$w_{0.063 \sim 0.212} + w_{0.020 \sim 0.063} + w_{0.002 \sim 0.020} + w_{<0.002} = w_{0.60 \sim 2.00} + w_{0.212 \sim 0.60} \quad 12$$

~~$$w_{<0.60} = w_{0.212 \sim 0.60} + w_{0.062 \sim 0.212} + w_{0.020 \sim 0.062} + w_{0.002 \sim 0.020} + w_{<0.002} \quad 13$$~~

~~$$w_{<0.212} = w_{0.062 \sim 0.212} + w_{0.020 \sim 0.062} + w_{0.002 \sim 0.020} + w_{<0.002} \quad 14$$~~

$$w_{<0.063} = w_{0.020 \sim 0.063} + w_{0.002 \sim 0.020} + w_{<0.002} \quad 1$$

$$w_{<0.020} = w_{0.002 \sim 0.020} + w_{<0.002} \quad 1$$

2.00	%
0.0	%
0.212	%
0.03	%
0.020	%

1

$$m = m' - m_0' \quad 1$$

1

$$d_p^2 = 1.8\eta z / (\rho_s - \rho_w)gt \quad 1$$

/ 2

2. / 3

1.00 / 3

1 / 2

	/	/
20	0. 2	1.002
21	0. 0	0.
22	0.	0.
23	0.	0. 33
24	0. 3	0. 11
2	0. 0	0. 1
2	0.	0. 1
2	0.	0. 2
2	0. 2	0. 33
2	0.	0. 1
30	0.	0.

1

$$w = \frac{m}{m_s \times w_{dm}} \times 100\%$$

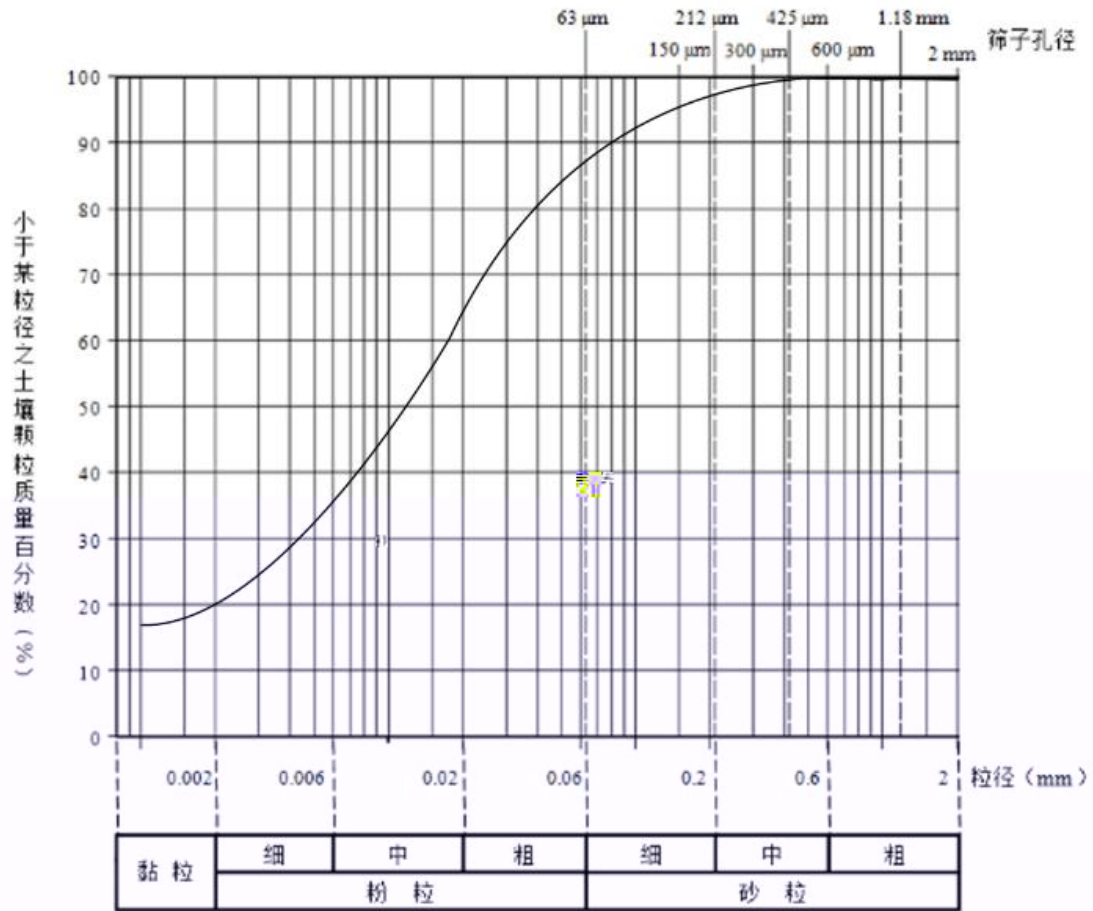
1

%

%

3

3



3

2.000 0.00 13% 3 % 0.01% 3 %

12% 32% 42% % 3 % 0.3% 0.3% 0.3%

0. % 0. % 0. %

0.00 0.212 3. % 20% 1.4% 2%

0.01% 2 % % 3 % 30% 0. % 0. %

0.3% 2. % 0. % 0.4%

0.212 0.0 3 0. % 3. % 1. % 12%

4.3% 3 % 20% 44% 1% 3. % 3. % 2.1%

31% 24% 4.3%

0.0 3 0.002 1. % . % 0. % 3. %

0.1% 2. % 31% 12% .1% 4. % 4.1%

3.0% 2 % 22% 10%
0.002 1.1% 42% 2. % 1 % 1.4% .0%
44% 3 % 14% 2. % 1. % 2. %
12% 13% 10%

3

2.000 0. 00 14% 3 % 21% 100%
12% 21% 0% 3% 2 % 0.3% 0.3% 0.3%
0. % 0. % 0.4%
0. 00 0.212 3. % 14% 14% 31%
0.01% 3 % 21% 3% 3 % 0.3% 0.3%
0.3% 0. % 0. % 0.4%
0.212 0.0 3 0. % 3. % 1. % 1 %
.1% 22% 1 % 0% % 4.2% .2% 2.4%
2 % 2 % . %
0.0 3 0.002 3 . % .0% .2%
2.4% .4% 1. % 3.0% 0. % 2. %
21% 13% . % 4.3% 4. % 3. % 22% 24% 1 %
0.002 . % 13. % 2 .0%
3.1% 14% 2.1% 11% 2.2% . % 30%
2 % 11% 2. % 2. % 3. % .2% . % .3%

20

20

3

	%
2.000 0. 00	2.0
0. 00 0.212	2.0
0.212 0.0 3	.0
0.0 3 0.002	.0
0.002	.0
