2015 1674 ≤60

2022 8 2023 1 1 1674

2024 12 25

2025 12 15

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1.2 1
1.3 5
1.4 5
2. 7
2.1 7
2.2 7
2.3 9
2.4 ..... /

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[2015]

[2012]55 ' ˝ È] ф 2 0 Я

[201 11 2019 4 13

11 [2016]88 [2019]

2 2019 9 1

12 [2025]4 2025 •

13 [2025]5

2025 1 7 m Ÿ ‘ ς

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[2021]

1.2.2.

1	GB50156-2021
2	GB 6944-2025
3	GB 12268-2025
4	GB 18218-2018
5	

1.2.3.

1 2005 4

2 2002

11

3 2003 7

1.3

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1.4

1.4-1

2.

1546m^2 SF 4 1 1

1 2 2 2

4 2 30m^3 2 30m^3

GB50156-2021 3.0.9

90m^3

2024 12

2.1

H=4m

150

18m 20m 33m

10m

2.2

1

7.7

7 25.2

1 -12.7

38.3

-30.6

8.3

6.9

2

69%

67%

7 78%

1 61%

3

101.2kPa

103.9kPa

96.9kPa

4

755.4mm

997.3mm

520.5mm

178.8mm

42.6mm

5

250.0mm

6

3.2m/s

23m/s

7

28.3d

42d

8

6

1.40m

2.3

17m 3.5m 2

1 13.5m

2

8m

0.2m 1.2m 6m

0.6m 3.5m

11.5m 4

50mm 4m

2-1

2.3-1 2.3-2

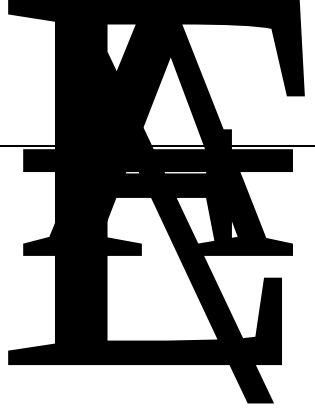
2.3-1

				11	43
			—	5	31
				5	33
				5.5	36
				11	33
			—	5	18
				5	20
				5	19
				11	41
			—	5	29
				5	31
				5	43

	6	40.5
—	5	28.5
	3	30.5
	3	36
	6	40
—	5	18
	3	20
	3	10
	6	40.5
—	5	28.5
	3	30.5
	3	43
	11	42
—	5	30
	5	32

2.3-2 m

	0.5	0.5	0.5	0.5	—	—	—	—	—	—	—	—	—	—
	0.5	0.5	0.5	0.5	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	3	12
	—	—	—	—	—	—	—	—	—	—	—	—	2	12
	7	15	6	13.5	7	18	6	18	7	42	6	51	—	—
	4	6	3	3.5	4	5	3.5	4.5	5	17	4	25	5	11.5
	2	2	2	4.5	2	3.5	2	4	—	—	—	—	—	—
1	7	30	6	27	7	32.5	6	32	7	48	6	57	—	—
2	7	27	6	23	7	36.5	6	36	7	40	6	49	—	—



2.4

2.4-1

2.4-1

1		2/3	225.76m^2			
2			400m^2			H=6m
3	K		145m^2			

2.4-2

2.4-2

1	2	30m^3	—	SF	
2	2	30m^3	—	SF 9%æ‹ $$ P Vƒh	
3	2	SK52QF222K			
4 ó	2	SK52QF222K		?±,ÙB!ñ0@ÿÀ^ Aå!bpÓûm	

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1.0 1.2

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10min

2min

2024 12 6

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[2022]000381

2022 12 16 2025 12 15

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1062024001 [2025]00430

2025 9 22

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2.7.2

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3.1

3.1.1

GB18218-2018

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3.1.2

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2

$$S=q_1/Q_1+q_2/Q_2\ldots\ldots+q_n/Q_n\geq 1$$

S——

q_1 q_2...q_n—— t

Q_1 $Q_{2...}Q_n$—— t

ˆ 3

3.1.3

3.1-1

3.1-1

1		200t
2		5000t

60m³, 0.75,

45t 60m³, 0.89, 53.4t

$$S = \frac{45}{200} + \frac{53.4}{5000} = 0.24 < 1$$

Z ´

3.2

3.2.1

2* 1B

3

$1000m^3$

1

2

$0.5m^3$

100mm

3

4

GB 7231

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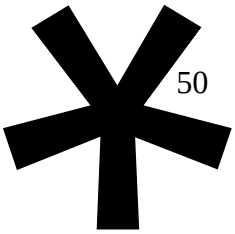

5 0 -10 60 -20

50 -35 -50 45

15min

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3.3-1

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3.3.4

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3.3.7

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	3		
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GB50156-2021
3.0.4

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GB50156-2021
GB 50966 3.0.5

3 GB
50156 3.0.15 GB50156-2021 $30m^3$
3.0.9

4

GB50156-2021
3.0.25
12

5

GB50156-2021
3.0.27

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	8	GB50156-2021 5.0.11		
	9 2.2m 4.0.4 1.5 25m 4.0.4	GB50156-2021 5.0.12	2-1	
	10 GB50156 5.0.14	GB50156-2021 5.0.14	2.3-2	
	11 5.0.13-1 5.0.11 A	GB50156-2021 5.0.15		
	12 C	GB50156-2021 5.0.16		

5-4

1

GB50156-2021
6.1.1

	9	GB50156-2021 6.1.11		
	10 0.5m 0.9m 0.3m	GB50156-2021 6.1.12		
	11	GB50156-2021 6.1.13		
	12	GB50156-2021 6.1.14		
	13 90% 95%	GB50156-2021 6.1.15		
	14 0.8L/h	GB50156-2021 6.1.16		
	15 SH/T 3022	GB50156-2021 6.1.17	SF	
	1	GB50156-2021 6.2.1		
	2 50L/min	GB50156-2021 6.2.2	5~50L/min	

3

GB50156-2021

6.2.3

4

GB50156-2021
6.3.5

11

GB50156-2021
6.3.6

12

50mm

1.0 1.2

	23 GB/T21447	GB50156-2021 6.3.20	GB/T21447	
	24	GB50156-2021 6.5.1	SF	
	25 GB 50108 200mm 500mm	GB50156-2021 6.5.2	SF	
	26 100mm 4mm 200mm 10mm	GB50156-2021 6.5.3	SF	

	30mm			
	27	GB50156-2021 6.5.4		
	28 6.3 5mm 5%	GB50156-2021 6.5.5		
	29 3.5mm	GB50156-2021 6.5.6	3.5mm	

5-5

	1		4 5kg	

2 2 5kg GB50156-2021
1 5kg 12.1.1 2
1 6L 2 2 35kg
2 5kg
1 35kg 2
2m³
15m
5
2m³ 2
2m³
5kg
2
2kg CO_2
2 4
GB50140 5kg
GB50156-2021 2
12.1.2

GB50140
1

0.25m
0.25m GB50156-2021
12.3.2

2
GB50156-2021
12.3.3

1 GB/T2893.5 GB2894
GB13495.1

4.4

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XF/T3004-2020

8.1

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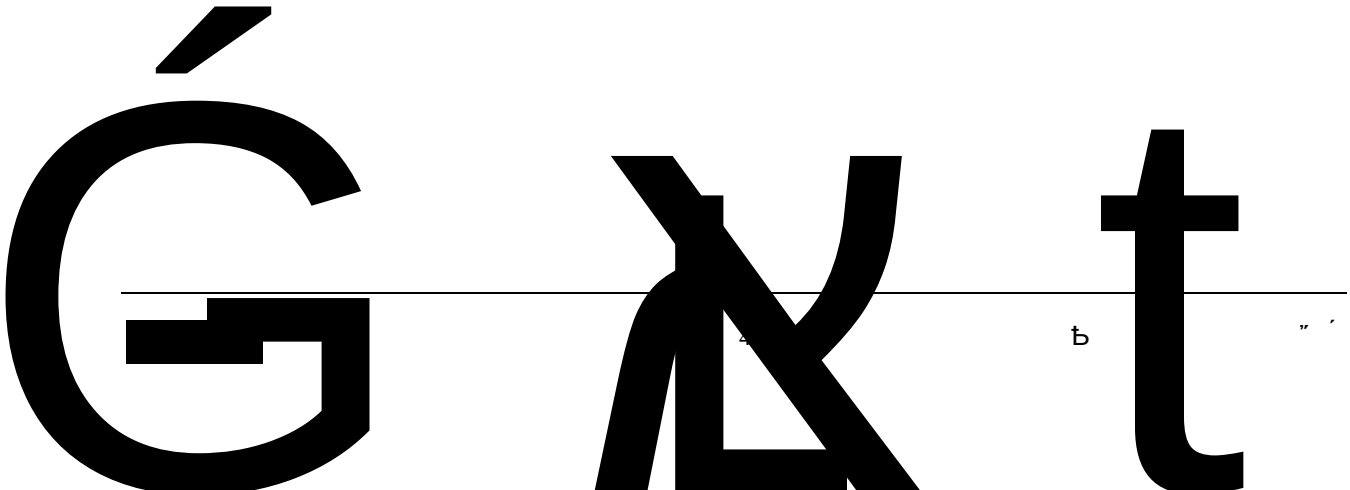
“ ” XF/T3004-2020

8.4

1		
		GB50395-2007 5.0.1
2		GB50395-2007 5.0.5
3		GB50395-2007 5.0.8
1		GB50156-2021 13.5.1
2.		
	1 3	GB50156-2021 13.5.2
3.		GB50156-2021 13.5.4



3

0.15 0.2m

1.2m

1.2m

0.2m

0.6m

GB50156-2021

14.2.3 0.6m

100mm

0.5m

4

GB50156-2021

14.2.7

5

GB50156-2021

14.2.9

6

300m^2

GB50156-2021 300m^2

14.2.10

7

B B

GB50156-2021

GB50016 14.2.11

8

3h GB50156-2021

14.2.12

9

GB50156-2021

14.2.13

10

5.0.13

25m

8

	11	GB50156-2021 14.2.15		
	12	GB50156-2021 14.2.16		
	1	GB50156-2021 14.3.1		

5-8

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	28	27	0	1
	16	10	0	6
	20	11	0	9
	173	149	0	24

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173 24 149

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6 “ ” “

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[2018]74

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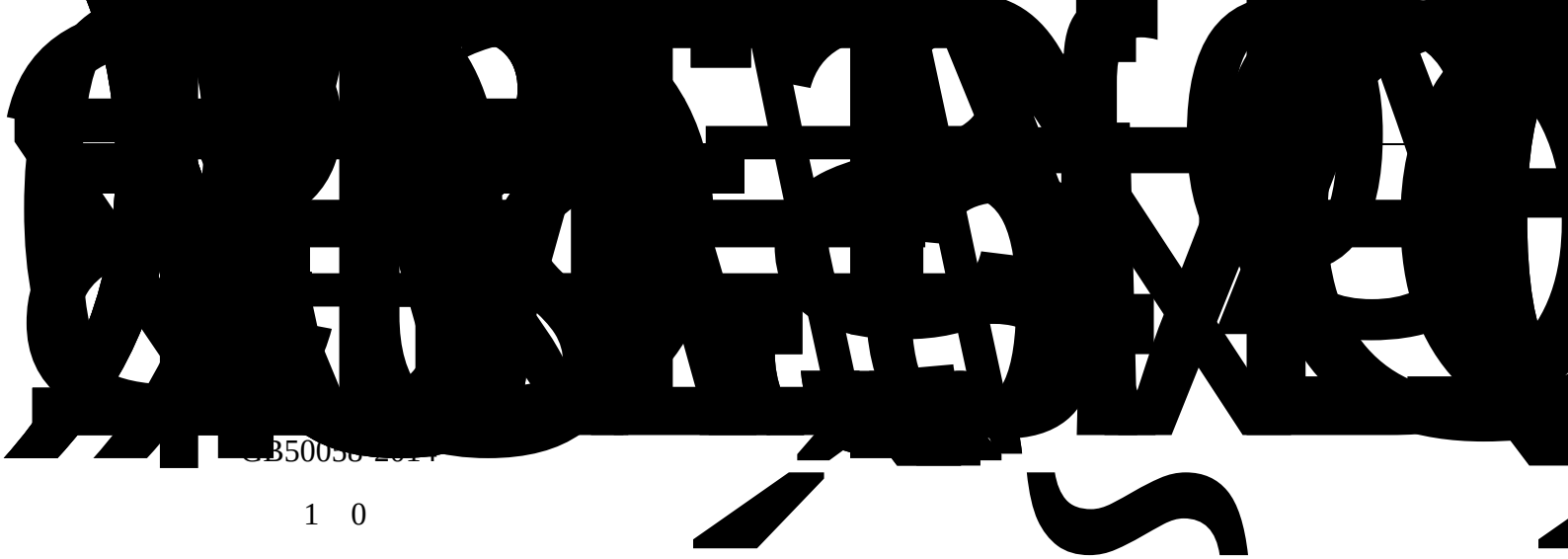

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2 1

Ä3 2

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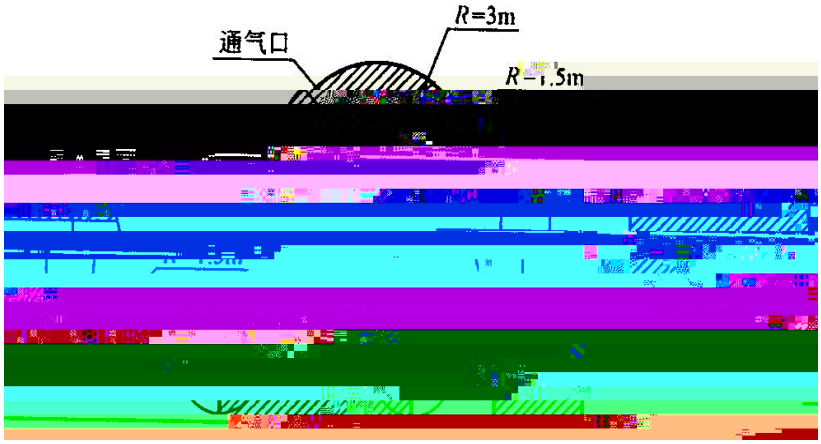
3 3m

1.5m 2



2

5. 3

1 0

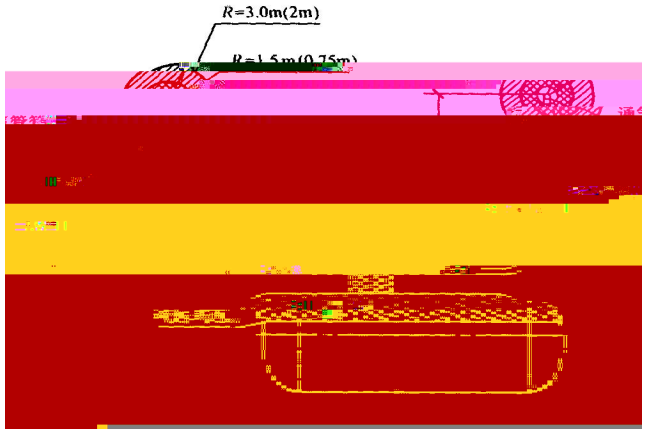
2 1.5m 0.75m

0.5m 1

3 1.5m 1m

3m 2m 1.5m

2



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