
2015 1674 ≤60

2022 8 2023 1 1 1674

2023 4 14

3 q

1.		
1.1		1
1.2		1
1.3		5
1.4		5
2.		7
2.1		7
2.2		7
2.3		7
2.4		12
2.5		12
2.6		12
2.7		14
3.		17
3.1		17
3.2		18
3.3	.8 °	22
4.		28
4.1		
4.2		28
5.	8	r

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1.1

1.2

1.2.1.

1								2021	9	1
2								2021	4	29
3						591		2013	12	7
645										
4						708		2019	4	1
5					2025					
14	34	2025	5	28						
6									103	
					2022	11	9			
7									3	2015
5	29				80		2015	7	1	
8										

16	2008	2	1						
	9					2	2019	9	1
	10								
30	2015	5	29		80		2015	7	1
	11						44		

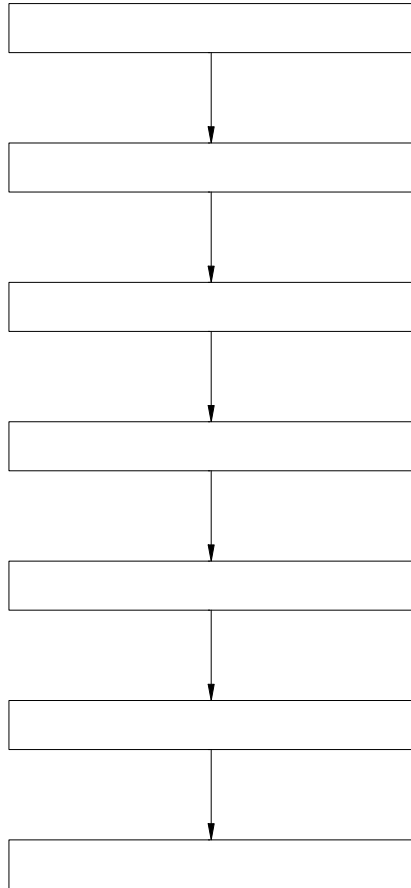
				2015	80		2015	8	19	
23										
			2020	1		2020	5	30		
24										
	2011	95		2011	7	1				
25										
						2011	142		2011	7 1
26										
	2016	8		2016	2	5				
27										
									2019	107
2019	10	28								
	28								341	2021
5	18									
29										
2017	45		2017	12	23					
30							<			
				>			2017	47	2017	12 28
31										
				2012	144		2012	8	30	
32			<							>
							2017	22	2017	11 28
33									<	
	>						2017	5	2017	9 13
34										
						2016	11		2016	7 6
35										
									2018	21
	2018	8	31							

$\angle$
$$>$$

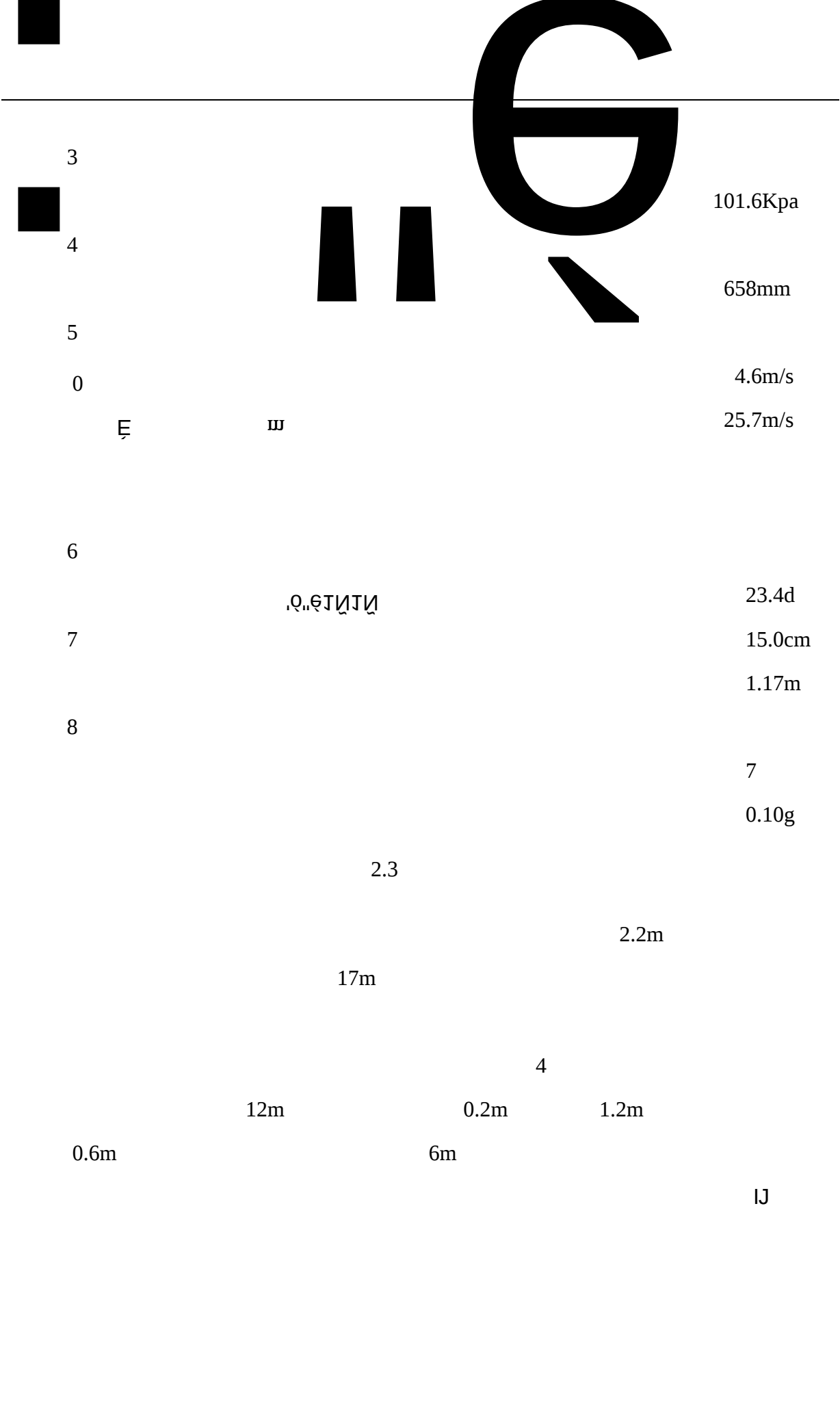
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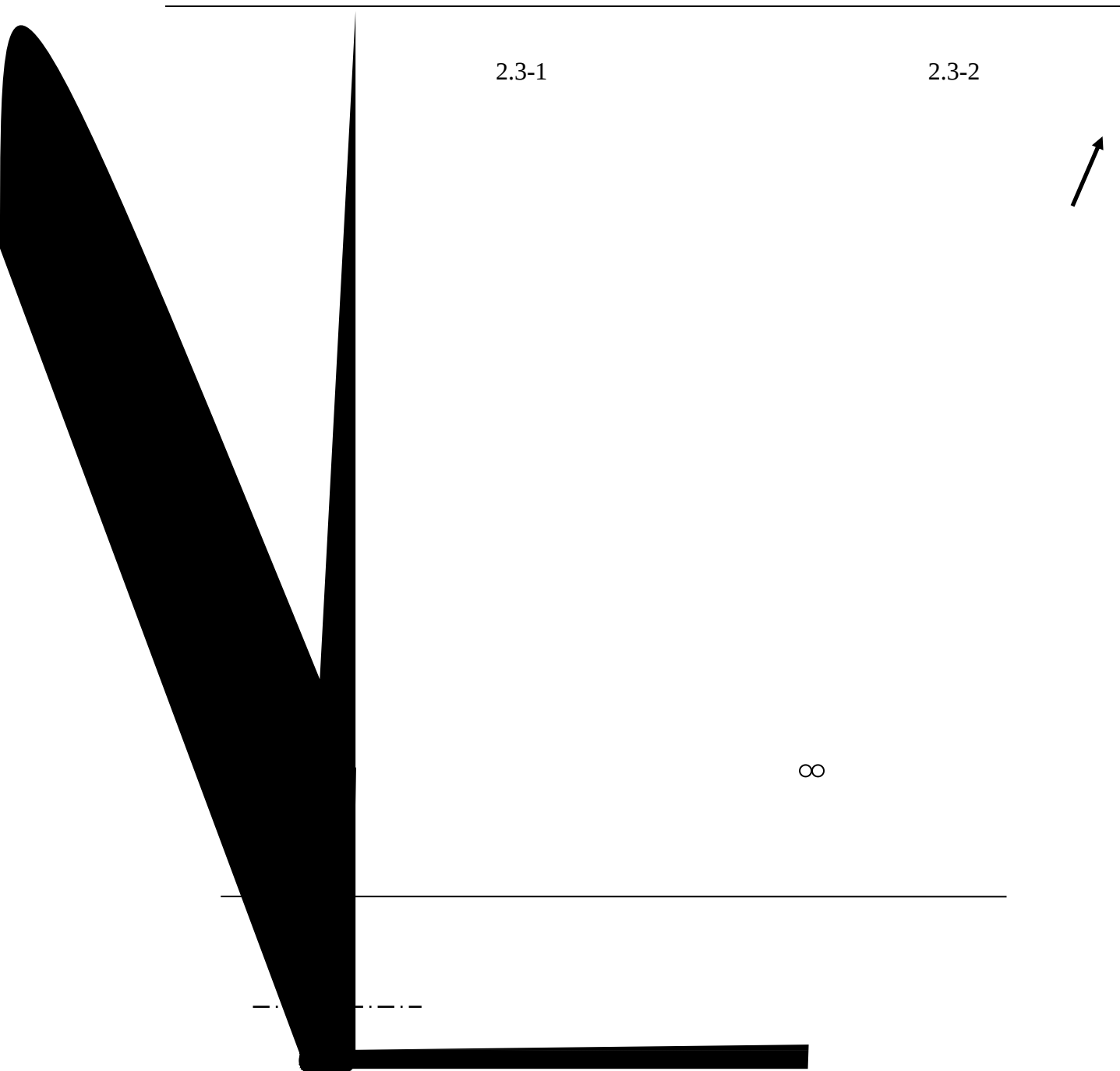
7

22	YJ/T 9007-2019	
23	(AQ 3010-2022)	
24	AQ 3018-2008	
25	GB 30871-2022	
26	XF/T 3004-2020	
27	-	SH/T
3178-2015		
28	GB/T 13869-2017	
29	AQ 8001-2007	
1.2.3.		
1	2005	4
2		2002
11		
3		2003 7
	1.3	
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2		
3		
4		
5		
	1.4	
		1.4-1



1.4-1





ОР

2.3-1

m

m

		12.5	33
	-	-	-
H=7m	-	5	34
H=7m		5	38
		10.5	49
H=7m	-	5	44
		5.5	44.5
		12.5	28
	-	-	-
H=7m	-	5	25
H=7m		5	29
		10.5	32
H=7m	-	5	28
		5	28.5
		12.5	40
	-	-	-
H=7m	-	5	39.5
H=7m		5	43.5
		10.5	57
H=7m	-	5	50
		5	50.5
		10	32
	-	-	-
H=7m	-	5	40
H=7m		5	44
		9	54
H=7m	-	5	44
		3	44.5
		10	26
	-	-	-
H=7m	-	5	25

2.3-2

m

	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-
	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	3	7.5
	-	-	-	-	-	-	-	-	-	-	-	-	2	7.5
	4	5.5	3	10.5	4	10	3.5	10	5	17	4	29	5	9.5
	2	4	2	3	2	2.5	2	2.5	-	-	-	-	-	-

2.4

1

5min

2

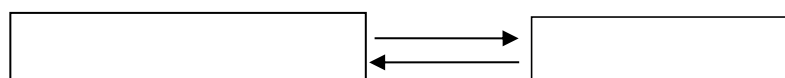
3

1

2

1.0 1.2

2.6-1 2.6-2 2.6-3 2.6-4



2.6-1

2.6-2

2.6-3

2.6-4

2.7

2.7.1

1

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6

		6		8kg		1
8kg		4	5kg	CO ₂	5	35kg
2	8kg		2		2m ³	

7

			9	4
4		4m	1	3m

3.

3.1

3.1.1

GB18218-2018

1

2

3.1.2

1

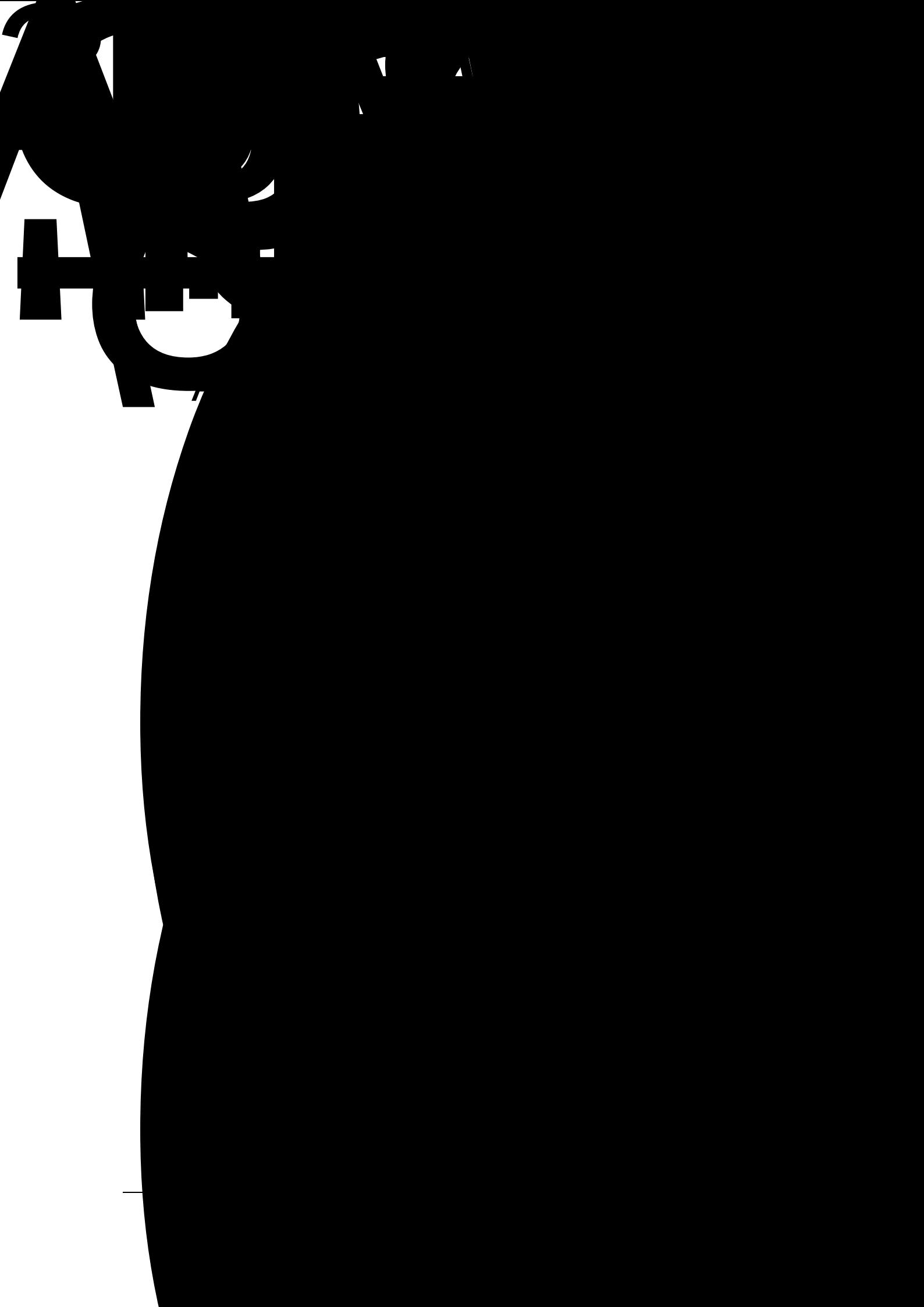
2

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

S——

q₁ q₂...q_n——

t



2

3

1000m³

15min

50m

300m

1674

15min

10

3.2.2

3.3

3.3-1

3.3-1

1			
2			
3			
4			
5			
6			
7			

3.3.1

1

70m

6 46

2

3.3.2

1

2

3

3.3.3

3.3.4

3.3.5

3.3.6

3.3.7

1

2

4.

4.1

5.

8

5-1~9

5-1

	1		
	2		
	3		
	4		
	5		

5-2

	1		
	2		
	3		
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
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	10		

	11		
	12		
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	14		
	15		
	16		
	17		
	18		
	1		
	2		
	3		
	1		
	1		
	2	GB/T29639-2020	
	3		
	1		
	2		
	3		

2025 1 17

2

4m

6m

8%

GB 201

11

GB50156-2021
6.1.11

12

0.5m
0.9m
0.3m

GB50156-2021
6.1.12

13

GB50156-2021
6.1.13

14

GB50156-2021
6.1.14

Λ

1

15

90%
95%

		GB50156-2021 6.2.2	
3		GB50156-2021 6.2.3	
4		GB50156-2021 6.2.4	
5		GB50156-2021 6.2.5	
6	“ ”	GB 50156-2021 6.6.1	
7		GB 50156-2021 6.6.2	
8	6.2 1 2 3 4 5	GB 50156-2021 6.6.4	
9		GB 50156-2021 6.6.5	
10	1 2 3 4 5	GB 50156-2021 6.6.6	

1

GB50156-2021

6.3.1

2

GB50156-2021

6.3.2

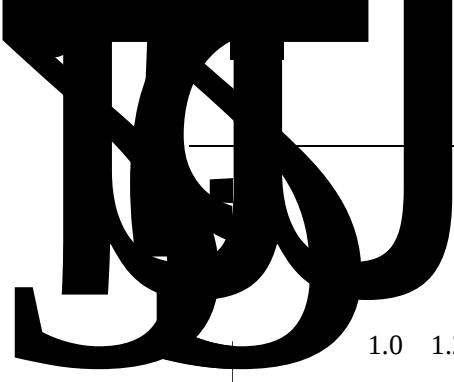
3

GB50156-2021

6.3.3

4

100mm



1.0 1.2

25mm

25mm

8

100mm

T

50mm

45°

100mm

GB50156-2021

45°

6.3.8

150mm

150mm

200mm

9 5

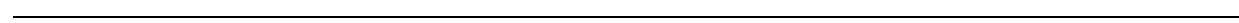
4m

Φ3.

6

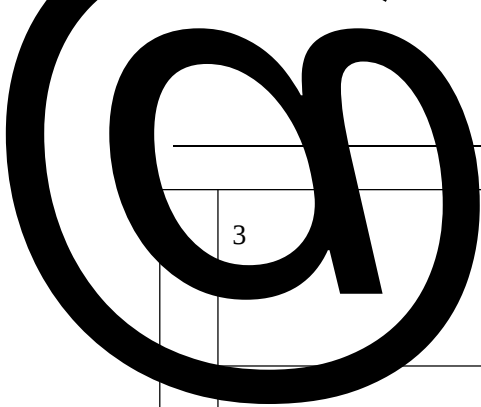
0 3

2m



GB/T8163

	10mm	
30mm		
24		
		GB50156-2021
		6.5.4
25		
	6.3	
5mm		GB50156-2021
		6.5.5
5%		
26		
	3.5mm	GB50156-2021
		6.5.6



3	”	XF/T3004-2020 8.1
4	“ ”	XF/T3004-2020 8.4

13.1.5

6

GB50156-2021

13.1.6

7

GB 50058

GB50156-2021

13.1.7

8

J

IP44

IP44

GB50156-2021

13.1.8

1

2

GB50156-2021

2

13.2.1

2

CB201e-55J

GB50156-2021

13.2.2

 4Ω

3

LPG

GB50156-2021

13.2.4

4

GB50156-2021

13.2.6

0.5mm

0.65mm

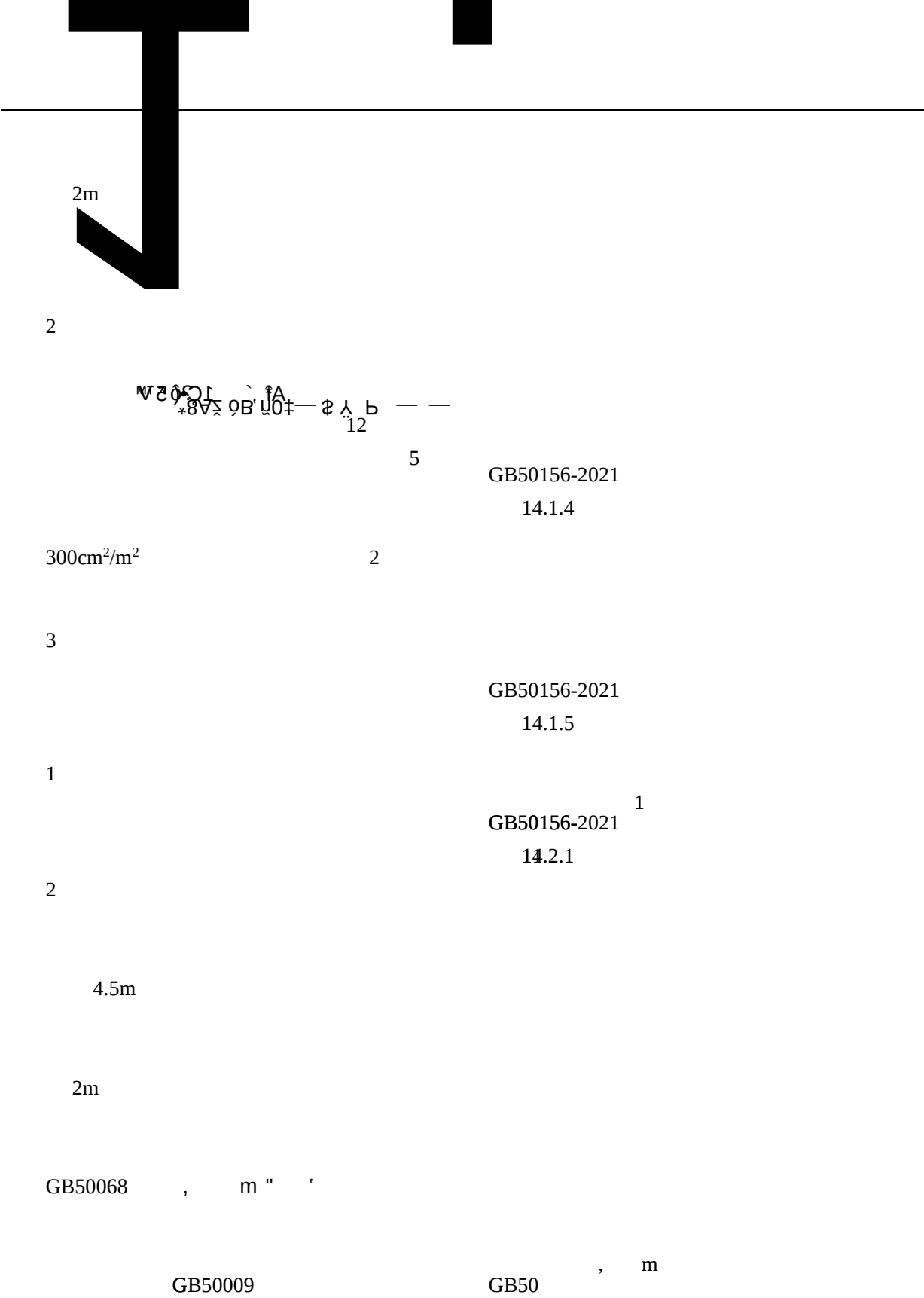
0.7mm

$$D > 2_{\text{MT}} Q_1 \quad Q_2$$

4

				GB50156-2021 13.2.8	
7	380/220V 380V	TN-S TN-C-S			
				GB50156-2021 13.2.9	
8					
	30Ω			GB50156-2021 13.2.10	
9					
				GB50156-2021 13.2.11	
10					
		5		GB50156-2021 13.2.12	
11					
				GB50156-2021 13.2.13	
12					
				GB50156-2021 13.2.14	
13					
100Ω				GB50156-2021 13.2.15	
14					
			1	GB50156-2021 13.2.16	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		



	0.6m 100mm 0.5m	14.2.3	0.6m	
4	GB 50016	GB50156-2021 14.2.4		
5		GB50156-2021 14.2.7		
6		GB50156-2021 14.2.9		
7	300m ²	GB50156-2021 14.2.10	300m ²	
8	B GB50016	GB50156-2021 14.2.11		
9	3h	GB50156-2021 14.2.12		
10		GB50156-2021 14.2.13		
11	5.0.13 25m 3.0h	GB50156-2021 14.2.14		
12				

		GB50156-2021 14.2.15		
13		GB50156-2021 14.2.16		
1		GB50156-2021 14.3.1		

17

10

7

20

5-8 20



5-9				
	5	5	0	0
	31	31	0	0
	24	20	0	4
	53	42	0	11
	8	8	0	0
	28	27	0	1
	17	10	0	7
	20	10	0	10
	186	153	0	33

5-9

186

33

153

1

1		8kg	4	4
			2	4
2				2
		35kg	1	2
		8kg	-	2
			2m ³	2m ³
3		8kg	-	4
		5kg CO ₂	-	5

6.

1

6 “ ” “ ”

7

8

9

10

11

2018 74

HBIB

GB50058-2014

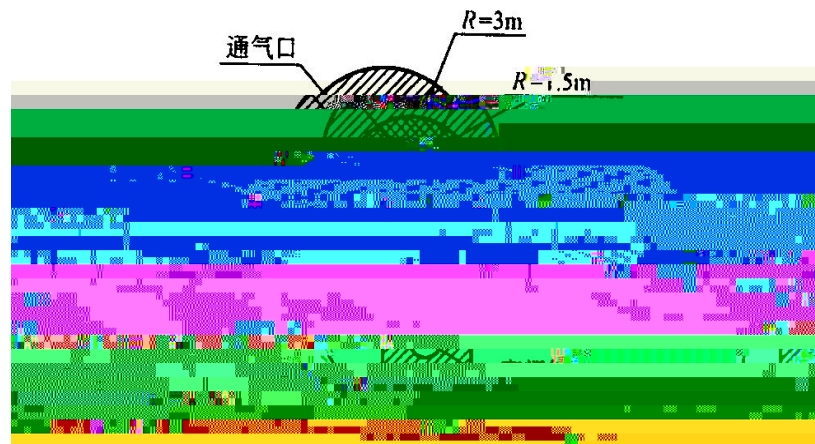
1 0

2 2 1

3
1.5m

3m

2



2

5.

3

1

0

2

1.5m 0.75m

0.5m

1

3

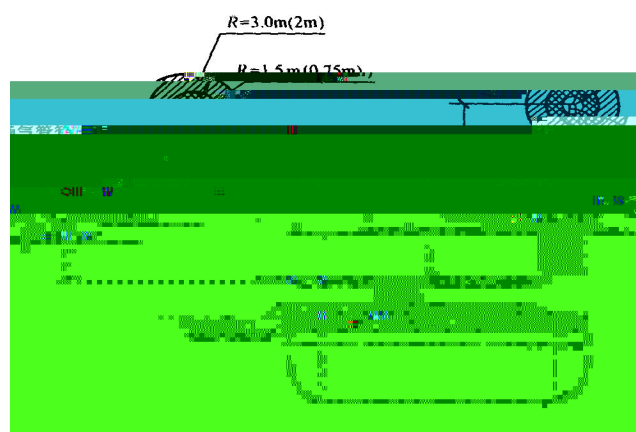
1.5m

1m

3m 2m

1.5m

2



3

I 1PgnD0@ —