



1.1	.....	1
1.2	.....	1
1.3	.....	5
1.4	.....	5
2.1	.....	7
2.2	.....	7
2.3	.....	7
2.4	.....	9
2.5	.....	9
2.6	.....	10
2.7	.....	12
3.1	.....	15
3.2	.....	16
3.3	.....	20
4.1	.....	26
4.2	.....	26

1.

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 5
29 80 2015 7 1
12 55
2015 3 23 79 2015 7 1
13 44 2025 6 1
14

				2015	80		2015	8	19
23									
				2020	1		2020	5	30
24									
	2011	95		2011	7	1			
25									
	2013	12		2013	2	5			
26									
							2011	142	2011 7 1
27									
	2016	8		2016	2	5			
28									
									2019 107
2019	10	28							
29									
							2017	121	2017 11 13
30									324 2018 11
26									
31									341 2021
5	18								
32									
	2017	45		2017	12	23			
33									
									<
									>
							2017	47	2017 12 28
34									
							2012	144	2012 8 30
35									
									<
									>
							2017	22	2017 11 28

36

<

>

2017 5 2017 9 13

37

2016 11 2016 7 6

38

Q?

*

*

ÖKING#SS É - EÍò@P f!t

20	(GB/T 12801-2008)	
21	(GB 5083-2023)	
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 3177-2015
28	GB/T 13869-2017	
29	AQ 8001-2007	

1.2.3.

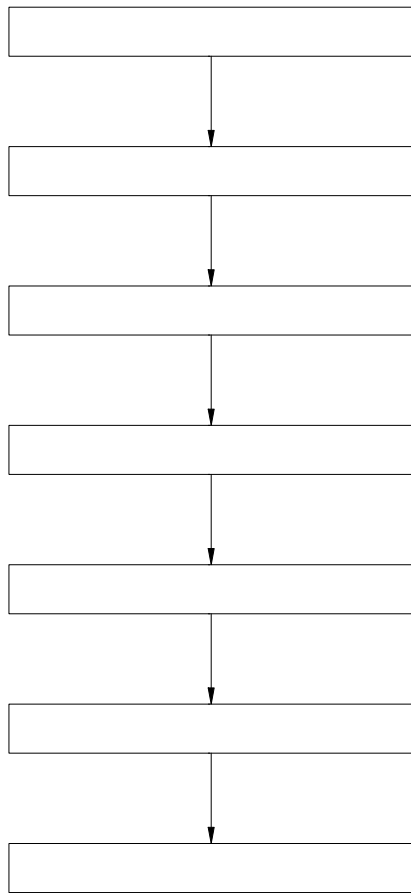
1	2005	4	
2			2002
11			
3		2003	7

1.3

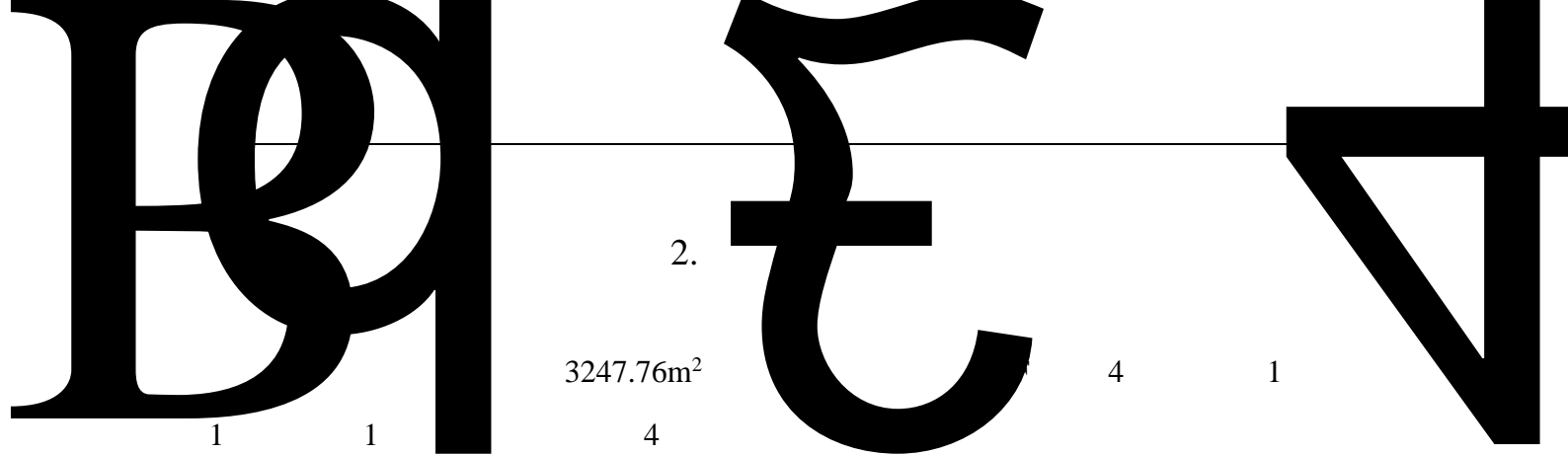
- 1
- 2
- 3
- 4
- 5

1.4

1.4-1



1.4-1



1

1

3247.76m²

4

2.

4

1

4

3 30m³

1 30m³

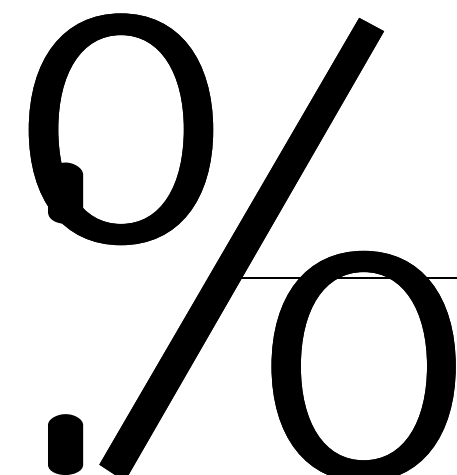
105m³

GB50156-2021

3.0.9

2.1

H=7m



7



			54%
3			101.6Kpa
4			658mm
5			4.6m/s
			25.7m/s
6			23.4d
7			15.0cm
			1.17m
8			7
			0.10g

2.3

2.2m

9m

1

18m

4

1

11m

0.2m

1.2m

0.6m

6m

0.9m

12m

15m

4

50mm

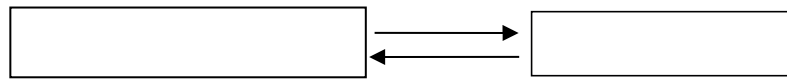
4m

“

10min

2min

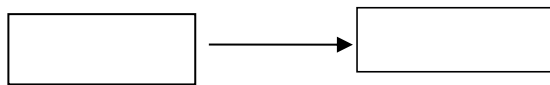
2.6-1 2.6-2 2.6-3 2.6-4 2.6-5



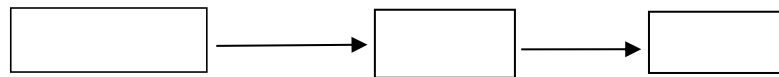
2.6-1



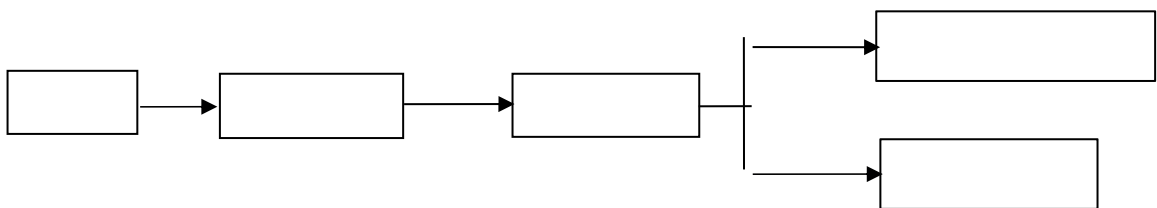
2.6-2



2.6-3



2.6-4



2.6-5

2.7

2.7.1

1

91210300725665288M

2024 12 10

2

[2024]100036

2023 02 11 2026 02 10

3

LNFYJC/B/TY2025003420

2025 09 19

3

2.7.2

1

2

3

4

380/220V

TN-S

UPS

5

5

6

7

8kg

1

8kg

5

5kg

CO₂

5

35kg

2

8kg

2

2m³

7

15

8

5

5m 2

3m

3.

3.1

3.1.1

GB18218-2018

1

2

3.1.2

1

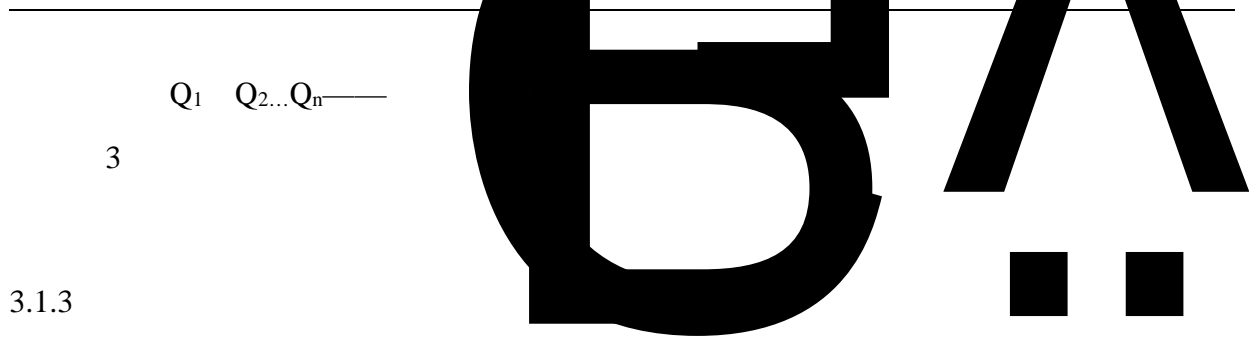
2

$$S = q_1/Q_1 + q_2/Q_2 + \dots + q_n/Q_n \quad (1)$$

S——

q₁ q₂...q_n——

t



3.1.3

3.1-1

3.1-1

1		200t
2		5000t

90m³

0.75

67.5t

30m³

0.89

26.7t

$$S=67.5/200+26.7/5000=0.34284<1$$

3.2

3.2.1

2

3

1000m³

15min

15min

10

3.2.2

3.3

3.3-1

3.3-1

--	--	--	--

1			
2			
3			
4			
5			
6			
7			

3.3.1

1

ã

1986 5 2

3

4

5

" " " "

3.3.2

1

2

3

3.3.3

5.

8

5-1~9

一、基 件

5-1

	1		
	2		
	3		
	4		
	5		

二、安全

5-2

	1		
	2		
	3		
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		

	11		
	12		
	13		
	14		
	15		
	16		
	18		
	19		
	1		
	2		
	3		
	1		
	1		
	2	GB/T29639-2020	
	3		
	1		
	2		
	3		

2025 1 17

三、总图布

5-3

	1		



2			5.0.1	
		4m		11m
	6m		GB50156-2021	8%
	8%		5.0.2	
3			GB50156-2021	
			5.0.3	
4	V	“ ” “		“
	”		GB50156-2021	” “
			5.0.5	”
5				
	3m		GB50156-2021	
			5.0.6	
	1.2m ³			
	100mm	1.2m		
6			GB50156-2021	
			5.0.7	
7			GB50156-2021	
			5.0.8	8
8				
14.2.10				b

“ ” “ ”

10

GB50156-2021

5.0.11

11

2.2m

4.0.4

1.5

25m

4.0

50%

2

GB50156-2021

6.1.2

3

50mm			
1.0 1.2			
25mm			25mm
8			
100mm T	50mm 45°		
200mm	150mm	GB50156-2021 6.3.8	100mm 45° 150mm
9			
	4m		
	2m	GB50156-2021 6.3.9	4m
10			
	50mm	GB50156-2021 6.3.10	50mm
11			
	2kPa~3kPa	GB50156-2021	
	1.5kPa~2kPa	6.3.11	
12			

<p>GB/T8163</p> <p>4mm</p> <p>4mm</p> <p>108 mm</p> <p>1010</p>	<p>GB 50156-2021 6.3.12</p>	<p>GB/T8163 4mm</p>	
<p>13</p>	<p>GB50156-2021 6.3.13</p>		
<p>14</p>	<p>GB50156-2021 6.3.14</p>		
<p>15</p> <p>2‰</p> <p>1%</p>	<p>GB50156-2021 6.3.15</p>	<p>2‰</p> <p>1%</p>	
<p>16</p> <p>6.3.15</p> <p>1%</p>	<p>GB 50156-2021 6.3.16</p>		
<p>17</p> <p>0.4m</p> <p>100mm</p> <p>0.2m</p>	<p>GB50156-2021 6.3.17</p>	<p>0.5m</p> <p>0.3m</p> <p>0.2m</p>	
<p>18</p>	<p>GB50156-2021 6.3.18</p>		



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

53

47

6

五、 施及 排

5-5

	1			8kg
	2	2 5kg	GB50156-2021 12.1.1	4
	1 5kg			35kg

	3		AQ3010-2022 5.1.6	
	4	“ ”	XF/T3004-2020 8.1	
	5	”“ ”	XF/T3004-2020 8.4	
	6			

10

10

六、

5-6

	1		GB50156-2021 1 .1.1	
	2	380/220V	GB50156-2021 1 .1.2	380/220V
	3	90min	GB50156-2021 1 .1.3	2h
	4			

GB50156-2021

13.1.4

4.5m

5m

4.5m

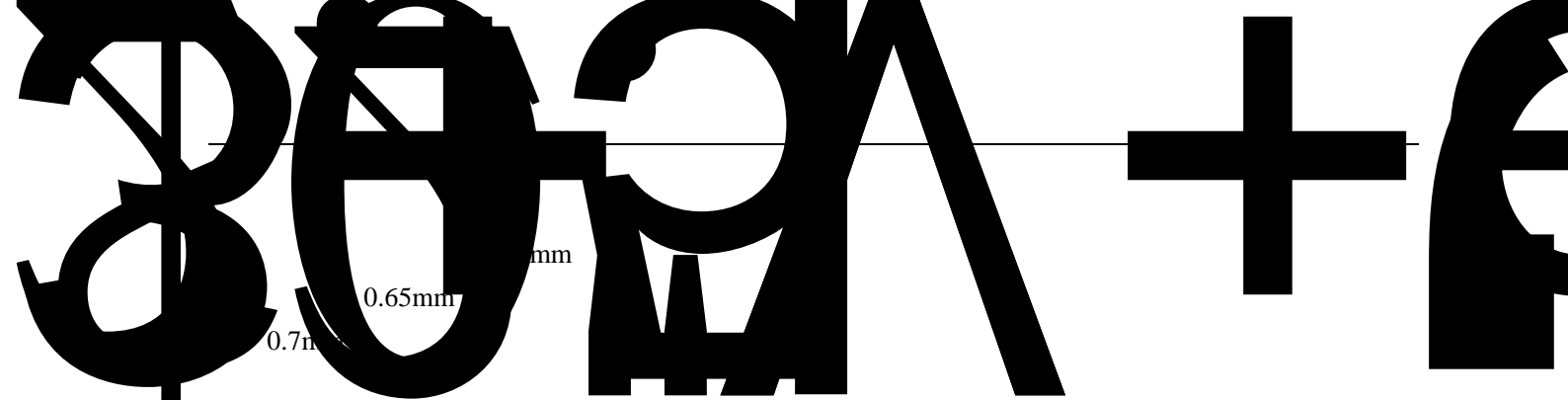
3m

5

GB50156-2021

13.1.5

6



0.7mm
0.65mm
mm

5



GB50156-2021
13.2.7

6

È

GB50156-2021
13.2.8

7

380/220V

380V

TN-S
TN-C-S

GB50156-2021
13.2.9

8

30

È

GB50156-2021
13.2.10

d

七、建 化

5-7

1	140kw			
2m		GB50156-2021 14.1.3		
2	12 5			
300cm ² /m ²	2	GB50156-2021 14.1.4		
3				
		GB50156-2021 14.1.5		
1				
		GB50156-2021 14.2.1		
2			6m	
4.5m				
2m		GB50156-2021 14.2.2	GB50009 GB/T50011	

GB50068

GB50009

GB/T 50011

3

0.15 0.2m
1.2m

0.6m

1.2m
0.2m

GB50156-2021

14.2.3

0.6m

100mm

0.5m

4

		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

八、大 产安全事故 患

5-8 20

35kg

1

2

8kg

-

2

$2m^{32n}$

6.

1

2

3

“ ” “

” “ ”

4

5

6

“ ” “ ”

7

8

9

10

11

2018 74

12

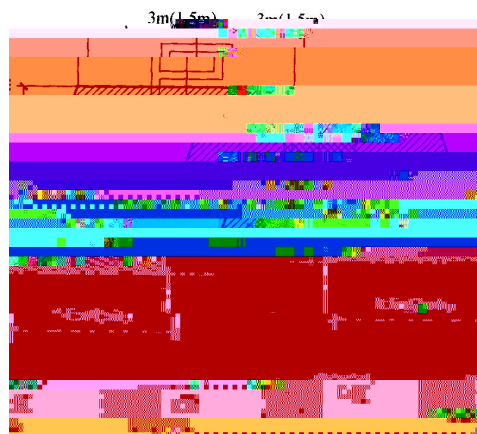
7.

GB50156-2021

1.
GB50058-2014

1 0
2 1
3 2

2. 1
3. 1
1 1
2 4.5m
0.15m 3m 2

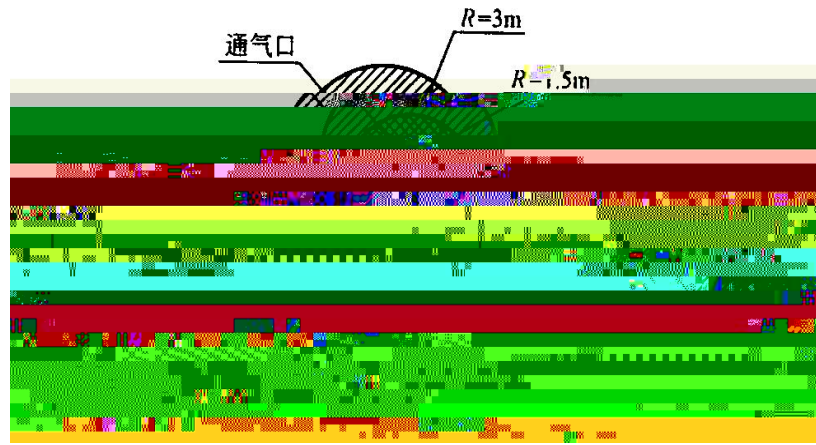


1
4. 2
1 0
2 1.5m 0.5m
1

3
1.5m

3m

2



2

5.

1

0

3

2

1.5m 0.75m

0.5m

1

3

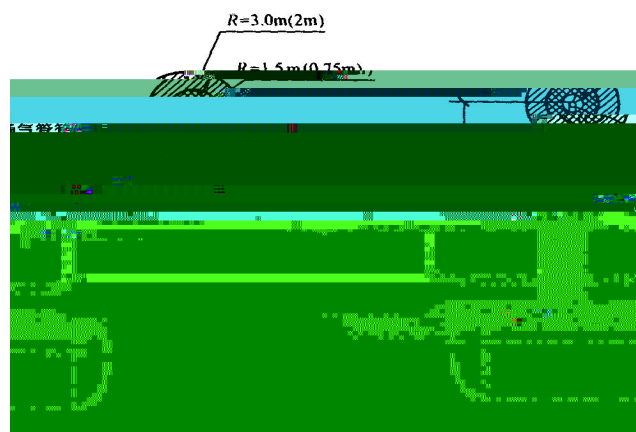
1.5m

1m

3m 2m

1.5m

2



3

