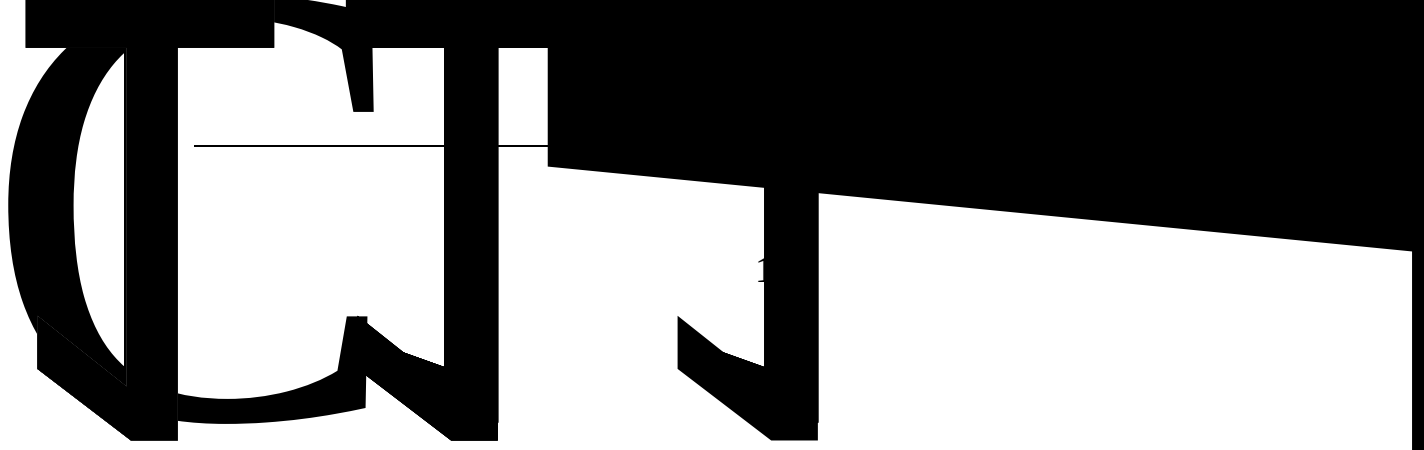

2015		1674		≤60	
2022	8	2023	1	1	1674

2023 5 14

3

1.1		1
1.2		1
1.3		5
1.4		5
2.1		7
2.2		7
2.3		7
2.4		13
2.5		14
2.6		14
2.7		15
3.1		18
3.2		19
3.3		24
4.1		30
4.2		30



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22

[2015] 100

23

[2016] 2016

24

2019 7

2019 10 028" °

25

341 2021 • Đ

5 1871

26

2017 45 2017 12 23

27

< ≤

> Ê 2017 47 2017 12 28

28

[2012]144 2012 8 30

29

< >

[2017] 11 21 ÷ A m " B

1.2.2.

1	GB50156-2021	
2	GB 6944-2025	
3	GB 12268-2025	
4	GB 18218-2018	
5	GB 17914-2013	
6	GB 55036-2022)	
7	GB 50058-2014	
8	AQ 3009-2007	
9	GB/T 6441-1986	
10	GB/T 13861-2022	
11	GB 50016-2014 2018	
12	GB 50140-2005	
13	GB 55037-2022	
14	GB 50057-2010	
15	GB 12158-2024	
16	GB/T 50610-2010	
17	GB20952-2020	
18	GB 50395-2007	
19	GB/T 29639-2020	
20	(GB/T12801-2008)	
21	(GB 5083-2023)	
22	YJ/T 9007-2019	
23	(AQ 3010-2022)	
24	AQ 3018-2008	
25	GB30871-2022	
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

1

2

3

4

5

1.4

1-1

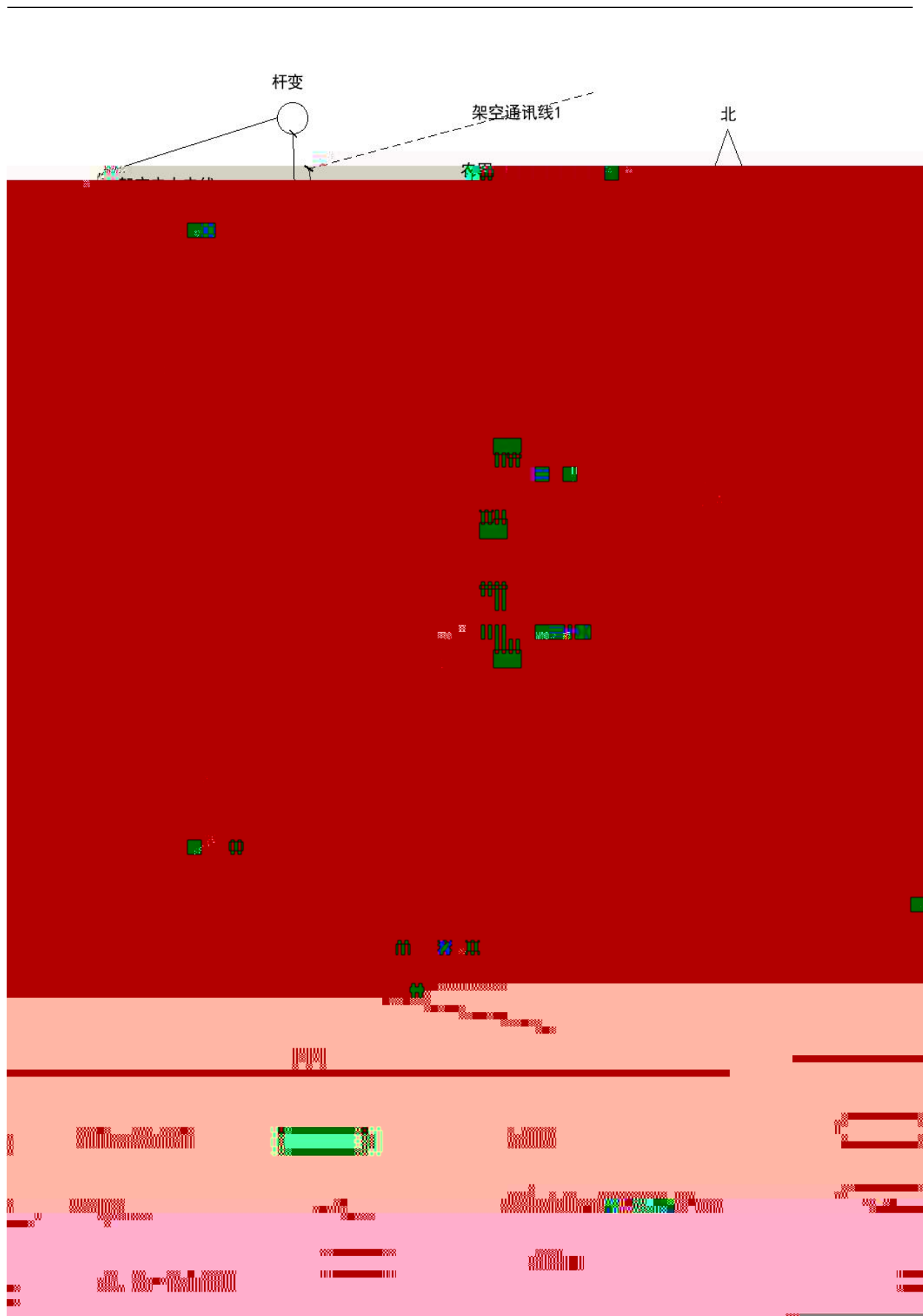
1.4-1

2.

SF 4 1 1

2 2

4 2 30m³ 2 30m³
GB50156-2021 3



2.3-1

m

	2			5	21.5	
				3	22	
				9	41	
				5	41	
	1			5	29	
				3	13	
	2			5	15	
				3	15	
				9	34.4	
				5	34.4	
	1			5	23.2	
				3	30	
	2			5	20	
				3	21	

2.3-2

m

0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	2	3.8
0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	2	9.8
-	-	-	-	-	-	-	-	-	-	-	-	3	7.2	2	9
-	-	-	-	-	-	-	-	-	-	-	-	2	7.2	2	9.5

2.4

2.4-1

2.4-1

1				122m ²		-
2				96m ²		H=6m

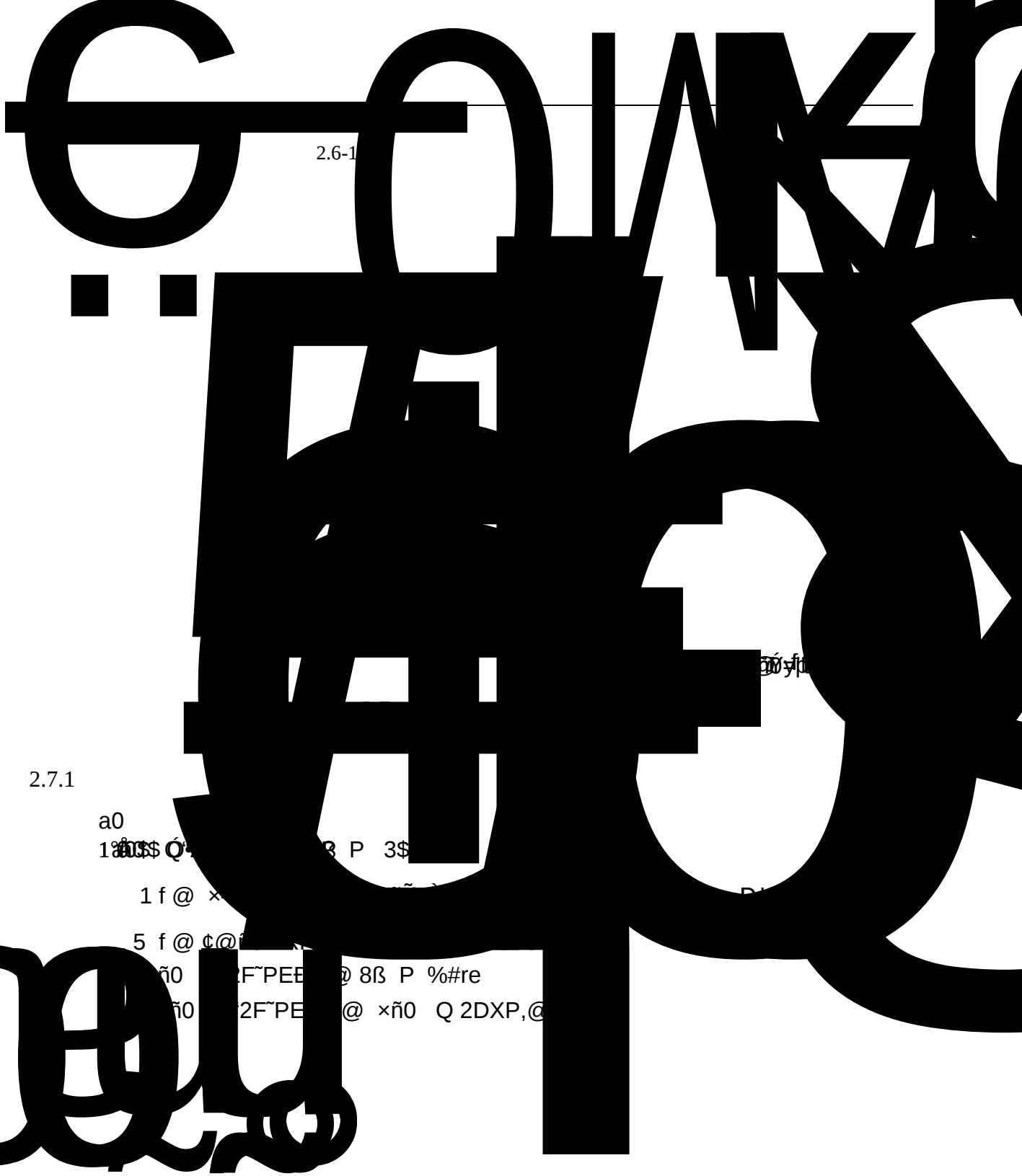
2.4-2

2.4-2

1		2	30m ³	-	SF
2		2	30m ³	-	SF
3		1	SK56QF444K Q=5 50L/min		4
4		1	SK56QF444K Q=5 50L/min		2
5		1	UZK-SA-LD		
6		1	VEEDER-ROOT		
7		10		-	-
8		1	HDR-D-12		12kw



1 Å



2026 3 27 2026 9 26

4

	210302198504232433			2025 12 12 2028 12 11
	21032320000526503X			2025 12 12 2028 12 11

2.7.2

1

2

1

5

2

3

3

4

380/220V

TN-S

UPS

2h

5

5

6

4 2 2 2m³

8kg 2 5kg 8 8kg 4

35kg 2 8kg 2

7

10

5 4m 4 1

3m

90%

$$Q_1 \quad Q_2 \dots Q_n \text{---} t$$

3

3.1.3

$$23 \leq 60 \qquad 3.1-1$$

3.1-1

1		200t
2		5000t

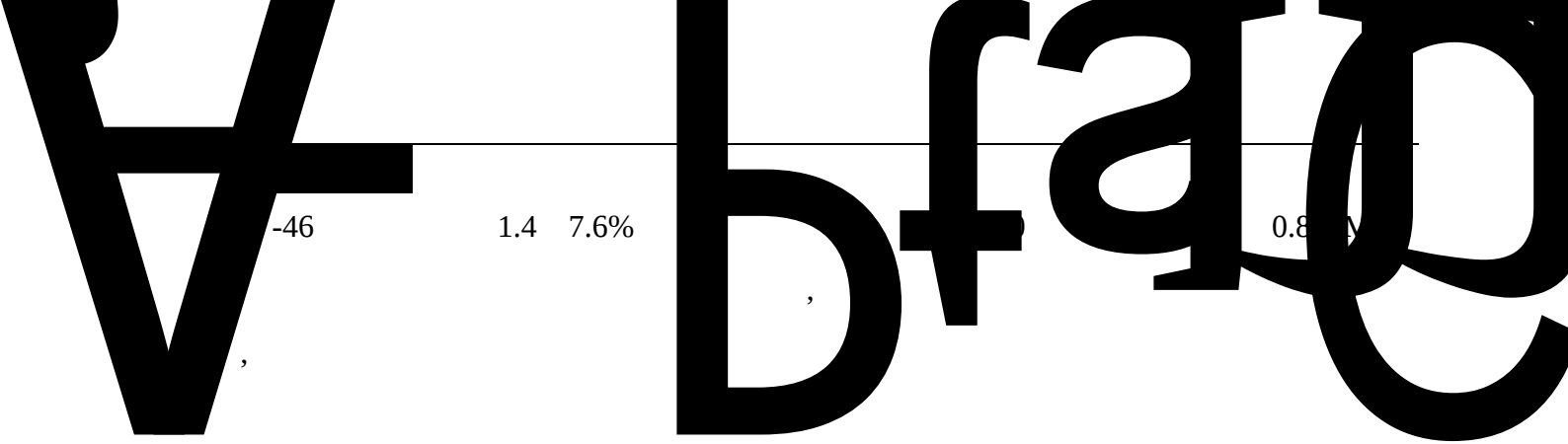
$$\begin{array}{ccccccc}
 & & 60\text{m}^3 & & 0.775 & & \\
 46.5\text{t} & & 60\text{m}^3 & & 0.85 & & 51\text{t} \\
 S=46.5/200+51/5000=0.2325+0.0102=0.2427<1
 \end{array}$$

3.2

3.2.1

$$\begin{array}{ccccccc}
 & & 2^* & & 1\text{B} & & 2 \\
 1 & & - & & 2 & & - & & 2 \\
 & & 1630 & & & & & &
 \end{array}$$

$$\begin{array}{ccccccc}
 & & & & \text{E10} & & 92 \\
 95 & & 98 & 3 & =1 & 0.72 & 0.775 & & =1 & 3 & 4
 \end{array}$$



-46

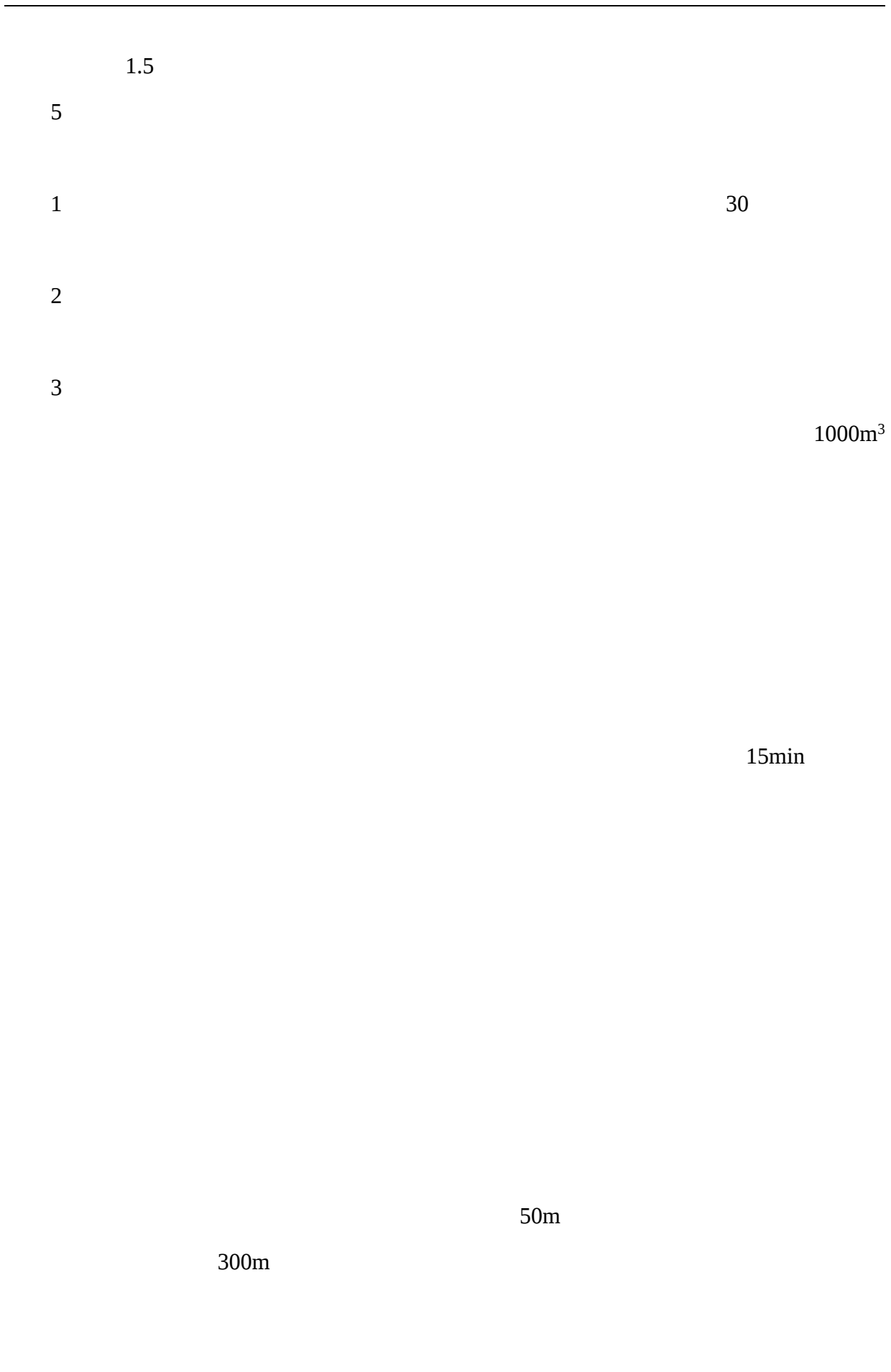
1.4 7.6%

0.8

PC-TWA 300mg/m³

)

(



-18 =1 0.79~0.85
282-338
0.6%~7.2%

15min

10

3.2.2

1

2

3

4

3.3

3.3-1

3.3-1

1

2

3

4

5

6

7

8

4

5

3.3.2

1

2

3

3.3.3

3.3.4

N

3.3.5

3.3.6

4.

4.1

8

1

2

3

4

5

6

7

8 20

4.2

5.

8

5-1

5-1

	1		
	2		
	3		
	4		
	5		

5-2

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

10

11

12

13

14

15

16

17

18

1

2

3

1

1

2

GB/T29639-2020

3

1

2

3



5-3

1

	4	GB50156-2021 4.0.12		
	5	GB50156-2021 4.0.13		
	1	GB50156-2021 5.0.1		
	2	4m 6m 8% GB50156-2021 5.0.2	6m 8%	
	3	GB50156-2021 5.0.3		
	4	“ ” “ ” GB50156-2021 5.0.5	“ ” “ ”	
	5	3m 1.2m ³ 100mm 1.2m GB50156-2021 5.0.6		

6

GB50156-2021

5.0.7

7

GB50156-2021

5.0.8

8

GB50156-2021

300m²

5.0.9

0.08MPa

5

-

SF

GB 50156-2021

6.1.5

SH/T3178

6



17

SH 3022

GB 50156-2021
6.1.17

SF

1

GB 50156-2021
6.2.1

2

50L/min

GB 50156-2021
6.2.2

5-50L/min

3

GB 50156-2021

	5			
	9	GB 50156-2021 6.6.5		
	10 1 2 3 4 5	GB 50156-2021 6.6.6		
	1	GB 50156-2021 6.3.1		
	2	GB 50156-2021 6.3.2		
	3	GB 50156-2021 6.3.3		
	4 100mm	GB 50156-2021 6.3.4	100mm	
	5			

	9	4m 2m	GB 50156-2021 6.3.9	4m
	10 50mm		GB 50156-2021 6.3.10	50mm
	11	2KPa~3KPa 1.5KPa~2KPa	GB 50156-2021 6.3.11	
	12	GB/T8163 4mm 4mm $10^8\Omega\cdot m$ $10^{10}\Omega$	GB 50156-2021 6.3.12	GB/T8163 4mm

13

$10^8\Omega\cdot\text{m}$
 $10^{10}\Omega$

GB 50156-2021
6.3.13

14

GB 50156-2021
6.3.14

15

		GB 50156-2021 6.3.20		
	21	GB 50156-2021 6.5.1	SF	
	22	GB 50156-2021 6.5.4		
	23		6.3	
	6.3			
	5mm	GB 50156-2021 6.5.5		
	5%		0.5%	
	24			
	3.5mm	GB 50156-2021 6.5.6		

51

43

8

5-5

1

2

2 5kg

1 5kg

1 6L

2 2

1 35kg

GB50156

15m

5

2m³

2

2m³

	4.5m 5m 4.5m 3m			
	5	GB50156-2021 13.1.5		
	6 LNG CNG LPG	GB50156-2021 13.1.6		
	7 GB50058	GB50156-2021 13.1.7		
	8 IP44	GB50156-2021 13.1.8	IP44	
	1 2	GB50156-2021 13.2.1	2	
	2 4Ω	GB50156-2021 13.2.2		
	3 LPG	GB50156-2021 13.2.4		
	4	GB50156-2021 13.2.6		

0.5mm

GB50156-2021
13.2.14

	2.			
	1			
	2	GB50156-2021 13.5.2		
	3.	GB50156-2021 13.5.4		

30

29

1

5-7

	1			
	140kW			
	2m	GB50156-2021 14.1.3		
	2			
	12			
	5	GB50156-2021 14.1.4		
	300cm ² /m ²			
	2			

3

GB50156-2021

14.1.5

1

Ç

GB50156-2021

14.2.1

L + 5' A

1000000

„€

2011 €

2.340 9B 40-202.000 €

2



3.0h

12

5

6

7

8 (

9

10

11

12

13

2.3-2

14

σ ΙJ o

15

16

8kg

GB50156-2021

12.1.1

2 2 5kg

1 5kg 1 6L

2 2

1 35k

1

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

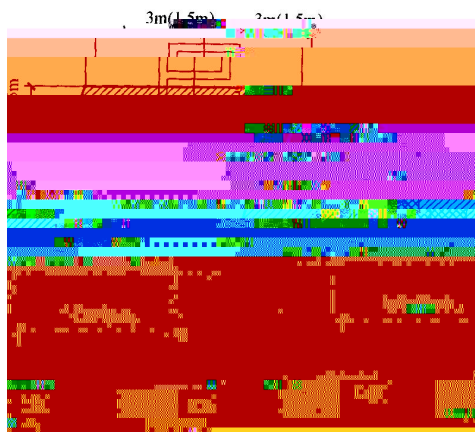
2

4.5m

0.15m

3m

2



1

4.

2

1

0

2

1.5m

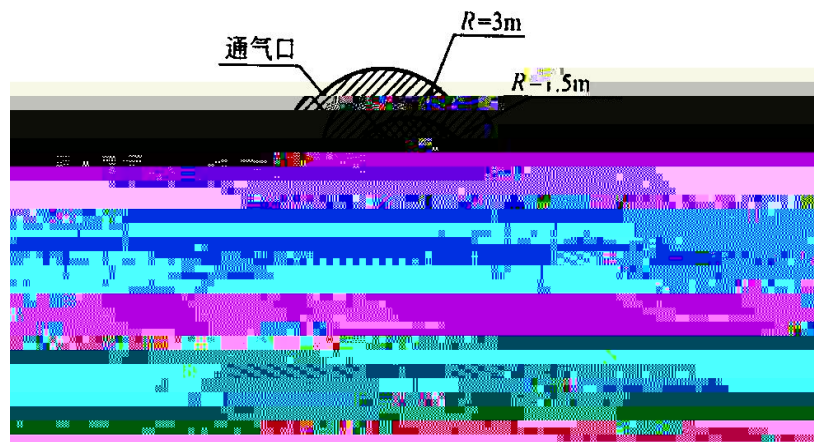
0.5m

1

3
1.5m

3m

2



2

5.

3

1

0

2

1.5m 0.75m

0.5m

1

3

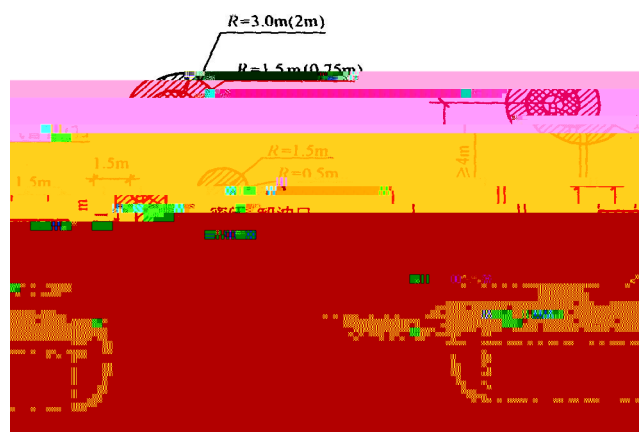
1.5m

1m

3m 2m

1.5m

2



3

-
- 1
 - 2
 - 3
 - 4
 - 5
 - 6
 - 7
 - 8
 - 9
 - 10
 - 11