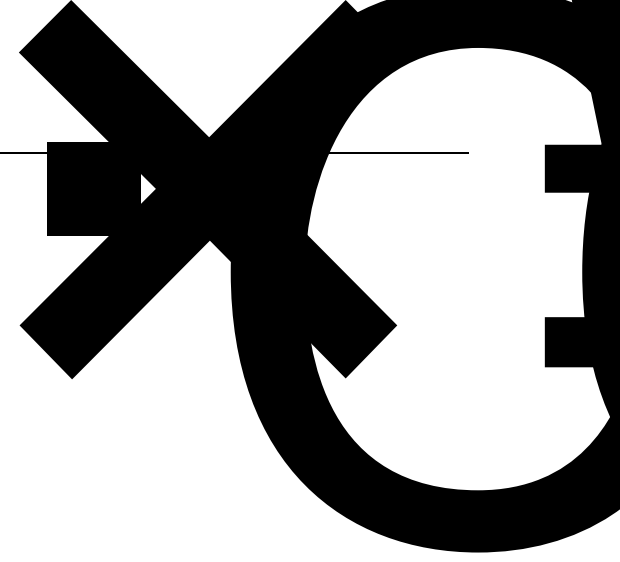
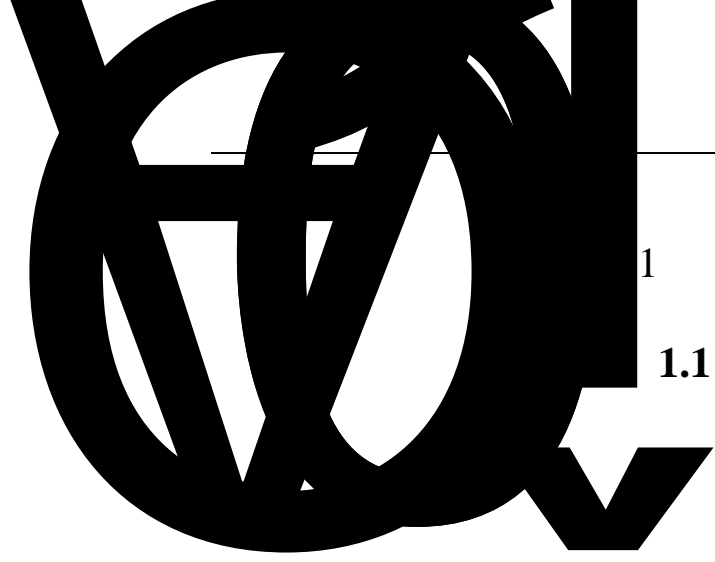

1	.....	3
1.1	.....	3
1.2	.....	4
1.3	.....	4
1.4	.....	4
2	.....	6
2.1	.....	6
2.2	.....	6
2.3	.....	7
2.4	.....	9
2.5	.....	9
2.6	.....	12
2.7	.....	16
2.8	.....	17
3	.....	18
3.1	.....	18
3.2	.....	18
3.3	.....	19
3.4 “ ”	.....	20
4	.....	21
5	.....	22
6	.....	23
6.1	.....	23
6.2	.....	23
6.3	.....	24
7	.....	29
7.1	.....	29
7.2	.....	32
7.3	.....	34



1

1.1

È

1.2

1.3

1.4

2

2.1

42

"

2.2

1

1

516
420m

5

6

1.6m

4.5m

0.2m

0.6m

2

4

6

7

2.3

2.3.1

SF

SS

SF

FF

SF

FRP

E

3

24h

3

A-)S Q PÑ ...YA0

SF
ERP

SF Ä Ä
9. 35 O+35(t)= 97 8. +9LX8 d 5

906

99

<

2.4

2.4.1

2F

29.3m 43m 5.4m

25

56.8m 44m

21.4m

2.42

1531.93m²

2.4.3

2 30m³

SF

4 30m³

SF

180m³

2.5

2.5.1



0.2m

0.6m

6m

6.2m

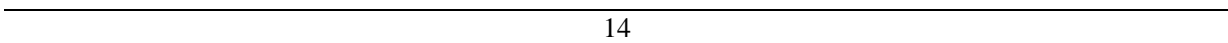
5.8m

5.9





3		
4		16
	18m	
	1m	
5		
6		
	1.5m	
7		
8		
	1	
9		B
10	TN-C-S	
11		10
12		
2.6.5		



8

0.8L/h

3.5mm

3

3.1

2015

6					
7					
8					

3.4 “ ”

C

4

4-1

1

m

5

5-1

5-1

1			
2			
		G.M	
3			
4			

6

6

6.1-1

6.1-1

c |

| |

| 9 ..

Q

Q

+

q

6.2.2

$$Q_{TNT} = C_0 \cdot V \cdot k \cdot H_C / q_{TNT}$$

$$Q_{TNT} \quad \text{TNT} \quad \text{kg}$$

$$C_0 \quad L_X / 0.55$$

$$L_X \quad \% \quad 0.55$$

$$V \quad 30 \text{m}^3$$

$$4$$

$$H_C \quad 43000 \text{kJ/kg}$$

$$q_{TNT} \quad \text{TNT} \quad 4500 \text{kJ/kg}$$

$$K \quad 1$$

$$Q_{TNT} = 1.3\% / 0.55 * 30 * 4 * 1.29 * 1 * 43000 / 4500 = 34.97 \text{kg}$$

$$Q_{TNT} = 0.6\% / 0.55 * 30 * 4 * 1.29 * 1 * 43000 / 4500 = 16.14 \text{kg}$$

2 G·M

G·M

$$= 0.8 \left(\frac{\quad}{\sqrt[3]{\quad}} \right)^{-3}$$

$$= \left(0.8 \quad / \quad \right)^{1/3}$$

$$P \quad \text{MPa}$$

$$R \quad \text{m}$$

$$Q_{TNT} \quad 34.97 \text{kg}$$

3

6.3-1 6.3-2

6.3-1

P MPa		P MPa	
0.02 0.03		0.05 0.10	
0.03 0.05		>0.1	

6.3-2

P_0 /MPa		P_0 /MPa
0.005 0.006		0.06 0.07
0.006 0.015		0.07 0.10
0.015 0.02		0.10 0.20
0.02)		

0.015 0.02		12.54 11.49	0.10 0.20		7.06 5.64
0.02 0.03		11.49 10.13	0.20 0.30		5.64 4.97
0.03 0.05		10.13 8.69			

2

6.3-3

6.3-4

0.02MPa

0.005MPa

11.18m

17.75m

7

7.1

7.1.1

7.1.3

1

8.3

35.2

-28.2

28.2

-15.7

2

70.5%

82%

54%

3

101.6Kpa

4

658mm

5

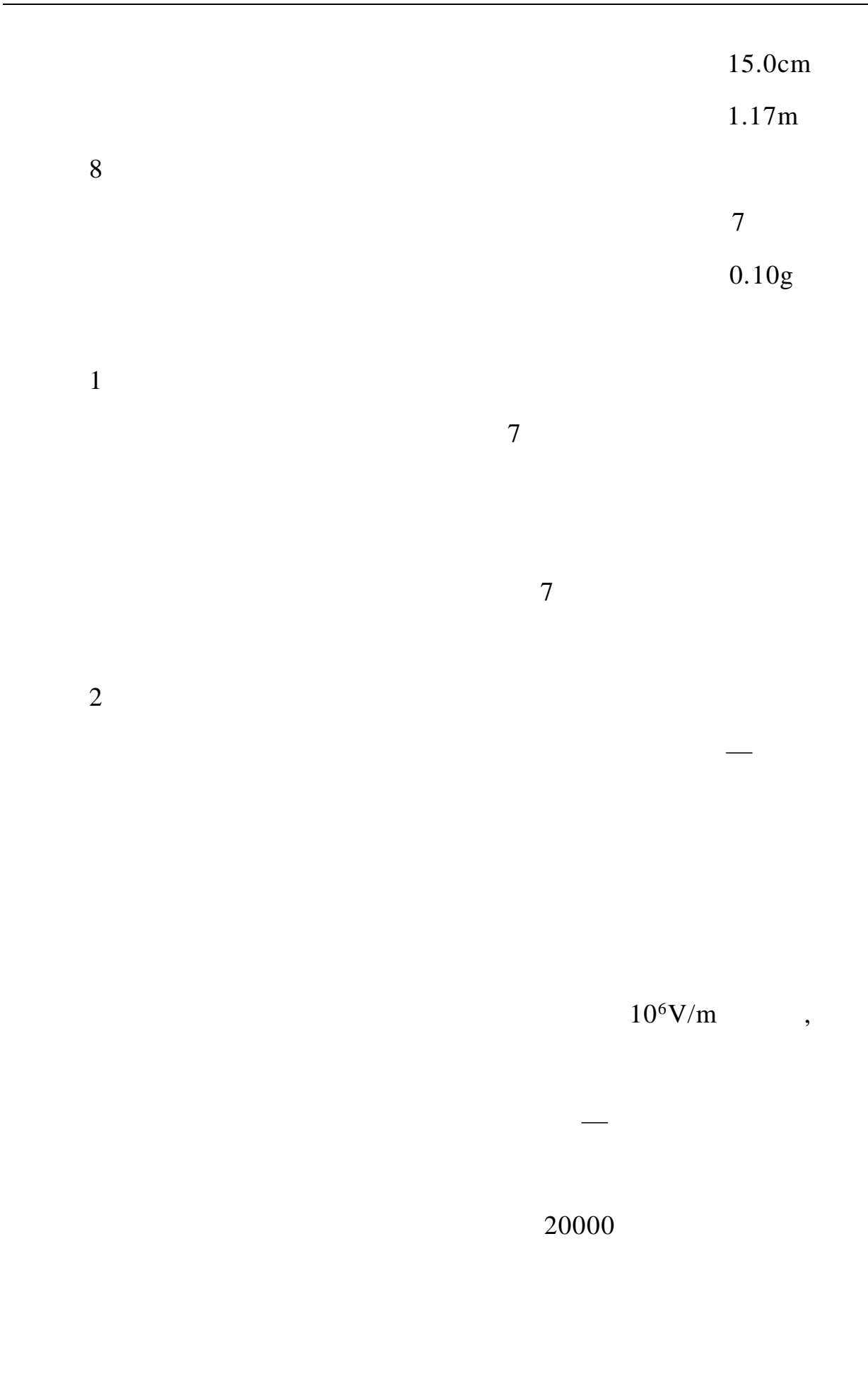
4.6m/s

25.7m/s

6

23.4d

7



SF

7.2-1

7.2-1

1
2

5.0.11

2

6.1.5

-

-

95%

10 6.1.16

2

1 6.2.2

50L/min

2 6.2.3

3 6.2.4

4 6.2.5

5 6.6.2

3

1 6.3.1

2 6.3.2

3

6.3.3

4

6.3.4

100mm

5

6.3.5

6

6.3.6

7

6.3.7

1

50mm

1.0 1.2

25mm

8

6.3.8



		50mm	100mm	
45°	T			
			150mm	200mm
	200mm			
9				6.3.9
4m				
10				6.3.10
	50mm			
11				6.3.11
			2kPa	3kPa
1.5kPa	2kPa			
12				6.3.12



GB/T 8163

4mm

4mm

$10^8 \cdot m$

10^{10}

100kV

13

6.3.13

$10^8 \cdot m$

10^{10}

14

6.3.14

15

6.3.15

2‰

1%

16

6.3.16

6.3.15

1%

17

6.3.17

0.4m

1

12.1.1

2

2 5kg

1 5kg

1 6L

2 2

1 35kg

15m

5 2m³

2

12.3.2

0.25m

0.25m

3

12.3.3

1

1

13.1.1

2

13.1.3

			90min
3		13.1.5	
4		13.1.6	
5		13.1.7	
	GB50058		
6		13.1.8	
	IP44		
7			4.5.1
8			4.5.2
9			4.5.3
		3.5m	

10 4.5.5

11 3.2.5

12 3.2.5 5.3.2

100mm

50mm

100m

100mm

50mm

2

1 13.2.1

2 13.2.2

4

	30		
10			13.2.11
11			13.2.12
		5	
12			13.2.13
13			13.2.14
14			13.2.15
		100	
15			13.2.16
			1
16			GB
50169-2016	4.2.9		
		3	
1			13.4.4



3

6 n

4

13.5.2

†

l i \$(X1p \$)2,\$\$q3E

5

7-PÄ 7 ¼ 0000P P 97#s% 11Pis@D pa." 5, \$

2

14.1.5

2

1 1

14.2.1 .2.

2

14.2.2

4.5m

2m

&

			0.6m	
4			GB 50156-2021	14.2.4
			GB 50016	
5			14.2.7	
		14.1.4		
6			14.2.9	
7			14.2.10	
			300m ²	
8			14.2.11	
		B		
			GB50016	
9			14.2.12	
3h				
10			14.2.14	
				5.0.13

5 15.2.1

6 15.2.9

GB 50517

7 15.2.10

35kPa

30min

2

8 15.2.12

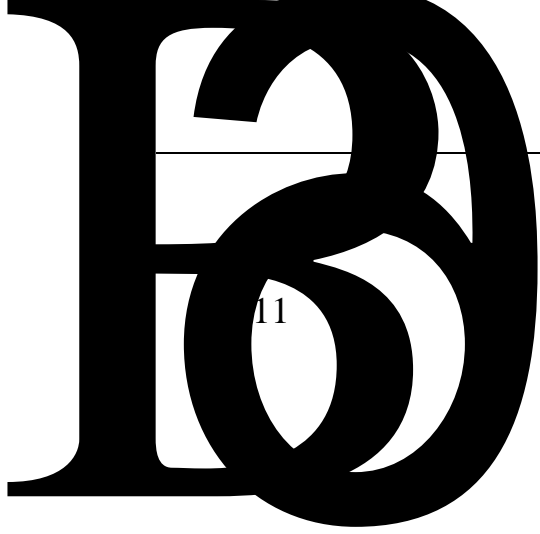
9 15.5.7

3

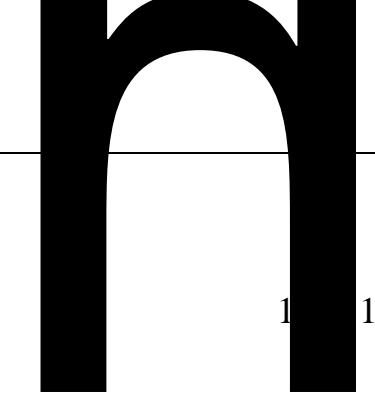
2

10 15.5.15

11



1 1



GB 50171

12

15.7.2

GB 50168

13

15.7.3

GB 50303

14

15.7.4 'LwF@?ô

GB 50517

24

25 4.4
GB/T2893.5 GB2894 GB13495.1 GB15630

26 4.5

27 5.1.6

28

9

9.1

10

A

PC-TWA

mg/m³ 300



1.5

5

1

30

2

3

1

2

0.5m^3

100m



GB 7231

5

15min

15min

C.0.1.3

1

2

3

4

C.0.2

6					
7					
8					

C.0.2.1

1

70m

6

46

2

XX X X

XX X X

C.0.2.2

1

2

C.0.2.3

C.0.2.4

2

C.0.2.8

2m

2m

C.0.3

1

2

$$S = q_1/Q_1 + q_2/Q_2 + \dots + q_n/Q_n \leq 1$$

S...

$q_1 \quad q_2 \dots \quad q_n$

t

$Q_1 \quad Q_2 \dots \quad Q_n$

t

1

200t

(D)

60m³

0.75

45t

5000t

120m³

0.89

106.8t

$$45/200 + 106.8/5000 = 0.24636 < 1$$

C.0.4

C.0.4.1

1

2004 1

221L

“ ”

2

100%

C.0.5

GB 50156-2021

C.0.5-1

1			GB50156-2021 3.0.4	
2	L-GNG GB50156	3.0.17	GB50156-2021 3.0.17	30m ³
3			GB50156-2021 3.0.25	
4			GB50156-2021 3.0.27	8
1			GB50156-2021 4.0.1	
2	GB50156	4.0.4	GB50156-2021 4.0.4	2.4-2 2.4-1
3			GB50156-2021 4.0.13	
1			GB50156-2021 5.0.1	
2		6m	4m	8.4m
			GB50156-2021	

5.0.2

8%

3

C.0.6-2

C.0.6-1

C.0.6-2

(<PHA>)

V

1

2

(1
2
3
4
5
6)

WIKI

WIKI



2

3
4

2
3
4

D

D.0.1

1
2021 9 1
2 2021
4 29
3
2024 11 1
4
2018 12 29
5
2015 1 1
6 708 2019 4
1
7

17

2016 8 2016 2 5

18

2022 8 2023 1 1

42 2015
2022 300

2022 12 5

43

2022 317 2022 12 20

D.0.3

1 GB 50156-2021

2 GB 19147-2016

3 E10 GB 18351-2017

4 GB 50016-2014 2018

5 GB 30871-2022

6 GB 30077-2023

7 GB 55036-2022

8 YJ/T 9009-2015

9 GB 6441-1986

10 GB 50140-2005

11 GB 12158-2024

12 GB 50395-2007

13 AQ 3009-2007

14 AQ 3010-2022

15 GB 2894-2008

16 GB/T

13861-2022

17 (GBZ/T 230-2010)

18 GB/T 50610-2010

19 GB 50057-2010

20 GB 6944-2025

21

GB 50171-2012

22 GB 50009-2012

23 GB 50343-2012

24 GB 12268-2025

25 1 GB/T

30040.1-2013

26 2 GB/T

30040.2-2013

27 3

GB/T 30040.3-2013

28 4

GB/T 30040.4-2013

29 5

GB/T 30040.5-2013

30 6

GB/T 30040.6-2013

31 7

GB/T 30040.7-2013

32 GB 50058-2014

33	-		
		SH/T 3178-2015	
34			GB 50303-2015
35			GB/T 13955-2017
36			GB/T 35579-2017
37			GB 18218-2018
38			GB/T 8163-2018
39			GB/T 21447-2018
40			GB
50168-2018			
41			1
	1		GBZ 2.1-2019/XGI-2022
42			2
GBZ 2.2-2007			
43			1
		GB/T 22380.1-2017	
44			2
		GB/T 22380.2-2019	
45			GB 50068-2018
46			GB/T
50484-2019			
47			YJ/T 9007-2019
48			GB 20952-2020
49			GB/T
29639-2020			

50

AQ 8001-2007

D.0.4

1

2005 4

2

3

1	1	
2	2	
3		
4		
4	1	
5	1	
6		1