ь Ӈ ″

1.

1.1

1.2

1.2.1.

1 2021 9 1

2 2024 11 1

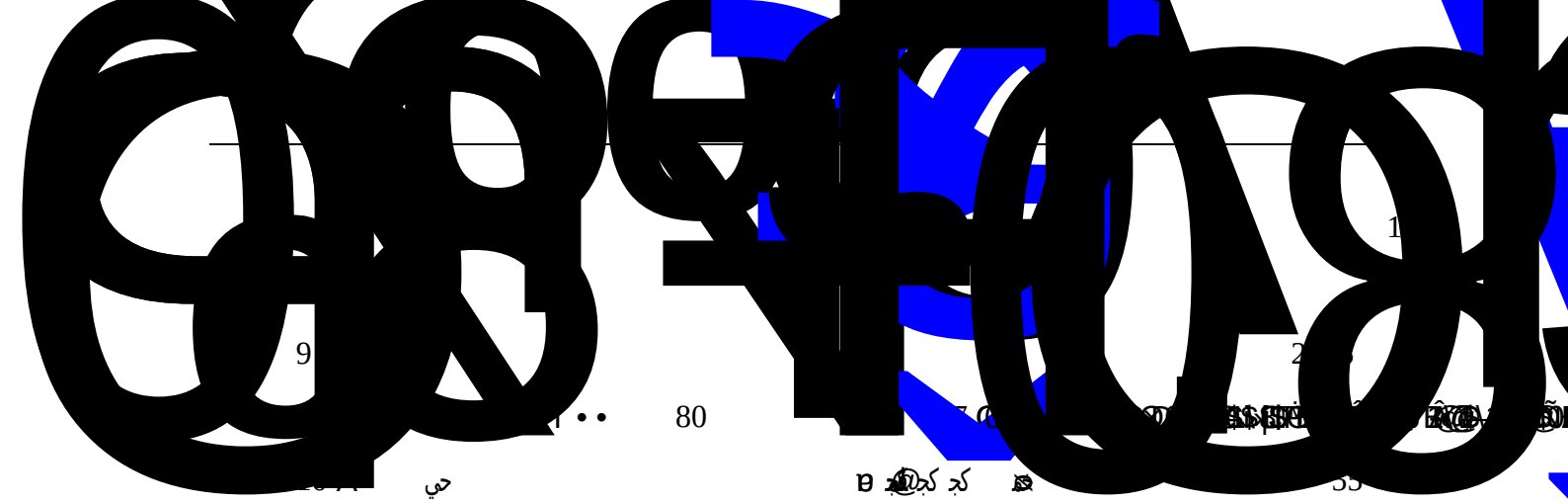
3 591 2013 12 7
645

4 708 2019 4 1

5 2025
14 34 2025 5 28

6 23 2024
10 1

7 3 2015
5 29 80 2015 7 1



21

2020 1 2020 5 30

22 2015

2015 80 2015 8 19

23

2011 95 2011 7 1

24

2011 142 2011 7 1

25

2017 121 2017 11 13

26

2019 78

27

2019 62 2019 12 26

28 341 2021 5 18

29

2017 45 2017 12 23

30

2012 144 2012 8 30

31 < >

2017 22 2017 11 28

32

2018 21

2018 8 31

3	GB 12268-2025
4	GB 18218-2018
5	GB 17914 2013
6	GB 50058-2014
7	AQ 3009-2007
8	GB/T 6441-1986
9	GB/T 13861-2022
10	GB 50140-2005
11	GB 50057-2010
12	GB 12158-2024
13	SH/T 3178-2015
14	GB/T 50610-2010
15	GB 10395-2007

1.2.3.

1 2005 4

2 2002

11

3 2003 7

1.3

1

2

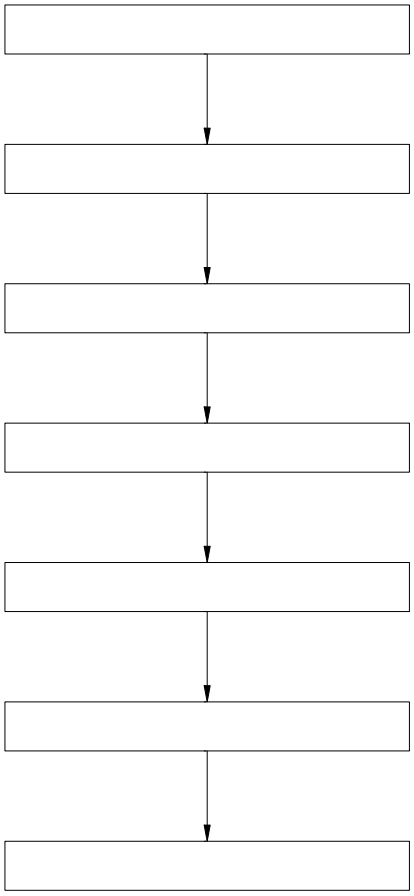
3

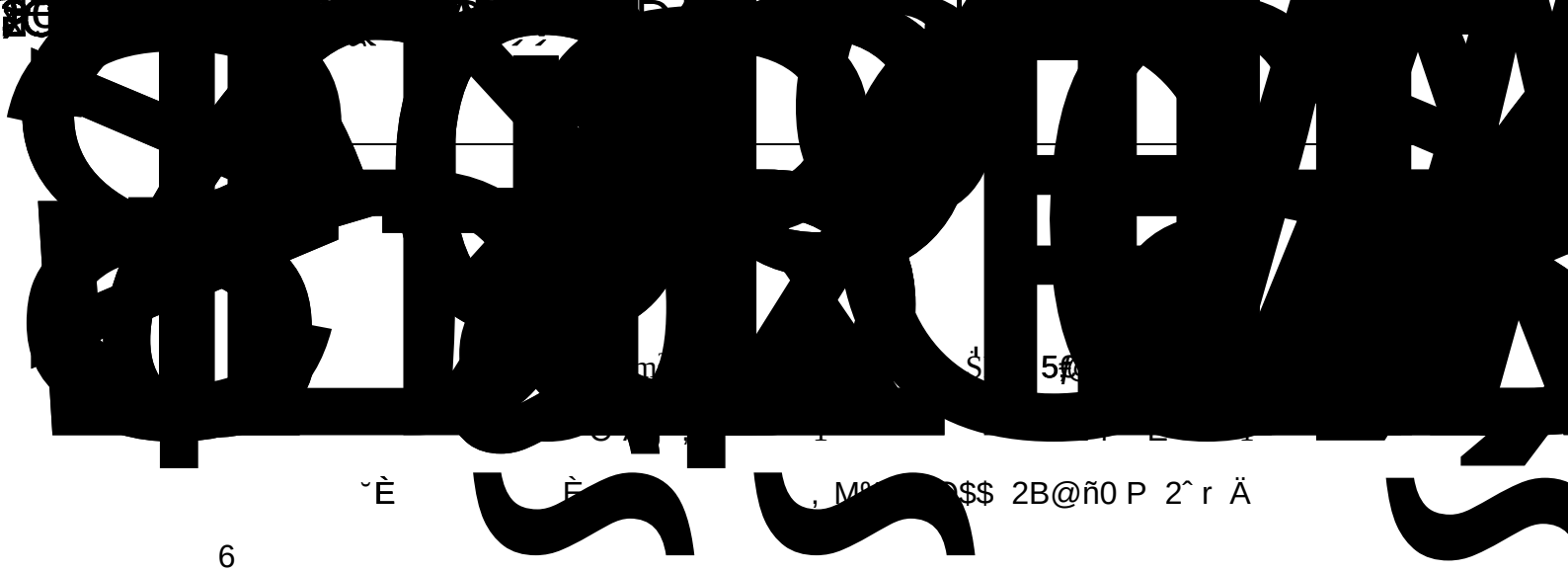
4

5

1.4

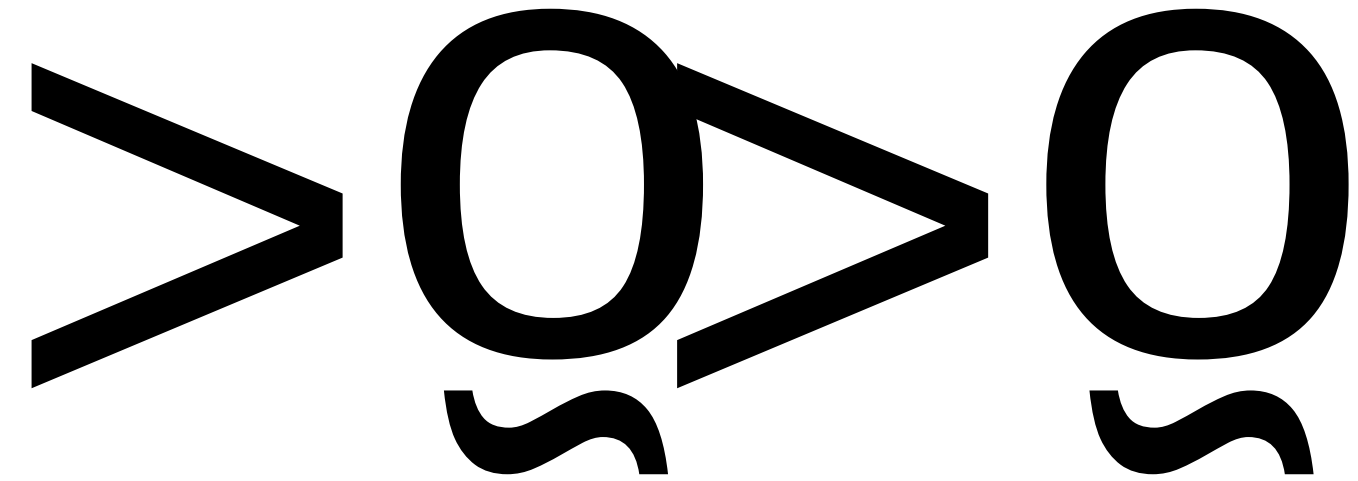
1-1





˘È È , M 0$$ 2B@ñ0 P 2ˆ r Ä

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

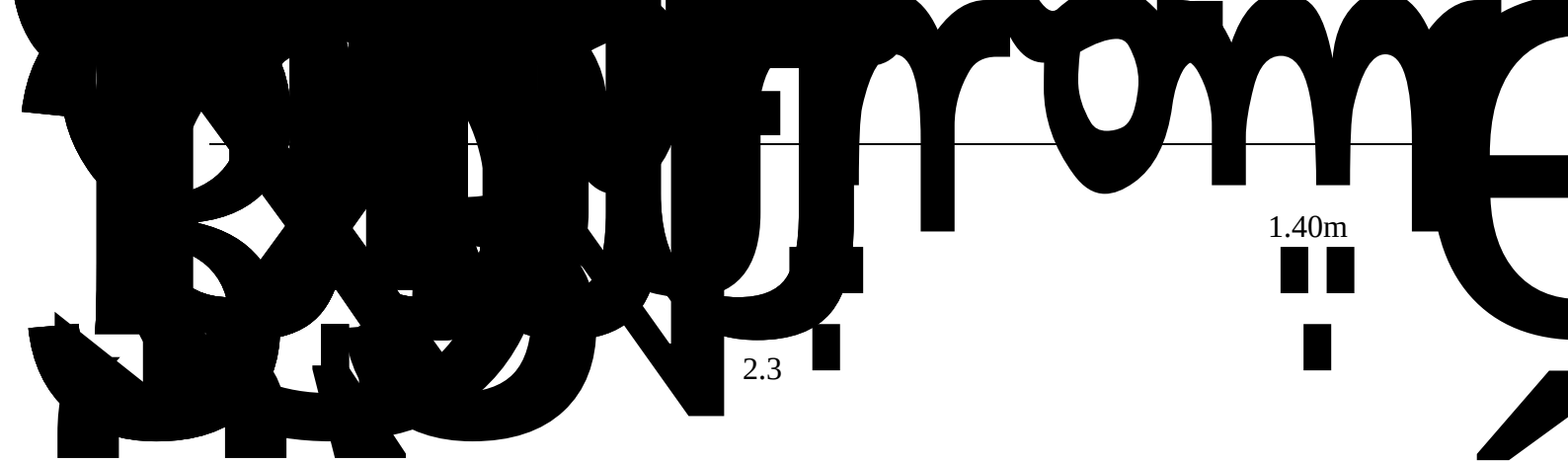
7

28.3d

42d

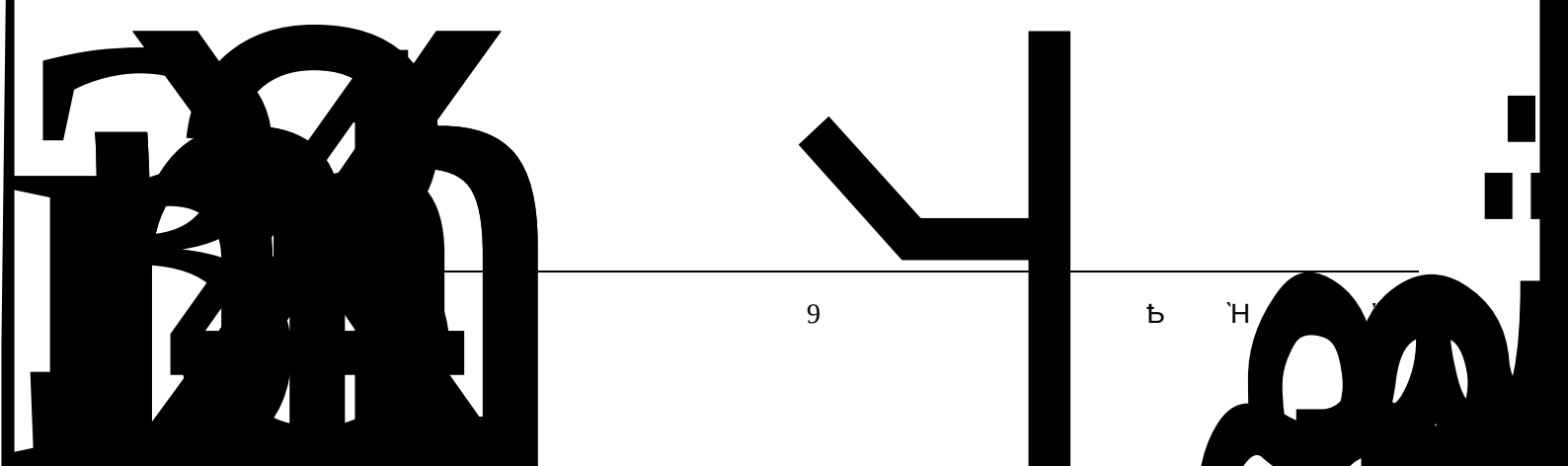
8

7



8m

1



1	H=7m	-	5	43.5
	H=7m		5	16
1			6	23
	1		9	31
	2		9	35
2	H=7m	-	5	18
			9	24
			9	20
			6	30

	1 H=7m		-	5	43.5
	H=7m			5	16
	1			7	23
	1			10.5	31
	2			10.5	35
	2 H=7m		-	5	18
				10.5	24
				10.5	20
				7	30

	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-
	0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	3	8
	-	-	-	-	-	-	-	-	-	-	-	-	2	8
	4	5.5	3	5.5	4	12	3.5	12	5	8	4	17	5	6.5
	2	15	2	15	2	13	2	13	-	-	-	-	-	-
	8.5	19.5	6	13.5	7	18	6	18	7	31	6	40	-	-

2.4

2-3

1			96m^2			
2			400m^2			H=6m
3			30m^2			

2-4

1		3	30m^3	-	SF
2		2	30m^3	-	SF
3		3	52GF212K		
4		3	52GF212K		
5		5	TLS2		
6		5	UZK-SA-LD		-
7		13		-	5 6 4m 2 3m
8		1	DCGN-10		
9		1	XFY-VR-M2/8A		IIBT4

Ã'ɐ 1Ef Ó»dV•'

ɟ ɯ „

ˇ đ ώ

ə

2.7

2.7.1

1

91210111764387612E

2024 11 29

2

[2023]000360

2023 1 9

3

(1062017007)[2025]0106ZSY179

2026 5 6

4

2.7.2

1

2

a. 5

b.

c.

3

4

380/220V TN-S

UPS

5

5

6

6 5kg 2

5kg 3 2kg CO_2 3 5kg

2 2kg CO_2 2 35kg 2

$3m^3$

7

13 5

6 4m 2 3m

3.

3.1

3.1.1

GB18218-2018

1

2

3.1.2

1

2

ʌ Ď $S=q_1/Q_1+q_2/Q_2$

Q2… Qn—— t

3

3.1.3

23 ≤ 60 3-1

3-1

1		200t
2		5000t

90m3 0.75

67.5t 60m3 0.89

4 -46 1.4 7.6% 415 53

0.813

Pa

,

,

:

PC-TWA( )(mg/m^3) 300

:

:

1

2

Ď Đ

5

1 30

2

3

1000m^3

1

2 ( ) ( )

0.5m^3

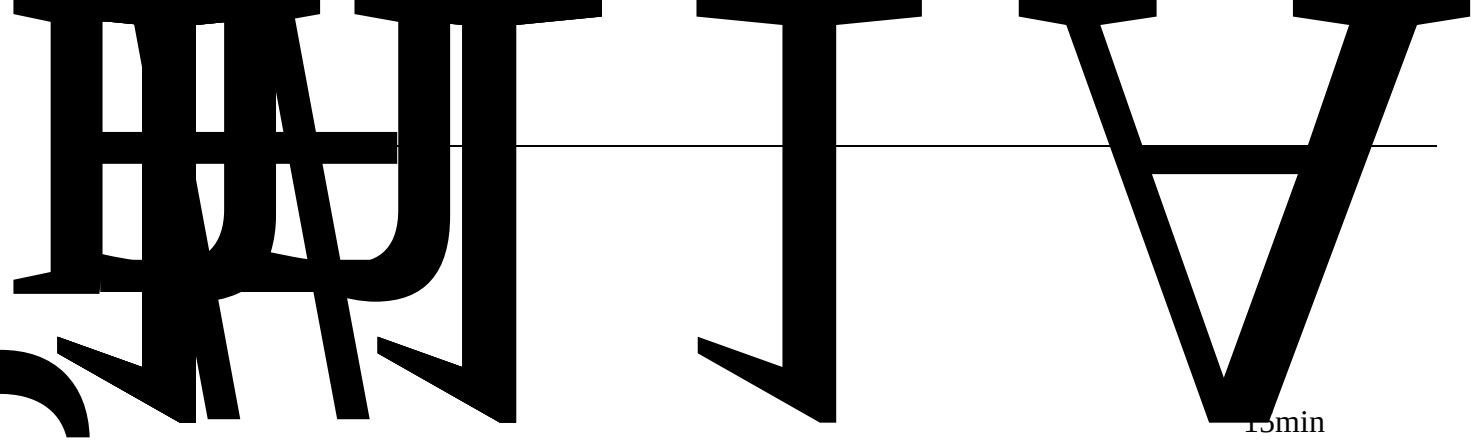
100mm

3

4

GB 7231

5



15min

5 0 -10 60 -20

Ţ 50 -35 -50 05

Ő Ď

3.2.2

3.3

3-2

1			
2			
3			
4			
5			

6		

3

4

3

3.3.3

3.3.4

3.3.5

3.3.6

3.3.7

1

4.

4.1

8

1

2

3

4

5

6

7

8

4.2

5.

8

5-1

1

2

3

4

5

8

9

10

	1	GB50156-2021 3.0.4		
	2 GB50156 3.0.9	GB50156-2021 3.0.9	30m^3	
	3	GB50156-2021 3.0.25		
	4	GB50156-2021 3.0.27	13	
	1	GB50156-2021 4.0.1		
	2	GB50156-2021 4.0.2		
	3 4.0.4	GB50156-2021		

		4.0.4	4.0.4	
	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	9m 8%	
	3	GB50156-2021 5.0.3		
	4 “ ” “ ”	GB50156-2021 5.0.5	“ ” “ ”	
	5 3m	GB50156-2021 5.0.6		

1.2m³

	12 GB50156 5.0.13-1	GB50156-2021 5.0.13	2-1 2-2	
	13 C	GB50156-2021 5.0.16		

	1	GB50156-2021 6.1.1		
	2	GB50156-2021 6.1.2		
	3 6.1.4 0.08MPa	GB50156-2021 6.1.4	SF	
	4 - - SH/T3178	GB50156-2021 6.1.5	SF - SH/T3178	

	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 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
6.2.4

5

GB50156-2021
6.2.5

1

GB50156-2021
6.3.1

2

GB50156-2021
6.3.2

3

GB50156-2021
6.3.3

4

100mm

Ş ɔʁ

5

GB50156-2021
6.3.5

6

GB50156-2021
6.3.6

7

50mm

50mm

GB50156-2021
6.3.7

1.0 1.2

25mm

8

50mm

100mm 45·

T

100mm

150mm

200mm GB50156-2021 45°

6.3.8

150mm

200mm

9

4m

	4mm 4mm $10^{8}\Omega\cdot m$ $10^{10}\Omega$ 100kV		4mm $10^{8}\Omega\cdot m$ $10^{10}\Omega$	
	13	GB50156-2021 6.3.13		
	14	GB50156-2021 6.3.14		
	15 2‰ 1%	GB50156-2021 6.3.15	2‰ 1%	
	16 0.4m 0.2m 100mm	GB50156-2021 6.3.17	0.5m 0.2m	

0.5m

17

GB50156-2021
6.3.18

22

100mm 4mm

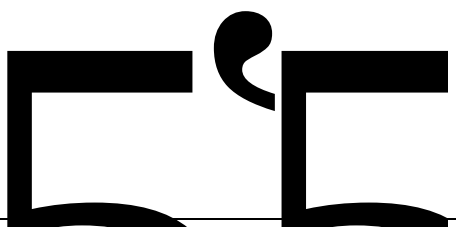
200mm

p

GB50156-2021

6.5.3

10mm 30mm



1

6

2 2 5kg

1 5kg 1

5kg

6L 2 2

1 35kg

2

GB50156-2021

35kg

12.1.1

15m

5

2

2m³ 2 2m³

3m³

2

2

GB5015 021
3

1

AQ3010-2022
4.4

2

AQ3010-2022
4.4

3

“ ” ,

XH/T3004-2020
8.1

3

90min GB50156-2021

13.1.3

90min

4

4.5m 5m

3 LPG

GB50156-2021
13.2.4

4

GB50156-2021
13.2.6

0.5mm
0.65mm 0.7mm

5

GB50156-2021
13.2.7

6

.#$

ь `Н ˝ ´

2

5.0.5

3

5.0.8

1

GB50156-2021
13.5.1

2.

1

GB50156-2021

2 1

1

140kw

G

2m

2

4.5m

2m ώ

GB50068

GB50009

GB50011

7

B B

GB50156-2021

GB50016 14.2.11

8

3h GB50156-2021

14.2.12

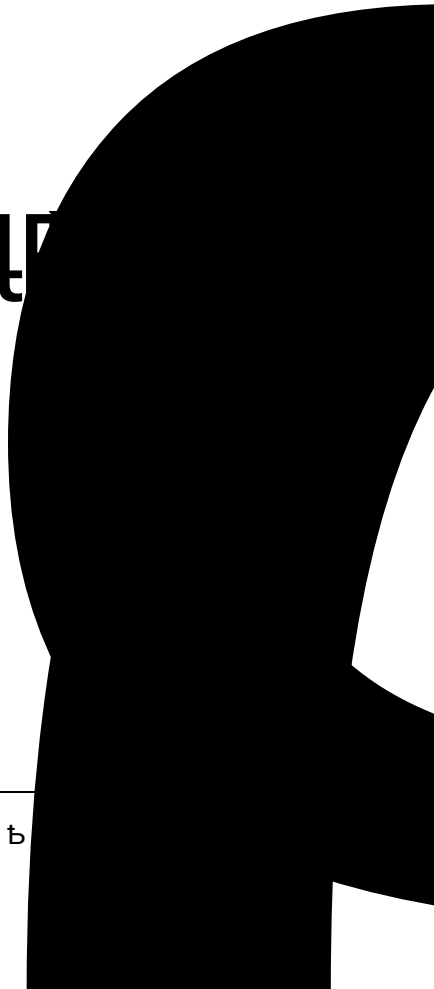
9

GB50156-2021

14.2.13

10

ÃL™ñ × _ ñ4ÿ? ·



		4		

24 20

15 9

	5	5	0	0
	31	31	0	0
	22	18	0	4
	45	37	0	8
	8	8	0	0
	28	27	0	1
	16	10	0	6
	24	15	0	9
	179	151	0	28

5-9

179 28 151

1

1		5kg	6	12
2		35kg	1	2
			$2m^3$	$3m^3$

			5	6
3		5kg	-	3
		2kg CO_2	-	3
4		5kg	-	2
		2kg CO_2	-	2

6.

1

2

3

“ ” “

” “ ”

4

5

6 “ ” “

”

7

8

9

10

“ ”

11

[2018]74

12

ь ˋН ₩

1 0 j

2 1

3 2

2. 1

3. 1

1 1

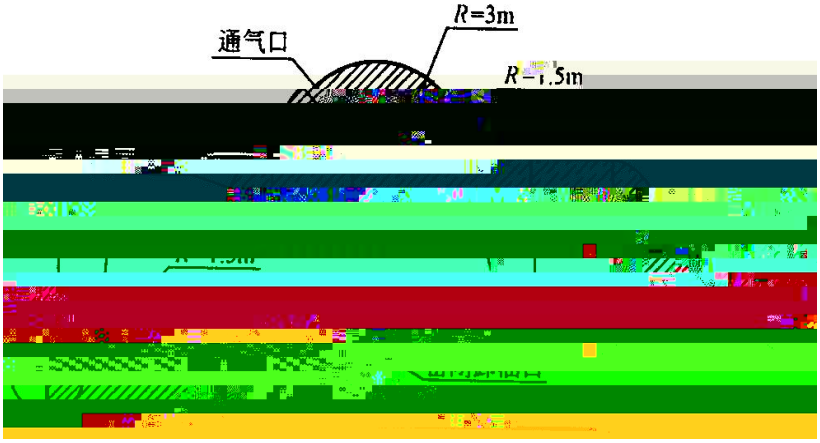
2 4.5m

0.15m 3ßnSw C':,@ U QxhHÖ "é ⅋'-2 j

4. 2ﻙ

3 3m

1.5m 2



5. 3

1 0

2 1.5m 0.75m

0.5m 1

3 1.5m 1m

3m 2m 1.5m

2