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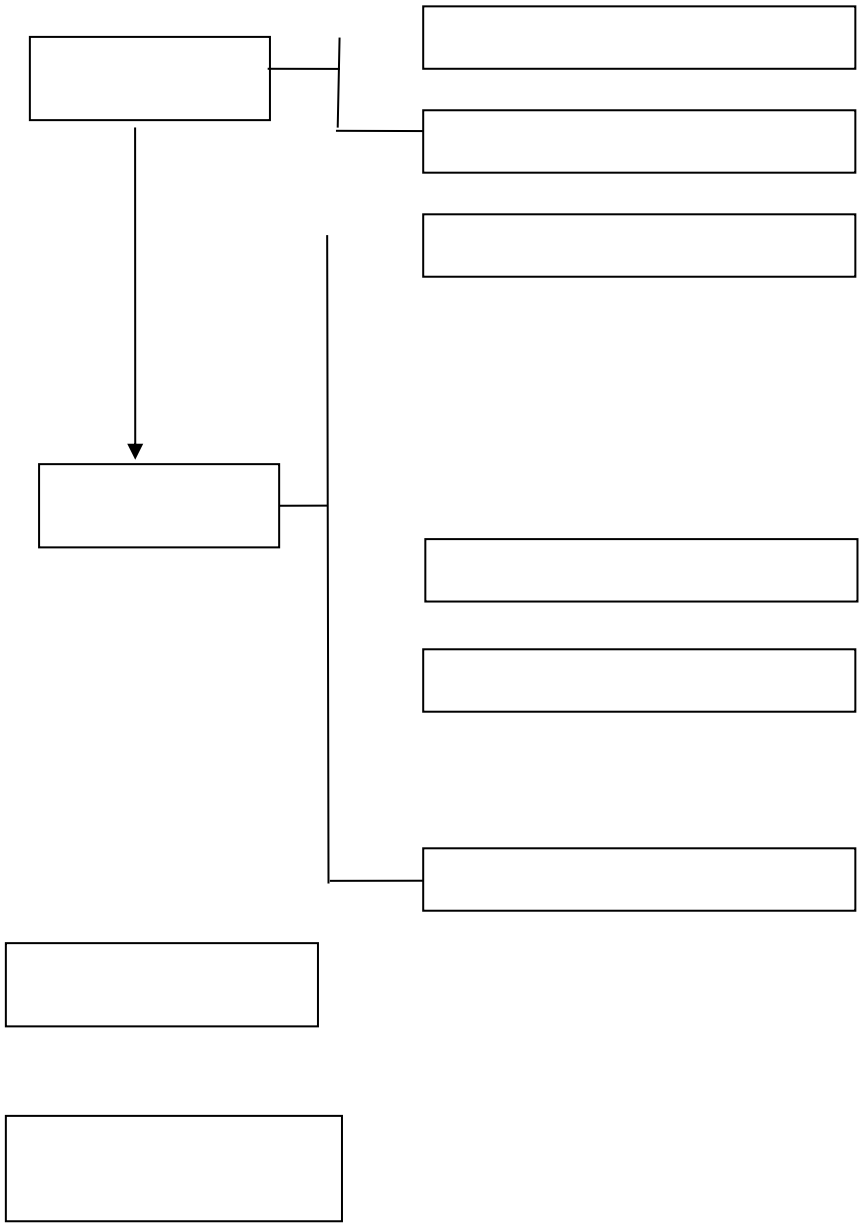

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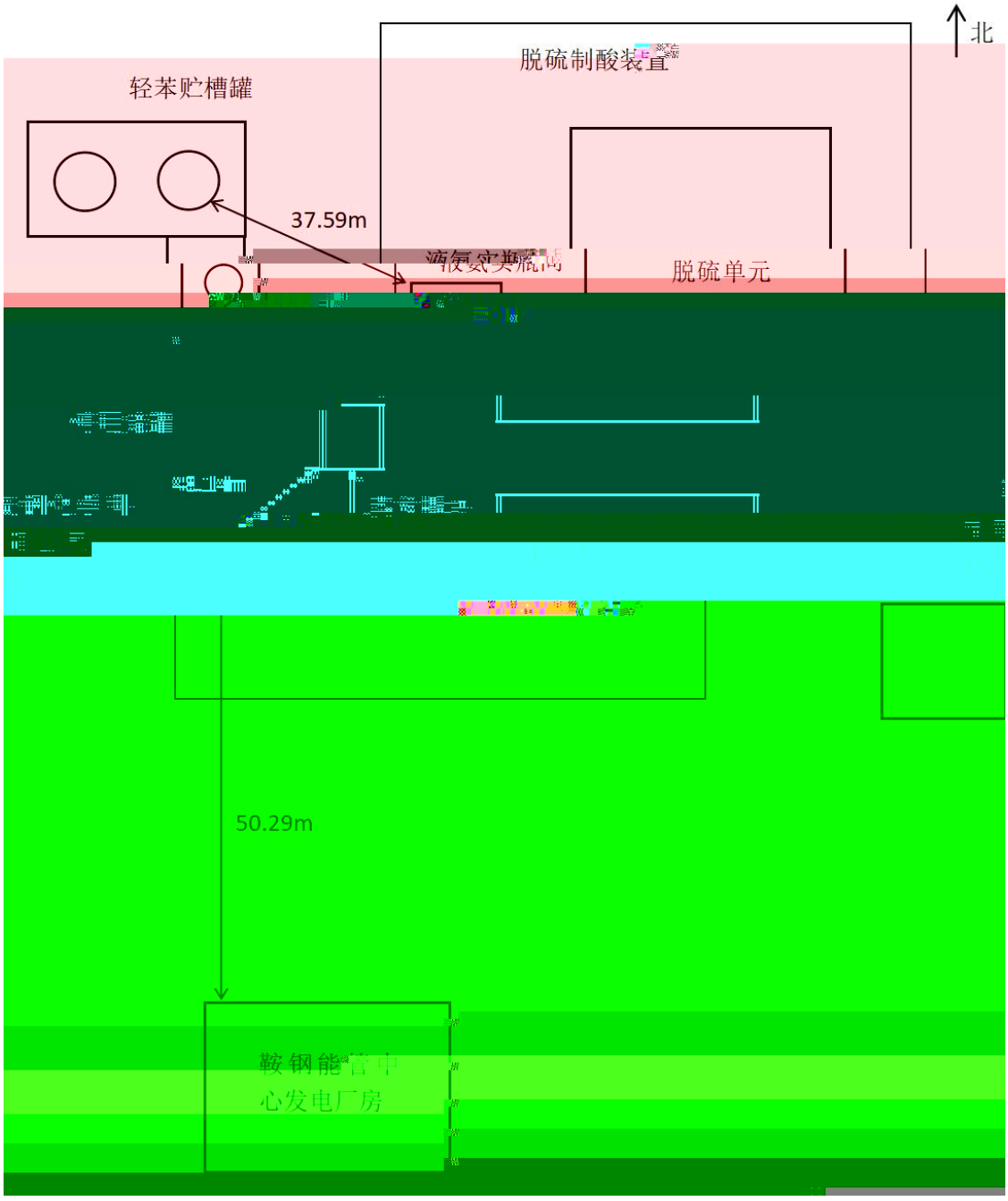
m	m
100	3729
100	576
100	676
100	2830

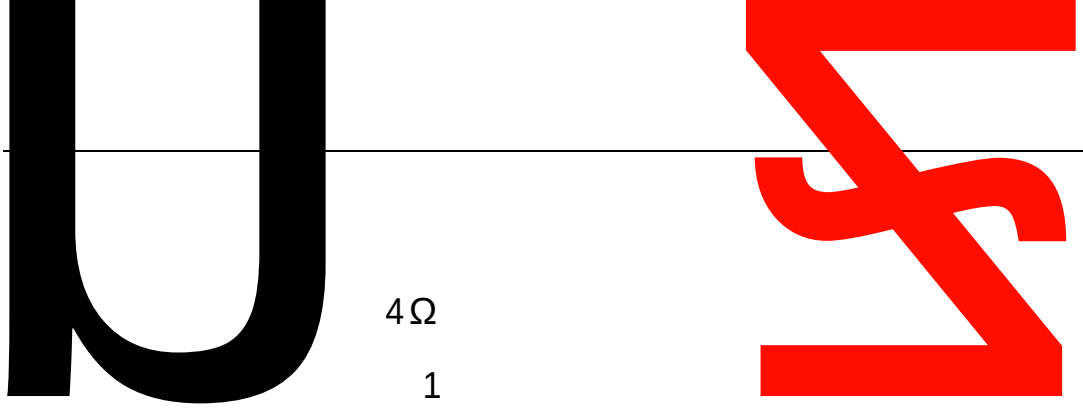
900m³

2.4-1 2.4-1



				m	m	
			2018 5.2.1	-	6.33	
			2018 4.2.12	50	50.29	

				m	m	
			2018 4.2.12	22.5	48.14	
		900m³	2018 4.2.12	20	37.59	



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DCS

DCS

HAZOP SIL

SILA DCS

9L/ ·min 1.2 1.4

8 2.02L/s 3

13.2L/s

7.2 1.03L/s 2

13.2L/s

MFZ/ABC8 2

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2.6-2

		[MPa(G)]				
	( )					kg
1	8	3	4.5	600X1780	316L	400

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D.0.2

531m 162m

D.0.3

GB 36894-2018

D.0.4

26.7m

32.28m 20.93m

18.57m

87%

42%

102.22kpa

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1 FT-201

FT-201 8Nm3/h

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5 2018 GB50160-2008

5.2.1

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3 A AT-3201 B AT-3202

25PPm XV-103

AT-3203 25ppm

XV-201

4 5%

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( )

(kg/m2/)

(mm/)

1 -20 ~12

	2	120 ~400	Sa2.5 St3			2	20	0.23
	3	-20 ~120	Sa2.5			2 1 2	50 100 40	0.23 0.23 0.23

2

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3

						( ) (m/)
1	-20 ~80	Sa2.5	+	+	1	≥150

4

						( ) (m/)
1	-20 ~80	Sa2.5	+ +	+ +	1	190

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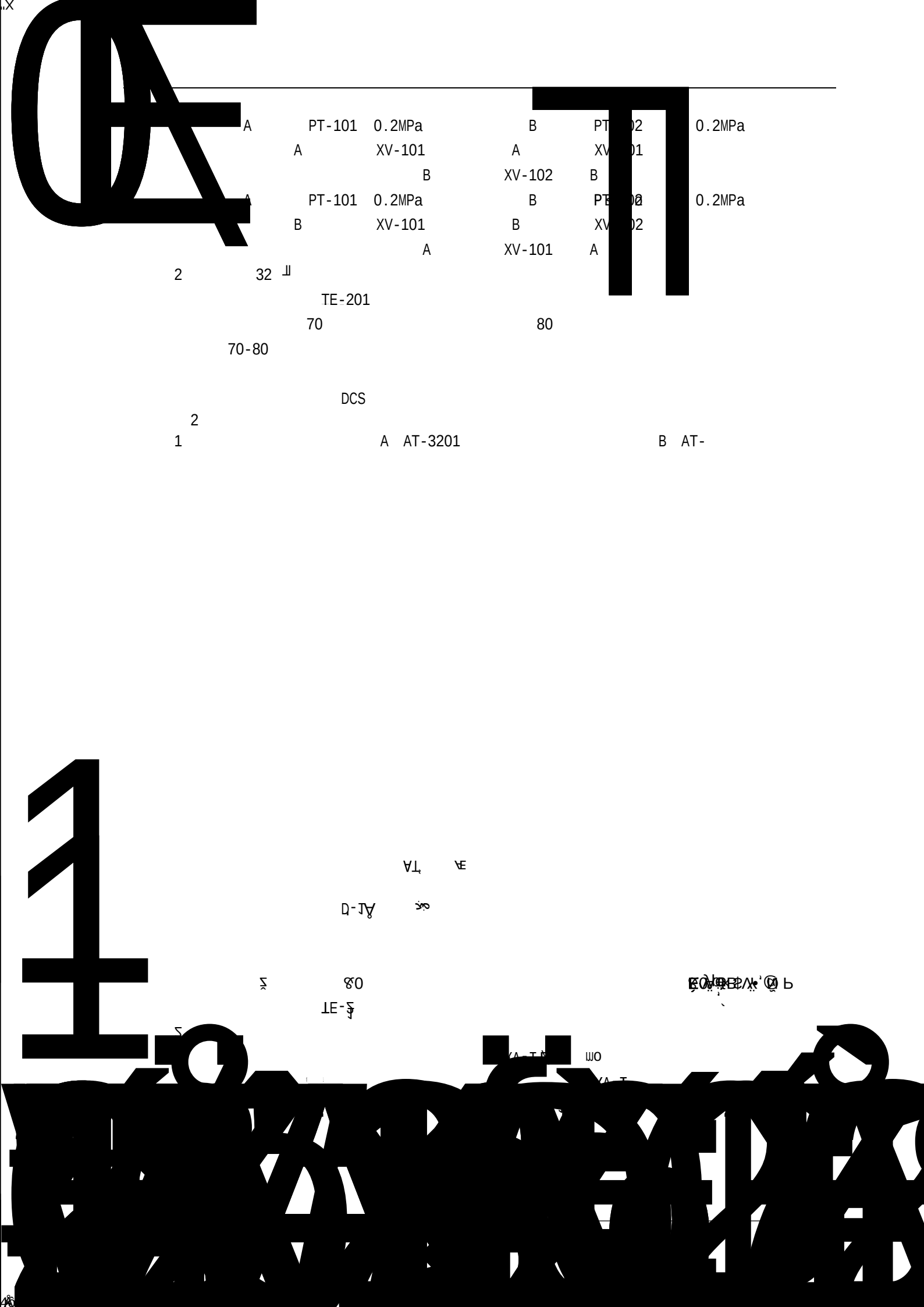
1 A XV-101 B XV-102

A PT-101 0.2MPa B PT-102 0.2MPa

XV-101 XV-102

A XV-101 B XV-102 A


A PT-101 0.2MPa
A XV-101
B XV-102
B PT-102 0.2MPa
A XV-101
A PT-101 0.2MPa
B XV-101
B PT-102 0.2MPa
A XV-101
2 32
TE-201
70
80
70-80
DCS
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A AT-3201
B AT-

1 FV-201
FT-201
FT-201 8Nm3/h
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4 TICSA43524,
5 PSV-101

	C30 200mm 150mm	
3.1	**1.** TSG 21-2016 GB/T150 GB/T151 NB/T47041 NB/T47042 2008 GB50316-2000 TSG D0001-2017 GB/T20801-2020 2008 GB 50316-2000 SH/T3059-2012 — TSGD0001-2017 GB/T20801-2020 GB50517-2010 2023	
3.2	**2.** 1 Q235B 80 Q235B S31603 50 0.1MPa S31603 50 0.09MPa S31603 S30408 80 S30408 2 GB/T8163-2018 GB/T14976-2012 ط 3	

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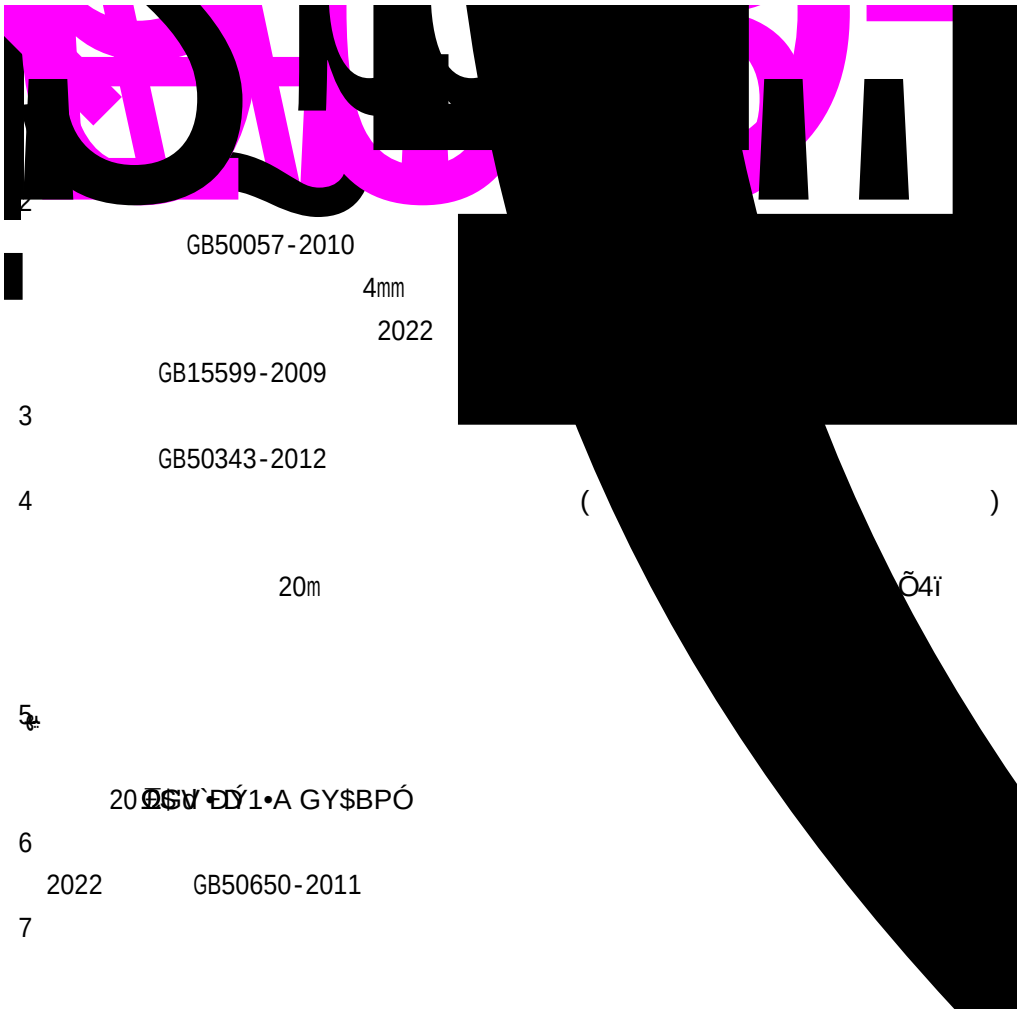

GB50057-2010

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GB15599-2009

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GB50343-2012

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DCS GDS

UPS UPS 6KVA 30min

5.1 10 3μm

10mg/m³ 0.6MPa G

8Nm³/h 0

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1 TIAS-201

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Exd BT4 IP55

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IP65 Exd BT4

4 20mADC HË

	12 /h	
7.1	**1.** 1 2 (GB50453-2008) 2024 GB/T50011-2010 7 0.10g	
7.2	**2.** 1 1 ( ) 2 3 2 GBZ158-2003 “ ” 30cm GB7231-2003 GB2893-2008 (SH/T 3043-2014) 3 4 GB30077-2023	

7.1	**1.** 1 (GB/T29639-2020) 2016 88 2019 2 1 2 3 4 5 6 7 8 9 2 3 SAJ125-100-250B 2 1 216m³/h 60m 1 4000m³ 3 GB30077-2023	
7.2	**2.** GB/T50483-2019	

V= V1+V2-V3 max+V4+V5

V—— m3

V1 9m³

V2 15m³

V3 0m³

V4 0m³

V5 1m³ 625mm

60

25m³ 5000m³

50m 2 Q=90m³/h

H=60m

1.8

120m³/h

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	ammonia H_3N NH_3	CAS 7664-41-7 2.3 8 17.03
	20 891kPa 17.03 -77.7 -33.5 0.7708g/L 1 0.59 1 0.7(-33) 11.40MPa 132.5 1013kPa(26) 15% 30.2% 630 0.580MPa	
	PC-TWA( )(mg/m^3):20;PC-STEL( )(mg/m^3):30	

	30m 100m 200m 150m 800m 2300m

172

Nitrogen CAS 7727-37-9

N_2

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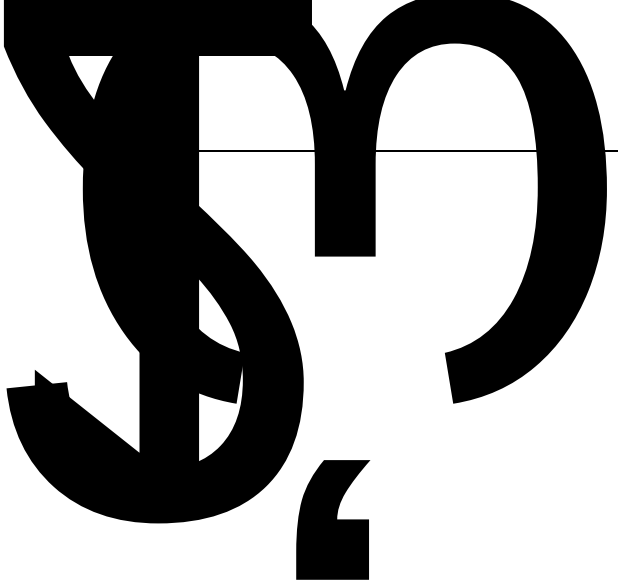
( ) -147 (MPa) 3.40 (kPa) 1026.42 -173 ( )

-209.8 ( ) -195.6 (=1) 0.81 -196 (=1) 0.97



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S $q_1/Q_1+q_2/Q_2……+q_n/Q_n≥1$

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q_1 $q_2……q_n$— t

Q_1 $Q_2……Q_n$— t

Ē GB 18218-2018

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$$R \quad {}_1\frac{q_1}{Q_1} \quad {}_2\frac{q_2}{Q_2} \quad {}_n\frac{q_n}{Q_n}$$

R—

q_1 q_2 … q_n—

Q_1 Q_2 … Q_n— t

β_1 β_2… βn—

α—

3 β

β C.0.3-1

β C.0.3-1 C.0.3-1

β C.0.3-2

	β
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	20

		β
	J1	4
	J2	1
	J3	2
	J4	2
	J5	1
	W1.1	2
	W1.2	2
	W1.3	2
	W2	1.5
	W3	1
	W4	1
	W5.1	1.5
	W5.2	1
	W5.3	1
	W5.4	1
	W6.1	1.5
	W6.2	1
	W7.1	1.5

	W7.2	1
	W8	1
	W9.1	1
	W9.2	1
	W10	1
	W11	1

α

500m

C.0.3-3 α

	α
100	2.0
50 99	1.5
30 49	1.2
1 29	1.0
0	0.5

R C.0.3-4

	R
	R≥100
	100>*R*≥50
	50>*R*≥10
	R<10

GB 18218-2018

C.0.3-5

		Q	q	q/Q	S
	-	10	3.2	0.32	0.32<1

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2m

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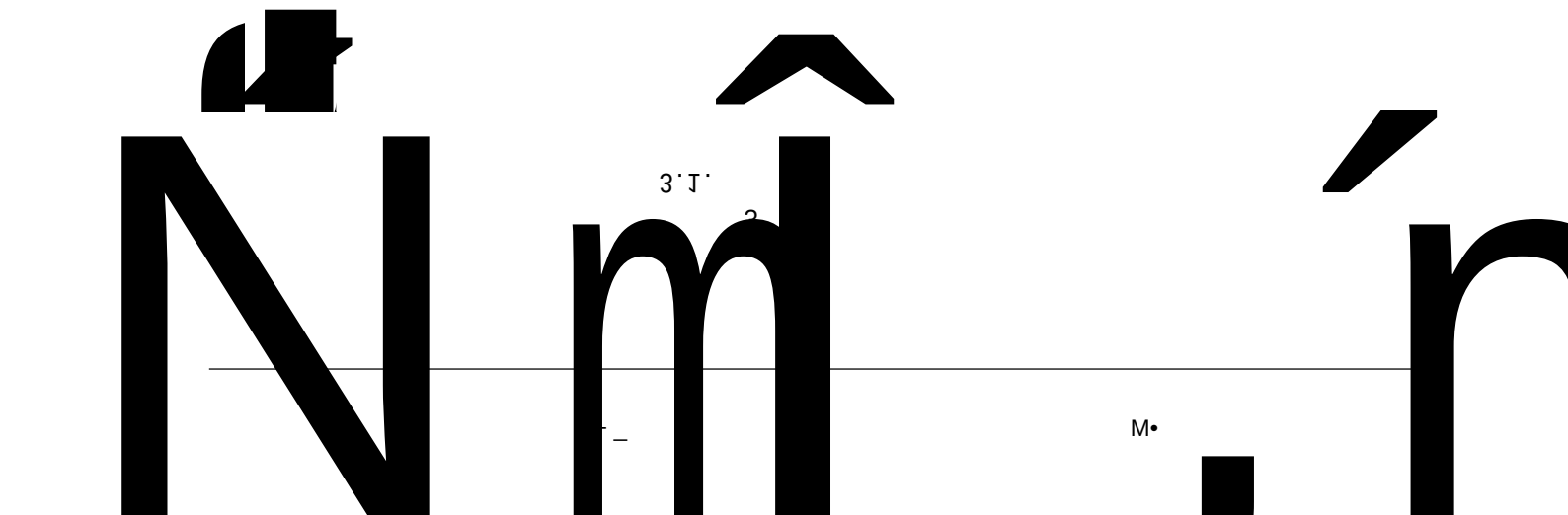

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4.2.2

2m

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6.1.1

0.5m

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6.1.2 2.0m

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48	12 /h	6.4.3	12 /h
49		6.4.4	
50	20m 20m 6m 20m	6.4.5	
51		6.4.6	
52		6.4.7	
53		4.2.10	1

120m 2018

8.5.6 120m

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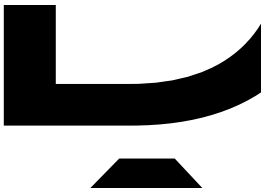

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20	13	7	0
14	14	0	0

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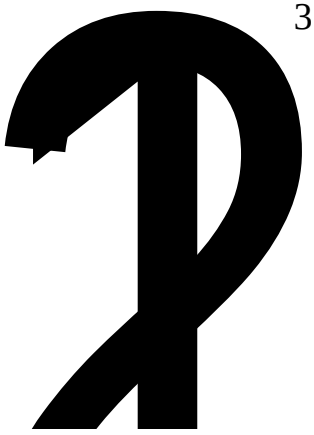

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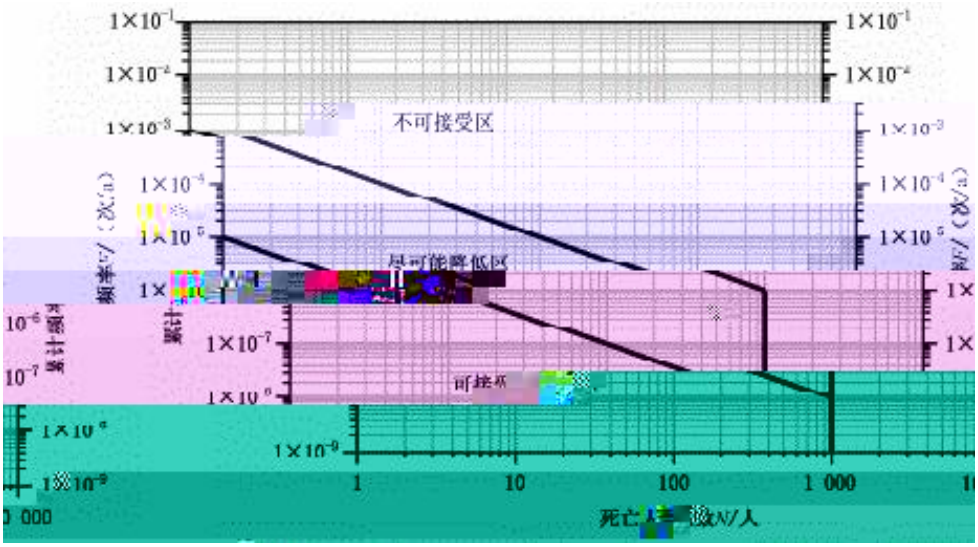

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GB 36894-2018

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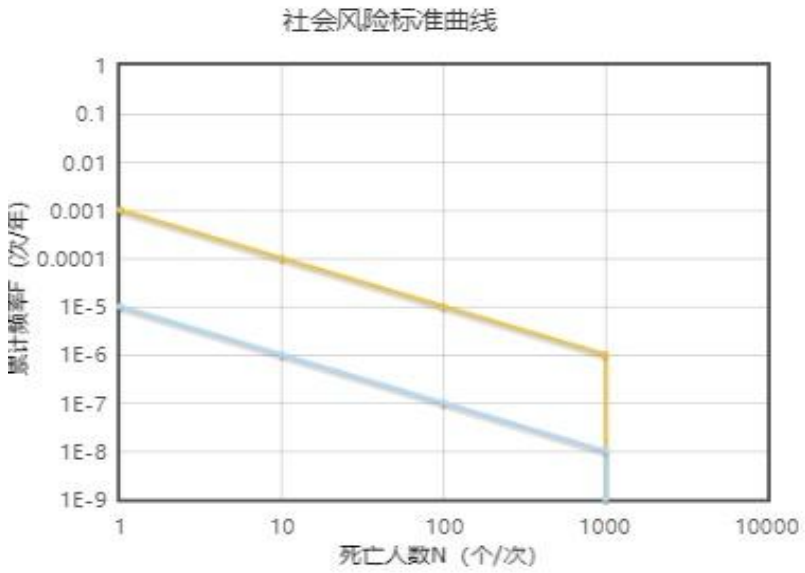

D.0.3-3

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m/s	2.6
kg/m^3	1.293
K	292.8

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26.7m 32.28m

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3 GB55037-2022

4 GB50984-2014

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9 GB/T15382-2021

10 TSG23-2021

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12 GB17916-2013

13 GB/T50493-2019

14 GB50169-2016

15 GB50453-2008

16 2024 GB/T50011-2010

17 2022 GB50650-2011

18 GB7231-2003

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20 HG/T20581-2020

21 GBZ158-2003

22 GB18218-2018

23 GB/T12801-2008

24 GB5083-2023

25 IP GB/T4208-2017

26 IP 124 GB/T 4208-2017/XG1-2024

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36 GB/T3608-2008

37 GBZ1-2010

38 GBZ 158-2003

39 GBZ/T230-2010

40 GB/T50770-2013

41 HG/T20509-2014

42 SH/T3164-2021

43 HG/T20514-2014

44 HG/T20510-2014

45 HG/T20512-2014

46 HG/T20513-2014

47 SH/T3019-2016

48 SH/T3081-2019

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56 GB/T50115-2019

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58 GB/T15408-2011

59 GB50582-2010

60 GB50013-2018

61 GB50014-2021

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93	AQ3009-2007
94	AQ/T3034-2022
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