i Ь ‵H ″

10 127
A .....
A.1 .....
A.2 .....
A.3 .....
B .....
B.1 .....
B.2 .....
B.3 .....
B.4 .....
C .....
C.1 .....
C.2 .....
D .....
D.1 .....
D.2 .....
E .....
E.1 .....
E.2 .....
E.3 .....
F .....

1.1

1

2

3

1.2

A

2

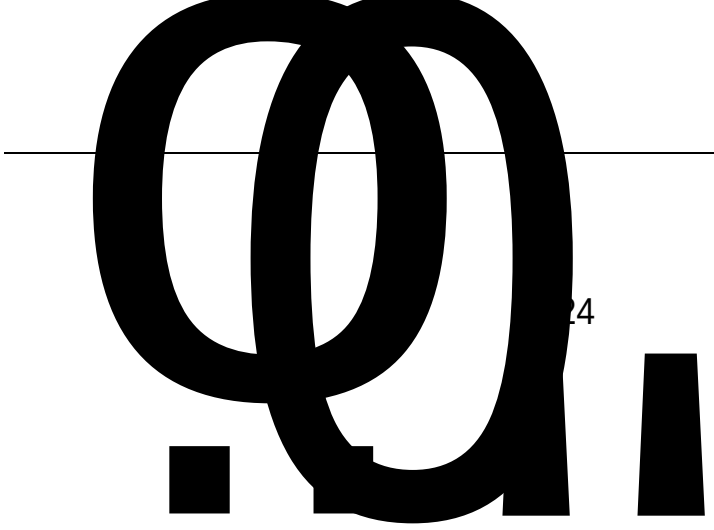
2.1.6

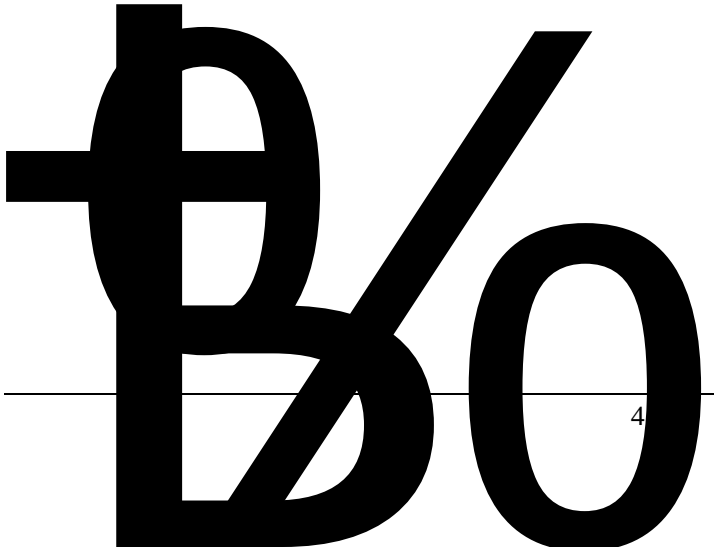
1

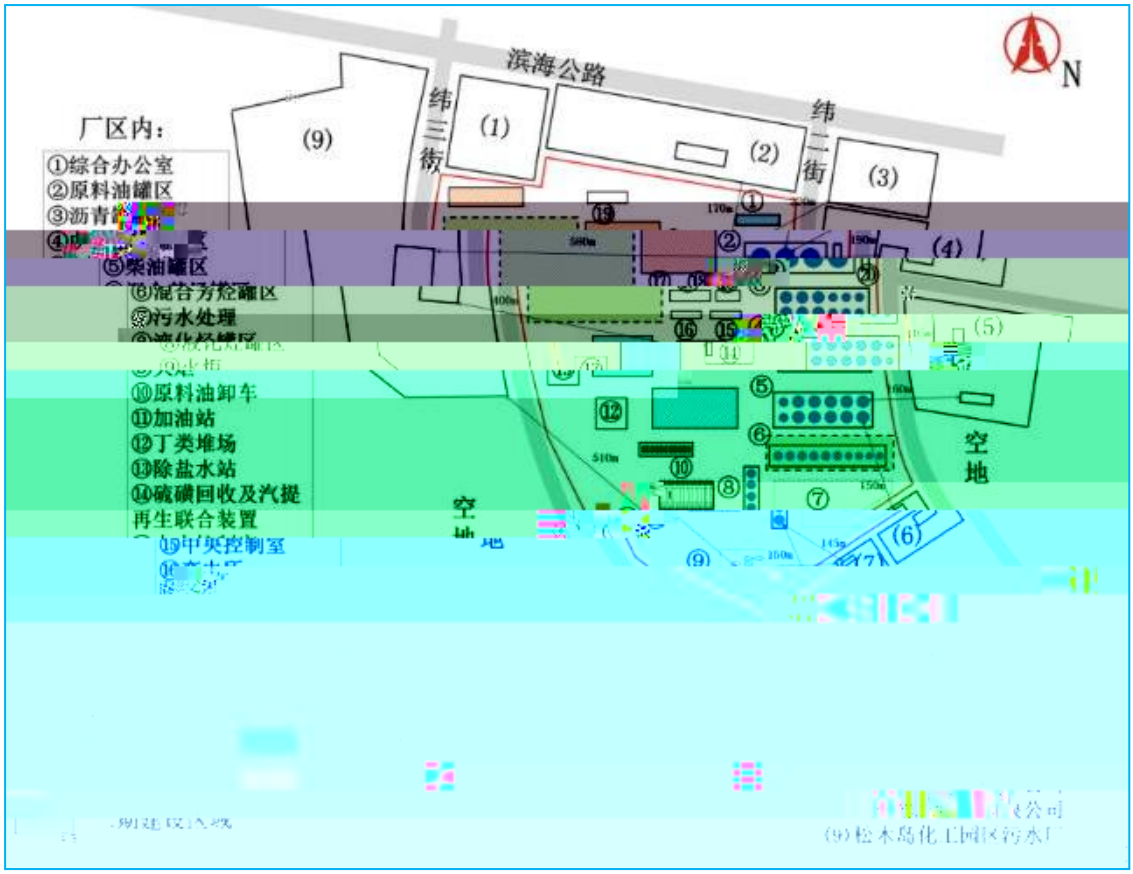
2.1.6-1

2.1.6-1

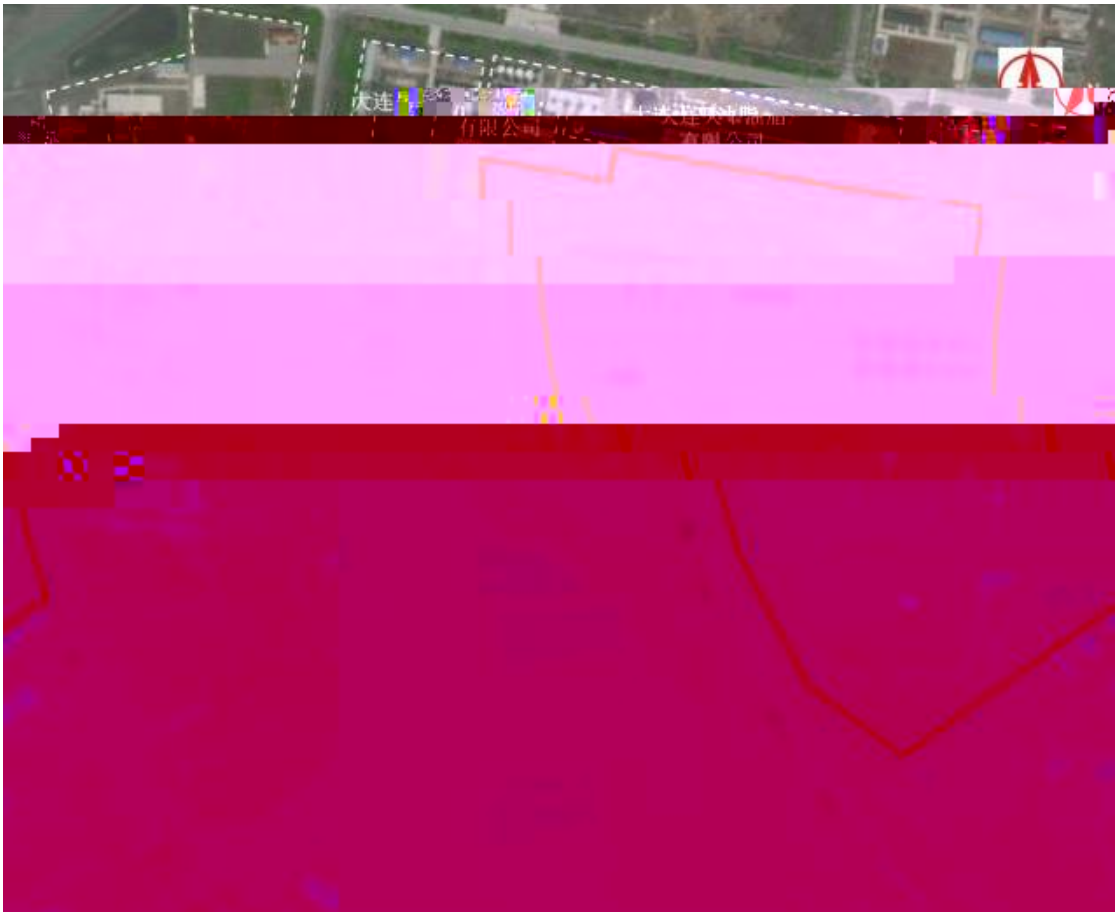
		35.30
		-21.10
	%	84.7
	%	56.7
	mm	67.8
	mm	171.1
	mm	218.0
	mm	1050.2
	mm	370
	kg/m^2	40
10m	m/s	31.0
	kg/m^2	60
		SE
		N
		N
	day	22.22
	day	30
	day	11
	mm	930
	month	4
		1.5
	month	6~9






滨海公路
纬三街
纬二街
N
厂区内：
①综合办公室
②原料油罐区
⑤柴油罐区
⑥混合芳烃罐区
⑧污水处理
⑩原料油卸车
⑪加油站
⑫丁类堆场
⑬除盐水站
⑭硫磺回收及汽提
再生联合装置
空地
空地
(1)
(2)
(3)
(4)
(5)
(6)
(9)

2.1.7-2

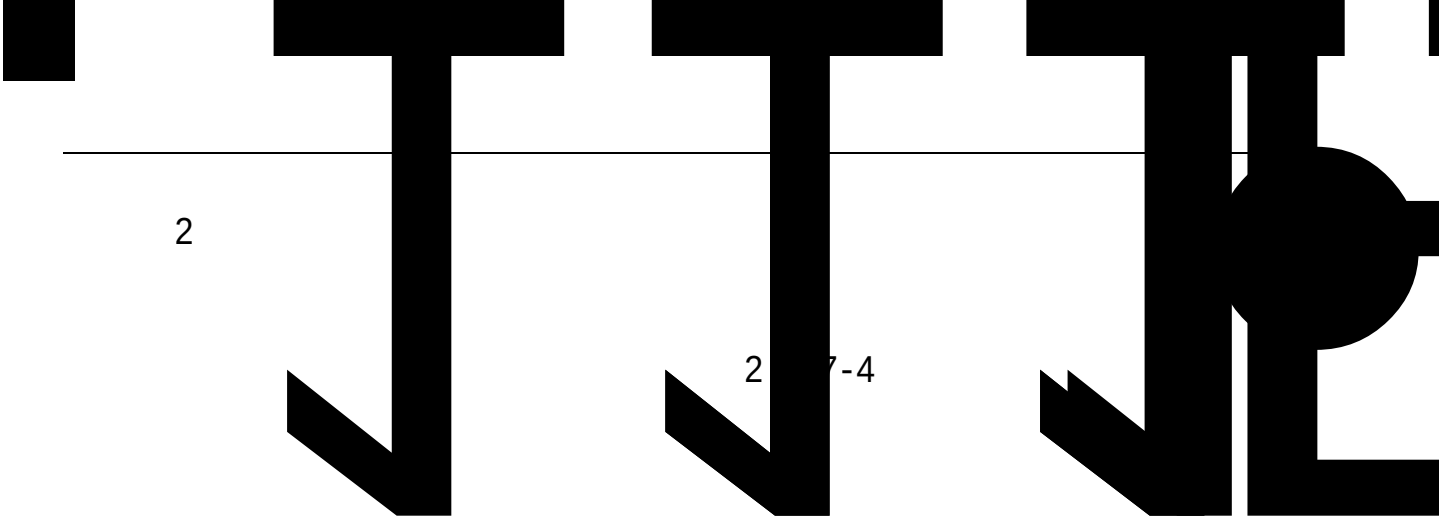


2.1.7-3

2.1.7-1

(m) **(m)**

GB50160-2008 2018 4.-



2

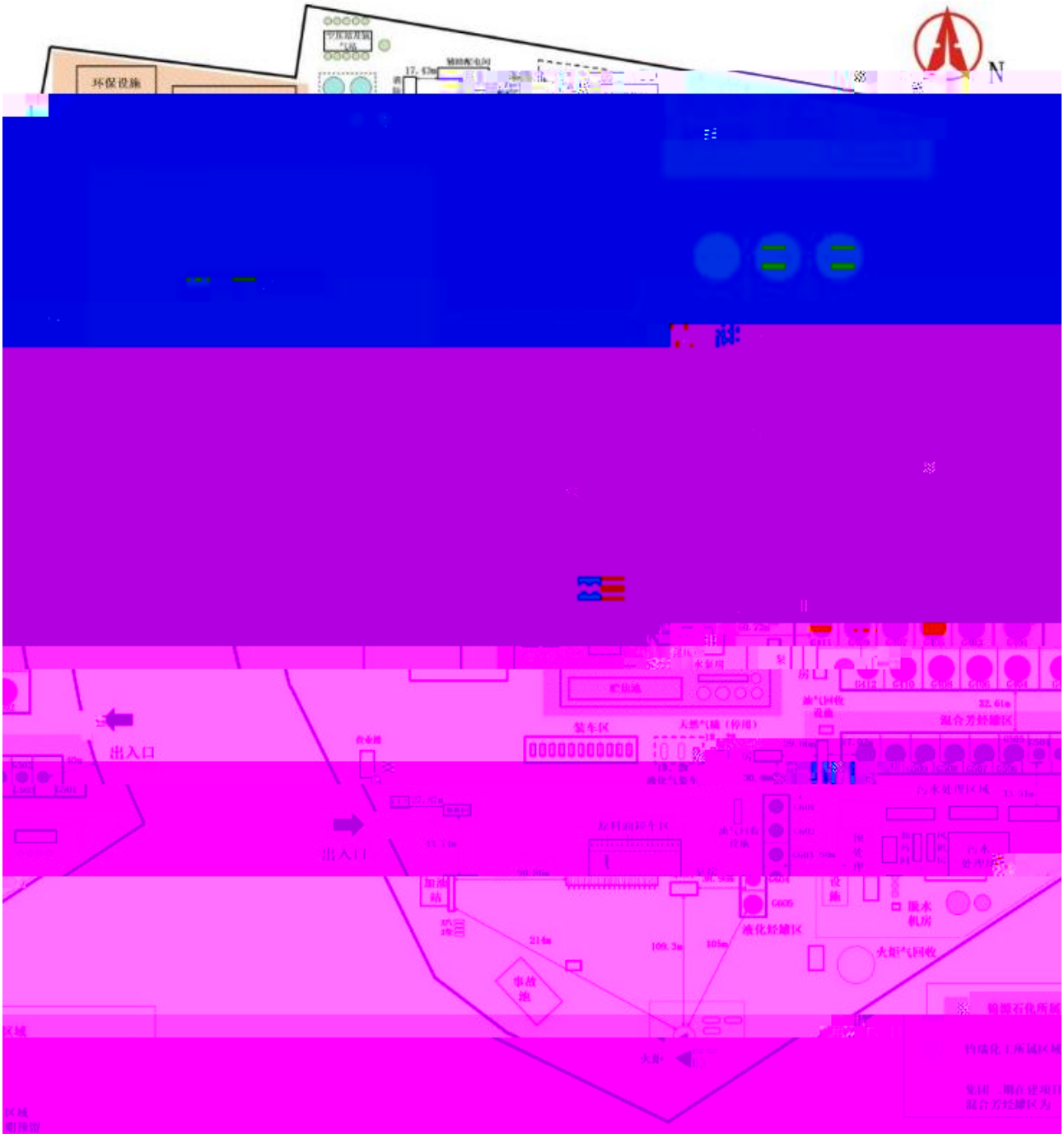
2 7-4

Eé

0m0

2 50m^3 2

50m^3 6



2.1.7-4

2.1.7-2

m m

GB50160-2008 2018
4.2.12

GB50160-2008 2018
4.2.12

GB50160-2008 2018

B

V =23000m^3

mæ ɔ

2.1.7-4

		m	m	
G301		H/2=7.21	11	GB50160-2008 2018
φ17000×15420		H/2=7.21	8	6.2.13
mm	G302	0.4D=6.168	14	GB50160-2008 2018
V=3000m³	G303	0.4D=8.4	11	6.2.8
	G302	0.4D=8.4	11	
		H/2=7.931	9	GB50160-2008 2018 6.2.13
	G306	0.4D=8.4	10	GB50160-2008 2018 6.2.8
G305		H/2=7.931	9	GB50160-2008 2018 6.2.13
φ21000×15862	G303	0.4D=8.4	10	GB50160-2008 2018 6.2.8
V=5000m³	G306	0.4D=8.4	10	
	G307	0.4D=8.4	12	
G309		H/2=7.931	9	GB50160-2008 2018 6.2.13
φ21000×15862	G307	0.4D=8.4	10	GB50160-2008 2018 6.2.8
V=5000m³	G310	0.4D=8.4	10	
	G311	0.4D=8.4	11	
G310	G309	0.4D=8.4	10	GB50160-2008 2018 6.2.8
φ21000×15862	G308	0.4D=8.4	10	
	G312	0.4D=8.4	11	
V=5000m³		H/2=7.931	9	GB50160-2008 2018 6.2.13

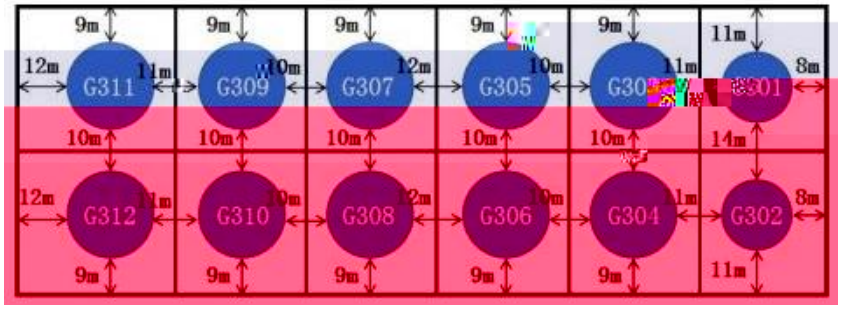
			m	m	
		G310	0.4D=8.4	11	
			H/2=7.931	9	GB50160-2008 2018
			H/2=7.931	12	6.2.13

1.0m 0.8m

9872.43m³ 5000m³

5000m³ 604.91m³ 10% 500m³

3000m³ 672.42m³ 10% 300m³



2.1.7-6

2.1.7-5

		m	m	
G401		H/2=7.931	9	GB50160-2008 2018
φ21000×15862		H/2=7.931	8	6.2.13
	G402	0.4D=8.4	13	GB50160-2008 2018
V=5000m³	G403	0.4D=8.4	13	6.2.8
G402				
φ21000×15862				
V=5000m³				
G403				
φ21000×15862				
V=5000m³				
G404				
φ21000×15862				
V=5000m³				
G405		H/2=7.931	9	GB50160-2008 2018
φ21000×15862				6.2.13
	G403	0.4D=8.4	13	GB50160-2008 2018
V=5000m³	G406	0.4D=8.4	13	6.2.8
G406				
φ21000×15862	G404	0.4D=8.4	13	
	G408	0.4D=8.4	13	

		m		
V=5000m³		H/2=7.931		GB50 -200 2018 6.2.
G407 φ 21000 × 15862 V=5000m³	G405	H/2=7.931 0.4D=8.4	9 13	160-2008 6.2.13 GB50160-2008 2018 6.2.8
G408 φ 21000 × 15862 V=5000m³				
G409 φ 21000 × 15862 V=5000m³	G407 G410 G411	0.4D=8.4 0.4D=8.4 0.4D=8.4	13 13 13	GB50160-2008 2018 6.2.8
G410 φ 21000 × 15862 V=5000m³	G409 G408	0.4D=8.4 0.4D=8.4	13 13	GB50160-2008 2018 6.2.8
G411 φ 17000 × 15420 V=3000m³				
G412 φ 17000 × 15420 V=3000m³	G410	0.4D=6.8 H/2=7.71 H/2=7.71	17 11 8	GB50160-2008 2018 6.2.13
	1.3m 1.1m 14628.17m³		5000m³	
5000m³ 3000m³		1002.8m³ 1032.37m³		10% 500m³ 10% 300m³

2.1.7-6

m m

3 3

G601 GB50160-2008 2018

φ12300 6.3..1 1 1 1 1 1(

V=1000m³

2.1.3-4

2.1.3-4

	㎡	m	
1	1121.74	7.80	
2	389.04	6.60	
3	428.67	7.40	/
4			
5			
6			

2.2

2.2.1

2.2.2

2.2.2-1

2.2.2-2~ 2.2.2-4

1	C-7201		Φ1800×33691×14 73m³	1	Q245R+S321
2	D-7201		Φ2000×6074×12	1	Q245R
3					
4					
5					
6					
7					
8					
9					
1	C-7101		φ2800×28702×12/14,140m³	1	Q245R+S321
2	C-7102		φ1200/2600×24786	1	Q245R+S321
3	D-7101		φ8000×8000	1	Q235-B
4	D-7104		φ1400×6974, 50%	1	Q245R
5					
6					
7					
8					
9					
1	C-7301		φ1600×18948	1	Q245R+S321
2	C-7302		φ1600×22335	1	Q245R+S321
3	C-7302		φ2800×14020	1	Q245R,0Cr13

4
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6
7
8
9
10
11

12	F-7301	φ2400×7600×16	1	Q245R,Cr25Ni20
13	F-7302	φ2100×8000×l6	1	Q245R OCr18Ni9
14	E-7309	φ2100×4560	1	Q245R
15	E-7311	φ1400×5744	1	OCrl3,Q245R
16	S-7301	φ1100×70000	1	Q235-B

1	-	DN700, 65m DN300, 65m	1	

2

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				/		
23.		0-0.6 MPa	1307P-10035-02486			2025.2
24.						
25.						
26.						
27.						
28.						
29.		0-1 MPa	1307P-10035-03590			2025.2
30.		0-1 MPa	1307P-10036-03568			2025.2
31.		0-0.1 MPa	1307P-09888-01717			2025.2
32.		0-1 MPa	1307P-10035-02482			2025.2
33.		0-1 MPa	L1D049663			2025.2
34.						
35.						
36.						
37.						
38.						
39.						
40.						
41.		0-1 MPa	L1D0409611	B		2025.2
42.		0-0.6 MPa	1307P-09888-01710			2025.2
43.		0-0.6 MPa	1307P-09888-01712			2025.2
44.		0-0.6 MPa	1307P-09888-01657			2025.2
45.		0-0.16	1307P-09888-01701			2025.2

				/		
70.		(0-1.6)MPa	1405P-08677-08473	B		2025.2
71.		(0-6)MPa	22-08-98082			2025.2
72.						
73.						
74.						
75.						
76.		(0-2.5)MPa	1307P-09888-01574	3020P001C		2025.2
77.		(0-2.5)MPa	1307P-09888-01576	3020P002A		2025.2
78.		(0-2.5)MPa	1307P-09888-01575	3020P002B		2025.2
79.		(0-2.5)MPa	1307P-09888-01578	3020P003A		2025.2
80.		(0-2.5)MPa	1307P-09888-01577	3020P003B		2025.2
81.		(0-2.5)MPa	1307P-09888-01579	3020P004A		2025.2
82.		(0-2.5)MPa	1307P-09888-01580	3020P004B		2025.2
83.		(0-1.6)MPa	1307P-09888-01581	3020P005A		2025.2
84.						
85.						

				/		
86.						
87.						
88.		(0-2.5)MPa	1307P-09888-01589	C		2025.2
89.		(0-2.5)MPa	1307P-09888-01587	D		2025.2
90.		(0-1.0)MPa	1307P-09888-01591	B		2025.2
91.						
92.						
93.						
94.						
95.		(0-1.6)MPa	1307P-09888-01605	3040P002B		2025.2
96.		(0-1.6)MPa	1307P-10719-05469	3040P002A		2025.2
97.		(0-1.6)MPa	1307P-09888-01607	3040P002B		2025.2
98.		(0-1.6)MPa	1307P-09888-01608	3040P002C		2025.2
99.		(0-1.6)MPa	1307P-09888-01609	3040P003A		2025.2
100.						
101.						
102.						
103.						
104.						
105.		(0-2.5)MPa	1307P-09888-01527			2025.2

/

106.	(0-2.5)MPa	1307P-09888-01528		2025.2
107.	(0-2.5)MPa	1307P-09888-01522	G-601	2025.2
108.				

				/		
				(		
125.		(0-1.6)MPa	13034439	6		2025.2
126.		(0-2.5)MPa	13034441	6		2025.2
127.		(0-0.6)MPa	13034438	6		2025.2
128.						
129.						
130.						
131.		(0-1.6)MPa	10.09.21.2059	2		2025.2
132.		(0-1.6)MPa	2012054292	B		2025.2
133.		0-0.1 MPa	2012054283	B		2025.2
134.						
135.						
136.						
137.						
138.						
139.		0-0.1 MPa	2012054294	A		2025.2
140.		0-1 MPa	DLWF-03			2025.2
141.		0-1 MPa	DLWF-04			2025.2

				/		
142.		0-1 MPa	1307P-10036-03571			2025.2
143.						
144.						
145.						
146.						
147.						
148.						
149.		0-40 MPa	2017-06-2070	5# /		2025.2
150.		0-40 MPa	2017-06-2064	6# /		2025.2
151.		0-40 MPa	1211131K84	1# 1		2025.2
152.		0-40 MPa	Z1207098059	1# 2		2025.2
153.						
154.						
155.						
156.						
157.						
158.		0-2.5 MPa	1301232B103	1# 3		2025.2
159.		0-1 MPa	1304282W16	1# 1		2025.2
160.		0-1 MPa	1304282W59	1# 2		2025.2
161.						
162.						
163.						

/

164.

165.

166.	0-2.5 MPa	1211211A42	2#	2	2025.2
167.	0-2.5 MPa	1401P-01606-06783	2#	3	2025.2

168.

169.

170.

171.

172.	0-1 MPa	1307P-10035-02565	2#		2025.2
173.	0-1 MPa	1305242E68.	2#		2025.2
174.	0-1.6 MPa	1904P-11380-13603	LNG		2025.2
175.	0-1.6 MPa	1307P-10035-02358	LNG		2025.2

176.

177.

178.

179.

180. 1 * ,

2.2.3

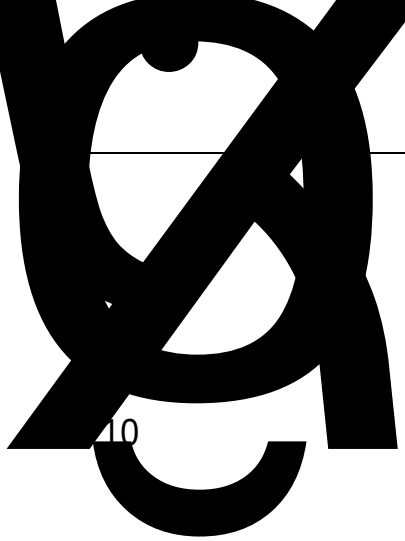
1

2.2.3-1

2.2.3-1

G101	B	φ37000×20100	1	23000m³

G102-G103



SIS

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DCS

SIS

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2.3

2.3.3

2.3.3-1

2.3.3-1

		V
1	H_2S	65
2	CO_2	15
3	NH_3	10
4	HC	2
5	H_2O	8
		100

2.3.4

2.3.4-1

2.3.4-1

1		26000	m³	
2	≥ 30%	15	t/a	
3		15	t/a	
4		15000	Nm³/a	
5				
6				
7				
8				
9				

2.3.5

2.3.5-1

1		20000	t/a	

2.4

2.4.1

1

DN200 0.3~0.5MPa 800㎥/h

2

㎥/h

1

2.4.2

1

220/66kV 66kV 66kV

66/10kV

50000kVA 66/10.5kV

10kV

380/220V

2

2404.5kW

DCS SIS

UPS 180min SIS

EPS EPS

100kW 1000kW

2 2

3

66kV 8 10kV 4

2 2

10kV

380V

1

10kV 380V 10

1600kVA 10/0.4+kV

2

2 2000kVA 10/0.4

1000KW

3

2 2000kVA 10/0.4

4

10kV

2m

5

2.4.3

6m × 6m

380/220V TN-S

4Ω

2.4.4

DCS SIS GDS

DCS SIS GDS

PLC

DCS

2.4.4.1

1 DCS

2 SIS

SIS 3 2 SIS

SIL 2.4.4-1 2.4.4-2

2.4.4-1 SIF SIL

	SIF	SIF			SIL	SIL
1	SIF001	SIF001—	G-101	LZT_001A	SIL1	SIL1
2	SIF002	SIF002—	G-102	LZT_001B	SIL1	SIL1
3	SIF003	SIF003—	G-103	LZT_001C	SIL1	SIL1
4	SIF004	SIF004—	G-207	LZT_201A	SILa	SIL1
5	SIF005	SIF005—	G-208	LZT_201B	SILa	SIL1
6	SIF006	SIF006—	G-209	LZT_203A	SIL1	SIL1
7	SIF007	SIF007—	G-210	LZT_203B	SIL1	SIL1
8	SIF008	SIF008—	G-211	LZT_204A	SIL1	SIL1
9	SIF009	SIF009—	G-212	LZT_204B	SIL1	SIL1
10	SIF010	SIF010—	G-301 LZT_04A	LZT_304A	SILa	SIL1
11	SIF011	SIF011—	G-302 LZT_04B	LZT_304B	SILa	SIL1
12	SIF012	SIF012—	G-303 LZT_03B	LZT_303B	SIL1	SIL1
13	SIF013	SIF013—	G-304 LZT_03D	LZT_303D	SIL1	SIL1
14	SIF014	SIF014—	G-305 LZT_03A	LZT_303A	SIL1	SIL1
15	SIF015	SIF015—	G-306 LZT_03C	LZT_303C	SIL1	SIL1
16	SIF016	SIF016—	G-307 LZT_02B	LZT_302B	SIL1	SIL1
17	SIF017	SIF017—	G-308 LZT_02E	LZT_302E	SIL1	SIL1
18	SIF018	SIF018—	G-309 LZT_02A	LZT_302A	SIL1	SIL1
19	SIF019	SIF019—	G-310 LZT_02D	LZT_302D	SIL1	SIL1

	SIF		SIF		SIL	SIL
20	SIF020	SIF020—	G-311 LZT_04A	LZT_304A	SIL1	SIL1
21	SIF021	SIF021—	G-312 LZT_02C	LZT_302C	SIL1	SIL1
22	SIF022	SIF022—	G-501 LZT_5110	LZT_510	SIL1	SIL1
23	SIF023	SIF023—	G-502 LZT_5109	LZT_509	SIL1	SIL1
24	SIF024	SIF024—	G-503 LZT_5108	LZT_508	SIL1	SIL1
25	SIF025	SIF025—	G-504 LZT_5107	LZT_507	SIL1	SIL1
26	SIF026	SIF026—	G-505 LZT_5106	LZT_506	SIL1	SIL1
27	SIF027	SIF027—	G-506 LZT_5105	LZT_505	SIL1	SIL1
28	SIF028	SIF028—	G-507 LZT_5104	LZT_504	SIL1	SIL1
29	SIF029	SIF029—	G-508 LZT_5103	LZT_503	SIL1	SIL1
30	SIF030	SIF030—	G-509 LZT_5102	LZT_502	SIL1	SIL1
31	SIF031	SIF031—	G-510 LZT_5101	LZT_501	SIL1	SIL1
32	SIF032	SIF032—	G-601 LZT_103	LZT_601A	SIL2	SIL2
33	SIF033	SIF033—	G-602 LZT_104	LZT_601B	SIL2	SIL2
34	SIF034	SIF034—	G-603 LZT_101	LZT_601C	SIL2	SIL2
35	SIF035	SIF035—	G-604 LZT_102	LZT_601D	SIL2	SIL2
36	SIF036	SIF036—	G-605 LZT_105	LZT_601E	SIL2	SIL2
37	SIF037	SIF037—	G-301 LZT_04A	LZT_304A	SILa	SIL1
38	SIF038	SIF038—	G-302 LZT_04B	LZT_304B	SILa	SIL1
39	SIF039	SIF039—	G-303 LZT_03B	LZT_303B	SIL1	SIL1
40	SIF040	SIF040—	G-304 LZT_03D	LZT_303D	SIL1	SIL1

	SIF		SIF		SIL	SIL
41	SIF041	SIF041—	G-305 LZT_03A	LZT_303A	SIL1	SIL1
42	SIF042	SIF042—	G-306 LZT_03C	LZT_303C	SIL1	SIL1
43	SIF043	SIF043—	G-307 LZT_02B	LZT_302B	SIL1	SIL1
44	SIF044	SIF044—	G-308 LZT_02E	LZT_302E	SIL1	SIL1
45	SIF045	SIF045—	G-309 LZT_02A	LZT_302A	SIL1	SIL1
46	SIF046	SIF046—	G-310 LZT_02D	LZT_302D	SIL1	SIL1
47	SIF047	SIF047—	G-311 LZT_04A	LZT_304A	SIL1	SIL1
48	SIF048	SIF048—	G-312 LZT_02C	LZT_302C	SIL1	SIL1
49	SIF049	SIF049—	G-501 LZT_5110	LZT_510	SILa	SIL1
50	SIF050	SIF050—	G-502 LZT_5109	LZT_509	SILa	SIL1
51	SIF051	SIF051—	G-503 LZT_5108	LZT_508	SILa	SIL1
52	SIF052	SIF052—	G-504	LZT_507		

	SIF	SIF	SIL	SIL
62	SIF062	SIF062— G-604 LZT_601D LZT_102	SILa	SIL1
63	SIF063	SIF063— G-605 LZT_601E LZT_105	SILa	SIL1
1.SILa 2. /Null				

2.4.4-2 SIF SIL

SIL

SIF F SIF SIL

1 SIF001

2.4.4-3

		SIL										
SIS7301		SIL1	STOP_7301A	K7301A	0	BOOL				USV_7301	K7301AB	
			STOP_7301B	K7301B	0	BOOL				USV-7311	D7302	
		SIL1	LICA—7306A		≤15	%				USV_7307		
			LS-7306		0	BOOL				PV_7314	D7302	
		SIL1	TSHH_7309	F-7301	≥1400		32			PV-7312	D7301	
			TSHH_7310	F-7301	≥1400					PV-7311	K7301B	
			TSHH_7312	F-7301	≥1400					FV-7303	K7301A	
			PS_7307		≤0.01	MPa				UV-7305	D-7301	
			FT-7305	K-7301A/B	≤500	Nm3/h						
			PS-7315		≥0.07	MPa						
			LS-7304	D-7301	0	BOOL						
			LS-7302	D-7302	0	BOOL						

SI

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SIS730

2

TSHH-7351

SIL1

	SIL				
	-	0303-LSHH1007A	G-307		
G-307	-	XZY_303B1_STOP			
	-	0303-HS-UV007			
	-	XZY_303B2_STOP		XZY_303B2	G-307
G-308					
G-308					
G-309					
G-309					
		LZT_02D_HH			
G-310					
	-	0303-LSHH1010A			

SIL

LZT_01A_HH m

- 0303-LSHH1011A G-311
- XZY_301A_STOP
- 0303-HS-UV011

G-311

- XZY_301B_STOP XZY_301B G-311

LZT_302C_HH

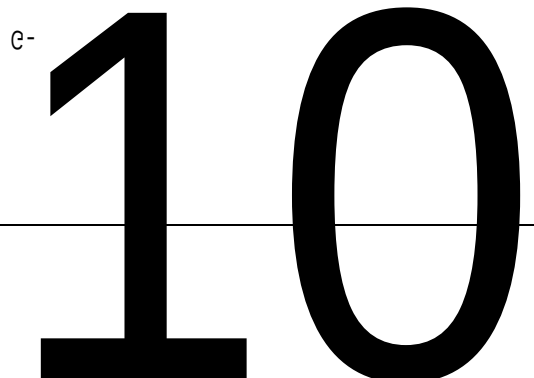
SIL1 G-312 >14100

G-312

	SIL						
G-506	-	XZY_505B_STOP					
	-	HS-HV1006				XZY_505B	G-506
G-507	SIL1	LZT_504_HH LZT_5104_HH	G-507	>14150	m m	XZY_504A	G-507
G-508	SIL1	LZT_503_HH LZT_5103_HH	G-508	>14150	m m		
	-	0305-LSH1013	G-508			XZY_503A	G-508
	-	XZY_503A_STOP					
	-	HS-UV1008					
G-508		XZY_503B_STOP					

SIL

G-510 - XZY



SIL

-	XZZSL_506B	G-505
-	XZZSL_505B	G-506
-	XZZSL_504B	G-507
-	XZZSL_503B	G-507
-	XZZSL_510B	G-501
-	XZZSL_509B	G-502
-	XZZSL_508B	G-503
-	XZZSL_507B	G-504

KTS_P501

		SIL											
/ (	/ (	-	XZZSL_301B	G-311						KTS_3030P002AKTS_3030P002B			
		-	XZZSL_302A2	G-309						KTS_3030P003AKTS_3030P003B			
		-	XZZSL_302B2	G-307									
		-	XZZSL_302C2	G-312									
		-	XZZSL_302D2	G-310									
		-	XZZSL_302E2	G-308									

	SIL						
		LIT101	18	18	m		
D-4601						LSV_5901	
			60	60		HV_5901	
	-	PT_5101/PT_5201		0.2	Mpa		
A/B	-	TE_3111/TE_3211		20			A/B
	-						
	-						

2.4.4.4

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2.4.5-2~ 2.4.5-5

2.4.5-2

	15541179555 85187182
/	24

2.4.5-3

	13795119718 85187187
/	10

2.4.5-4

	85256119
/	30

0.65Mpa G ≤40

lum ≤lmg/m³ ≤1mg/m³

-31

2.4.7-1

2.4.7-1

		Nm³/h		Nm³/h	
5		630	-	114	-
6			-		-
7			-		-
		630	1600	1078	-
118m³/min				60m³/min	

2230Nm³/h

1078Nm³/h 118m³/min

60m³/min

2

DN350 350~370

3.5~3.7Mpa 1.0MPa 160

1.0MPa 18.4t/h 20t/h

6t/h

2.4.7-2

		t/h	
1		-6	
2		21.62	DN350 350~370 3.5~3.7Mpa 220t/h
3		23.725	
		39.345	

2.4.7.3

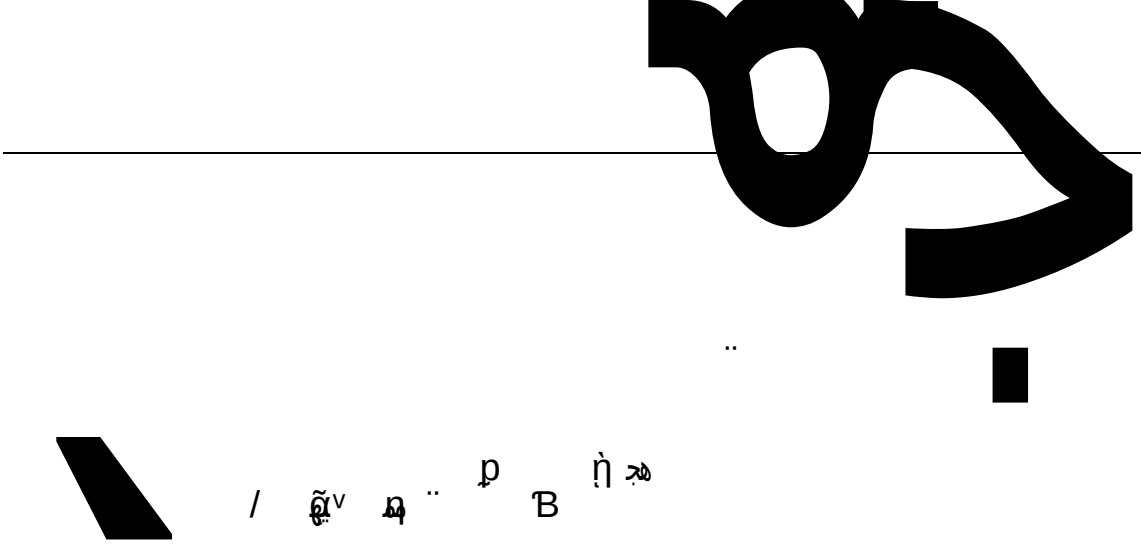
2

JY/CMS-N2-350/99.5 350Nm³/h 0.6MPa G ≤40

2.4.7-3

2.4.7-3

		0.6MPa	
1		30	-
2		200	-
4		-	20
5		100	80
6		-	60
7		-	60
8		-	60
		330	280
700Nm³/h			



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2.4.9

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DN700

300um

2

DN300

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2.4.10

2.4.10-1

2.4.10-1

			m^3/h	( )	Mpa(G)		m	NPSHA (m)		kW	

		m³/h ( )	Mpa(G)		m	NPSHA (m)		kW
1	A	108	0.72	YBD7.2/30-125-235	72	5	Y3 B25	

2023 7

2.5.5

2021

12

3

GB30077-2023 4.1

A

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2.5.8

2.5.9

2021 -2022 2

2012 16 8

1000 4%

1000 1 2%

1 10 0.5%

10 0.2%

2023

2022 136

4.1

4.2

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“ ” “

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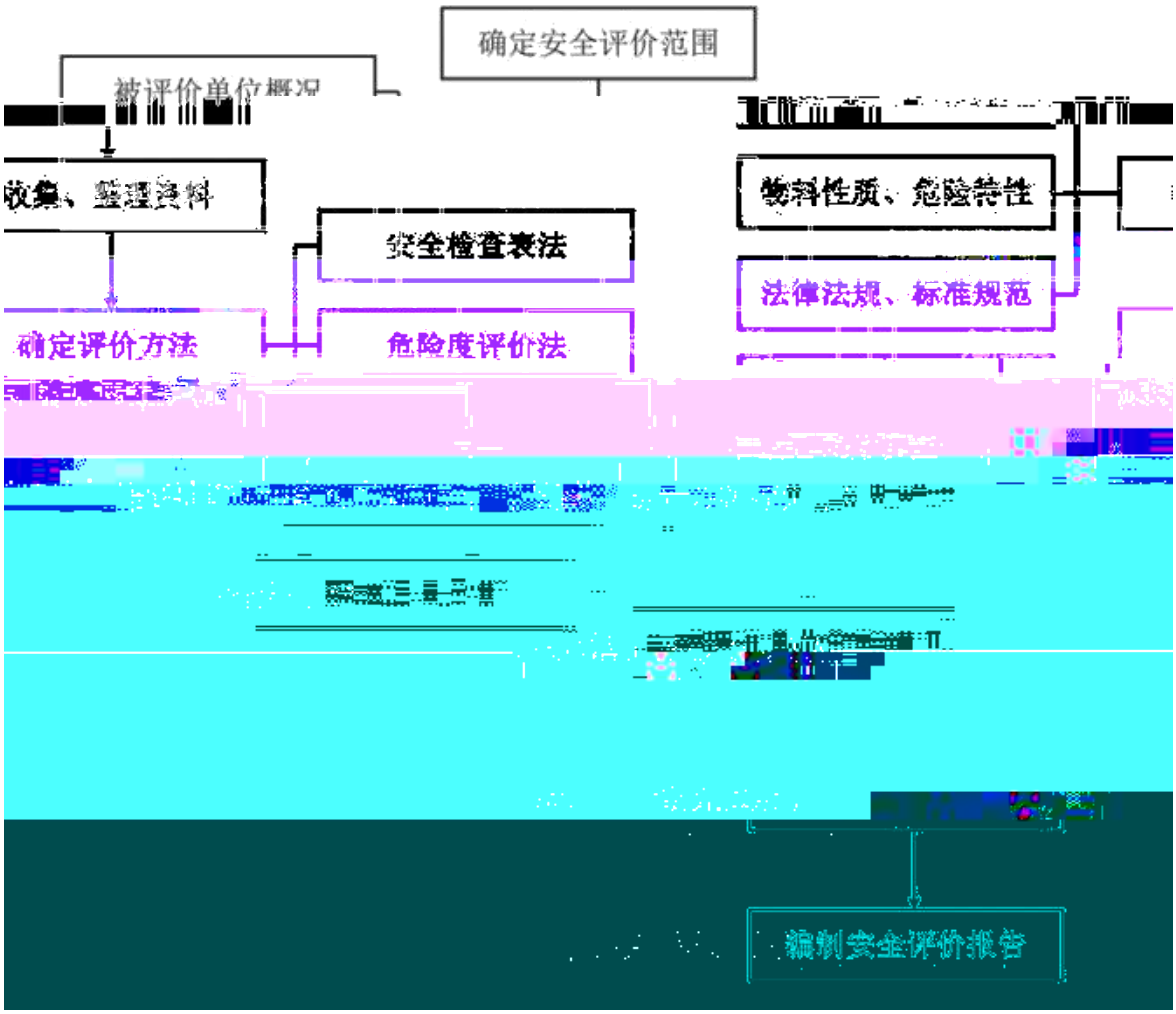
4.6

4.7

4-1


确定安全评价范围
被评价单位概况
收集、整理资料
安全检查表法
确定评价方法
危险度评价法
物料性质、危险特性
法律法规、标准规范
编制安全评价报告

4-1

5.1

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5.1-1

5.1-1

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2015

6.1.2

2003 142

6.1.3

445 666

703

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2017

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6.1.6

6.2

GB6441-1986

GB/T13861-2009

6.2-1

6.2-1

1				
2				
3				
4			H_2S-H_2 H_2S	
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6				
7				
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13				

6.3

6.3.1

2009 116

2013 3

6.3.2

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B4.2-1

B G102 G103

73.5682m

G303 35.0123m

G401 17.9412m

G605 172.6323m

7.1.2

7.1.3

1

0.15g

2024 GB/T50011-2010

2

65%

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69 70

71 72

73 74

75 76

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95 м Ø

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97		98	
99			

41 <

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7.2.1-3

7.2.1-3

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7.2.1-4

7.2.1-4

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7.2.1-7

7.2.1-7

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2			2		
3			23		
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1			32	20m	
			10		
			112		
		MFT/ABC8	38		
		MFT/ABC50	12		

2.5km

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			6	0
3		-	112	0
4		-	111	0
5			8	0
			54	0
			56	0
			29	0
			37	1
			184	1
			560	1

7.5.2

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7.6

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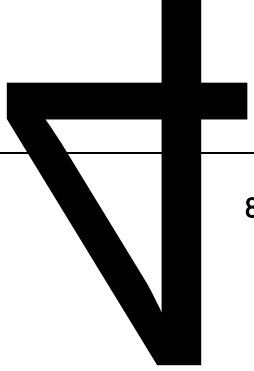
8.2-1

8.2-2 8.2-3

8.2-1

0 /	10kg/s	1000kg	0.2	
	10kg/s~100kg/s	1000kg~10000kg	0.5	
	100kg/s	10000kg	0.7	
0	10kg/s	1000kg	0.02	
	10kg/s~100kg/s	1000kg~10000kg	0.04	
	100kg/s	10000kg	0.09	
1			0.065	
2			0.01	
3,4			0	



8.2-2

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9.1-1

9.1-1

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GB30077-2023

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