重庆润通智能装备有限公司
新增3万台电动摩托车产能技改项目
环境影响报告书

（征求意见稿）

建设单位：重庆润通智能装备有限公司

编制单位：重庆一可环保工程有限公司

编制日期：二〇二四年七月

3

“ ”

1994

99 2007

2009

2012

2019

2023

2007

2007 178

637385.2 362202

35666.15 2272

50 ATV10

150 350 60

10 100 / 120 2011

50 80

150

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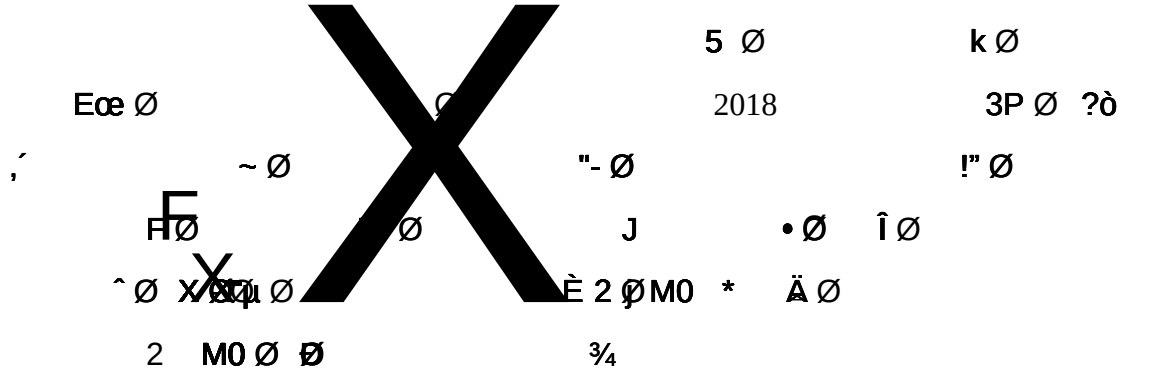


2021

16 “

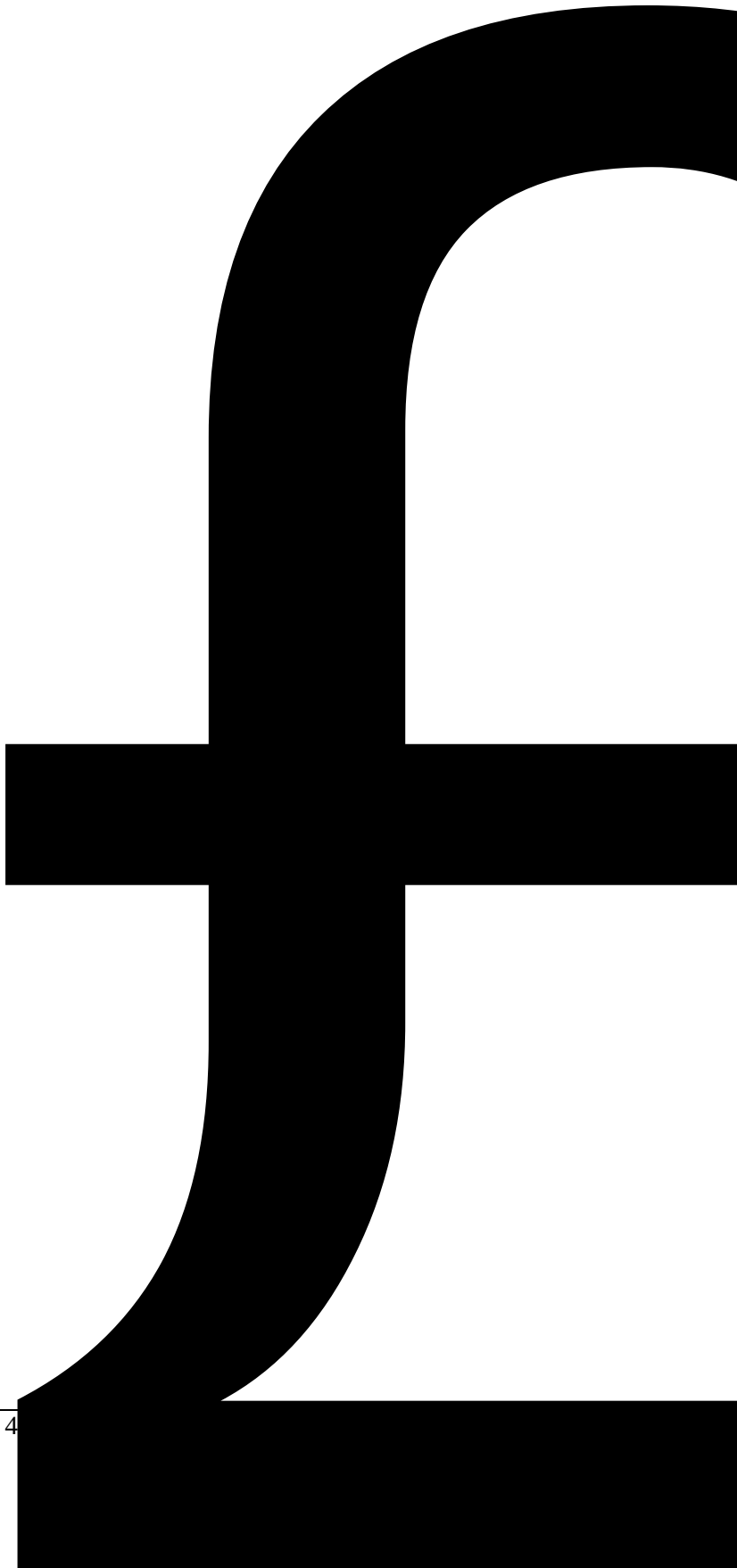
37” “75. 375” “

10 ”

2022 1436

2018 781 2022

“ ”



1 2014 4 24 2015 1 1

2 2018 12 29

3 2018 10 26

4 2017 6 27 2018 1 1

5 2016 7 2

6 2020 4 29 2020 9 1

7 2021 12 24 2022 6 5

8 2019 1 1

9 2011 3 1

10 2019 8 26

11 2021 3 1

12 2012 2 29 2012 7 1

13 2018 10 26

14 2018 10 26

15 2018 1 1

1 2017 6 21 177 2017 10 1

2 2021

16

3 2024

4 4 2019 1 1

5 2018

48

6 2021 15

7 23

2022 1 1

8 2017 43

9 2020

733

10 2013 37

11 2015 17

12 2016 31

13

284

14 748 2021 12 1

15 2012

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16 2012 98

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2015 4

18 2015 34

19 2022

20 591

21 2022

2022 7

22 48

23 2019

24 2017 4

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2021 24

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2021 45

27 “ ”

2017 121

28 2019

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29 2020 2020

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30 2022

1 2018 7 26

2 270

3 [2017] 9 2018

7 26

4 2020

10 1

5

2012 26

6

2016 19

7

[2016]43

8 2012 142

9 2013 86

10 2018 25

11

[2022]1436

12 2008 133

1 HJ 2.1-2016

2 HJ 2.2-2018

3 HJ 2.3-2018

4 HJ 2.4-2021

5 HJ 610-2016

6 HJ 19-2022

7 HJ 169-2018

8 HJ 964-2018

9 HJ 819-2017

10 HJ884-2018

11 HJ 1209-2021

12 HJ 942-2018

13 HJ 1301-2023

14 HJ 1200-2021

15

HJ 944-2018

16 HJ1097-2020

17 2 1

HJ1124-2020

18 2021

82

19

20

21

22

1

“

”

2

3

4

5

6 2011 2016

1.3-1

						/	+
		/					
			pH COD BOD_5 SS LAS			/	+
						/	+
* “+”							

1

SO_2 NO_2 $PM_{2.5}$ PM_{10} CO O_3

pH COD BOD_5 TP

K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- SO_4^{2-} pH

pH C_{10}-C_{40}

1,1- 1,2- 1,1- -1,2-

-1,2- 1,2- 1,1,1,2- 1,1,2,2-

1,1,1- 1,1,2- 1,2,3-

1,2- 1,4- +

2- [a] [a] [b] [k]

[a,h] [1,2,3-cd]

2

SO_2 NOx

pH COD BOD_5 SS LAS

pH COD

pH

A

1

GB3095-2012

2

25m 4a

3

SO_2 NO_2 PM_{10} $PM_{2.5}$ CO O_3

GB3095-2012

DB13/1577-2012

TVOC H.J2.2-2018 D.1

1	SO_2	1	150	500	GB 3095-2012
		24	50	150	
			20	60	
2	NO_2	1	200	200	
		24	80	80	
			40	40	
3	PM_{10}	24	50	150	
			40	70	
4	$PM_{2.5}$	24	35	75	
			15	35	
5	O_3	1	160	200	
		8	100	160	
6	CO	1	10000	10000	
		24	4000	4000	
7	TSP	24	120	300	
			80	200	

8			1000	2000	DB13/1577-2012

GB3838-2002

“ ”

2021—2025 2 1 1

15.5km

V

6.85km

V

GB3838-2002 V

		II		V
1	pH	6 9		
2	COD	≤15	≤20	≤40
3	BOD_5	≤3	≤4	≤10
4	NH_3-N	≤0.5	≤1.0	≤2.0
5	P	≤0.1	≤0.2	≤0.4
6	F-	≤1.0	≤1.0	≤1.5
7		≤0.05	≤0.05	≤1.0
8		≤0.2	≤0.2	≤0.3

1	pH	6.5~8.5	21		≤0.02
2		≤0.5	22		≤0.05
3		≤20	23	CODcr	≤20
4		≤1	24		≤0.2
5		≤0.002	25		≤0.05
6		≤0.05	26		≤0.01
7		≤0.01	27		≤0.7
8		≤0.001	28		≤0.5
9		≤0.05	29		≤0.02
10		≤450	30		≤0.06
11		≤0.01	31		≤0.002
12		≤1	32	1,2-	≤0.03
13		≤0.005	33		≤0.005
14		≤0.3	34		≤0.3
15		≤0.01	35		≤0.3
16		≤1000	36	1,1-	≤0.03
17		≤0.3	37	1,2-	≤0.05
18		≤0.005	38		≤0.07
19		≤1	39		≤0.04
20		≤1	/	/	/

3 4a GB 3096-2008

3 4a

3	65	55

4a	70	55

GB 36600-2018

1			800	2500
2			65	172
3			60	140
4			5.7	78
5			18000	36000
6			38	82
7			900	2000
8			2.8	36
9			0.9	10
10			37	120
11		1,1-	9	100
12		1,2-	5	21
13		1,1-	66	200
14		-1,2-	596	2000
15		-1,2-	54	163
16			616	2000
17		1,2-	5	47
18		1,1,1,2-	10	100
19		1,1,2,2-	6.8	50
20			53	183
21		1,1,1-	840	840

22		1,1,2-	2.8	15
23			2.8	20
24		1,2,3-	0.5	5
25			0.43	4.3
26			4	40
27			270	1000
28		1,2-	560	560
29		1,4-	20	200
30			28	280
31			1290	1290
32			1200	1200
33		+	570	570
34			640	640
35			76	760
36			260	663
37		2-	2256	4500
38		[a]	15	151
39		[a]	1.5	15
40		[b]	15	151
41		[k]	151	1500
42			1293	12900
43		[a, h]	1.5	15
44		[1,2,3-cd]	1.5	151
45			70	700
46		C10~C40	4500	9000

pH HJ 964-2018

pH	
pH 3.5	

pH	
3.5≤pH 4.0	
4.0≤pH 4.5	
4.5≤pH 5.5	
5.5≤pH 8.5	
8.5≤pH 9.0	
9.0≤pH 9.5	
9.5≤pH 10.0	
pH≥10.0	

DB50/418-2016

DB50/660-2016

DB50/418 2016 1

		mg/m^3)	m	(kg/h)	mg/m^3)	
		60		3.7	2.0	
	VOCs	70		5.0	/	
		20	15	1.5	1.0	(DB 50/660-2016)
		300		1.4	0.40	
		240		0.5	0.12	
		100	15	1.5	1.0	(DB 50/418-2016)

NMHC	10	1h	
	30		

GB8978-1996 4

DW001

GB18918-2002 B

		GB 8978-1996
pH	6~9	6~9
COD	360	
BOD_5	170	
SS	300	
	40	
	35	

		GB 8978-1996
	8	/
	/	5.0
	/	5.0
	2	/
LAS	/	20
	/	20
	3	/

		GB 18918-2002 B
1	pH	6 9
2	SS	20
3	COD	60
4	BOD_5	20
5		3
6		3
7	N	20
8	N *	8(15)
9	P	1
10		30
11		1
12	/L)	10000
*	>12	≤12

GB 12348-2008 3 4

3	65	55
4	70	55

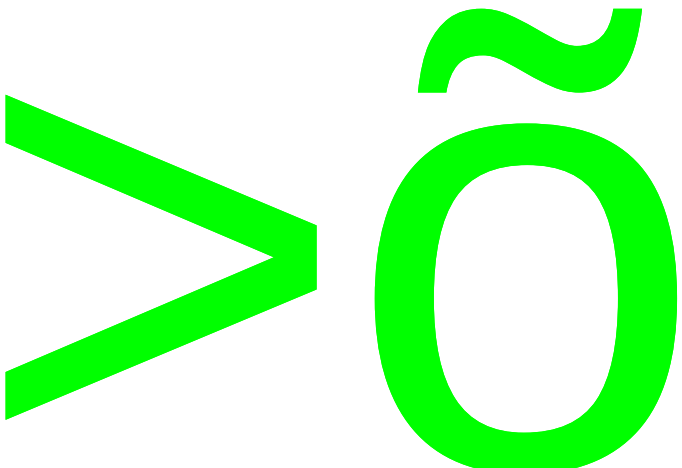
Å Å Lb ³J * "‘ = +X È C^

$G Lb ³ Ô?± × ¡

ÄGB/T 18597-2023 ¡

L TM

L TM



	P_{max} 1%

		μg/m^3	
SO_2	1	500	GB 3095-2012
NO_x	1	200	
PM_{10}	24	150	
$PM_{2.5}$	24	75	
	1	2000	DB13/1577 2012

/	/	
		/
/		44.5
/		-1.5
		■ □
	/m	90
		□ ■
	/km	/
	/°	/

4.4.1-18 4.4.1-19

		μg/m³	Pi %	m
G9-1		2.21	0.11	57
	NOx	0.40	0.16	57
G9-2		2.21	0.11	57
	NOx	0.40	0.16	57
G9-3		0.55	0.03	25
	NOx	0.10	0.04	25
G10-1		0.54	0.03	60
	NOx	0.10	0.04	60
G10-2		.93	0.10	60
	NOx	0.35	0.14	60
G10-3		0.54	0	25
	NOx	0.01	0	25
G10-4		0.49	0	26
	NOx	0.01	0	26
1		2.45	0.27	244
2		3.24	0.36	244

2.96% 10%

5km

HJ 2.3-2018

		Q/ m³/d W/

		Q/ m^3/d W/
		Q≥20000 W≥600000
A		Q 200 W 6000
B		—

GB8978-1996 4

DW001

GB18918-2002 B

HJ 2.3-2018

B

HJ 610-2016

HJ

610-2016 A “ ”

HJ 610-2016

$6km^2$

3 4

3dB A

HJ 2.4-2021

200m

HJ 964-2018

									-
								-	-
		“ ”							

HJ964-2018 A

“

” “ ”

≤5hm2 200m

HJ 964-2018

200m

HJ 169-2018

	+			
				a
a A				

Q

0.298 Q 1 I

			m)	
1		E	490	
2		N	378	
3		SE	360	
4		SW	259	
5		W	50	
6		S	167	

GB3838-2002

200m

2.5km

200m

2

			X	Y				m	
	1		106.302675	29.426884		3500		2300	
	2		106.328461	29.413751		2500		1871	
	3		106.312065	29.423257		6000		1771	
	4		106.304692	29.394295		2500		967	
	5		106.28863	29.405376		3000		1792	
	6		106.301774	29.420947		600		1705	
	7		106.302668	29.397738		400		714	
	8		106.308966	29.427879		3000		2285	
	9		106.287613	29.407955		4500		1896	
	10		106.294504	29.411773		2500		1362	
	11		106.328588	29.415553		400		1967	
	12		106.292141	29.39028		350		2020	
	13		106.296949	29.411258		300		1125	
	14		106.30189	29.412526		300		854	
	15		106.326571	29.410927		400		1598	

			X	Y				m	
	16		106.287392	29.410385		500		1961	
	17		106.32743	29.410274		3000		1663	
	18		106.327089	29.40888		500		1594	
	19		106.304811	29.408856		2000		357	
	20		106.303994	29.402312		800		332	
	21		106.313476	29.401777		1000		285	
	22		106.294139	29.390262		200		1884	
	23		106.305896	29.399602		4000		370	
	24		106.299489	29.394557		6000		1183	
	25		106.312602	29.401268		4500		294	
	26		106.297668	29.402279		5000		943	
	27		106.291701	29.389905		4000		2080	
	28		106.324538	29.407544		3500		1316	
	29		106.304779	29.407095		4000		170	
	30		106.302909	29.414824		7000		1028	
	31		106.304767	29.415014		3500		989	
	32		106.297379	29.412215		3000		1146	

			X	Y				m	
	33		106.291987	29.390881		3500		1986	
	34		106.289058	29.40996		4000		1793	
	35		106.322596	29.422366		5000		2033	
	36		106.32351	29.414258		4500		1467	
	37		106.323688	29.409193		4000		1283	
	38		106.301507	29.398217		6000		755	
	39		106.300298	29.411924		4000		906	
	40		106.302569	29.396362		5000		842	
	41		106.297689	29.410427		6000		1019	
	42		106.323453	29.413135		5000		1401	
	43		106.306125	29.397139		4500		626	
	44		106.324506	29.411683		4000		1431	
	45		106.286325	29.412883		3700		2140	
	56		106.283769	29.413386		5000		2392	
	1		106.304779	29.407095		4000		170	2
	1		/	/			/	/	/

C375 2024

2024

2023 11 9

2311-500116-07-02-152955

[2018]781 1.8- 1

	1 5		
	“ ”	“ ”	

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“ ” “ ”

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2022 2022 7	1.		
	2.		
	3.		
	4.		
	5.		

	7. “ ” 332	“ ” 332	
	8.		
	9.		
	10.		
	11.		
	12.		

2022

2022 7

2022

2022 17

	21 38		
2022 2022 17	2035		
	2020--2035	2020 2035	

	51 45 6		

2021 5 27

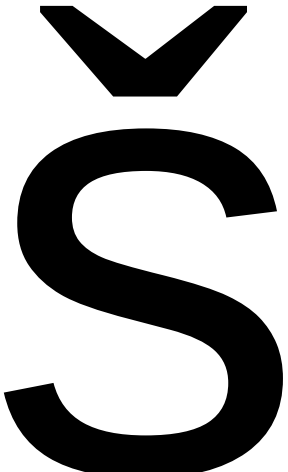
(GB24409-2020)

(GB38597-2020) VOC

2017

2020 10 1

“•



GB12348-2008 3 /4

(HJ 1301 2023)

363

2020 4 29

"ë

VOCs

VOCs 10%

VOCs

VOCs VOCs

1.

2.

UV

VOCs 6.

VOCs

VOCs

VOCs

VOCs

VOCs

VOCs

VOCs

VOCs

4.4 4.4.1 GB24409 VOCs		
	1.	
4.4.2	(GB38597-2020)	
4.4.5 VOCs VOCs	VOC (GB 24409-2020)	
4.4.6		
	2.	
VOCs		
	3.	
	4.	
4.4.7	5.	
4.4.8 / “ ”	6.	
4.4.9 VOCs		
3		

4.4.10		

11.14

2022 2025

1. VOCs GB37822-2019	GB37822-2019	
2. GB18918-2002 B	GB18918-2002 B	
3.		
4.		

2023 638

“ ”

2023 2024 2 “ ”

“ ” “ ”

“ ”

ZH50011620002 -

		A		

		A B		

		“ ”		
			10km	
			10km	

5000

			10km	

			0#	
ZH50011620002		1.		
		2.		
		3.		
		1.		
		2. VOCS VOCS VOCs	VOCS VOCs	
		3.		
		1.		
		2.		

1.

1994

99 2007

2009

2019

“ ”

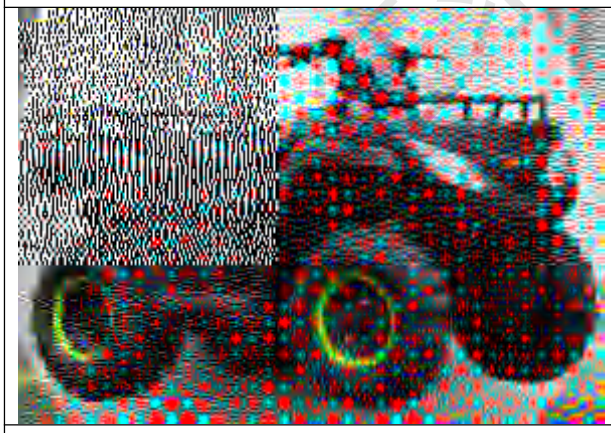
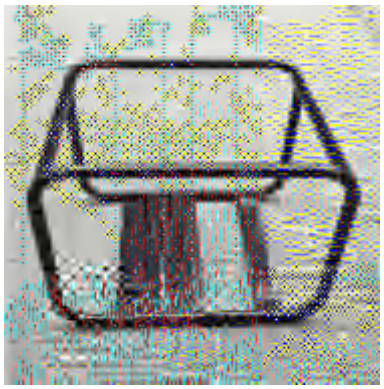
2023

“ ”

7

		2007	2011		
		4	4		/
		1	1		/
		1	1		2014
		4	0		
		1	1		2020 1
	ATV	1	1		
		2	2		/
		1		/	
		2		/	
	/	2		/	
		7	0	/	
		5	5		
	CKD	0	1		
		7	3		4
		1		/	
		1		/	

9		-C110	20	
10				

1		× × mm	1940×700×1095
		ml	174.5
		kW/rpm	13/8500
		Nm/rpm	15.5/7000
		L	7
		km/h	110
		kg	113
		mm	1288
		°	32
		mm	1940
2		× × mm	2200×940×1140
		ml	223.1
		kW/rpm	11.5/7500
		Nm/rpm	17/5500
		L	16
		km/h	102
		kg	140
		mm	1500
		°	25
		mm	3200
3	ATV	× × mm	1830×1040×1150
		mm	1145
		km/h	70
		kg	230
		L	12
		CC	230
		kw	11
		Nm/rpm	15.5

2.2-3

			540 25	
			2283 80	
			1100m² - - 1- 2- - - 3- 4-1# - -UF1~UF2-2# - - L16m×W4.9m×H6.55m	
			1000m² - - 1- 2- - 3-- - - 4 1 L5.5m×W4m×H7m 1 1 L15m×W2.8m×H6.8m	
			35074.73 2 1 2	
			10 2 15m 12000m³/h 2 1600 2 3500m³/h	2
	CKD		4392.24m² 1	
			4032m²	
			1 6 1129m² 6774m²	
			10kv 10KV 110KV 6100KVA 10KV 10KV	
			1 4.0t/h RO 75%	
			1 1 2.1m³/min 15m³/min	

2 $10m^3$ 15t

$2600m^2$

$7200m^2$

$2920m^2$

$64m^2$

$10m^3/h$ Ar $40m^3/h$

1 1

2 1

1 10kv 3

1 10kv

“ ”

$40m^3/h$

$350m^3/d$

1 1

$22m^3$

Q=$400m^3$ /h 32/42

1

2 1

20000m^3 /h

1#15m

1 15m

"D

E– 4ÿ 1 15m

3000m^3 /h 2 15m ™

8# 10000m^3 /h

2 15m Q

8#8# Gÿ12000m^3 /h

E–

3

			/	
4		/	1	
5			4	
6		/	2	
7	CO_2	YD350 350A	80	
8		S9-7500m^3	3	
9		1 3m/min	2	
10		× × =800×2400×900 mm	1	
11		× × =1000×2400×900 mm	1	
12		× × =1000×2400×900 mm	1	
13		× × =800×2400×900 mm	2	
14		× × =1000×2400×900 mm	1	
15		× × =3000×2400×900 mm	1	
16		× × =800×2400×900 mm	2	
17		× × =800×2400×900 mm	1	
18		× × =3600×1200×2300 mm	1	
19	UF1	× × =800×2400×900 mm	1	
20	UF2	× × =800×2400×900 mm	1	
21		× × =800×2400×900 mm	1	
22		180 ~220 L21m×W5.5m×H5.85m 60m^3/h	1	
23	UF	/	2	
24		4t/h	1	
25		1 6m/min	1	
26		× × =1600×1300×1800 mm	1	
27		× × =1600×1300×1800 mm	1	
28		× × =1600×1300×1400 mm	1	
29		× × =3500×2000×1400	1	

			/	
		mm		
30		× × =1600×1300×1400 mm	1	
31		38.7m*1m*7m	1	
32		L5.5m×W4m×H7m 4 12 17329m³/h 20000m³/h	1	
33		180 ~220 L15m×W2.8m×H6.8m 85m³/h	1	
34		/	4	
35			3	
36			2	
37			1	
38			1	
39			1	
40		T3000	3	
41		T3000	1	
42		T3000	1	
43			2	
44			2	
45		YL41-35DN	1	
46		YL41A-30KN	3	
47		GFLT-612LS	1	
48		GFLT-612LS	1	
49		YL41A-40KN	2	
50		JF-139	2	
51		SPD-400	1	
52		MH-101B	1	
53		D2P5 MTP-910	2	
54			1	
55			4	
56		1	2	
57		PK1N-1F	3	
58			2	

			/	
59		MODELS	12	
60	AVL	AMA1800	1	
61	AVL	AMP-100	1	
62		733S	1	
63		GSP-6	1	
64		MEXA-584L	2	
65	RLVBOX3iV5	VB3i-V5	5	
66	B&K	4231	1	
67	B&K	2240	1	
68		PR-THS-20S	1	
69		ZKMPL200	1	
70		TT3030	1	
71		DF101	1	
72	32KN	R0320SL	1	
73		35000m^3 /h 150kg/h 30000m^3 /h 120kg/h 18000m^3 /h 60kg/h	3	
74		400m^3 /h	1	
75		1 15m^3 CO_2 1 5m^3 2 1 3m^3	1	
76		1 2.1m^3/min	1	
77		1 22m^3	1	

1

400 2

2h

		m/min	m	/	h	/a	/a	

		1.2	0.6	250	2400	600000	50	
	/			/	2400	/	/	/

2400h

120

20min 8h

300d 2880

86.4

80

2.2-6

	/h				
	360	8h/d	300d	86.4 /a	80

2.2-7

			t/a		t		
1.			2868t		500t		Fe≥97% Mn C Si P
2.			100		10		Al≥99% Fe Gu Si Zn
3.			3t		0.5t		
4.			0.2t		0.1t		55% 15% 10% 15% 20%
5.			108t		10		Mn 1.4% 1.55% C 0.0.3% 0.15% Si 0.8% 1.15% S 0.25% P 0.025% Cr 0.3% Ni 0.2% Mo 0.3% Gu 0.5% Fe

6.		48t/m^3	15m^3	CO_2
7.		229t	5m^3	100% 1
8.		40t	5t	100kg/
		5%		
9.		1.3t	0.2	
10.		45t	5	
11.		0.85t	0.1	
12.		12.9t	1	
13.		0.1	0.02	10% 40% 1% 3%
14.		1.8t	0.5	
15.		6.5t	1	10% 14% 6% 8% 6% 8% 4% 8% 14% 18% 0-0.6% 40% 60% 0.5% 0.8%
16.		38t	1	20% 40% 10% 20% 20% 40% 20% 50%
17.		1.5t	0.2	10% 16% 8% 14% 8% 14% 0-0.6% 55% 75% 0.3% 0.4%
18.		1.3t		
19.		45t	5	
20.		11t	1	
21.		41t	5	
22.		4.2t 6000L	/	/

23.			300kg		50kg		25kg/
24.			XXt		20t		
25.			5.4t			/	/
26.			500			/	/
27.			34 Nm^3			/	/

1		50	2		50
3		50	4		50
5		50	6		50
7		50	8		50
9		50	10		50
11		50	12		50
13		50	14		50
15	-A	50	16		50
17		50	18		50
19		50	20		50
21		50	22		50
23		50	24		50
25		50	26		50
27		50	28		50
29		50	30		50
31		50	32		50
33		50	34		50
35		50	36		50
37		50	38		50
39		50	40		50
41		50	42		50
43		50	44		50
45		50	46		50
47		50	48		50
49		50	50		50
51		50	52		50
53		50	54		50

2.2-12

=10:30 2 t/a

μm t/m³ t/a % % t/a t/a

				m³/d				m³/d		
1		50L/.d	800	40.000	/	36		40.000	/	36
2		34395m2	0.3L/m²	2.064	/	1.857		2.064	/	1.857
3		0.54 m3/h	8h/d	23	/	20.7		23.000	/	20.700
4		/		0.313	/	0.090	1	2.352	/	1.925
5		/		0.590	/	0.339		10.668	/	9.409
6	1-1	/		1.337		21.903	1-2	2.673	/	23.106
7	1-2	/		26.892	/	1.203		28.229	/	2.406
8		/		0.456	/	0.219		1.671	/	1.312
9		/		1.621	/	1.267		6.896	/	6.014
10	1-3	/		1.337		29.103	2	2.673	/	30.306
11	1-4	/		5.445	/	4.901	1	10.890	/	9.801
12	1			1.337	38.272	1.203		2.673	38.272	2.406
13		/		0.111	0.213	0.100	1	33.368	0.213	30.032
14	UF	10m3		0.053	6.926	0.048		3.980	6.926	3.582
15	2				23	20.7		0	23	20.7
16				1.504		1.264		8.637		7.582

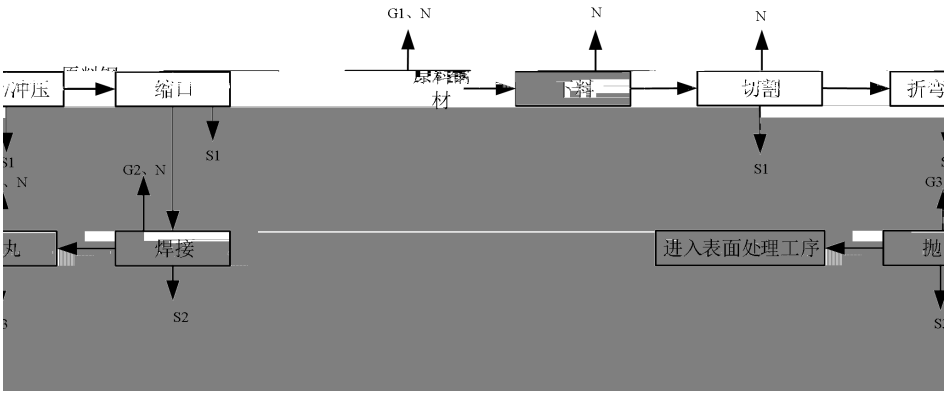
17				3.142		2.738		18.465		16.427
18		2-1		1.458		22.012		1.458		22.012
19		2-2		31.016		4.914		31.016		4.914
20				2.943		2.457		16.593		14.742
21		2-3		23		20.7		23		20.70
22				4.333		0.3		104		90
23			/	0.533	/	0.03	1	5.500	/	4.5
24			RO	98.103		24.526		98.103		24.526
25			/	/	1	0.9	1 1	0	6	5.4
26			4t/h 3%	/	4.167	0.15	1	0	54	45
27			330kg/h	2.64	/	0		2.64		0
			/	273.227		219.622		480.32		455.36

2.2-1

3 1# 2#

3#

3 2 1



1

2

N S1 G1

3 /

N S1

4

N S1

5

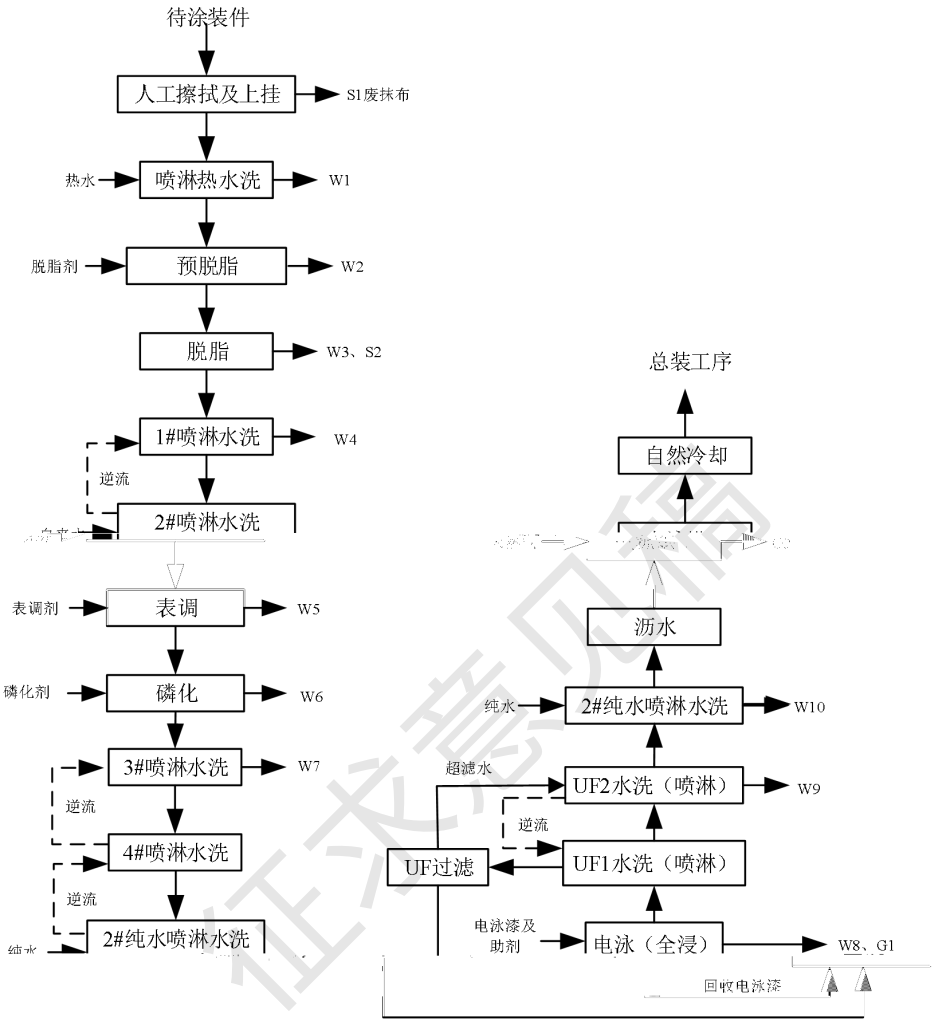
80%Ar+20%CO_2 80

N G2 S2

6

N S3

G3



8h 1 2m/min

1

S1

2

j j >˜ 40~60 j j. 30 >˜ j

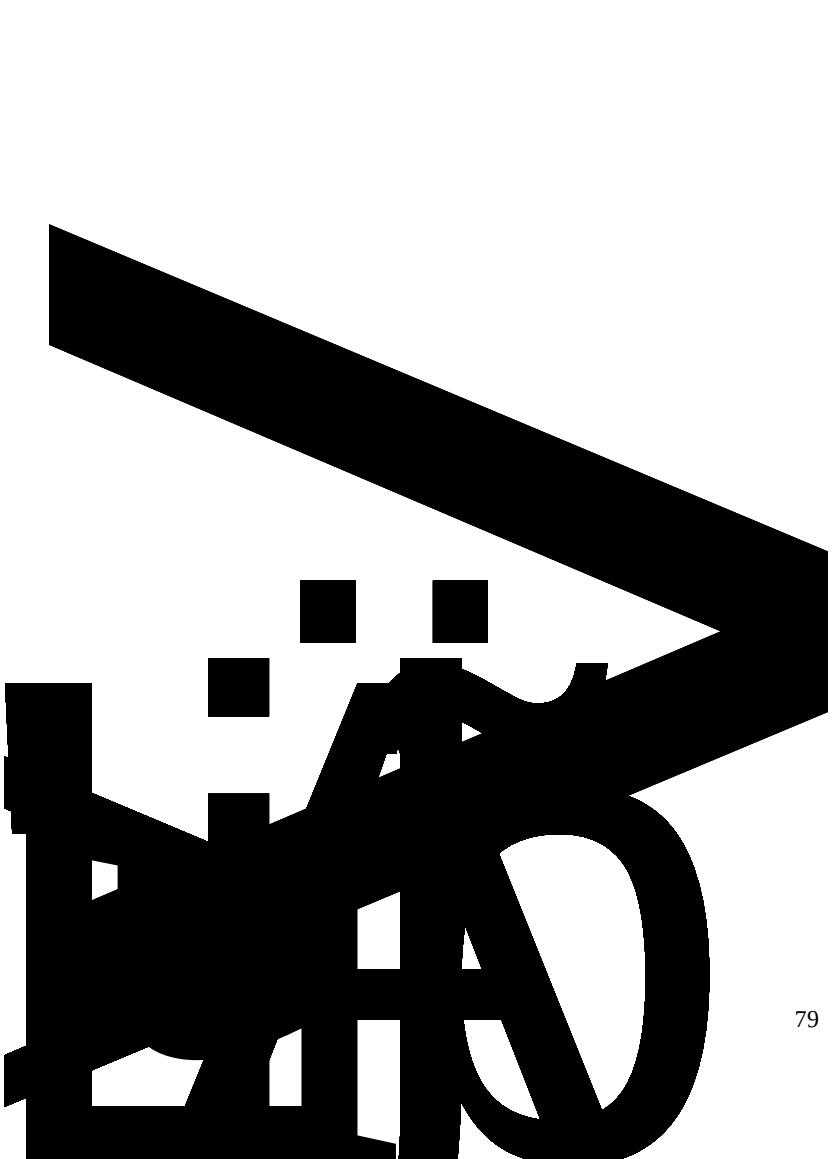
j W1 j >˜ Lb

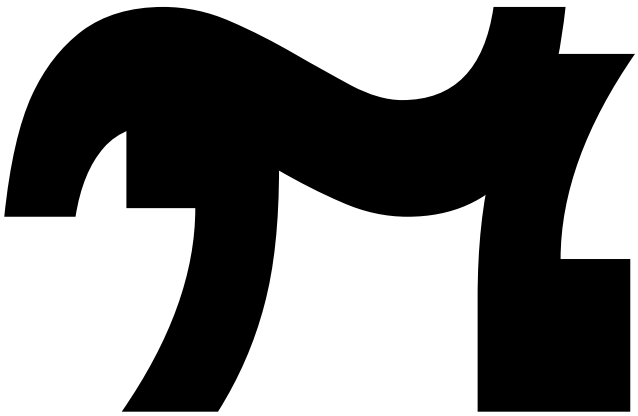
3 ' j

Lb j >Ä j >˜

Lb j Ä 1:2 j ^ >Ä Lb 1.6% ›

>˜ j j >Ä





1

W5

7

45

3 4min

3 1

W6

8 3# 4# 4# 3#

120s W7

2 1

W7

9 2#

30S 4#

0.2m3/h

10

$2H_2O-4e \rightarrow O_2\uparrow+4H^+$

$2H_2O+2e \rightarrow H_2\uparrow+2OH^-$

H^+

26~30 7/9

2 3min 380V 20μm

66.74m^3

30:10:2:58

1 1

G1

S10

W8 G1 S9

S10 N

11 UF

UF 60s UF

1#UF

2#UF UF 3 1 W9

12 2#

30s W10

13

14

180 ~220 40min

1

60m^3 /h

N G2

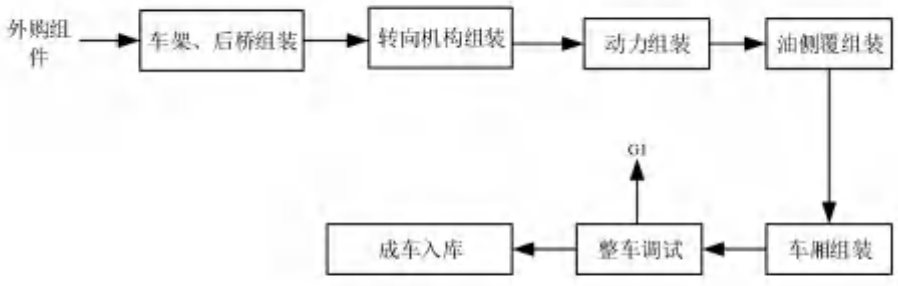
15

2.3-1

		Lm*Wm*Hm	m³					
		2.2*1.35*0.9	2.14	1		1 /2		
		2.2*1.35*0.9	2.14	1		1 /	0.2m^3/h	
		13.2*1.35*0.9	10.45	1		1 /		
	1	2.2*1.35*0.9	2.14	1		1 /2		
	2	2.2*1.35*0.9	2.14	1		1 /2		
		1.2*1.35*0.9	1.17	1		1 /		
		5.5*1.35*0.9	5.35	1		1 /3		

		Lm*Wm*Hm	m^3					
	3	2.2*1.35*0.9	2.14	1		1 /2		
	4	11*1.1*0.9	8.71	1		1 /2		
	1	2.2*1.35*0.9	2.14	/		1 /1		
		15.6*1.55*3.45	66.74	1		1 /		
	UF1	2.2*1.25*0.9	1.98	1		1 /3		
	UF2	11.2*1.23*0.9	10.08	1		1 /3		
	2	2.2*1.25*0.9	1.98	1		1 /3		
		/	/	/	/			

		L21m×W5.5m×H5.85m		180~220	
		TBG 60PV		60	



1

2

3

4

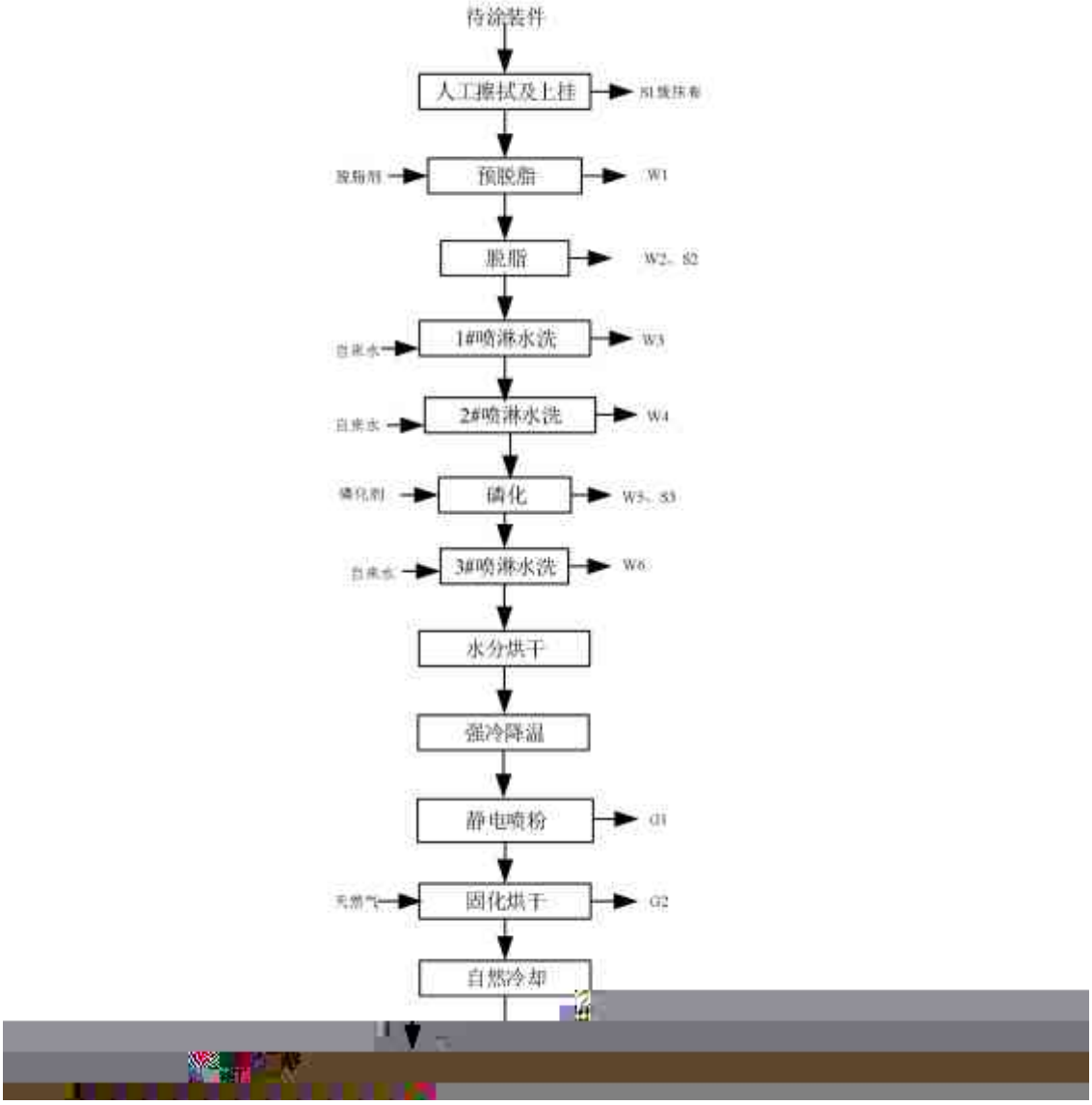
5

5%

100ml Gx

/

6


待涂装件
人工擦拭及上挂
S1 废抹布
脱脂剂
预脱脂
W1
脱脂
W2、S2
自来水
1#喷淋水洗
W3
自来水
2#喷淋水洗
W4
磷化剂
磷化
W5、S3
自来水
3#喷淋水洗
W6
水分烘干
强冷降温
静电喷粉
G1
天然气
固化烘干
G2
自然冷却

1

2

3.0%　　40~60　　120s

3　　1　　W2

3　1#　　120s

W3

120s

W3

4　2#　　60s

W4

W4

5

45

3　4min

3　　1

W5

6　3#　　120s

W6

W6

7

8

- - -

- - - - -

-

-

- - - - - -

1 8 3 5min/

100ml/

80 0.056t/a 15m 1#

1

4t/h 75% RO

“ + + + ”

RO

1

1 7-12

200m^3/h 2% 1

1

1 2

—

~~2023 12~~

HJ 971-2018

1 GX

1

39.6g/h

2868t 1800h/a G1

0.071t/a(0.04kg/h)

7.7 8.0g/cm^3

90% 5m

10%

0.071t/a(0.04kg/h)

2 GX

2 1

“ ” “06 ”

2.19kg/t

2868t 4h/d 1200h/a 50t

2h/d 600h/a

	m^3 /h	h/a	mg/m^3	kg/h	J t/a		kg/h	mg/m^3	t/a
1#	14600	1200	179.25	2.617	3.140	95%	0.131	8.963	0.157
2# Gÿ	14600	1200	179.25	2.617	3.140	95%	0.131	8.963	0.157
3#									

			m^3/h	mg/m^3	kg/h	t/a			mg/m^3	kg/h	t/a
1		1#	20300	20	0.404	0.242			20	0.404	0.242
2		2#	40700	10	0.404	0.242			10	0.404	0.242
3		3#	14800	27	0.404	0.242	80%	0%	27	0.404	0.242
4		4#	17100	24	0.404	0.242			24	0.404	0.242
5		5#	20900	13	0.269	0.162			13	0.269	0.162
6		6#	30600	9	0.269	0.162			9	0.269	0.162
7		7#	31200	9	0.269	0.162			9	0.269	0.162
8		8#	24300	11	0.269	0.162	80%	0%	11	0.269	0.162
9		9#	30000	17	0.505	0.303			17	0.505	0.303
10		10#	30000	17	0.505	0.303			17	0.505	0.303

1.293t/a 0.929t/a

2

1 G1

1

1 15m 1#

4430“ ”

GB·17820-2018 1

GB·17820-2018 1 SO_2

2kg/ m^3 15.87kg/ m^3

13.6m^3/h

2.4kg/ m^3

159Nm^3/h 38.16 m^3/a

SO_2 0.032kg/h 0.076t/a NOx 0.252kg/h 0.606t/a

0.038kg/h 0.092t/a

2 G2

VOC_S

1 15m 2#

HJ1097-2020 35% 65%

0.605t/a 3000m^3/h 84.04mg/m^3

0.252kg/h

3 G3

1

HJ1097-2020 35% 65%

1.124t/a 14000m^3/h

33.45mg/m^3 0.468kg/h

1 15m

S=100 15.87kg/

“ ” 2.4kg/

-

60Nm^3/h 646.5m^3/h

155.16 m^3/a SO_2 0.012kg/h 0.029t/a NOx

0.095kg/h 0.229t/a 0.014kg/h 0.035t/a

2 G6

70%

1 4 2100h

42t/a 33-37 431-434

14 — · 300kg/t·

12.6t/a +

13.313t/a

95% 60% 80% 20000m^3/h

80%

0.504t/a 20% 0.126t/a

	t/a		t/a	kg/t·	t/a	kg/h
	29.4	25%	7.35	0.504	0.0088	0.0037

4 G8 G9

3 15m

2min

50mL/ 40000L/a

5% 5min

100mL/ 2500L/a

1 2083h/a

GB 14622-2016

				mg/km		kg/a	
		L/a	L/100km		NOx		NOx
	400000	40000	3	380	70	506.67	93.33
	25000	2500	3	380	70	31.67	5.83

5

10

2

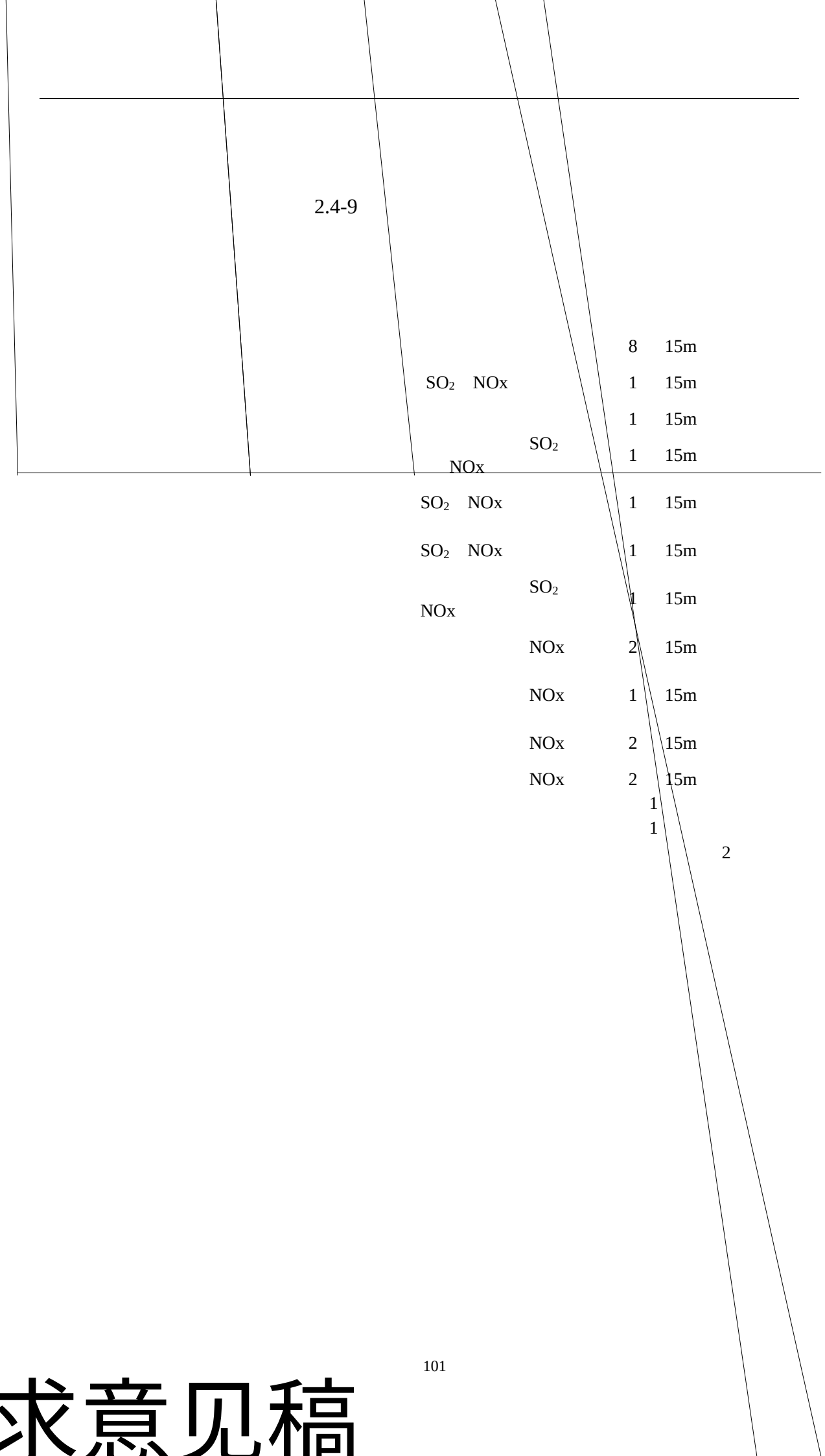
2

2

	m³/h								
			mg/m³	kg/h	t/a		mg/m³	kg/h	t/a
1	20300		19.9	0.404	0.242	15m	19.9	0.404	0.242
2	40700		9.9	0.404	0.242	15m	9.9	0.404	0.242
3	14800		27.3	0.404	0.242	15m	27.3	0.404	0.242
4	17100		23.6	0.404	0.242	15m	23.6	0.404	0.242
5	20900		12.9	0.269	0.162	15m	12.9	0.269	0.162
6	30600		8.8	0.269	0.162	15m	8.8	0.269	0.162
7	31200		8.6	0.269	0.162	15m	8.6	0.269	0.162
8	24300		11.1	0.269	0.162	15m	11.1	0.269	0.162
9	3500	SO_2	18.17	0.064	0.153	15m	18.17	0.064	0.153
		NO_x	42.52	0.149	0.357		42.52	0.149	0.357
			12.99	0.045	0.109		12.99	0.045	0.109
10	3000		84.04	0.252	0.605	15m	84.04	0.252	0.605
11	14000	SO_2	0.86	0.012	0.029	15m	0.86	0.012	0.029
		NO_x	6.80	0.095	0.229		6.80	0.095	0.229
			1.03	0.014	0.035		1.03	0.014	0.035
			33.45	0.468	1.124		33.45	0.468	1.124
12	2500	SO_2	19.20	0.048	0.115	15m	19.20	0.048	0.115
		NO_x	44.93	0.112	0.270		44.93	0.112	0.270
			13.73	0.034	0.082		13.73	0.034	0.082
12	1000	SO_2	12.00	0.012	0.029	15m	12.00	0.012	0.029
		NO_x	95.22	0.095	0.229		95.22	0.095	0.229

			14.40	0.014	0.035		14.40	0.014	0.035
3 13	5000	SO_2	3.40	0.017	0.041	15m	3.40	0.017	0.041
		NO_x	26.98	0.135	0.324		26.98	0.135	0.324
			4.08	0.020	0.049		4.08	0.020	0.049
			0.74	0.0037	0.009		0.74	0.0037	0.009
15-1	10000		10.56	0.1056	0.2533	15m	10.56	0.1056	0.2533
		NOx	1.94	0.0194	0.0467		1.94	0.0194	0.0467
15-2	10000		10.56	0.1056	0.2533	15m	10.56	0.1056	0.2533
		NOx	1.94	0.0194	0.0467		1.94	0.0194	0.0467
16	3000		4.40	0.0132	0.0317	15m	4.40	0.0132	0.0317
		NOx	0.81	0.0024	0.0058		0.81	0.0024	0.0058
17	12000		2.35	0.0282	0.0677	15m	2.35	0.0282	0.0677
		NOx	0.43	0.0052	0.0390		0.43	0.0052	0.0390
18	12000		2.35	0.0282	0.0677	15m	2.35	0.0282	0.0677
		NOx	0.43	0.0052	0.0125		0.43	0.0052	0.0125
19	3000		0.45	0.0013	0.0032	15m	0.45	0.0013	0.0032
		NOx	0.08	0.0002	0.0006		0.08	0.0002	0.0006
20	3000		0.45	0.0013	0.0032	15m	0.45	0.0013	0.0032
		NOx	0.08	0.0002	0.0006		0.08	0.0002	0.0006
G1	/		/	0.04	0.071		/	0.04	0.071
G2	30000		17	0.505	0.303		17	0.505	0.303
G3	30000		17	0.505	0.303		17	0.505	0.303
G4	14600		179	2.617	3.140		8.96	0.131	0.157

G5	14600		179	2.617	3.140		8.96	0.131	0.157
G6	6000		61	0.365	0.110		3.04	0.018	0.005
G7	/		/	0.053	0.126		/	0.053	0.126


2.4-9
8 15m
SO_2 NOx 1 15m
1 15m
SO_2
1 15m
NOx
SO_2 NOx 1 15m
SO_2 NOx 1 15m
SO_2
1 15m
NOx
NOx 2 15m
NOx 1 15m
NOx 2 15m
NOx 2 15m
1
1
2

A.

COD SS

B.

pH COD

SS LAS

C.

pH COD SS LAS

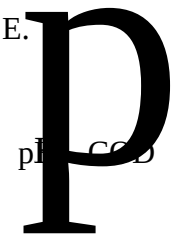
D. 1 2

1 2 1

1 1 2 2

COD SS LAS

E.



pH COD

pH COD SS

H. 1

1 1 1

pH COD SS

A.

pH COD SS

B.UF1 UF2

UF1 UF1 pH COD SS UF2

UF2 pH COD SS

C. 2

UF 1 2 2

2 pH COD SS

A.

pH COD

SS LAS

B.

pH COD SS LAS

C. 1

2 1

1 2 2

COD SS LAS

D.

pH COD SS

E. 3

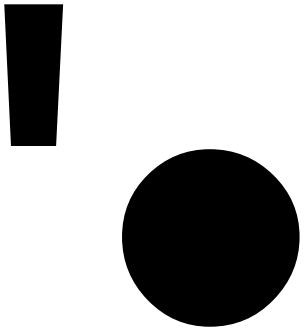
1 3 3 3

pH COD SS

1

SS Ca^{2+} Mg^{2+}

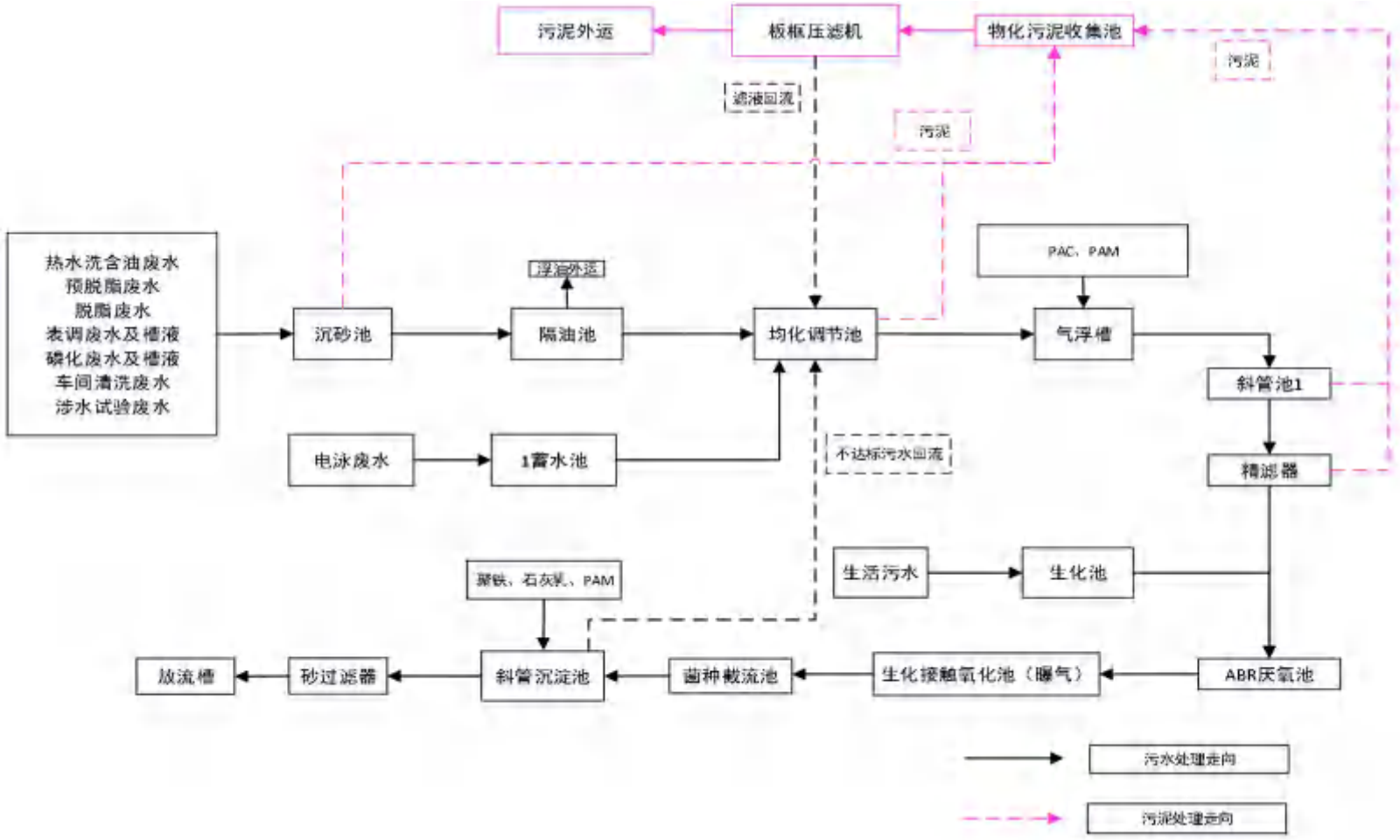
			m³/d		t/a
	COD	mg/L	kg/d		
		663.15	107.645		56964.56t/a
				GB897	
			162.32		



350m³/h

2.4-11 2.4-1

	SS Ca^{2+} Mg^{2+}	pH COD SS NH_3-N TP Zn Mn LAS	pH COD SS	pH COD SS NH_3-N
	350m³/h			
	pH COD SS GB8978-1996			


污泥外运
板框压滤机
物化污泥收集池
污泥
滤液回流
污泥
热水洗含油废水
预脱脂废水
脱脂废水
表调废水及槽液
磷化废水及槽液
车间清洗废水
涉水试验废水
浮油外运
沉砂池
隔油池
均化调节池
PAC、PAM
气浮槽
斜管池1
电泳废水
1#蓄水池
不达标污水回流
精滤器
聚铁、石灰浆、PAM
生活污水
生化池
放流槽
砂过滤器
斜管沉淀池
菌种截流池
生化接触氧化池（曝气）
ABR厌氧池
污水处理走向
污泥处理走向

2.4-1

[2022]

12020-WT

2.4-12

mg/L

		pH	COD	NH_3-N		TP			Zn
	2023.12.23	6.9~7.1	89-100	0.228-0.282	0.30-0.34	1.37-1.60	0.05L	0.05L	0.153-0.194
		/	177	97.1	0.13	7.34	0.002L	0.002L	0.072

2.4-13

[2022] 12020-WT

GB 12348-2008 3

1

20

20

2.4-14

				t/a		
				40	20	XX
				3		
				0.6		
				2		
				20		XX
				2		
				10		XX
				0.2		xxx
				0.5		
				10.82		
				4.38		
				0.2		
	RO			2		RO
				240		/

1

2

3

4

5

6

2007 2011

2016

2.5-1

	COD	23.46	3.95	
	SS	/	1.32	
		/	0.53	
		/	0.2	
		1.3	0.2	
		0.13	0.07	
		0.1344	0.03	
		0.0365		
		0.0076		
	SO_2	/	0.23	
	NOx	/	2.0	
		39.05	10.42	
		25.394	2.45	
		8.395		
		14.064		
		55 dB	55 dB	
		65 dB	65 dB	
		100	0	
		131	0	

“ ”

91500116693938914J001W 2020 4 15 2025 4 14

“ ”

1

◯ 3m

◯

◯

◯

◯

◯

DB 50/658-2016 1 50mg/m^3

2

3

4

5

6 2023

1

◯ 15m

◯ 4 8

4 4 15m 2

1 1 15m

1 1

15m

◯ 1

“ + + ” 15m

◯

◯ 2

DB 50/658-2016 1

2

3

1 “ ”

4

5

3

8

1

3

500 200 40%

3

8h 300d

50 3

3

47

	50	-3	47
	80	0	80 47 33
	50	0	50
	0	3	3

	180	0	180

1

	× × mm	1950×1060×1100
	kw	3
	mm	1240
	km/h	80
	Nm/rpm	200
	kg	121
	kg	150
	h	12h(5A)/3 4h(10A)/1 2h(20A)
	/	/

1

1

2

3 1

1

12

80

8h/d 6h/d

6h/d 4h/d 8h/d

1 2 4

8 4 4 15m

3 4 1

1 15m

1 1

15m

2

3m

15m

3

1

“ ”

“ ”

2

1

“ + + ” 1 15m

3

1 NOx NOx 50mg/m^3

4

Mb≥6.0m K≤1×10 ^{7}cm/s GB16889

5 1

1

20m^2

Mb≥6.0m K≤1×10 ^{7}cm/s GB16889

1

1 8 /

1 200m^2

Mb≥6.0m K≤1×10 ^{7}cm/s

GB16889

3.3-1 4

		1 200m^2	
		6 6 15m 1 2 4 4 15m 3 4 2 2 15m 1 15m	6 8 6
		3 15m	3 15m
		1 “ + + ” 1 15m	1 “ + + ” 3 1 2
		2 1	2
		1 80m^2	1
		HJ610-2016 ≥6m ≤1.0×10^{-7}cm/s GB18597-2023 1m ≤10 ^{7}cm/s 2mm ≤10 ^{10}cm/s	

			Mb≥6.0m K≤1×10 ^{7}cm/s GB16889	
			1	
			80m³	

			540 13 3 15m	+
			2283	12

			80 12	
			1100m^2 - - 1- 2- 3- - - - -1# - -UF1~2-1# - - L16m×W4.9m×H6.55m	
			1000m^2 - - - - -- - - 4 1 L5.5m×W4m×H7m 1 1 L15m×W2.8m×H6.8m	
			30055 2 1 2 1	1
			10 2 15m 12000m^3/h 2 1	1
	CKD		4339m^2 5	
			4032m^2	
			1 6 1129m^2 6774m^2	
			10kv 10KV 110KV 6100KVA 10KV 10KV	
			1 4.0t/h	

RO 75%

1 1 25m^3/min

20m^3/min

2 20m^3

15t .

2600m^2

7200m^2

2920m^2

1 200m^2

64m^2

25m³/h Ar 90m³/h 1

1 2 1

+a

3 3 15m
15m
6 6

350m^3 /d GB8978-1996 COD
TP SS BOD5

GB18918-2012 A
1 20
1

1 20m^2

$0.2m^3$

$5m^3$

$0.5m^3$

12

/

5	/	2
6	YD350 350A	80
7	YA-1UAR61~62	12
8	S9-7500m^3	3
9		2
10	1 3m/min × × =800×2400×900 mm V=1.7m^3	1
11	× × =1000×2400×900 mm V=2.16m^3	
12	× × =1000×2400×9 mm V=2.16m^3	1
13	× × =800×2400×900 mm V=1.7m^3	2
14	× × =1 2400 90 mm .5m	
15	×Q 0×2400×900 mm V= m^3	1
16	× ×2400×900 mm V= m^3	2
17	× 2400×900	

/

3

/

59		MODELS	12
60			2
61			1
62		T3000	1
63		500KG	1
64		YL41-35DN 5T	3
65		ZJ-150-90	1
66		GCD23	1
67		GCD24-Z	2
68		RU-D-220120	2
69			1
70		T20	3
71		1T	1
72	AVL	AMA1800	1
73	AVL	AMP-100	1
74		733S	1
75		GSP-6	1
76		MEXA-584L	2
77	RLVBOX3iV5	VB3i-V5	5
78	B&K	4231	1
79	B&K	2240	1
80		PR-THS-20S	1
81			

				/	
86			1 15m^3 CO_2 1 5m^3 2 1 3m^3	1	
87			1 25m^3/min	1	
88			1 22m^3	1	

7.			40t		5t		100kg/
8.			24		10		10kg/
9.			1.3t		0.2		
10.			45t		2		
11.			0.85t		0.1		
12.			12.9t		1		
13.			0.5		0.1		10% 40% 1% 3%
14.			1.8t		0.5		
15.			6.5t		1		10% 14% 6% 8% 6% 8% 4% 8% 14% 18% 0-0.6% 40% 60% 0.5% 0.8%
16.			1.5t		0.2		20% 40% 10% 20% 20% 40% 20% 50%
17.			38t		1		10% 16% 8% 14% 8% 14% 0-0.6% 55%-75% 0.3% 0.4%
18.			1.3t		0.2		
19.			45t		3		
20.			11t		1		5% 30% 1% 2% 2% 8% 1.5% 5%
21.			41t		5		
22.			4.2t 6000L		/		/

23.			300kg		50kg		25kg/
24.			20t		5t		
25.			3.15				
26.		/	5.4t			/	
27.		/	500			/	
28.		/	136.56 Nm^3			/	

1		3	2		3
3		3	4		3
5		3	6		3
7		3	8		3
9		3	10		3
11		3	12	DCDC	3
13		3	14		3
15		3	16	-A	3
17		3	18		3
19		3	20		3
21		3	22		3
23		3	24		3
25		3	26		3
27		3	28		3
29		3	30		3
31		3	32		3
33		3	34		3
35		3	36		3
37		3	38		3
39		3	40		3
41		3	42		3
43		3	44		3
45		3	46		3
47		3	48		3

49		3	50		3
51		3	52		3
53		3	54		3
55		3	56		3
57		3	58		3
59		3	60		3
61		3	62		3
63		3	64		3
65		3	66		3
67		3	68		3
69		3	70		3
71		3			

1		50	2		50
3		50	4		50
5		50	6		50
7		50	8		50
9		50	10		50
11		50	12		50
13		50	14		50
15	-A	50	16		50
17		50	18		50
19		50	20		50
21		50	22		50
23		50	24		50
25		50	26		50
27		50	28		50
29		50	30		50
31		50	32		50
33		50	34		50
35		50	36		50
37		50	38		50
39		50	40		50
41		50	42		50
43		50	44		50

“ ”

“ ”

1

2

49m^3/d 178m^3/d

GB8978-1996 COD TP SS BOD5

80m^3 /d GB8978-1996 COD

TP SS BOD5

GB18918-2012 A

10KV 10kv

6100kvA 10kv 10kV

1 12

1

1 20m^2

1

1 200m^2

3

1.2m^2

90%

98% 98%

“ + + ”

HJ 1097-2020 E

35% 65% ~

35% 65%

=30% 10% 2% 58%

MSDS

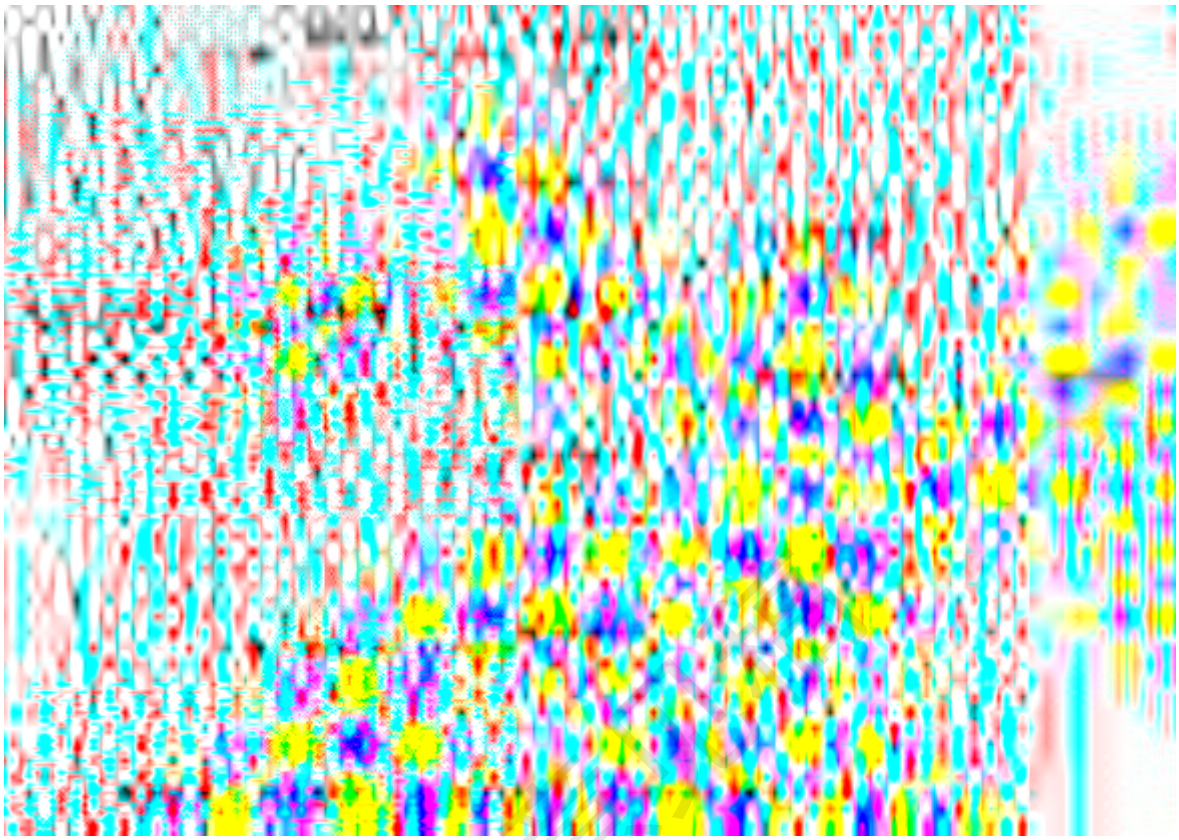
					=10:30 2						t/a			
				μm	t/m³		t/a	%	%	t/a	t/a				
2		40	1.2	20	1.2	98%	11.755	49%	34%	3.81	7.94	7.785	23.355	1.557	45.152
ATV 4		10	1.6	20	1.2	98%	3.918	49%	34%	1.27	2.65	2.595	7.785	0.519	15.051
		/	/	/	/		15.673	/	/	5.09	10.59	10.380	31.139	2.076	60.203

			VOCs	VOCs				VOCs		
	30%	31.139	1%	0.311	10.587	20.241				
	10%	10.380	1%	0.104	5.086	5.190				
	1%	2.076	65%	1.349	0	0.727		1.765	15.673	86.360
	59%	60.203	0	0	0	60.203				
	100%		0	1.765	15.673	86.360				

104.11t/a 1.765t/a

HJ1097-2020 35% 0.618t/a 65% 1.147t/a

98%



VOCs

VOCs

1% 1% VOCs 65% 65%

31.139t/a 10.38t/a 2.076t/a VOCs

1.765t/a

VOCs VOCs 35% 65%

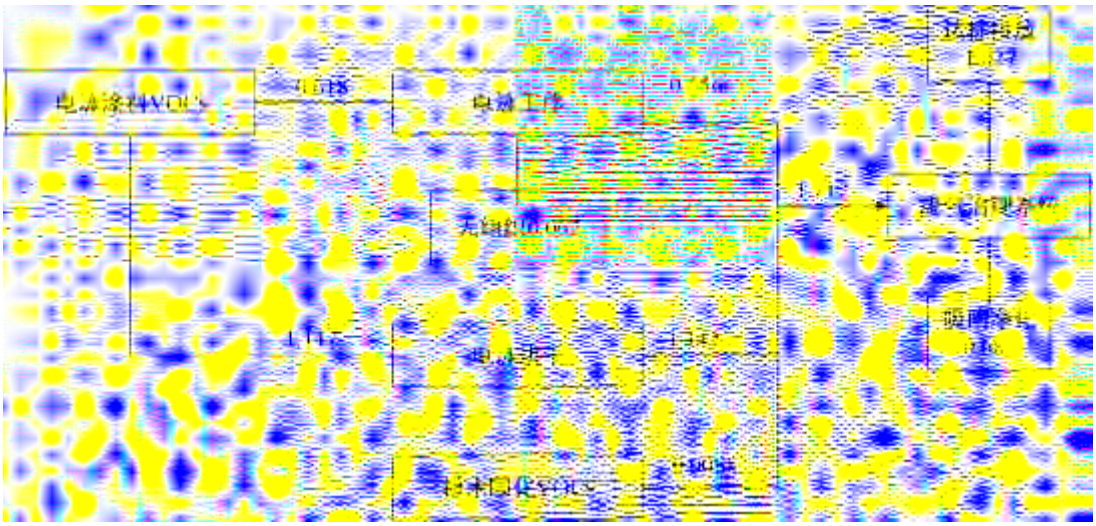
90%

VOCs 0.0088t/a

“ + + ” VOCs

40%

VOCs 3.8-2



+

“ ” “ ”

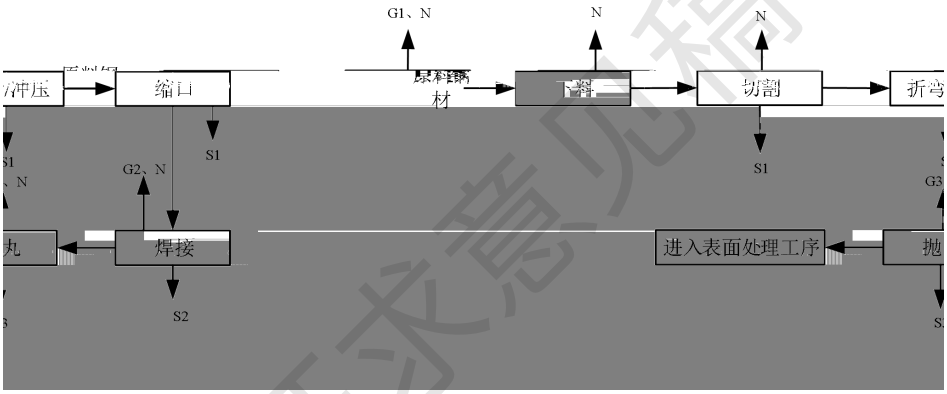
3.8-3

				m³/d				m³/d		
1		50L/.d	4230	40.000	/	36		40.000	/	36
2		72425m2	0.3L.m2	2.064	/	1.857		2.064	/	1.857
3		0.54 m3/h	8h/d	23.000	/	20.7		23.000	/	20.700
4		/		0.313	/	0.090	1	2.352	/	1.925
5		/		0.590	/	0.339		10.668	/	9.409
6	1-1	/		1.337		21.903	1-2	2.673	/	23.106
7	1-2	/		26.892	/	1.203		28.229	/	2.406
8		/		0.456	/	0.219		1.671	/	1.312
9		/		1.621	/	1.267		6.896	/	6.014
10	1-3	/		1.337		29.103	2	2.673	/	30.306
11	1-4	/		5.445	/	4.901	1	10.890	/	9.801
12	1	90m3		1.337	38.272	1.203	1	2.673	38.272	2.406
13		/		0.111	0.213	0.100		33.368	0.213	30.032
14	UF	10m3		0.053	6.926	0.048		3.980	6.926	3.582
15	2				23	20.700		0	23	20.7
16				1.504		1.264		8.637		7.582

50 3

47 3 1

“ ” “ ”



1

2

N S1 G1

3 /

N S1

4

N S1

5

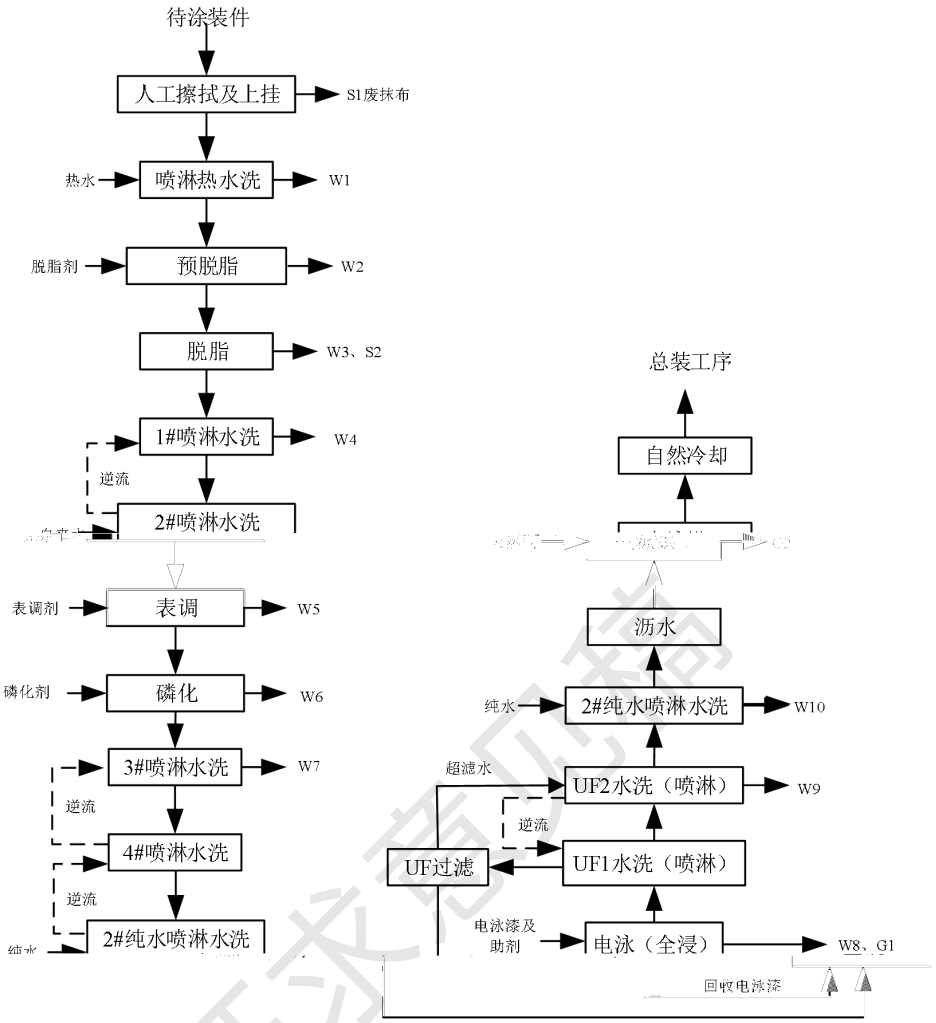
80%Ar+20%CO_2 80

N G2 S2

6

N S3

G3



8h 1 2m/min

1

S1

2

40~60 30S

W1

3

3 4min

3 1

W6

15 3# 4# 4# 3#

120s W7

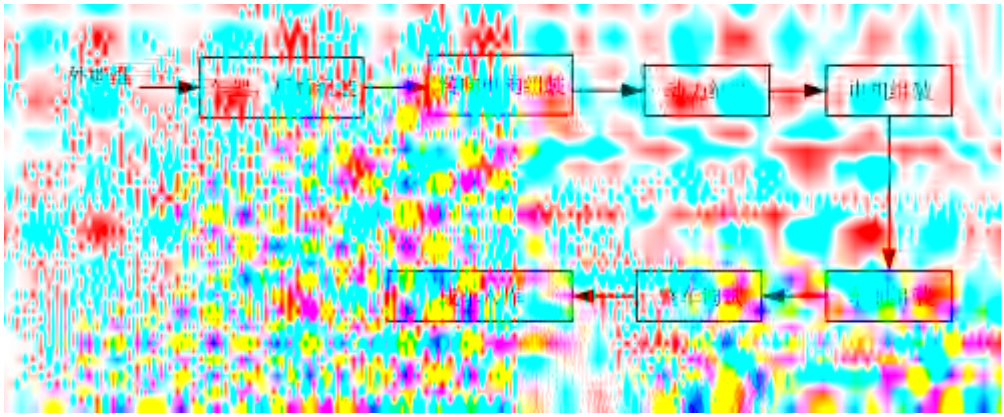
Ũ 2 1

W7

16 2#

12　2#

		Lm*Wm*Hm	m^3				
		2.2*1.35*0.9	2.14	1	1 /2		
		[redacted]					0.2m^3/h
		5.5*1.35*0.9	5.35	1	1 /3		
	3	2.2*1.35*0.9	2.14	1	1 /2		
1	4	11*1.1*0.9	8.71	1	1 /2		
	1	2.2*1.35*0.9	2.14	/	1 /1		
		15.6*1.55*3.45	66.74	1	1 /		



1

2

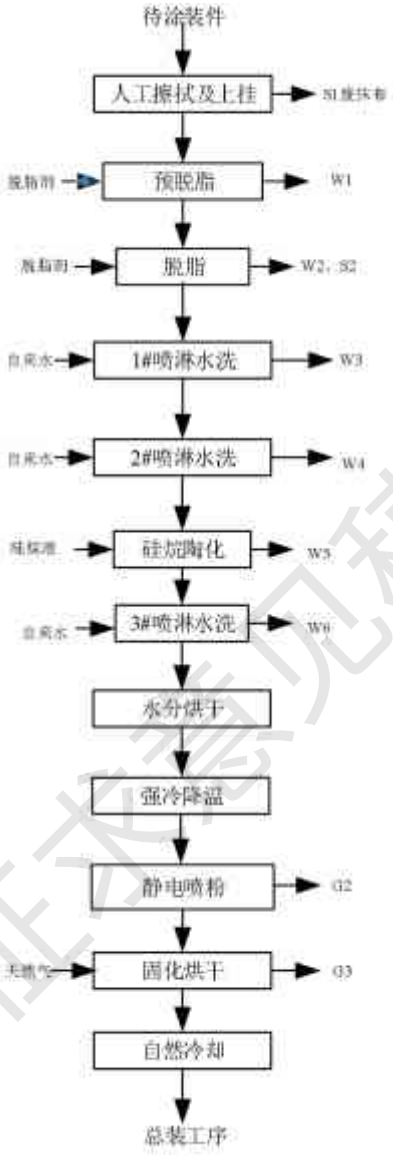
3

4

5

6

“ ” “ ”



1

1:20 1.6%

50~60 60s

1

W1

2

3.0% 40~60 120s

3 1 W2

3 1# 120s

W3

120s

W3

4 2# 60s

W4

W4

5

3

Si-OR Si-OH Si-OH Si-OH

Si-OH OH

Si-OH Si-OH

/ R'(CH2)nSi(OR)$_3$

OR R'

-Si(OR)$_3$ +H$_2$OSi(OH)$_3$+3ROH

SiOH MeOH Me

MeF SiOH+MeOH=SiOMe+H$_2$O

Si-O-Me

700kJ/tool

SiOH Si-O-Si

1/20

15% 20%

35 55

3 1

W5

6 3# 120s

W5

W6

7

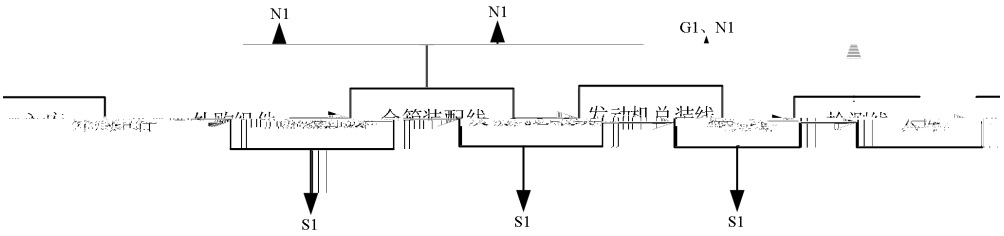
8

1 4

G2

S10 S5 N

9



- - -

- - - - -

-

-

- - - - - -

1 8 3 5min/

100ml/

80 0.056t/a 15m 1#

1

4t/h 75% RO

“ + + + ”

RO

1

1

1

1 2

G1

G2 +15m 3 15m

G3

			G13	NO_X				1 15m
			G14	NO_X				1 15m
				COD BOD_5 SS				
				COD BOD_5 SS LAS				
				COD BOD_5 SS LAS				
				COD BOD_5 SS				
				COD BOD_5 SS				
				COD BOD_5 SS				
	UF			COD BOD_5 SS			UF1 UF2	
				COD BOD_5 SS				
				COD BOD_5 SS				
				COD BOD_5 SS				
				COD SS				
				COD SS				
				COD SS				
				COD BOD_5 SS				

				LAS
			S1	
			S2	
			S3	
			S4	
			S5	
			S6	
			S7	
			S8	
			S9	
			S10	
			S11	
			S12	
			S13	
			S14	
			/	/

3

1 47

G1 0.071t/a(0.04kg/h)

7.7 8.0g/cm^3 90%

5m

10%

0.071t/a(0.04kg/h)

15m

100%

95% 3 15m G2-1~G2-3#

	m^3/h	h/a	mg/m^3	kg/h	t/a		kg/h	mg/m^3	t/a
1#	14600 h	1200	179.25	2.610	3.140				

4

7 7 15m

4#~10#

				m^3/h		t/a	t/a	h/a	kg/h	mg/m^3			mg/m3	kg/h	t/a
1		17		61000	3-1	17	0.343	600	0.572	9.4			0.75	0.046	0.027
2		17		31900	3-2	17	0.343	600	0.572	17.9			1.44	0.046	0.027
3		12		51500	3-3	12	0.242	600	0.404	7.8			0.63	0.032	0.019
4		12		55500	3-4	12	0.242	600	0.404	7.3	80%	90%	0.58	0.032	0.019
5		22		60000	3-5	22	0.444	600	0.741	12.3			0.99	0.059	0.036
6		12		50000	3-7	30	0.606	600	1.010	20.2			1.62	0.081	0.048
			/	/	/	100	2.222	/	3.703	/			/	0.296	0.178

1

1 15m

G4#

4430“ ”

GB·17820-2018 1

GB·17820-2018 1 SO_2

2kg/ m^3

13.6m^3/h 2.4kg/ m^3

DB 50/658-2016 1

50mg/m^3

159Nm^3/h 38.16 m^3/a

SO_2 0.032kg/h 0.076t/a NOx 0.048kg/h 0.116t/a

0.035kg/h 0.092t/a

1

30000m^3/h

1

1 “ + + ”

0.605t/a

1.124t/a

1.765t/a 0.735kg/h

60m^3/h SO_2 0.012kg/h

0.029t/a NOx 0.095kg/h 0.229t/a 0.014kg/h 0.035t/a

			VOCs	VOCs				VOCs		
	30%	31.139	1%	0.311	10.587	20.241				
	10%	10.380	1%	0.104	5.086	5.190				
	1%	2.076	65%	1.349	0	0.727		1.765	15.673	86.36
	59%	60.203	0	0	0	60.203				
	100%	103.798	0	1.765	15.673	86.36				

29.4t MSDS 25%

7.35t/a

0.0088t/a 0.0037kg/h

SO_2 NO_x

1

	t/a		t/a	kg/t·	t/a	kg/h
	29.4	25%	7.35	0.504	0.0088	0.0037

1 15m G5

1

5 1 1 15m

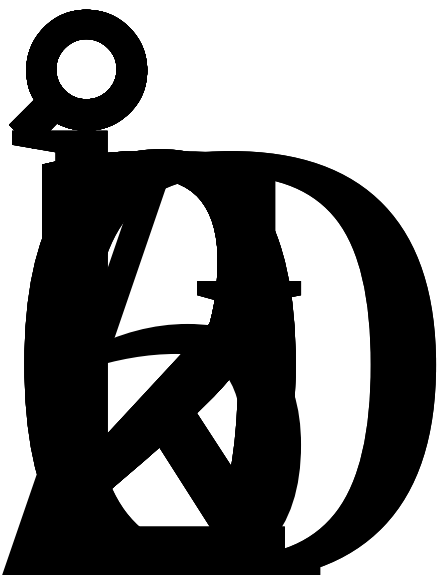
Â ~ G6

Â 1200Nm³/h 2 28.8 m³/a

. 2 S 2 SO₂ 0.024kg/h 0.058t/a Nox / 0.036kg/h 0.87t/a

0.029kg/h 0.069t/a

~ 1



		L/a	L/100km		NOx		NOx
	400000	40000	3	380	70	506.67	93.33
	25000	2500	3	380	70	31.67	5.83

10

2 G10-1~G10-2

2

2 G10-3~G10-4

				mg/km		kg/a	
		L/a	L/100km		NOx		NOx
1#	4453h	5344.5	3	380	70	67.70	12.47
2#	4453h	5344.5	3	380	70	67.70	12.47
1#	425	255	3	380	70	3.23	0.60
2#	425	255	3	380	70	3.23	0.60

4.2-9

G4	2162	SO_2	14.71	0.032	0.076		15m	14.71	0.032	0.076
		NO_x	22.28	0.048	0.116			22.28	0.048	0.116
			17.65	0.038	0.092			17.65	0.038	0.092
		SO_2	0.97	0.029	0.070			0.97	0.03	0.07
		NO_x	7.67	0.230	0.552			7.67	0.23	0.55
			1.16	0.035	0.084	+		1.16	0.03	0.08
						90%				
G5	30000		24.63	0.739	1.773	+	+	13.30	0.399	0.958
						40%				
						15m				
G6	1632	SO_2	14.71	0.024	0.058		15m	14.71	0.024	0.058
		NO_x	22.28	0.036	0.087			22.28	0.036	0.087
			17.65	0.029	0.069			17.65	0.029	0.069
G7	1000	SO_2	12.00	0.012	0.029		15m	12.00	0.012	0.029
		NO_x	95.22	0.095	0.229			95.22	0.095	0.229
			14.40	0.014	0.035			14.40	0.014	0.035
G9-1	10000	NOx	10.56	0.1056	0.2533		15m	10.56	0.1056	0.2533
			1.94	0.0194	0.0467			1.94	0.0194	0.0467
G9-2		NOx	10.56	0.1056	0.2533		15m	10.56	0.1056	0.2533
			1.94	0.0194	0.0467			1.94	0.0194	0.0467
G9-3	3000	NOx	4.40	0.0132	0.0317		15m	4.40	0.0132	0.0317
			0.81	0.0024	0.0058			0.81	0.0024	0.0058
G10-1	12000	NOx	2.35	0.0282	0.0677		15m	2.35	0.0282	0.0677
			0.43	0.0052	0.0390			0.43	0.0052	0.0390
G10-2										

G10-3	3000		0.45	0.0013	0.0032	15m	0.45	0.0013	0.0032
		NOx	0.08	0.0002	0.0006		0.08	0.0002	0.0006
G10-4	3000		0.45	0.0013	0.0032	15m	0.45	0.0013	0.0032
		NOx	0.08	0.0002	0.0006		0.08	0.0002	0.0006
G1	/		/	0.04	0.071		/	0.04	0.071
G8	/		/	0.053	0.126		/	0.053	0.126

SO_2	0.366	0	0.366
NO_x	1.559	0	1.559
	0.807	0.197	1.004
	1.604	0	1.604

		(mg/m^3)	(kg/h)	(t/a)	(mg/m^3)	(kg/h)				/m	/m	/	(m^3/h)	m/s
G2-1		8.96	0.131	0.157	100	1.5				15	0.6	25	14600	14.4
G2-2		8.96	0.131	0.157	100	1.5				15	0.6	25	14600	14.4
G2-3		3.04	0.018	0.005	100	1.5				15	0.5	25	6000	8.5
G3-1		0.75	0.046	0.027	100	1.5				15	1. 1	25	61000	17.8
G3-2		1.44	0.046	0.027	100	1.5				15	1. 1	25	31900	9.3

G3-3		0.63	0.032	0.019	100	1.5				15	1. 1	25	51500	15.1
G3-4		0.58	0.032	0.019	100	1.5				15	1. 1	25	55500	16.2
G3-5		0.99	0.059	0.036	100	1.5				15	1. 1	25	60000	17.5
G3-6		1.62	0.081	0.048	100	1.5				15	1. 1	25	50000	14.6
G4	SO_2	14.71	0.032	0.076	50	/				15	0.3	80	2162	8.5
	NO_x	22.28	0.048	0.116	50	/								
		17.65	0.038	0.092	20	/								
G5	SO_2	0.97	0.029	0.070	300	/				15	1	80	30000	10.6
	NO_x	7.67	0.230	0.552	300	/								
		1.16	0.035	0.084	20	1.5								
	NMHC	24.63	0.739	1.773	60	3.7								
G6	SO_2	14.71	0.024	0.058	50	/				15	0.2	80	1632	6.4
	NO_x	22.28	0.036	0.087	50	/								
		17.65	0.029	0.069	20	/								
G7	SO_2	12.00	0.012	0.029	300	1.4				15	0.2	80	1000	8.8
	NO_x	95.22	0.095	0.229	240	0.5								
		14.40	0.014	0.035	100	1.5								
G9-1		10.56	0.1056	0.2533	20	/				15	0.6	40	10000	9.8
	NOx	1.94	0.0194	0.0467	50	/								
G9-2		10.56	0.1056	0.2533	120	10				15	0.6	40	10000	9.8
	NOx	1.94	0.0194	0.0467	240	0.5								
G9-3		4.40	0.0132	0.0317	120	10				15	0.3	40	3000	11.8
	NOx	0.81	0.0024	0.0058	240	0.5								
G10-1		2.35	0.0282	0.0677	120	10				15	0.6	40	12000	11.8
	NOx	0.43	0.0052	0.0390	240	0.5								

G10-2		2.35	0.0282	0.0677	120	10				15	0.6	40	12000	11.8
	NOx	0.43	0.0052	0.0125	240	0.5								
G10-3		0.45	0.0013	0.0032	120	10				15	0.3	40	3000	11.8
	NOx	0.08	0.0002	0.0006	240	0.5								
G10-4		0.45	0.0013	0.0032	120	10				15	0.3	40	3000	11.8
	NOx	0.08	0.0002	0.0006	240	0.5								

			kg/h	t/a		
G1			0.04	0.071	XXm	15m
G8			0.053	0.126	xxm	15m
			0.093	0.197	/	

1

UF

2

“ ” “ ”

3 1

2

A. —

3 1

W4

B. $350m^3/d$

3.8-3

4.2-10 4.2-11

		COD		BOD5		SS		NH3-N						Zn				Mn		LAS		-			
			kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg
	20.700	1500	31.05	350	7.245	500	10.350			100	2.07														
	0.090	2000	0.18	500	0.045	600	0.054			200	0.02											30	0.003				
	0.339	2000	0.68	500	0.169	600	0.203			200	0.07											100	0.034				
	23.106	600	13.86	250	5.776	100	2.311			50	1.16											2	0.046				
	0.219	250	0.05	200	0.044	600	0.131					300	0.07														
	1.267	800	1.01	200	0.253	600	0.760					1500	1.90	2	0.00			50	0.06			200	0.253				
	35.206	600	21.12	150	5.281	80	2.816					100	3.52	1.50	0.05			15	0.53			25	0.880				
UF	0.048	8000	0.38	600	0.029	800	0.038																				

		COD		BOD5		SS		NH3-N						Zn				Mn		LAS		-			
			kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg
	0.1	3000	0.30	300	0.030	500	0.050																		
	20.70	2000	41.40	200	4.140	500	10.350																		
	1.264	2000	2.53	500	0.632	500	0.632																		
	2.738	2000	5.48	500	1.369	600	1.643																		
	26.926	600	16.16	250	6.732	600	16.156			15	0.40														
	2.457	800	1.97	200	0.491	600	1.474					0	0	2	0.005	100	0.25	50	0.12	20	0.049				
	20.7	600	12.42	150	3.105	600	12.420					0	0	1.50	0.031	5	0.10	15	0.31						
	0.03	800	0.02	300	0.009	400	0.012																		

		COD		BOD5		SS		NH3-N						Zn				Mn		LAS		-			
			kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg		kg
	1.857	600	1.11	250	0.464	200	0.371																		
	25.426	200	5.09			50	1.271																		
	36.000	600	21.6	200	7.2	500	18.0	100	3.60											50	1.80	100	3.6	100	3.60
	219.172	/	176.41		43.014	/	79.043	/	3.60	/	3.71	/	5.49	/	0.09	/	0.35		1.02	/	1.932		4.73	/	3.6

		m³/d		mg/L	kg/d		t/a
		162.324	COD	694.48	112.730		56718.86t/a
			BOD5	194.77	31.616		
			SS	311.75	50.605		
				22.89	3.715		*GB8978-1996*
			P				COD 360mg/L 23.671
				6.98	1.134		BOD_5 170mg/L 11.178
				0.56	0.091		SS 300mg/L 19.725
				6.31	1.025		2mg/L 0.132
			LAS	0.81	0.132		8mg/l 0.526
				2.15	0.3492		40mg/l 1.42
							5mg/L 0.027
		20.85	COD	2018.55	42.082		1mg/L 0.132

			SS	201.40	4.20		*LAS 20mg/L 0.329*
				500.69	10.44		NH_3-N 35mg/L 1.08
			COD	600	21.60		3mg/L 0.197
			BOD5	200	7.20		*20mg/L 0.66*
			SS	500	18.00		
			NH3-N	100	3.60		
			TN	100	3.60		*GB8978-1996*
				100	3.60		COD 60mg/L 3.95
		36					BOD_5 20mg/L 1.32
			LAS	50	1.80		SS 20mg/L 1.32
							3.0mg/L 0.2
							1.0mg/L 0.07
							20mg/L 1.32
							1.0mg/L 0.03
							1.0mg/L 0.13
							LAS 1.0mg/L 0.07
							NH3-N 8mg/L 0.53
							3mg/L 0.2
							10mg/L 0.07

		/ dB(A)/m		/m			m		/dB(A)	/dB A	/dB A	
				X	Y	Z						
	12	85/1		-0.19	-4.15	1	/26		63.53	15	/42.53	1m
							/7		64.57		/43.57	
									63.60		/42.60	
							/84		63.53		/42.53	
X=0 Y=0 Z=0												

1/ m /m / X Y Z dB(A)/m

1 / 90/1m

6		/				90/1m	15dB A		
7		/				90/1m	15dB A		
1					0 0				

3

1 47

80 50

1t/a

1/20

HW49 900-039-49 800

20% 30% 25%

0.787t/a 3.94t/a 3

2

$20m^2$

GB 18597-2023

40
3
0.6
2
20
2

20

F

				10.82	
				4.38	
				0.2	
				3.94	
	RO			2	
				240	

4.4-9

				t/a						
1		HW49	900-041-49	2					T/In	
2		HW49	900-041-49	10					T/In	
3		HW17	336-064-17	0.2				3	T/C	
4		HW17	336-064-17	0.3					T/C	
5		HW17	336-064-17	0.01					T/C	
6		HW17	336-064-17	10.82					T/C	
7		HW08	900-218-08	4.38					T I	
8		HW09	900-007-09	0.2					T	
9		HW49	900-039-49	3.94				3	T	

“ ” 4.3-1

		m3/a			
SO2		t/a	0.232	0	0.232
NOx		t/a	0.689	0	0.689
		t/a	8.891	8.115	0.776
		t/a	2.392	0.787	1.604
		t/a	0.197	0	0.197
		m3/a	56718.86		56718.86
COD		t/a	52.924	48.979	3.945
BOD5		t/a	12.904	11.589	1.315
SS		t/a	23.713	22.398	1.315
		t/a	1.114	0.917	0.197
	P	t/a	3.373	3.307	0.066
		t/a	1.420	0.105	1.315
		t/a	0.027	0.000	0.027
		t/a	0.307	0.176	0.132
LAS		t/a	0.580	0.514	0.066
		t/a	0.105	0.039	0.066
NH3-N		t/a	1.080	0.554	0.526
		t/a	12.080	0.883	

		m3/a					
		t/a	0.232			0.232	
		t/a	1.995		1.306	0.689	-1.306
		t/a	3.229		2.453	0.776	-2.453
		t/a	2.454		0.85	1.604	-0.85
		t/a	7.193		6.996	0.197	-6.996
		m3/a				56718.86	
	COD	t/a	3.945			3.945	
	BOD5	t/a	1.315			1.315	
	SS	t/a	1.315			1.315	
		t/a	0.197			0.197	
	P	t/a	0.066			0.066	
		t/a	1.315			1.315	
		t/a	0.027			0.027	
		t/a	0.132			0.132	
	LAS	t/a	0.066			0.066	
		t/a	0	0.66		0.066	+0.006
	NH3-N	t/a	0.526			0.526	
		t/a	0.197			0.197	
		t/a	28.1	3.75		31.85	+3.75
		t/a	0.247			0.247	
		t/a	240			240	0

1

0% 1h 4~10#

“ ” 50% 1h

4.5-1

				mg/m^3	kg/h	m^3/h	m/s			kg/h	mg/m^3	
				23.77	0.713	30000	10.6	15m 1m	1h	3.7	60	
“ ” 50%	G3-1			3.75	0.229	61000	17.8	15m 1.1m	1h	1.5	100	
	G3-2			7.18	0.229	31900	9.3	15m 1.1m	1h	1.5	100	
	G3-3			3.14	0.162	51500	15.1	15m 1.1m	1h	1.5	100	
	G3-4			2.91	0.162	55500	16.2	15m 1.1m	1h	1.5	100	
	G3-5			4.94	0.296	60000	17.5	15m 1.1m	1h	1.5	100	
	G3-6			8.08	0.404	50000	14.6	15m 1.1m	1h	1.5	100	

2

28 °28′ 29 °28′ 105 °49′ 106 °36′ 80km 100km

50km

340km 170km

70km

306km

127km 179km

5 1300 t

5000t 135km 15

1709.4m 178.5m

1530.9m

7

17km 13km

98% 1.35 2.25 9

2000

250 500m

500 1700m 200 500m

18.4 , 2

39 40 0

1972 8 26 41.3 , 1975 12 15 16

2.3 1026.6 11

4 22% 5 10 78% 6 8 56%

1958 663.8mm 1965

1267.2mm 81%

1.43m/s 13.9m/s

26.7m/s NW 1981 5 10

127km

30km^2 27 100km^2 12

12 8 5

1 1000km^2

200km^2

697925km^2 8670m^3/s 2637.10

m^3

4 8 25

72 110 4 6 12

250m

1

J2s J2x J2sn

0.05 0.2L/s 100t/d

100 500t/d

J1-2z J1z

20 30m

2

1250mm 0.10

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5401.14km^2

28.15 m^3

2

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10m 15cm 0.3

1.5m 20%

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2016 19

SO_2

NO_2 PM_{10} $PM_{2.5}$ CO O_3 GB3095-2012

(HJ2.2-2018) 2023

SO_2 NO_2 PM_{10} $PM_{2.5}$ CO O_3

		μg/m³	μg/m³	%	
SO_2		10	60	16.6	
NO_2		35	40	87.5	
PM_{10}		63	70	90	
$PM_{2.5}$		40	35	114.2	
O_3	8 90	154	160	96.2	
CO	24 95	1200	4000	30	

2023 PM_{10} SO_2 NO_2 CO O_3

GB3095-2012 $PM_{2.5}$

2018 2025

“ ”

2020 44μg/m^3 PM_{10} NO_2

SO_2 8 O_3

24 CO

292 2025 $PM_{2.5}$

≤35μg/m^3

300

3

2022 11 5 2022 11 11

0.8km

3

1

G3—

2022 11 5 2022 11 11

7

m

2

G3

3

2022 11 5 2022 11 11

[2022] HP176

1

4

W1 ŏ w̄ $ ³ ɠm " pH

W ³ ɠm " D6 ³ ɠm " ³ ɠm " γ

0.5km 0.5km

W2 COD BOD_5

2022

11 5

11

7 [2022]

3 HP176

1

			V	W1 0.5km			W2- 1.0km			W3- 0.5km			W4- 1.5km		
					%	S_{ij}		%	S_{ij}		%	S_{ij}		%	S_{ij}
pH	6 9	6 9	6~9	7.4~7.5	0	0.250	7.4~7.5	0	0.250	7.6~7.7	0	0.350	7.6~7.8	0	0.40
	/	/	/	17.3~17.9	/	/	17.6~18.1	/	/	17.8~18.3	/	/	17.8~18.3	/	/
	/	/	/	538~553	/	/	510~521	/	/	398~421	/	/	400~425	/	/
	/	/	/	5481	/	/	5602	/	/	2.08×10^7~2.13×10^7	/	/	2.09×10^7~2.15×10^7	/	/
	≥6	≥5	≥2	8.42~8.63			8.72~8.88		/	9.16~9.35		.640	9.23~9.37		.533
	≤0.1	≤0.2	≤0.4	0.16~0.18		.45	0.17		.425	0.04~0.06		.600	0.05~0.07		.350
	≤0.5	≤1	≤2.0	3.90~4.15			3.46~3.95			1.57~1.97			1.50~1.77		
	≤0.5	≤1.0	≤2.0	0.223~0.237		.118	0.189~0.217		.108	0.195~0.259		.518	0.206~0.245		.245
	≤1.0	≤1.0	≤1.5	0.839~0.889		.592	0.528~0.617		.411	0.112~0.192		.192	0.073~0.166		.166
	≤0.1	≤0.2	≤1.0	0.01L			0.01L			0.01L			0.01L		
	≤0.0	≤0.	≤0	0.001			0.001			0.001L			0.001L		

			W1		W2-		W3-		W4-	
		V	0.5km		1.0km		0.5km		1.5km	
				S_{ij}		S_{ij}		S_i j		S_i j
5	2	.2	L	%	L	%		%		%
≤4	≤6	≤15	3.6~3.7	.246	3.9~4.0	.266	3.3~3.4	.850	3.2~3.5	.583
≤0.2	≤0.2	≤0.3	0.05L~0.056	.186	0.05L		0.05L		0.05L	
COD	≤15	≤20	≤40	15~16	.40	17	.425	10~13	.867	10~13	.650
BOD_5	≤3	≤4	≤10	3.0~3.3	.33	3.5~3.7	.37	2.1~2.6	.867	2.0~2.7	.675
	≤0.002	≤0.005	≤0.1	0.0003L		0.0003L		0.0003L		0.0003L	

			V	W1 0.5km			W2- 1.0km			W3- 0.5km			W4- 1.5km		
					%	S_{ij}		%	S_{ij}		%	S_{ij}		%	S_{ij}
	≤ 0.02	0.02	0.02	5.0×10⁴L	0		5.0×10⁴L	0		5.0×10⁴L	0		5.0×10⁴L	0	

GB/T 14848-2017

[2022] HP176 2022 HP092

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D7		pH K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- SO_4^{2-}	1	1 /	2022 11 5	[2022] HP176	
D8	-		1	1 /			

D9		K^+ Na^+ Ca^{2+} Mg^{2+} CO_3^{2-} HCO_3^- Cl^- SO_4^{2-} pH	1	1 /	2022 6 14	2022 HP092	

2

>1

$$P_i=C_i/C_{si}$$

P_i— i

C_i— i mg/L

C_{si}— i mg/L

pH

P_{pH}= 7.0-pH / 7.0-pH_{sd} pH≤7.0

P_{pH}= pH-7.0 / pH_{su}-7.0 pH 7.0

P_{pH}—pH

pH—pH

pH_{sd}— pH

pH_{su}— pH

3

	m	HCO_3^-	Ca^{2+}	K^+	Mg^{2+}	Na^+	CO_3^{2-}	Cl^-	SO_4^{2-}	
D7	401	108.6	34.0	2.18	9.89	19.6		23.7	42.1	HCO_3^- SO_4^{2-}—Ca^{2+} Na^+
D8	394	228.0	70.5	7.09	14.0	32.6		24.1	111	HCO_3^- SO_4^{2-}—Ca^{2+}
D9	/	313.0	39.0	3.5	27.5	39.3		10.6	29.2	HCO_3^{--}—Ca^{2+} Na^+ Mg^{2+}
	/	/	/	/	/	/	/	250	250	/

HCO_3-- SO_4^{2-}—Ca^{2+} Na^+ Mg^{2+}

		D7		D8		D9	
pH	6.5~8.5	7.20	0.000	7.21	0.067	7.26	0.173
	/	/	/	/	/	/	/
	450	126	0.280	234	0.520	182	0.404
	0.5	0.214	0.428	0.240	0.480	0.294	0.588
	[illegible]	[illegible]	/	0.748	0.748	0.396	0.396

		D7		D8		D9	
CFU/mL	100	30	0.300	37	0.370	75	0.750
	0.001	0.00004L	/	0.00004L	/	0.00004L	/
	0.01	0.0003L	/	0.0003L	/	0.0003L	/
	0.1	0.01L	/	0.07	0.700	0.01L	/
	0.3	0.05	/	0.03L	/	0.03L	/
	0.005	0.0005L	/	0.0005L	/	0.0005L	/
	0.05	0.004L	/	0.004L	/	0.004L	/
	0.05	0.01L	/	0.01L	/	0.01L	/
	0.02	0.005L	/	0.005L	/	0.005L	/
	0.05	0.002L	/	0.002L	/	0.002L	/
	700	1.4L	/	1.4L	/	1.4L	/

GB/T

14848-2017

3 4a GB 3096-2008 3

4a 2024 3 4~3 5 2024

5 15 16 CQ202403006

CQ2405024

1

4 N1— 1m N2—

1m N3— 1m N4— 1m

A

2 1

2024 3 4~3 5 2024 5 15 16

2

		dB A	dB A	
N1	2024.3.4	56	65	
	2024.3.5	51		
N2	2024.3.4	55	65	
	2024.3.5	55		
N3	2024.3.4	54	70	
	2024.3.5	52		
N4	2024.5.15	48	60	
	2024.5.16	47		

N1 N2 GB 3096-2008 3 N3 4a N4 GB 3096-2008 2

HJ 964-2018 6 3 1 2

CQ202403006 CQ2405024 1

TR1 1#		0~0.5m 0.5 1.5m 1.5 3.0m	pH C_{10}-C_{40} 1,1- 1,2- 1,1- -1,2- -1,2- 1,2- 1,1,1,2-	1 1	

			1,1,2,2- 1,1,1- 1,1,2- 1,2,3- 1,2- 1,4- 2- [a] [a] [b] [k] [a,h] [1,2,3-cd]		
TR2 1#		0~0.5m 0.5 1.5m 1.5 3.0m	C_{10}-C_{40}		
TR3 3#		0~0.5m 0.5 1.5m 1.5 3.0m	C_{10}-C_{40}		
TR4 2#		0~0.2m	C_{10}-C_{40}		
TR5 1#		0~0.2m	C_{10}-C_{40}		
TR6		0~0.2m	C_{10}-C_{40}		

2

TR1-6

GB36600-2018

3

	TR1			TR2			TR3			TR4	TR5	TR6	GB36600-2018
	0~0.5m	0.5 1.5m	1.5 3.0m	0~0.5m	0.5 1.5m	1.5 3.0m	0~0.5 m	0.5 1.5m	1.5 3.0m	0~0.2m	0~0.2m	0~0.2m	
pH	7.8	8.39	8.25	8.49	8.60	8.55	8.32	8.35	8.62	8.33	8.05	8.42	/
C_{10}-C_{40}	30	15	10	15	12	7	19	27	14	110	8	12	4500
	26	25	26	/	/	/	/	/	/	/	/	/	18000
	24.2	23.8	30.7	/	/	/	/	/	/	/	/	/	800
	0.18	0.16	0.16	/	/	/	/	/	/	/	/	/	65
	0.073	0.065	0.054	/	/	/	/	/	/	/	/	/	38
	4.32	4.06	3.98	/	/	/	/	/	/	/	/	/	60
	25	22	22	/	/	/	/	/	/	/	/	/	900
				/	/	/	/	/	/	/	/	/	5.7
				/	/	/	/	/	/	/	/	/	37
				/	/	/	/	/	/	/	/	/	0.43
1.1-				/	/	/	/	/	/	/	/	/	66
				/	/	/	/	/	/	/	/	/	616
-1.2-				/	/	/	/	/	/	/	/	/	54
1.1-				/	/	/	/	/	/	/	/	/	9

	TR1			TR2			TR3			TR4	TR5	TR6	GB36600-2018
	0~0.5m	0.5 1.5m	1.5 3.0m	0~0.5m	0.5 1.5m	1.5 3.0m	0~0.5 m	0.5 1.5m	1.5 3.0m	0~0.2m	0~0.2m	0~0.2m	
-1.2-				/	/	/	/	/	/	/	/	/	596
				/	/	/	/	/	/	/	/	/	0.9
1.1.1-				/	/	/	/	/	/	/	/	/	840
				/	/	/	/	/	/	/	/	/	2.8
				/	/	/	/	/	/	/	/	/	4
1.2-				/	/	/	/	/	/	/	/	/	5
				/	/	/	/	/	/	/	/	/	2.8
1.2-				/	/	/	/	/	/	/	/	/	5
				/	/	/	/	/	/	/	/	/	1200
1.1.2-				/	/	/	/	/	/	/	/	/	2.8
				/	/	/	/	/	/	/	/	/	53
				/	/	/	/	/	/	/	/	/	270
				/	/	/	/	/	/	/	/	/	28
1.1.1.2-				/	/	/	/	/	/	/	/	/	10
+				/	/	/	/	/	/	/	/	/	570
				/	/	/	/	/	/	/	/	/	640

	TR1			TR2			TR3			TR4	TR5	TR6	GB36600-2018
	0~0.5m	0.5 1.5m	1.5 3.0m	0~0.5m	0.5 1.5m	1.5 3.0m	0~0.5 m	0.5 1.5m	1.5 3.0m	0~0.2m	0~0.2m	0~0.2m	
				/	/	/	/	/	/	/	/	/	1290
1.1.2.2-				/	/	/	/	/	/	/	/	/	6.8
1.2.3-				/	/	/	/	/	/	/	/	/	0.5
1.4-				/	/	/	/	/	/	/	/	/	20
1.2-				/	/	/	/	/	/	/	/	/	560
				/	/	/	/	/	/	/	/	/	260
2-				/	/	/	/	/	/	/	/	/	2256
				/	/	/	/	/	/	/	/	/	76
				/	/	/	/	/	/	/	/	/	70
[a]				/	/	/	/	/	/	/	/	/	15
				/	/	/	/	/	/	/	/	/	1293
[b]				/	/	/	/	/	/	/	/	/	15
[k]				/	/	/	/	/	/	/	/	/	151
[a]				/	/	/	/	/	/	/	/	/	1.5
[1,2,3-cd]				/	/	/	/	/	/	/	/	/	15
[a h]				/	/	/	/	/	/	/	/	/	1.5

TR1-6

GB36600-2018

(1)

2021 365 8760

AERMOD LEM

WRF (57517) 2021

AERMOD 0 4 8 12 16 20

3km 16 (0m 10m 30m 95m 175m 250m 350m

450m 750m 1250m 1750m 2250m 2750m 3500m 4500m)

6. 1- 1

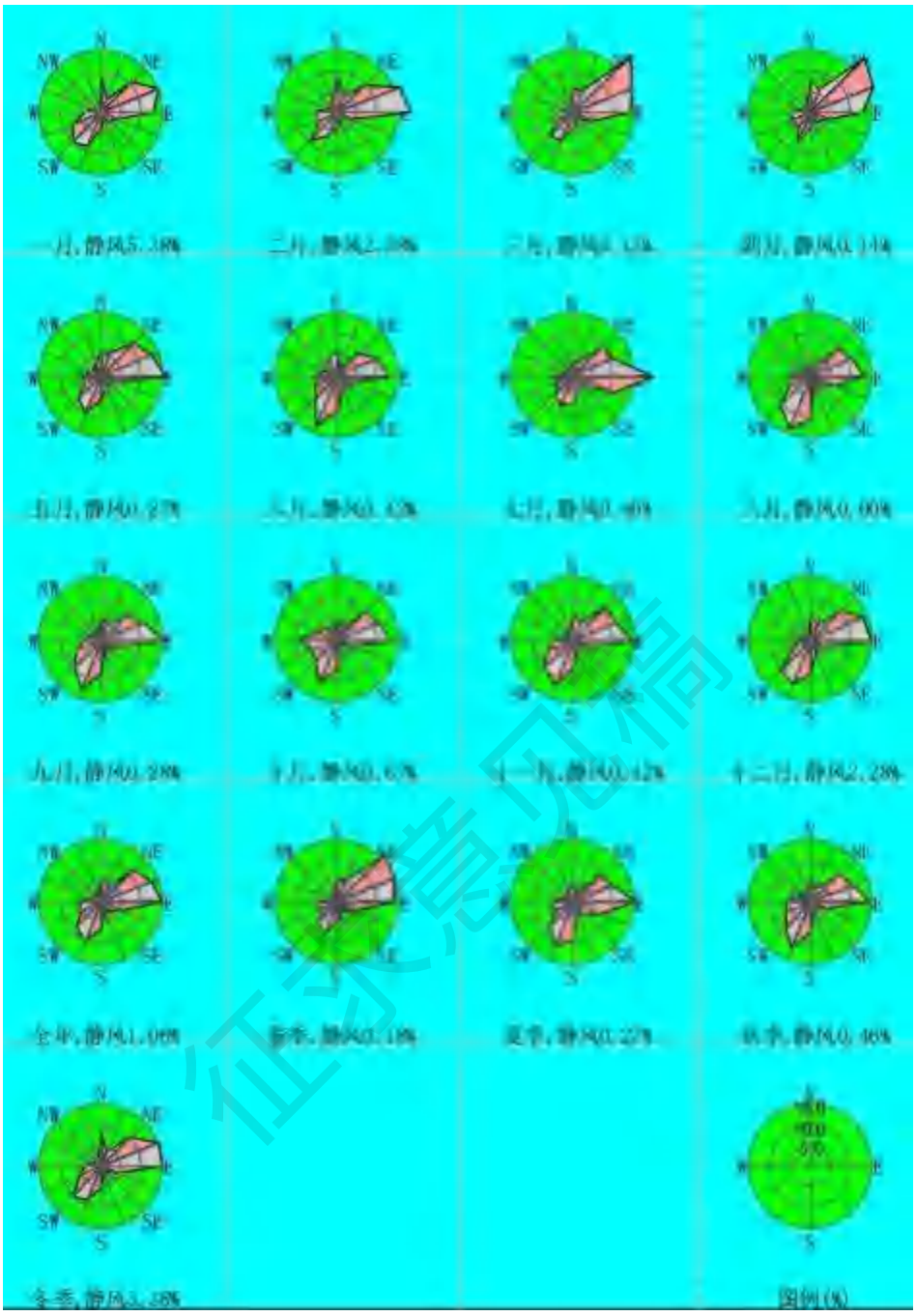
			/m		/m			
			X	Y	/m			
	57517		106.25E	29.28N	18000	212	2021	

2

1

2021

E 14.35% ENE 12.71%



%	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	C
	8.74	3.36	10.48	14.92	12.23	4.03	2.69	1.34	3.63	8.47	9.81	7.39	3.63	2.42	0.54	0.94	5.38
	8.93	4.46	9.23	16.22	17.41	3.57	1.04	0.89	3. 13	5.95	9.08	4.61	4.91	2.98	2.23	2.98	2.38
	5.91	5.65	19.22	15.32	13.71	5. 11	2.28	1.34	3.76	7.26	7.80	3.90	3.63	1.34	1.34	2.28	0. 13

	7.36	6.11	18.33	16.25	12.22	4.44	2.50	1.39	3.61	7.36	4.44	4.44	5.28	1.94	1.53	2.64	0.14
	5.65	5.91	10.89	12.77	15.46	4.03	2.55	2.96	5.78	9.54	7.53	4.30	4.57	2.28	2.55	2.96	0.27
	6.25	1.11	7.50	10.28	12.22	4.17	3.33	3.19	8.19	13.33	7.50	5.42	5.69	3.33	3.47	4.58	0.42
	3.23	3.63	10.22	10.08	19.22	10.75	4.03	2.96	6.99	7.53	6.32	3.76	4.84	2.15	1.61	2.28	0.40
	2.96	2.42	8.74	10.75	12.90	6.18	3.49	1.88	10.48	13.44	9.95	5.11	4.97	2.82	1.34	2.55	0.00
	5.28	3.89	8.33	10.69	15.42	3.75	1.94	2.64	7.78	12.64	9.17	6.25	4.31	2.92	2.50	2.22	0.28
	4.44	2.96	9.27	10.75	12.90	3.76	1.75	1.61	7.12	11.02	7.12	6.45	9.27	5.11	3.76	2.02	0.67
	6.11	4.17	10.97	11.11	14.03	4.44	2.22	2.08	6.53	11.53	9.44	6.25	4.58	1.94	2.50	1.67	0.42
	5.78	3.90	9.95	13.58	14.65	4.30	1.48	2.96	7.93	11.29	10.35	4.03	3.36	1.61	0.94	1.61	2.28
	6.30	5.89	16.12	14.76	13.81	4.53	2.45	1.90	4.39	8.06	6.61	4.21	4.48	1.86	1.81	2.63	0.18
	4.12	2.40	8.83	10.37	14.81	7.07	3.62	2.67	8.56	11.41	7.93	4.76	5.16	2.76	2.13	3.13	0.27
	5.27	3.66	9.52	10.85	14.10	3.98	1.97	2.11	7.14	11.72	8.56	6.32	6.09	3.34	2.93	1.97	0.46
	7.78	3.89	9.91	14.86	14.68	3.98	1.76	1.76	4.95	8.66	9.77	5.37	3.94	2.31	1.20	1.81	3.38
	5.86	3.96	11.11	12.71	14.35	4.90	2.45	2.11	6.27	9.97	8.21	5.16	4.92	2.57	2.02	2.39	1.06

2

A.

	1	2	3	4	5	6	7	8	9	10	11	12
m/s	1.15	1.22	1.56	1.37	1.40	1.43	1.60	1.56	1.60	1.37	1.23	1.15

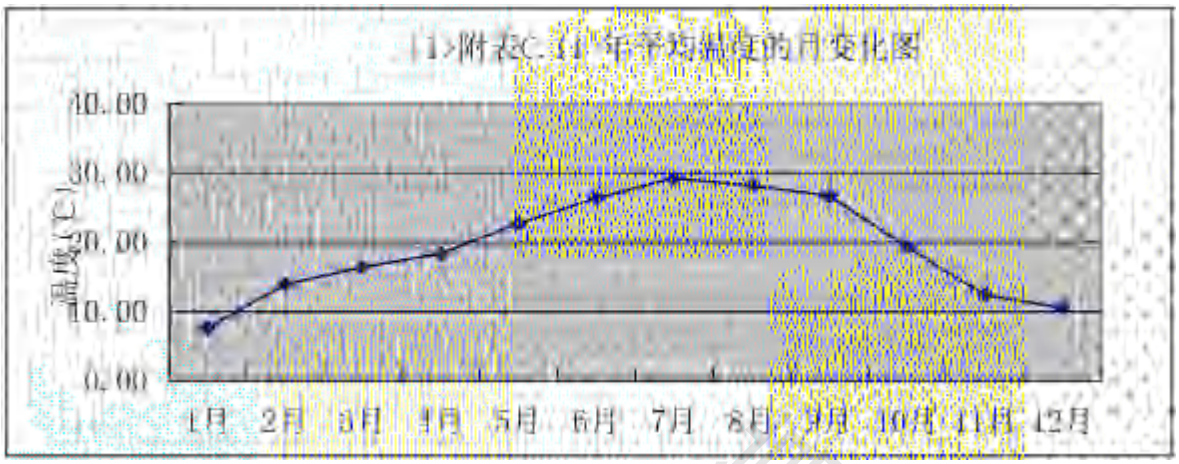
2021 1.39m/s 1.15~ 1.60m/s

7 1.60m/s 3 5 1.40~ 1.56m/s 1 12

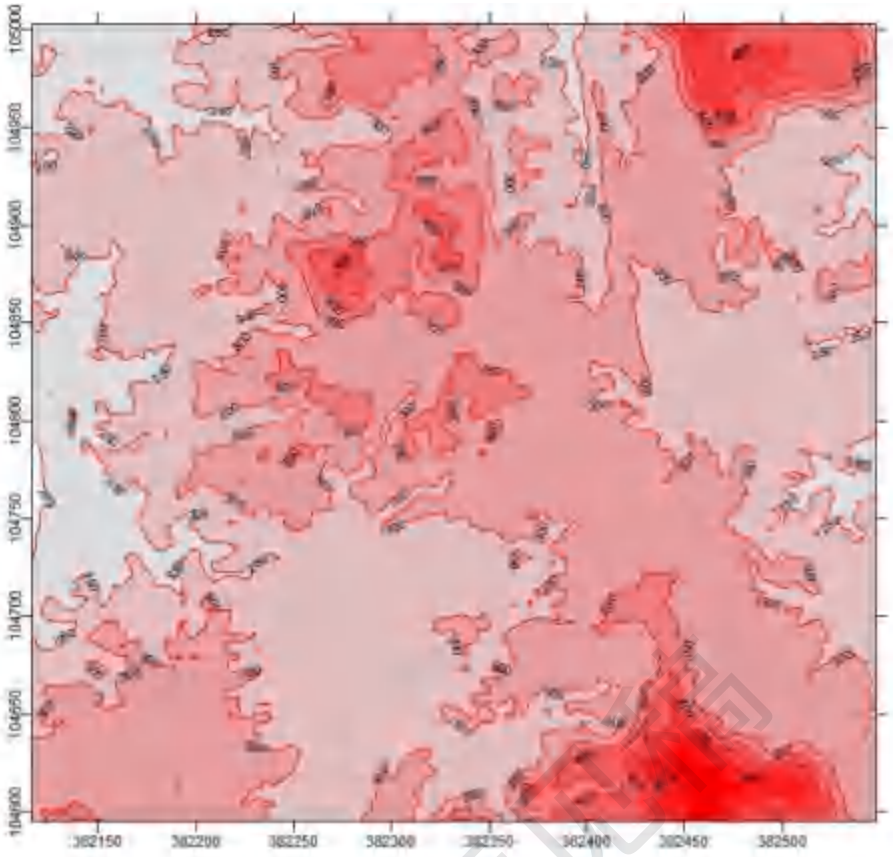
1.15m/s

B.

	1	2	3	4	5	6	7	8	9	10	11	12
	7.59	13.92	16.38	18.35	22.68	26 33	29 25	28 15	26 70	19 24	12 36	10 51



AERMOD DEM



6.1.3-1

AERMOD

AERMOD AERMET

USERGUIDE 1 0-360

BOWEN

				BOWEN	
1	0-360	12, 1,2	0.6	0.5	0.01
2	0-360	3,4,5	0. 14	0.2	0.03
3	0-360	6,7,8	0.2	0.3	0.2
4	0-360	9, 10, 11	0. 18	0.4	0.05

(1)

G2-1 G2-2 G2-3

G3-1 G3-2 G3-3 G3-4 G3-5 G3-6 G4

G5

G6 G7

		■ □
	/m	90
		□ ■
	/km	/
	/°	/

3

6.1-9 6.1-10

		/m		/m	/m	/m	/	/Nm³/h		/kg/h			
		X	Y							SO_2	NOx		
1	G2-1	16	-86	357	15	0.6	25	14600		/	/	0.131	/
2	G2-2	101	-62	357	15	0.6	25	14600		/	/	0.131	/
3	G2-3	125	-31	357	15	0.5	25	6000		/	/	0.018	/
4	G3-1	-117	-117	357	15	1. 1	25	61000		/	/	0.046	/
5	G3-2	-16	-94	357	15	1. 1	25	31900		/	/	0.046	/
6	G3-3	39	-125	357	15	1. 1	25	51500		/	/	0.032	/
7	G3-4	-94	-172	357	15	1. 1	25	55500		/	/	0.032	/
8	G3-5	125	-117	357	15	1. 1	25	60000		/	/	0.059	/
9	G3-6	70	-86	357	15	1. 1	25	50000		/	/	0.081	/
10	G4	55	-94	357	15	0.3	80	2162		0.032	0.048	0.048	/
11	G5	-8	-133	357	15	1	80	30000		0.029	0.230	0.035	0.739
12	G6	-8	-140	357	15	0.2	80	1632		0.024	0.036	0.029	/
13	G7	8	-140	357	15	0.2	80	1000		0.012	0.095	0.014	/

		/m			/m			/Nm³/h	/kg/h			
		X	Y	/m		/m	/		SO_2	NOx		
14	G9-1	70	-125	357	15	0.6	40	10000	/	0.0194	/	0.1056
15	G9-2	[illegible]	-177	357	15	0.6	40	10000	/	0.0194	/	0.1056
16	G9-3	[illegible]	-156	[illegible]	15	[illegible]	40	3000	[illegible]	0.0024	[illegible]	0.0132

	/		0.093
X=0 Y=0			

4

		μg/m^3	Pi %	m	D10% m
G2-1		2.23	0.50	6	0
G2-2		2.23	0.50	63	0
G2-3		0.49	0.11	28	0
G3-1		0.45	0.10	78	0
G3-2		0.56	0.13	67	0
G3-3		0.32	0.07	95	0
G3-4		0.32	0.07	95	0
G3-5		0.58	0.13	78	0
G3-6		0.83	0.19	95	0
G4	SO_2	1.69	0.34	23	0
	NO_x	2.53	1.01	23	0
		2.53	0.56	23	0
G5	SO_2	0.34	0.07	85	0
	NO_x	2.76	1.11	85	0
		0.42	0.09	85	0
	NMHC	8.87	0.44	85	0
G6	SO_2	1.35	0.27	22	0
	NO_x	2.03	0.36	22	0

		μg/m^3	Pi %	m	D10% m
		1.64	0.82	22	0
G7	SO_2	0.93	0.19	16	0
	NO_x	7.41	2.96	16	0
		10.92	2.43	16	0
G9-1		2.21	0.11	57	0
	NOx	0.40	0.16	57	0
G9-2		2.21	0.11	57	0
	NOx	0.40	0.16	57	0
G9-3		0.55	0.03	25	0
	NOx	0.10	0.04	25	0
G10-1		0.54	0.03	60	0
	NOx	0.10	0.04	60	0
G10-2		.93	0.10	60	0
	NOx	0.35	0.14	60	0
G10-3		0.54	0	25	0
	NOx	0.01	0	25	0
G10-4		0.49	0	26	0
	NOx	0.01	0	26	0
1		2.45	0.27	244	0
2		3.24	0.36	244	0

2.43% 10.92ug/m3

0.34% 1.69ug/m^3 2.96%

7.41ug/m^3 0.44% 8.87ug/m^3

0.36% 3.24ug/m^3

2.96% 10%

5km

		(mg/m^3)	(kg/h)	(t/a)
G2-1		8.96	0.131	0.157
G2-2		8.96	0.131	0.157
G2-3		3.04	0.018	0.005
G3-1		0.75	0.046	0.027
G3-2		1.44	0.046	0.027
G3-3		0.63	0.032	0.019
G3-4		0.58	0.032	0.019
G3-5		0.99	0.059	0.036
G3-6		1.62	0.081	0.048
G4	SO_2	14.71	0.032	0.076
	NO_x	22.28	0.048	0.116
		17.65	0.038	0.092
G5	SO_2	0.97	0.029	0.070
	NO_x	7.67	0.230	0.552
		1.16	0.035	0.084
	NMHC	24.63	0.739	1.773
G6	SO_2	14.71	0.024	0.058
	NO_x	22.28	0.036	0.087
		17.65	0.029	0.069
G7	SO_2	12.00	0.012	0.029
	NO_x	95.22	0.095	0.229

		14.40	0.014	0.035
G9-1		10.56	0.1056	0.2533
	NOx	1.94	0.0194	0.0467
G9-2		10.56	0.1056	0.2533
	NOx	1.94	0.0194	0.0467
G9-3		4.40	0.0132	0.0317
	NOx	0.81	0.0024	0.0058
G10-1		2.35	0.0282	0.0677
	NOx	0.43	0.0052	0.0390
G10-2		2.35	0.0282	0.0677
	NOx	0.43	0.0052	0.0125
G10-3		0.45	0.0013	0.0032
	NOx	0.08	0.0002	0.0006
G10-4		0.45	0.0013	0.0032
	NOx	0.08	0.0002	0.0006
	SO_2			0.233
	NO_x			1.1359
				0.599
				2.4531

						/ t/a
					/ kg/h	
1				DB50/418-2016 1	0.04	0.071
2					0.053	0.126
					0.197	

		/ t/a
1	SO_2	0.233
2	NO_x	1.1359
3		0.796
4		2.4531

(6)

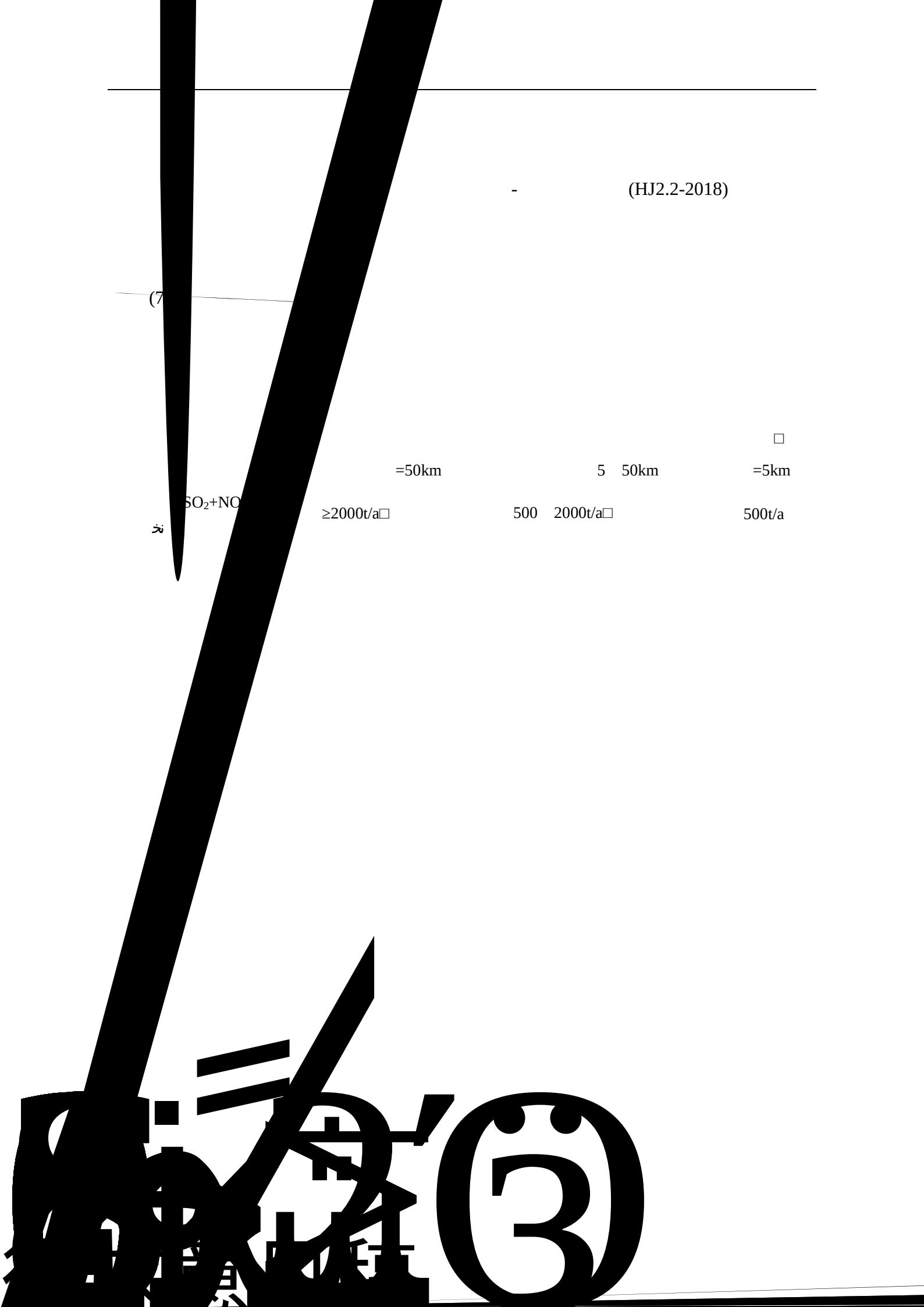
- (HJ2.2-2018)

(7

□

=50km 5 50km =5km

SO_2+NO ≥2000t/a□ 500 2000t/a□ 500t/a



		k ≤-20%□	k -20%□	
		SO_2 NO_2		□
				□
		□		
		/ / m		
		SO_2: 0.233 t/a	NOx: 1.1359 t/a	0.796 t/a	VOCs: 2.4531 t/a
“□” “√” “ ”				

(1)

(HJ 2.3-2018)

B

2

350m^3/d

60m^3/d 290m^3/d 219.174m^3/d

COD BOD_5 SS TN

LAS

2

6 m^3/d

□ □ □ □

COD BOD5 SS

□

TN

□ □

LAS

/ km / km²

/

□ □ □ □

□ □ □ □

/

□ □ □

□ □ □ □

□

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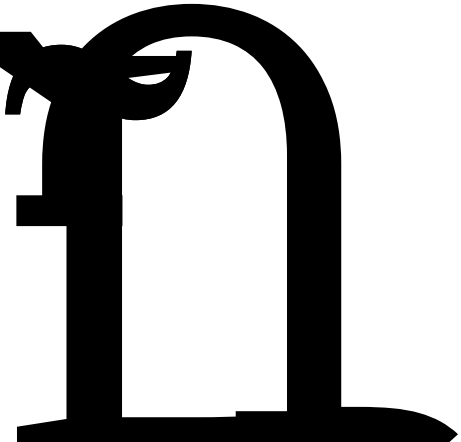
□

	/ t/a	/ mg/L
COD	3.95	60
BOD5	1.32	20
SS	1.32	20
	0.2	3.0
P	0.07	1.0
	0.13	1.0
LAS	0.07	1.0
	0.53	8
	0.07	10
	0.2	3

/ /

t/a mg/L

/ / / / /



3.1.5

HJ610-2016

1

(GB 18597-2023)

23

(GB 18597-2023)

2

COD

1

45m^3 (5m 3m 3m)

5%

20d

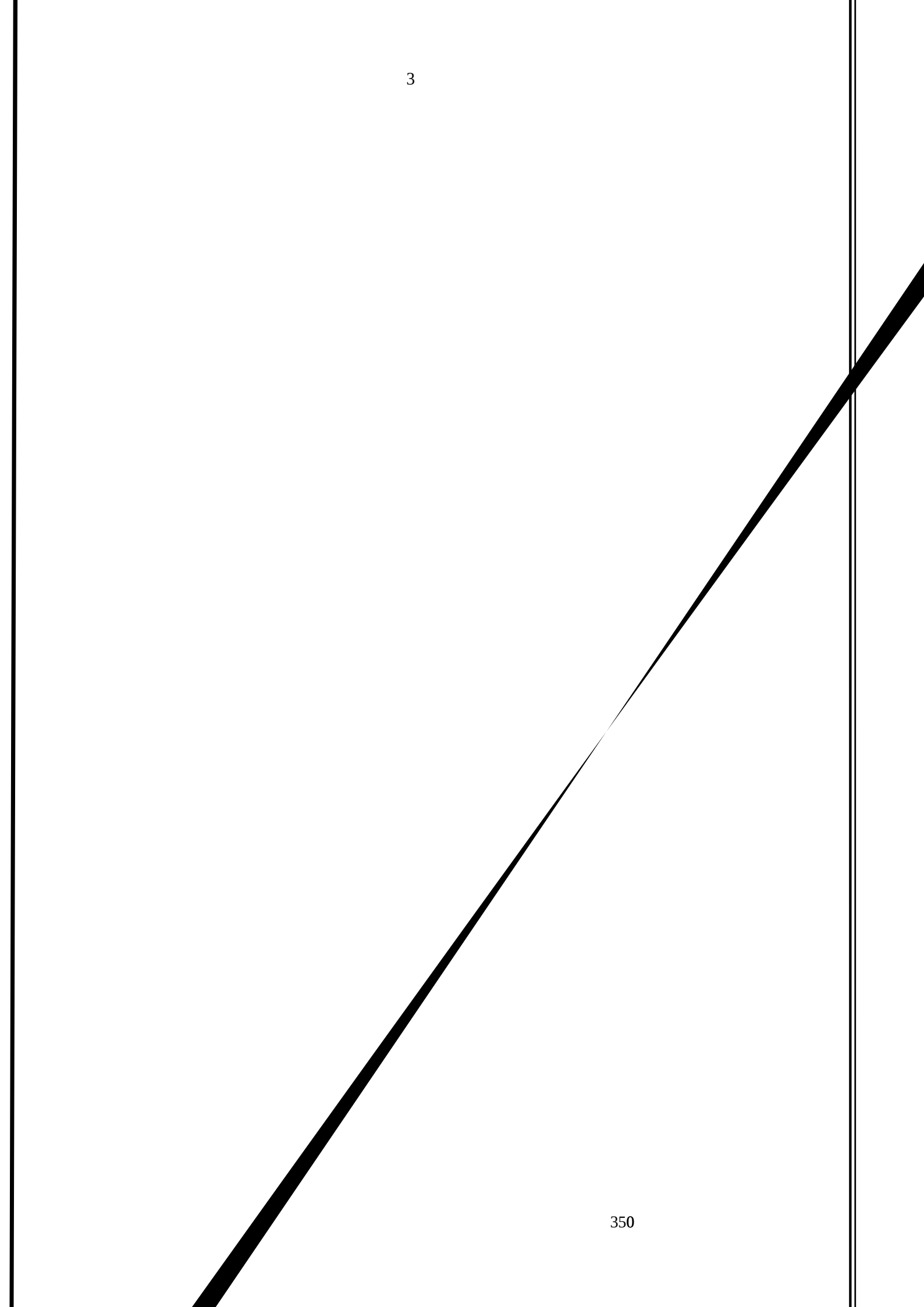
1.5m^3

$$A = \frac{Q K H A D}{D} A$$

Q— m^3/d
D— m 12m
A— m^2 5%
H— m 4m
K— m/d 0.5m/d

COD 6.1-17

	(mg/L)	(m^3)	(g)
COD	602	1.5	903
	54	1.5	81
1			



$$L_{p2}(T)=L_{p1}(T)-(TL_i+6)$$

Lp_{2i} T — N i dB

L_{p1i} T — N i dB TL_i—

i dB

S

$$L_w=L_{p2}(T)+10\lg S$$

L_w— S dB

Lp_2 T — dB

S— m^2

2

$$L_A(r)=L_A(r_0)-A_{div}$$

L_A r — r A dB A

L_A r_0 — r_0 A dB A

A_{div}— dB

$$L_p(r)=L_p(r_0)-20\lg(r/r_0)$$

L_P r — dB

L_P r_0 — r_0 dB

r— m

r_0— m

3

$$L_{eq}=10\lg\left(10^{0.1L_{eqg}}+10^{0.1L_{eqb}}\right)$$

L_{eq}— dB

L_{eqg}— dB

L_{eqb}— dB

3

		/ dB(A)/m		/m X	Y	Z	m		/dB(A)	/dB A	/dB A	
	12	85/1		-22.23	-106.22	1	/107.61		58.89	20	/32.89	1m
							/24.93		59.10		/33.10	
							/176.77		58.88		/32.88	
							/276.26		58.88		/32.88	
X=0 Y=0 Z=0												

			/m X	Y	Z	/ dB(A)/m		
1		/	-143.72	-133.67	1	90/1m	15dB A	
2		/	-133.74	-103.74	1	90/1m		

							15dB A	
3		/	-16.87	-73.81	1	90/1m	15dB A	
4		/	-82.43	-88.06	1	90/1m	15dB A	
5		/	-105.23	-166.45	1	90/1m	15dB A	
6		/	-49.65	-153.62	1	90/1m	15dB A	
7		/	100.01	-110.87	1	90/1m	15dB A	

4

	dB A	dB A		
	49.00	65		
	61.53	65		
	57.22	70		
	49.01	65		

GB 12348-2008 3 4

2

200m 1

/dB A /dB A /dB A

		200m	200m□	200m□
		A	A □	□
			□	
			□	
		□	□	□
		/	/	
			□	
		“□”	√ “ ”	

3

1 47

80 50

1t/a

1/20

1

HW49 900-039-49 800

20% 30% 25%

0.787t/a 3.94t/a 3

2

20m^2

GB 18597-2023

1

HJ 964-2018

‡™tEď P'CŴ f—@I !ÄP

2

□ □

□ □

8.7 hm^2

W S E /

□

pH COD BOD5 SS

NH3-N TP LAS

/

□

a b c d

/

1 2 0~0.2m

3 / 0~3.0m

pH C_{10}-C_{40} GB36600-2018 45

GB15618-2018 8

pH C_{10}-C_{40} GB36600-2018 45

GB15618-2018 8

GB 15618 GB 36600 D.1□ D.2□

TR1~6

GB36600-2018

/

E F

HJ 169-2018

HJ169-2018

7.2-1

1		290 , (=1) 0.896kg/m^{3}(15) , 222 , =1 1		
2		=1 1 76 248		
3				/

4		pH6.0~8.0		/
5		1.330 1.400g/ml		/
6		10% 40% 1% 3% ≥1.090 pH≥10		/
7		1.0~1.02		
8		1.15		/
9				/
10				/

HJ169-2018 D.1

5km 5 E1

HJ169-2018 D.2

F3 S3

E3

HJ169-2018 D.3

G3 0.5m≤Mb<1.0m K≤1.0×10 -6 cm/s

D2

E3

HJ169-2018 C

P Ä

B

Q Ä

¡ X X Ä X J J Q

X

/	CO		/	/	/	/

5%

COD 10000mg/L 2000mg/L

1

2

CO CO_2

25kg

1

350

征求意见稿

2

0.15m

1

2

3

4 /

1

2

3 /

4

5

6

1

2

3

“

”

1

2

3

4

5

6

7

8

9

10

HJ169-2018

Q<1 I

“ ”

/

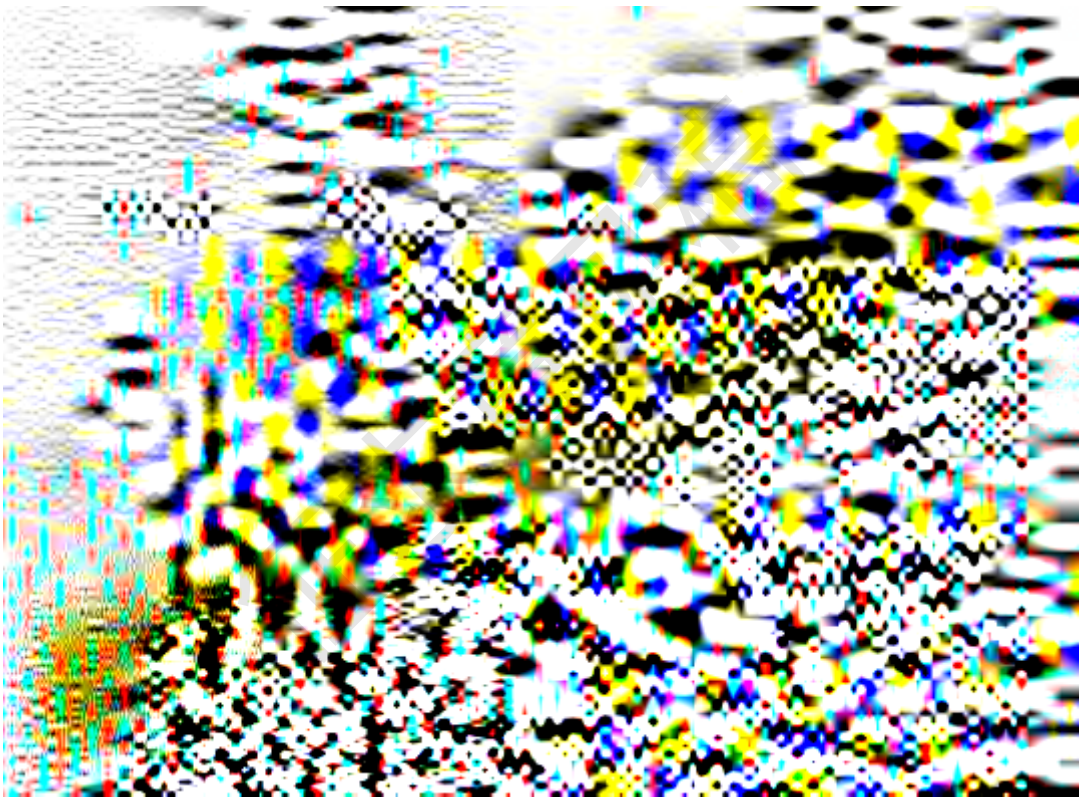
	3			
	/			
	/°	106.308478	/°	29.402603
	CO CO_2 1 80m^3			

	0.15m 1 80m^3

1

6

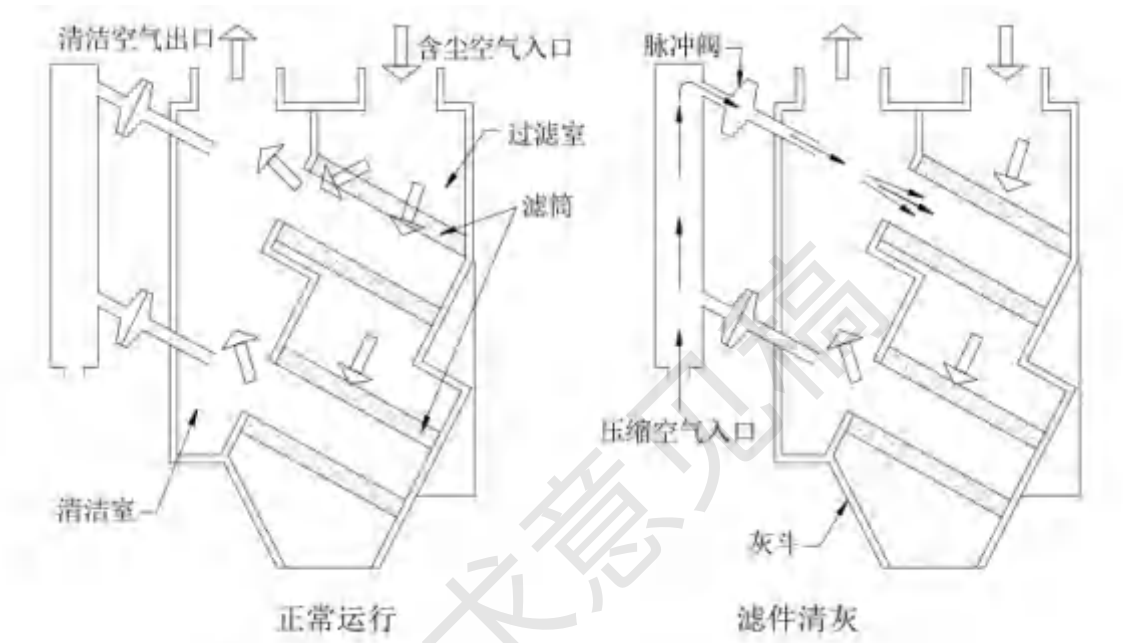
6 15m



ABB

90%

80%



HJ1097-2020

“ F.1 — ”

90% 99.9%

2

95%

15m

HJ1097-2020 “ F.1

— ”

80% 99.9%

3

A.

90%

90%

B.

1

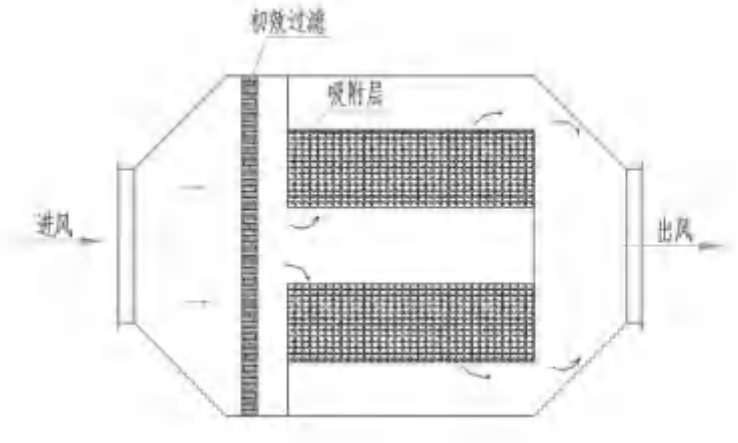
“ + + ”

15m

“ + + ”

800

40%



“ ”

1

90%

5m

10%

2

70%

80% 20%

“ + +

+ + + + +ABR + ”

HJ1124-2020 “ C.5

”

/

350m^3/d “ + ++ + +

+ABR + ”

+ + + +

+ +

1

+ + + +

+ +

90%

2 + +

4

220m^3/d

350m^3/d

-ABR

350m^3/d

280m^3/d 220m^3/d+ 60m^3/d 70m^3/d

350m^3/d

GB8978-1996 4

GB8978-1996 4

2023 12

COD TP Zn

GB8978-1996

4

“ ”

3mg/L 350m^3/d

70~85dB A

GB12348-2008 3

1

2

20m^2

GB18597-2023

GB18597-2001

Mb≥6.0m K≤1.0×10 7cm/s “

”

HJ1276-2022

1

2

3

1

2

GB18597-2001

1m ≤10 ^{7}cm/s 2mm

2mm ≤10 ^{10}cm/s

3

[2015]99

[redacted]

HJ610-2016

HJ164-2020

HJ1209-2021

1

1 1

1

COD

1

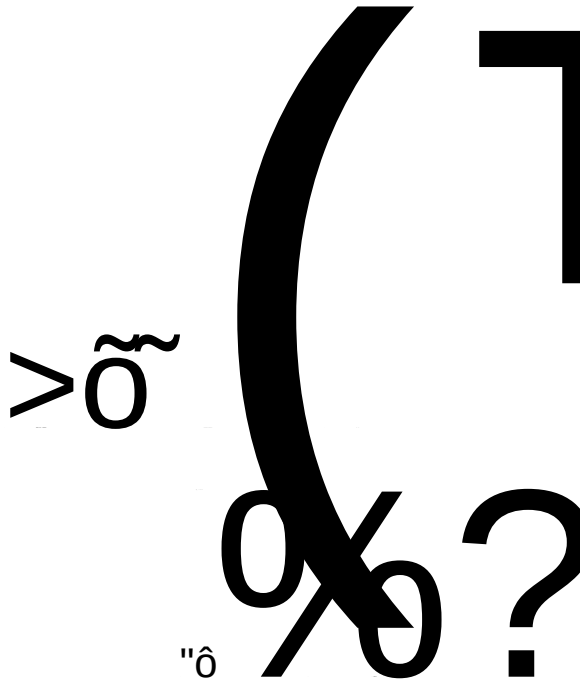
2

4

1

2

1



Â "ô

CX

A

“ ”

a

b

1000m

3

9.1-1 725

425 58.6%

5

15m 3

6

6 5 250

15m

3 1 “ + + 150

” 1 15

3 2 3 5

2 3

5

3

725	425	58.6%

1

2

3

4

“ ”

3

3

1

2

3

4 “ ”

3

					m	mg/m^3	kg/h	mg/m^3	t/a
DA001		14600m^3/h	95% DA001	DB50/418-2016		15	100	1.5	1	0.157
DA002		14600m^3/h	95% DA002			15	100	1.5	1	0.157
DA003		6000m^3/h	95% DA003			15	100	1.5	1	0.005
DA004		DA004 80%	90%	DB50/418-2016		15	100	1.5	1	0.027
DA005		DA005 80%	90%			15	100	1.5	1	0.027
DA006		DA006 80%	90%			15	100	1.5	1	0.019
DA007		DA007 80%	90%			15	100	1.5	1	0.019
DA008		DA008 80%	90%			15	100	1.5	1	0.036

DA009		DA009 80% 90%			15	100	1.5	1	0.048
DA010		NOx DA010	DB 50/658-2016	SO_2	15	50	/	/	0.076
				NO_x		50	/	/	0.116
						10	/	/	0.092
DA011		+ 90% + + 40% 15m DA011	DB 50/660-2016	SO_2	15	300	/	/	0.07
				NO_x		240	/	/	0.552
						20	1.5	/	0.084
				NMHC		60	3.7	2	1.773
DA012		NOx DA012	DB 50/658-2016	SO_2	15	50	/	/	0.115
				NO_x		50	/	/	0.27
						10	/	/	0.082
DA013		DA013	DB50/418-2016	SO_2	15	300	1.4	/	0.029
				NO_x		240	0.5	/	0.229
						100	1.5	/	0.035
DA014		15m DA014	DB50/418-2016		15	120	10	/	0.2533
				NOx		240	0.5	/	0.0467
DA015		15m DA015			15	120	10	/	0.2533

			DB50/418-2017	NOx		240	0.5	/	0.0467
DA016		15m DA016	DB50/418-2018		15	120	10	/	0.0317
				NOx		240	0.5	/	0.0058
DA017		15m DA017	DB50/418-2019		15	120	10	/	0.0677
				NOx		240	0.5	/	0.039
DA018		15m DA018	DB50/418-2020		15	120	10	/	0.0677
				NOx		240	0.5	/	0.0125
DA019		15m DA019	DB50/418-2021		15	120	10	/	0.0032
				NOx		240	0.5	/	0.0006
DA020		15m DA020	DB50/418-2022		15	120	10	/	0.0032
				NOx		240	0.5	/	0.0006
		/	DB50/418-2022			/	/	1	0.197

	+ + + + + + 1 + + + + + + 90% GB8978-1996 4 2 + + 3 220m^3/d 350m^3/d -ABR
	ABR

		t/a			
				t/a	%
		2		2	100
		10		10	100
		0.2		0.2	100
		0.3		0.3	100
		0.01		0.01	100
		10.82		10.82	100
		4.38		4.38	100
		0.2		0.2	100
		2		2	100
		3.94		3.94	100
		40		40	100
		3		3	100
		0.6		0.6	100
		2		2	100
		20		20	100
	RO	2		2	100
		240		240	100

3

2012 26

1

GB/T16157-1996 “

6 3 ”

D=2AB/(A+B) A B

1.5m^2

2

3

1m 1.2m

4

5

— GB 15562.1-1995

GB 15562.2-1995

2003 95

3

2

1

2

2019

HJ 819-2017

HJ 1086-2020

HJ 820-20217 “

”

DA001~DA003	DB50/418-2016
DA004~DA009	DB50/418-2016
DA010	DB 50/658-2016
DA011	DB50/660-2015
DA012	DB 50/658-2016
DA013	DB50/418-2016
DA014~DA016	DB50/418-2016
DA017~DA020	DB50/418-2016
	DB50/418-2016
1m 1 A	GB12348-2008
pH	GB8978-1996
106.3118,29.4037	GB/T14848-2017 + GB/T14848-2

3

pH

GB3660- Ů

3

[2017]4

10.6-1

“ ”

1

56718.86t/a COD_{Cr}3.945t/a 0.526t/a 0.066t/a 1.315t/a

2

0.232t/a 0.689t/a 0.776t/a

NMHC 1.604t/a

0.197t/a

3

10.7-1

		m3/a					
		t/a	0.232			0.232	
		t/a	1.995		1.306	0.689	-1.306
		t/a	3.229		2.453	0.776	-2.453

		t/a	2.454		0.85	1.604	-0.85
		t/a	7.193		6.996	0.197	-6.996
		m3/a				56718.86	
	COD	t/a	3.945			3.945	
	BOD5	t/a	1.315			1.315	
	SS	t/a	1.315			1.315	
		t/a	0.197			0.197	
	P	t/a	0.066			0.066	
		t/a	1.315			1.315	
		t/a	0.027			0.027	
		t/a	0.132			0.132	
	LAS	t/a	0.066			0.066	
		t/a	0	0.66		0.066	+0.006
	NH3-N	t/a	0.526			0.526	
		t/a	0.197			0.197	
		t/a	28.1	3.75		31.85	+3.75
		t/a	0.247			0.247	
		t/a	240			240	0

		DA001		95% 15m 14600m³/h	DB50/418-2016	≤1.5kg/h ≤100mg/m³
		DA002		95% 15m 14600m³/h		
		DA003		95% 15m 6000m³/h		
		DA004~DA009		DA004~DA009 80% 90%	DB50/418-2016	≤1.5kg/h ≤100mg/m³
		DA010		NOx DA010	DB 50/658-2016	≤50mg/m³ ≤50mg/m³ ≤20mg/m³ ≤1
		DA011		+ 90% + + 40% 15m DA011	DB 50/660-2016	≤300mg/m³ ≤300mg/m³ ≤20mg/m³ ≤1.5kg/h ≤60mg/m³ ≤3.7kg/h
		DA012		NOx DA012	DB 50/658-2016	≤50mg/m³ ≤50mg/m³ ≤20mg/m³ ≤1
		DA013		DA013	DB50/418-2016	≤300mg/m³ ≤300mg/m³ ≤100mg/m³
		DA014~DA016		15m		≤120mg/m³

	DA014~DA016	DB50/418-2016	≤10.5kg/h ≤240mg/m^3
DA017~DA020	DA017~DA020	DB50/418-2016	≤10kg/h ≤120mg/m^3 ≤10.5kg/h ≤240mg/m^3
			≤10kg/h ≤1.2mg/m^3
		DB 50/418-2016	≤0.12mg/m^3 ≤4.0mg/m^3

15m

4i

pH

LAS

F 220m

		$20m^2$	
	/	GB 18597-2023	GB18597-2023
	/		/
	Mb≥6.0m K≤1×10 ^{7}cm/s		/
	1 $80m^3$ 1		/

[2017]84

3

2015 1 1

“ ”“ ”

HJ 942-2018

HJ 1086-2020

HJ 820-20217

“ ”

3

1

3

1

12 12

1 2 4

8 4 4

15m

3 4 1

1 15m

1 1 15m

2

15m

3

3

1 NOx NOx

50mg/m^3

4

5 1 20m^2

6 1

1 8

/

7 1

200m^2

725 425 58.6%

1

PM2.5

DB13/1577-2012

2018 2025

“ ”

2020

44μg/m3 PM10 NO2

SO2 8 O3

24 CO

292 2025 PM2.5 ≤35μg/m3

300

3

GB3838-2002

GB/T14848-2017

GB3096-2008

2 3 4a

GB36600-2018

2

200m

2024 “

”

2024

2023 10 9

2303-500115-04-05-959135

2022 1436

[2018]781

2022 2022 17

[2023]638 “

”

2020

2015

1

SO_2 NOx

SO_2 NOx

2.43% 10.92ug/m3

0.34% 1.69ug/m^3 2.96%

7.41ug/m^3 0.44% 8.87ug/m^3

0.36% 3.24ug/m^3

2.96% 10%

- (HJ2.2-2018)

3

2

(HJ 2.3-2018) B

350m^3/d

60m^3/d 290m^3/d 219.174m^3/d

COD BOD_5 SS TN

LAS

219.174m^3/d

3

4

70~85dB A

GB12348-2008 3 4

5

3

6

GB36600-2018

“

”

7

COD 3.945t/a 0.526t/a 0.066t/a 1.315t/a

0.232t/a 0.689t/a 0.776t/a

NMHC 1.604t/a

0.197t/a

3

1

2

3

4-1

4-2

4-3

5

6

7

8

9

1

2

3

4

5

6 “ ”

7 MSDS

8