

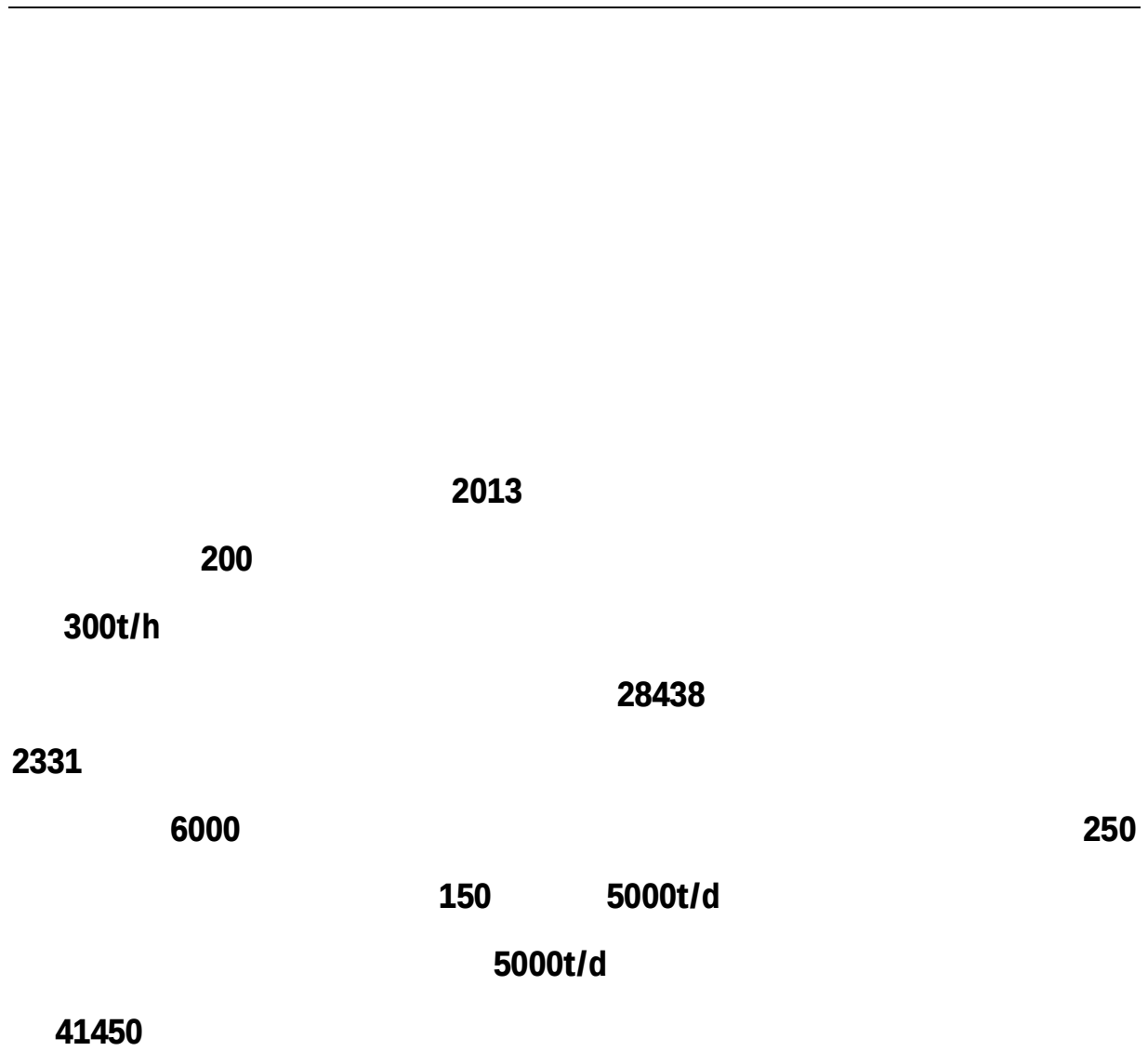
梅州市塔牌集团蕉岭鑫达旋窑水泥有限公司

二〇一六年六月

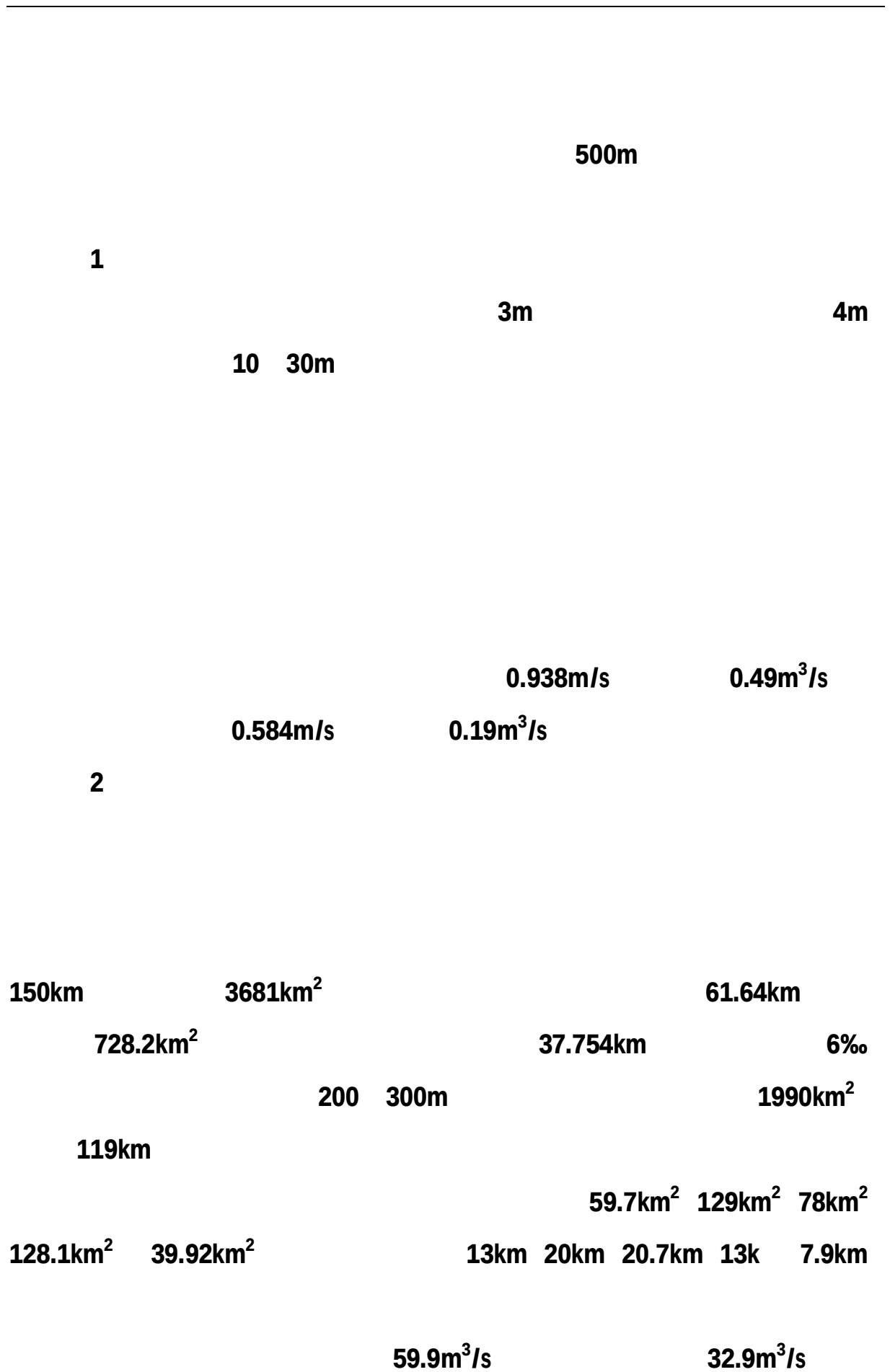
1	.....	1
2	.....	2
2.1	.....	2
2.2	.....	2
3	.....	

5.4	.....	40
6	.....	41
7	.....	42
7.1	Q	42
7.2	M	42
7.3	E	46
7.4	.....	48
8	.....	49
8.1	.....	50
8.2	.....	51
8.3	.....	53
8.4	.....	54
8.5	.....	56

	12					45
	13				[2010]	113
	14		“	”	[2013]	20
	15				2015	3 19 2015
6	1					
	16					
	4					
	1				GB 18218-2009	
	2				GB50016-2014	
	3					



	<u>116°11' 28"</u>		<u>24°45' 17"</u>
	0753-7522316		0753-7522315



3.006m³/s
1963
6
7
2650m³/s

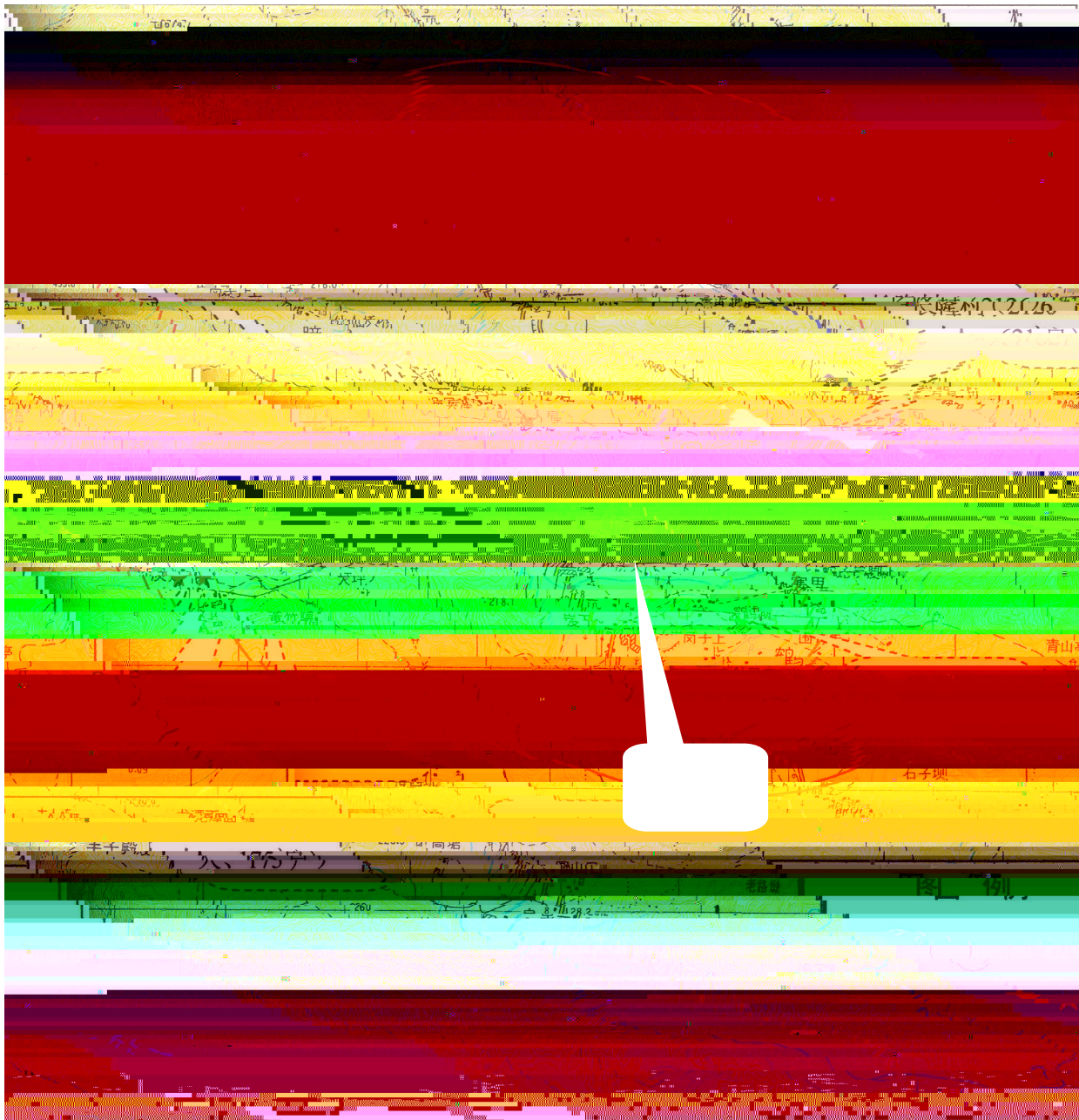
1964
6
15
3-2

3-2

		km ²	m ³ /s	m	km	‰
		745.5	58.16	71.3	61.64	1.2

(GB3838-2002) II

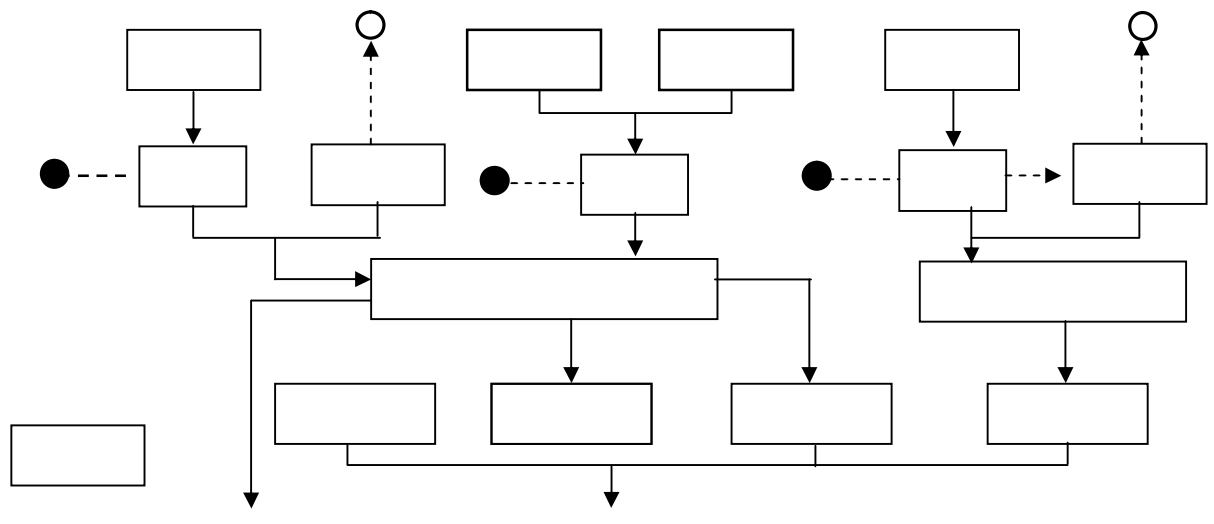
500m



3-1 5km

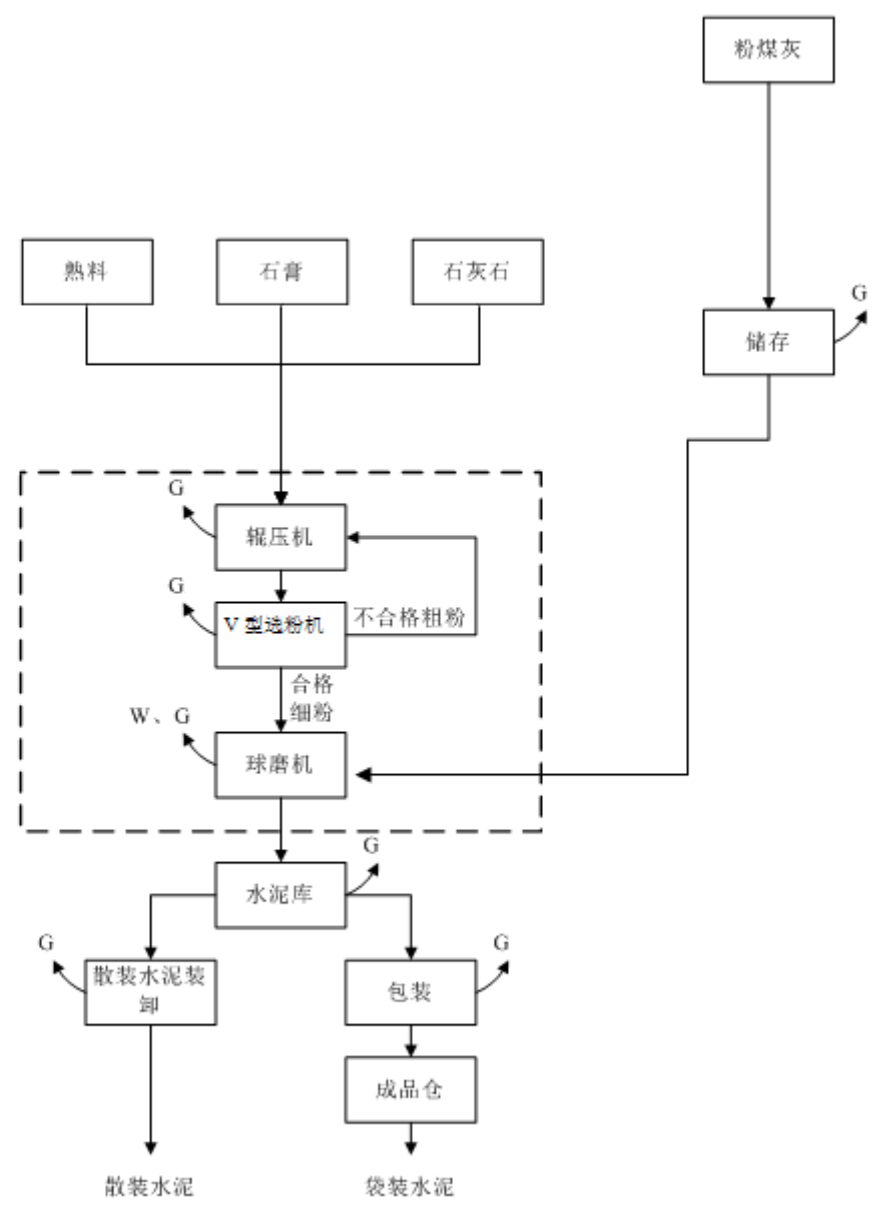
14

200 /



图例
 → 物料流向
 - - - 气体流向
 ● 噪声
 ○ 粉尘排放源

注：W表示废水；
 G表示有组织粉尘；
 虚线框表示水泥粉磨过程



24

1

2

≤ 300mm

≤ 30mm

200t/h

3

800t/h

400t/h

4

5

6

400t/d

7

TSD

AQC

320-370

90	SP	335-345
210		
8		
	Φ60m	
Φ18m×45m		13277
9		
	≤1000mm	≤25mm
		400t/h
	Φ8m×28m	
10		
	30	Φ8m×28m
		1 HMC-64
	26880m ³ /h	≥99.9
1 PPW64-7		10000 m ³ /h
	99.9	
11		
	V	
	Φ4.2×13m	

300t/h

2
100000 m³/h ≥99.9

12
2 Φ30×45m 2 Φ18×48m 8 Φ10×28m
109635

4
4×216=464 / 8 11%
18 7200 13000m³/h

≥99.9
13
6 180t/h

100t/h

6 PPW64-7

≥99.9%

1

4

294³

4

4

4

“

+ + ”

4

4

4

4

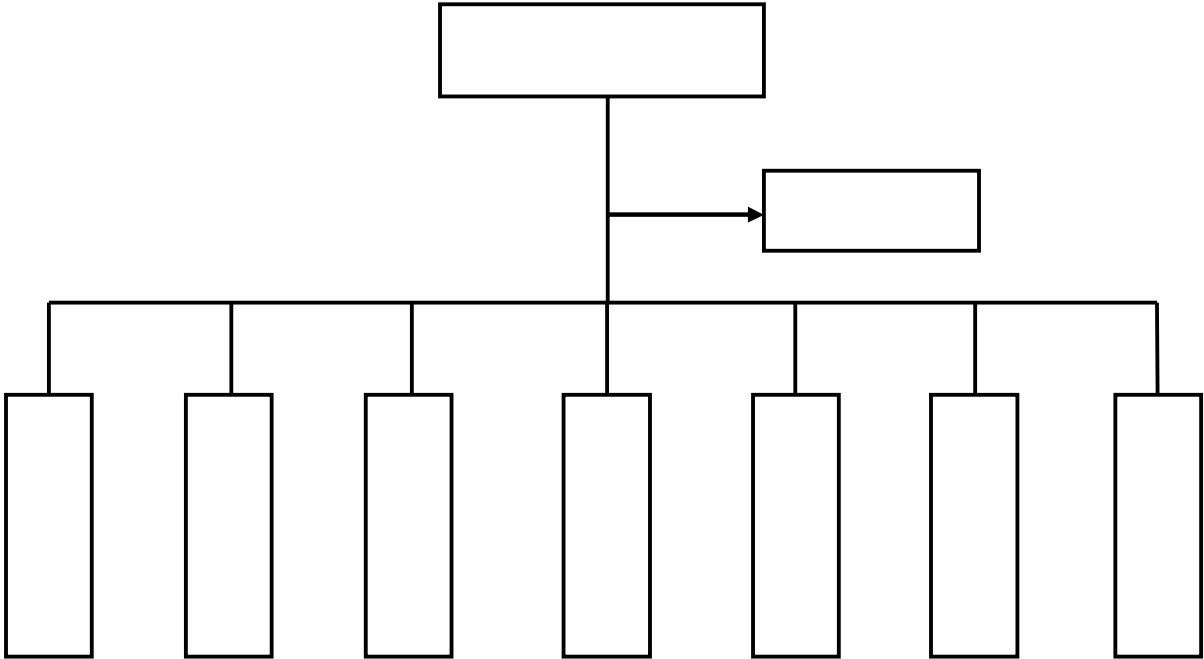
4

“ + + ”

4

6

3-3



		2		
		140		
		8		
		3		
		8		
		28		
		2		
		8		
		28		
		20		

1

SO₂ NO₂

NH₃

3306.24t/d

11.16t/d

3124.8t/a

“

+ + ”

294 m³

SO₂ NO₂

$$\text{NH}_3$$

760154m³/h

80t/a

SO₂

NO₂

NH₃

20

7kg

0.14t

3t

294m³

20

7kg

0.14t

3t

83

4

4

3.6 3.7

14

1

28

4-1

4-1

+		

4-2

		Nm ³ /h	kg/h			
			SO ₂		NO _x	
		344185	0.85	1.14	1.68	H113m/Ø4.2m

4-3

m						
	SO ₂				NO _x	
	mg/m ³	%	mg/m ³	%	mg/m ³	%
100	6.19E-15	0	1.22E-14	0	8.31E-15	0
200	1.06E-05	0	2.10E-05	0.01	1.42E-05	0
300	0.000428	0.09	0.000846	0.35	0.000574	0.19
400	0.001537	0.31	0.003037	1.27	0.002061	0.69
500	0.002271	0.45	0.004488	1.87	0.003045	1.02
522	0.002299	0.46	0.004544	1.89	0.003083	1.03
600	0.002093	0.42	0.004137	1.72	0.002807	0.94
700	0.001707	0.34	0.003374	1.41	0.002289	0.76
800	0.00164	0.33	0.003241	1.35	0.002199	0.73
900	0.001728	0.35	0.003415	1.42	0.002317	0.77
1000	0.001715	0.34	0.003389	1.41	0.0023	0.77
1100	0.001644	0.33	0.003249	1.35	0.002205	0.74
1200	0.001545	0.31	0.003054	1.27	0.002073	0.69
1300	0.001438	0.29	0.002843	1.18	0.001929	0.64
1400	0.001382	0.28	0.002732	1.14	0.001854	0.62
1500	0.001419	0.28	0.002805	1.17	0.001903	0.63
1600	0.001432	0.29	0.002829	1.18	0.00192	0.64
1700	0.001425	0.29	0.002817	1.17	0.001912	0.64
1800	0.001405	0.28	0.002778	1.16	0.001885	0.63
1900	0.001376	0.28	0.002719	1.13	0.001845	0.62

m						
	SO ₂				NO _x	
	mg/m ³	%	mg/m ³	%	mg/m ³	%
2000	0.001339	0.27	0.002647	1.1	0.001796	0.6

24			
		20%	
100 m ³	50		
	16m×13m×0.5m	104m ³	294m ³
	10min		
		HJ/T169-2004	
QL			
	$Q_L = C_d A \rho \sqrt{\frac{2(P - P_0)}{\rho} + 2gh}$		
Q _L ——	kg/s		
C _d ——	0.6~0.64	0.62	
A——	m ²		
ρ——	920kg/m ³		
P——	Pa		
P ₀ ——	Pa	101325Pa	
g——	9.8m/s ²		
h——	5.1m		
	100%	0.032m	
		18.3kg/s	10min
10.98t			

$$C(x,y,z) = \frac{Q}{2\sigma_z} \exp\left(-\frac{(x-x_0)^2}{2\sigma_x^2}\right) \exp\left(-\frac{(y-y_0)^2}{2\sigma_y^2}\right) \exp\left(-\frac{z^2}{2\sigma_z^2}\right)$$

C x y o — x, y mg.m⁻³

x₀, y₀, z₀ —

Q—

σ_x σ_y σ_z — X Y Z m σ_x=σ_y

$$C_w(x, y, z, t_w) = \frac{Q}{(2\pi)^{3/2} \sigma_{x,eff} \sigma_{y,eff} \sigma_{z,eff}} \exp\left(-\frac{(x-x_w)^2}{2\sigma_{x,eff}^2}\right) \exp\left(-\frac{(y-y_w)^2}{2\sigma_{y,eff}^2}\right) \exp\left(-\frac{z^2}{2\sigma_{z,eff}^2}\right)$$

C_wⁱ(x, y, z, t_w) — i t_w w (x,y,0)

Q'— mg Q'=QΔt; mg.s-1 t s

σ_{x,eff} σ_{y,eff} σ_{z,eff} — w

$$\frac{1}{\kappa} \left(\frac{1}{\kappa} - 1 \right)$$

$$-L_1$$

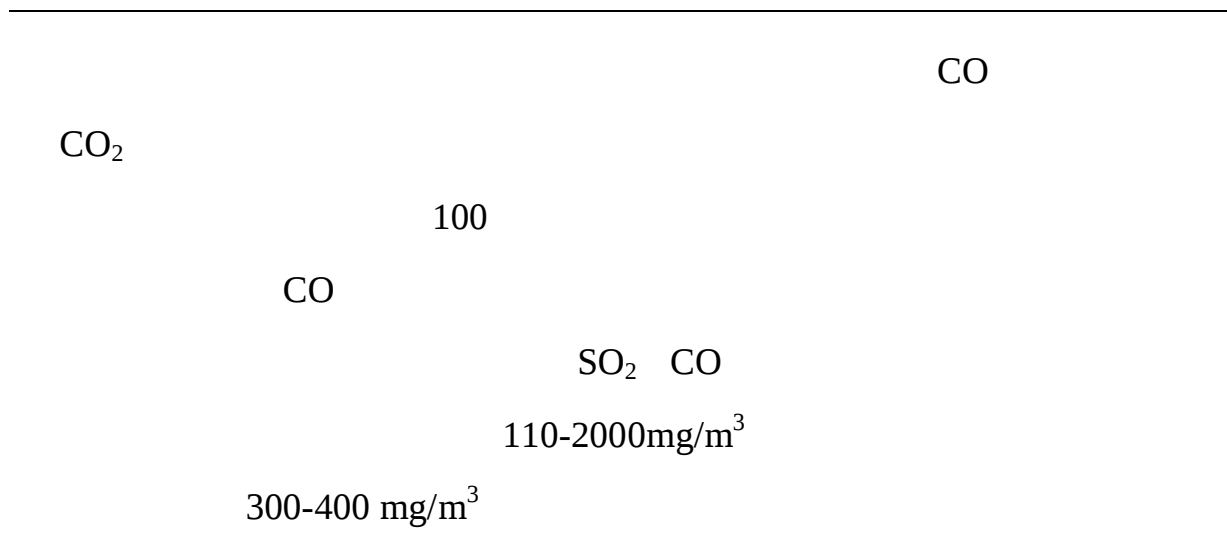
$$o, \tilde{t})$$

4-6

C	1.1m/s	1.1m/s
n	C 25min	C 30min
4	0.0001	0.0001
6	0.0002	0.0001
1	0.0003	0.0001
6	0.0004	0.0002

m	1.1m/s C 5min	1.1m/s C 10min	1.1m/s C 15min	1.1m/s C 20min	1.1m/s C 25min	1.1m/s C 30min
1900	0	0	0	0.0001	0.0003	0.0004
2000	0	0	0	0.0001	0.0002	0.0003
2100	0	0	0	0	0.0002	0.0003
2200	0	0	0	0	0.0001	0.0002
2300	0	0	0	0	0.0001	0.0002
2400	0	0	0	0	0.0001	0.0001
2500	0	0	0	0	0	0.0001
2600	0	0	0	0	0	0.0001
2700	0	0	0	0	0	0.0001
2800	0	0	0	0	0	0.0001
2900	0	0	0	0	0	0
3000	0	0	0	0	0	0
3500	0	0	0	0	0	0
4000	0	0	0	0	0	0
4500	0	0	0	0	0	0
5000	0	0	0	0	0	0
C _{max} mg/m ³	27.06512	27.06656	0.0138	0.0031	0.0012	0.0006
L ₁ m	1	1	349	672.93	985	1273

4-6



4-8

		Nm ³ /h	kg/h	
		22124	1.02	H30m/Ø0.6m

HJ2.2-2008 A

4-9

4-9

m		
	mg/m ³	%
100	0.0147	0.05
200	0.03128	0.10
300	0.03244	0.11
342	0.03346	0.11
400	0.03223	0.09
500	0.02757	0.09
600	0.02654	0.09
700	0.02627	0.09
800	0.02486	0.08
900	0.02302	0.08
1000	0.02110	0.07
1100	0.01928	0.06
1200	0.01766	0.06

m

10min

HJ/T169-2004

QL

$$Q_L = C_d A \rho \sqrt{\frac{2(P - P_0)}{\rho} + 2gh}$$

QL	kg/s
Cd	0.6~0.64 0.62,
A	m ²
ρ	810kg/m ³
P	Pa
Po	Pa 101325Pa
g	9.8m/s ²
h	5.1m

100% 0.02m

1.39kg/s 10min

0.834t

54 4

4-10

4-10 4

1			
2			
3			

4-10

64

3306.24t/d

11.16t/d 3124.8t/a

“

+ + ”

1

2

1

2

294m³

1

2

3

Q

$$\frac{q_1}{Q_1} + \frac{q_2}{Q_2} \wedge \wedge + \frac{q_n}{Q_n} \geq 1$$

$$q_1, q_2 \wedge \wedge q_n \text{ -- } t$$

$$Q_1, Q_2 \wedge \wedge Q_n \text{ -- } t$$

$$Q < 1 \qquad Q$$

$$1 \leq Q \qquad Q \qquad 1 \quad 1 \leq Q < 10 \quad 2 \quad 10 \leq Q < 100$$

$$3 \quad Q \geq 100 \qquad Q_1 \quad Q_2 \quad Q_3$$

		q	Q		
1	20%	16.6t	7.5t	2.2133	B “ ” “ ” _____ 1-C
2		0.14t	5t	0.028	
3		3t	2500t	0.0012	
4				2.2425	$q_1/Q_1 + q_2/Q_2 + \dots + q_n/Q_n > 1$

$$1 \leq Q < 10$$

$$Q_1$$

M

4

1

0

5

“

+

+

"

0

6

0

7

0

8

0

0

4

4

		20	10
		2	0
		2	0
		2	0
		2	0
		8	0
		8	0
		8	0
		8	0
		8	0
		8	0
		4	0
		10	0
		10	0

$10+0+0+0+0+0=10$

$M<25$

M	
M<25	M1
25≤M<45	M2
45≤M<60	M3
M≥60	M4

7-2

M=10

M<25

7-3

1 E1	• 10 • • 24 • 5 1000 5 5 500
2 E2	• 10 • 5 500 1 1000 5 500
3 E3	• 10 • 5 500 1 1 2 500

10

5

1

5

7-4

3

Q

M

Q	M			
	M1	M2	M3	M4
$1 \leq Q < 10$				
$10 \leq Q < 100$				
$100 \leq Q$				

8.1

8.2

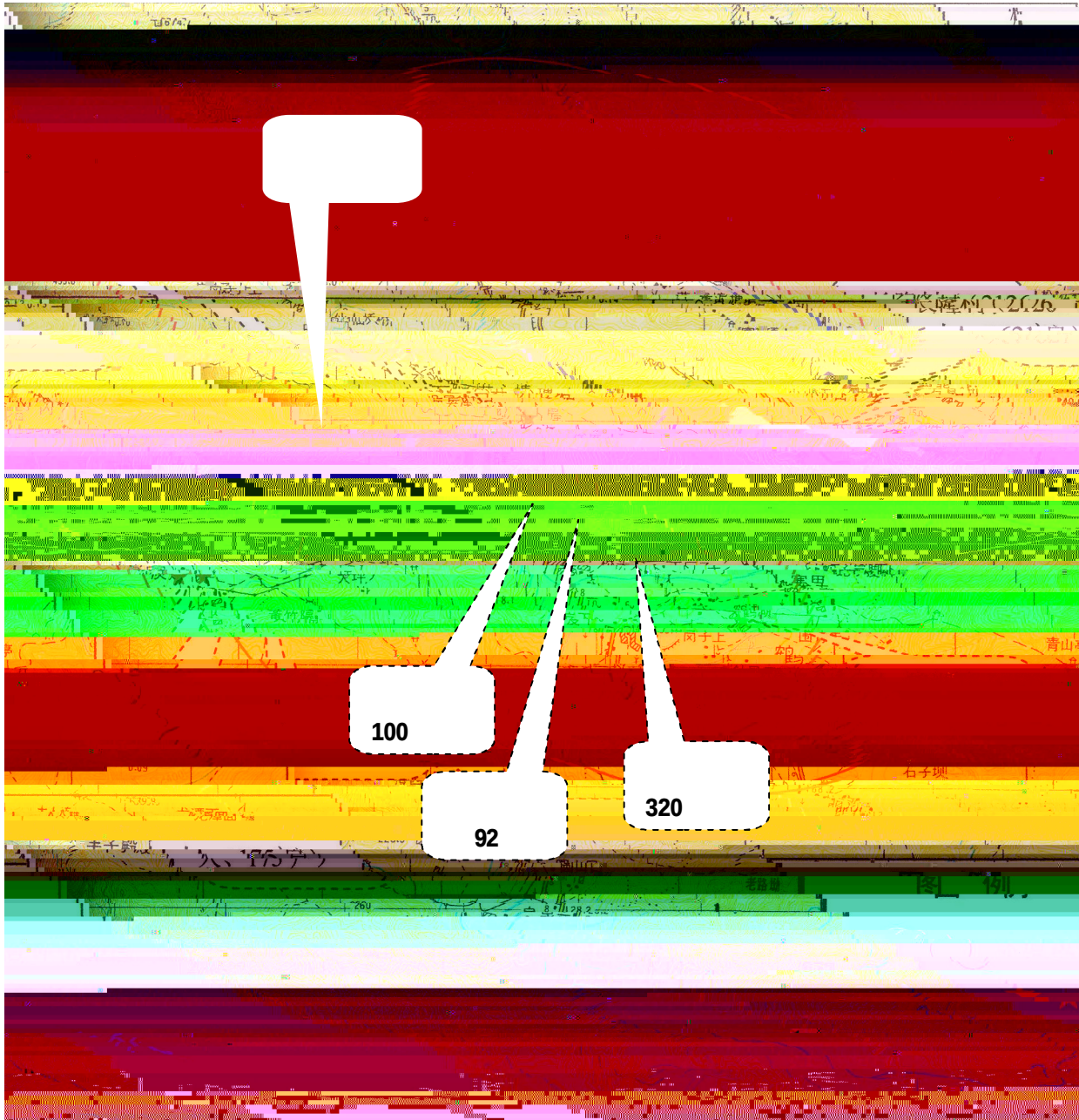
8.3

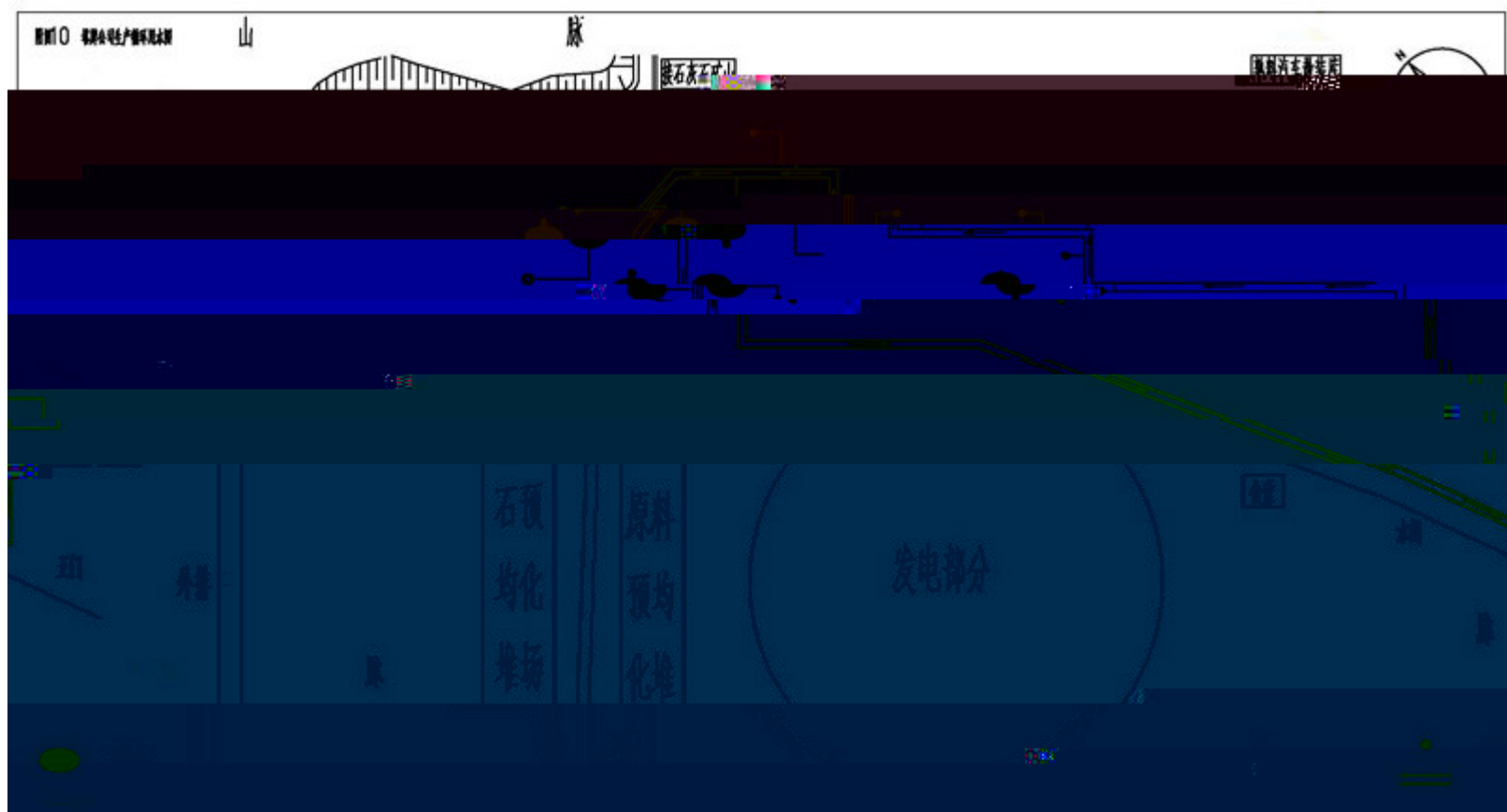
8.4

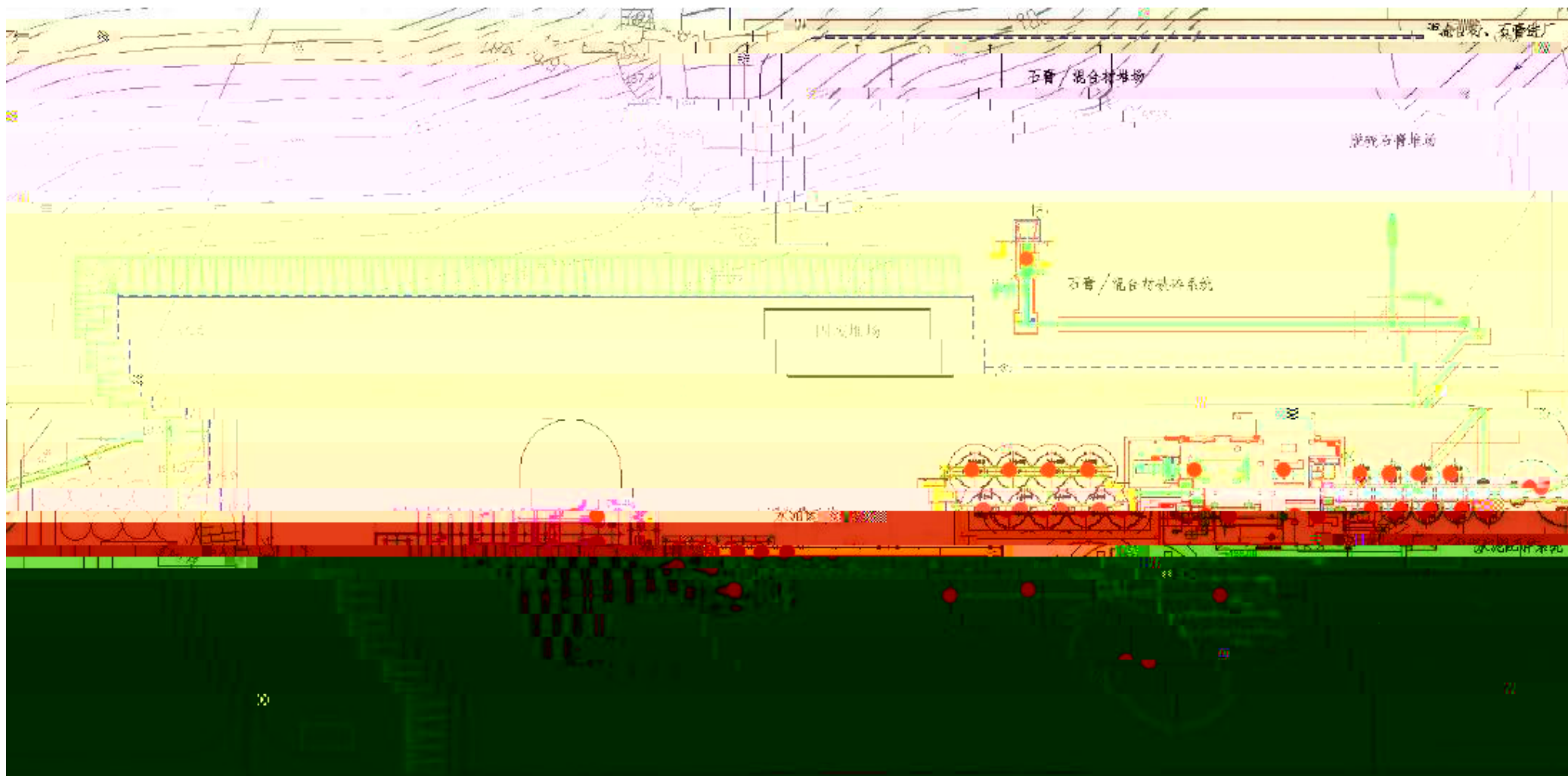
8.5











4

