HJ

HJ 580-2010

Technical Specifications for Oil-contained Wastewater Treating Process

2010-10-12 2011-01-01

2010 10 12

2011 1 1

1

2

GB8978

GB50014

GB/T16488

CJJ60 94

JB/T2932

13

3

3.1 oil and grease

( )

3.2 oil wastewater

3.3 floating oil

100μm

3.4 dispersed oil

10μm 100μm

3.5 emulsified oil

10μm 0.1μm 2μm

3.6 dissolved oil

0.1μm

3.7 water adjusting and oil separation tank

3.8 oil separation tank

3.9 air floatation

3.10 coalescence of oil water

3.11 primary treatment of oil wastewater

3.12 secondary treatment of oil wastewater

4

4.1

4.1.1 (1)

$$Q = K \times q \times S \quad \text{----------} \quad (1)$$

Q —— m^3/d

q —— $m^3/$

S ——

K ——

4.2

4.2.1

4.2.2

4.2.3

5

5.1

5.1.1

5.1.2

5.1.3

5.1.4

30mg/L

5.1.5

5.1.6 GB50014

5.2

5.2.1

5.2.2

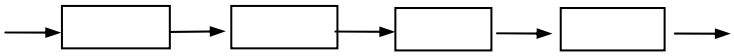
GB50014

5.3

5.3.1 GB50014

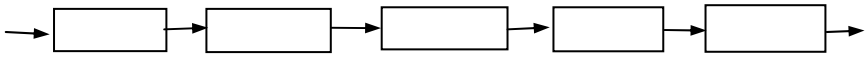
5.4

5.4.1 1



1

5.4.2 2



2

6

6.1

6.1.1 150μm

6.1.2

0.2m

6.1.3 0.5m

6.1.4 0.5m 0.8m 20 mm/s 50mm/s

6.1.5 2mm/s 5mm/s

6.1.6 6m 4

6.1.7 2m 0.4m

6.1.8

6.1.9 0.8m 0.5m 20 mm/s 50 mm/s

6.1.10 2m/min

6.1.11 200mm

6.1.12 0.5m 0.4m 45° 60° 0.01 0.02

6.1.13 Φ200mm Φ300mm 4.5m 4

6.1.14

6.1.15

6.2

6.2.1 80μm

6.2.2 0.2m

6.2.3 0.6m³/ m²·h 0.8m³/ m²·h

6.2.4 40mm 45° 3mm/s 7mm/s Re 500 Fr 10 2

$$Re = \frac{v \quad R}{} \qquad (2)$$

3

$$Fr = \frac{v^2}{Rg} \qquad (3)$$

v —— m/s

R —— m

γ —— m/s²

g —— 9.81 m²/s

6.2.5

6.2.6

6.2.7 15mm/s

6.2.8 200mm

6.3

6.3.1

I 0.05μm pH 6.5 8.5 100mg/L

6.3.2

6.3.2.1

6.3.2.2 0.3MPa 0.5MPa

6.3.2.3 5 10 25

6.3.2.4 1min 4min

6.3.2.5

6.3.2.6

6.3.3

6.3.3.1

6.3.3.2 10min 15min

6.3.3.3

6.3.3.4

6.3.4

6.3.4.1

6.3.4.2 4.5m 3 4

6.3.4.3 2.0m 2.5m 0.4m

6.3.4.4 1h

6.3.4.5 10mm/s

6.3.4.6

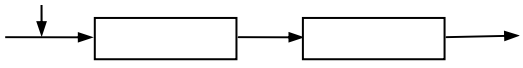
6.3.4.7

6.3.4.8 1m/min 5m/min

6.3.4.9

6.3.5

6.3.5.1 3



3

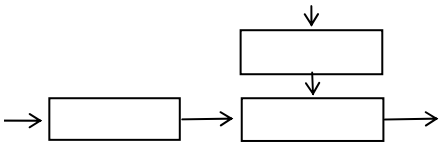
6.3.5.2 25mg/L 35 mg/L

60mg/L 80 mg/L 15mg/L 30mg/L 1mg/L 10mg/L

6.3.5.3

6.3.6

6.3.6.1 4



4

6.3.6.2 25 50

6.3.6.3 15mg/L 25mg/L

40 mg/L 60mg/L 10mgL 20mg/L 1mg/L 8mg/L

6.3.6.4 0.3m 0.5m/s

30s

0.5m/s 1.0m/s 0.3m/s 0.5m/s 3min 10min

6.4

6.4.1 5μm 10μm

1μm 2μm

6.4.2

6.4.3 1 3mm 5mm

6.4.4

6.4.5 0.6MPa

6.4.6 1

1

	(mm)	(mm)
	16 32	100
	8 16	100
	4 8	100
H		300

6.4.7 1

16mm 32mm 0.3m

6.5

6.5.1

6.5.1.1 50m^2 30mg/L

6.5.1.2 (40% 50%)

3.5m 4.5m

6.5.1.3 0.005

6.5.1.4

6.5.1.5 400mm

6.5.1.6

6.5.1.7 $25m^2$ 40mm

$25m^2$ $100m^2$ 50mm

6.5.1.8 1 2

6.5.1.9

6.5.2

6.5.2.1

6.5.2.2 8m/h 10m/h $12L/m^2 \cdot s$ $17L/m^2 \cdot s$

15min

6.5.3

6.5.3.1 25m/h $5L/m^2 \cdot s$,

15min 20min

6.6

6.6.1 pH

6.6.2

6.6.3

6.6.3.1 10s 30s

6.6.3.2 120m

6.6.3.3

6.6.4

6.6.4.1

6.6.4.2 10min 30min

G $30s^{-1}$ $60s^{-1}$,GT 10^4 10^5

6.6.5

6.6.5.1

6.6.5.2

6.6.5.3

( ) ,

6.6.5.4

6.7

6.7.1

6.7.2

6.7.3 30mg/L

6.7.4

6.8

6.8.1

8h 12h

6.8.2 GB50014

6.9

6.9.1

6.9.2

6.9.3 5 10 800 850

6.9.4

6.9.5

7

7.1

7.1.1

7.2

7.2.1

7.2.2 45 0.5MΩ

7.3

7.3.1

7.3.2

7.3.3

8

8.1

8.1.1

8.1.2

8.1.3

8.1.4

8.2

8.2.1

8.2.2

9

9.1

9.1.1

9.1.2 CJJ60

9.1.3

9.2

9.2.1

9.2.2

9.2.3

9.2.4

9.3

9.3.1

9.3.2 5%

9.3.3

9.4

9.4.1 CJJ60

9.4.2

9.4.3

9.5

9.5.1

9.5.2

A

A.1

$$D \quad \sqrt{\frac{4Q_1}{q}} \qquad (4)$$

D —— m

Q1 —— m^3

q —— $m^3/h \cdot m^2$ $15m^3/h \cdot m^2$ $35m^3/h \cdot m^2$

A.2

$$W \quad f \quad h\frac{D^2}{4} \qquad (5)$$

W —— m^3

h —— m

f ——

A.3

$$h \quad vt \qquad (6)$$

h —— m

v —— m/h

t —— h

A.4

$$G \quad W \qquad (7)$$

G —— kg

ρ —— kg/m^3