

attn:

Project-No. / Customer: /

1. Application / Process

- New Application** ☐ Yes ☒ No
- 1.1. Method of Combustion**
- ☐ Grate / Stoker Boiler
 - ☐ Pulverized Coal Firing
 - ☒ Fluidized Bed Combustion
 - ☒ Burner
 - ☐ Others:
- 1.2. Combustible**
- ☐ Lignite Coal ☐ Hard Coal
 - ☒ Natural Gas ☒ Oil
 - ☐ Others: Sub Bitumenous coal
 - ☒ Sulphur content: Typically <1, Max 4 %
- 1.3. Gas Cleaning System**
- ☒ Yes ☐ No
- ☐ Dry Absorption ☐ Spray Absorption
 - ☐ Ca (OH)₂ ☐ NaHCO₃ ☐ CaO
 - ☐ Activated Carbon ☐ Coke
 - ☐ Others: Direct dosing of CaCO₃ in CFB Boiler Furnace
- Conc. of Absorbent: 90~98% CaCO₃ (Ca/S ratio : 2.53) g/Nm³
recycling amount %

2. Dust Collector

- 2.1. Manufacturer / Type:** Tong Yang (S. Korea)
- 2.2. Cleaning System**
- ☐ Δ p-controlled ☒ time controlled
 - ☐ On-line ☒ Off-line
 - ☒ Pulse Jet ☐ Reverse Air
 - ☐ Shaker
- 2.3. Cleaning Pressure:** 6 normal, 8 max bar **2.4 No. of Bags:** 2400
- 2.5. Filter Area:** 7.837 (Gross) m² **-Bag Length:** 6500 mm
- Diameter:** 160 mm

3. Operation Conditions

- 3.1. Gas Volume:** 302,380 wet basis Nm³/h
- 3.2. A/C Ratio:** Gross 0.98 / Net 1.0 m³/m²min
- 3.3. Gas Temperature cont:** 145~160 °C **Peak:** 230 °C
- Peak Duration:** minutes
- Peak Frequency:** /year

3.4. Gas Composition:

H ₂ O	Vol. %	SO ₃	mg/Nm ³
O ₂	06 Vol. %	HCl	mg/Nm ³
NO _x	500 max / 370 mg/Nm ³	HF	mg/Nm ³
NO ₂	mg/Nm ³	Others:	mg/Nm ³
SO _x	1500 max / 400 mg/Nm ³	(HBr, Br ₂ , Cl ₂ , ...)	°C
Acid Dew Point:	°C	Water Dew Point:	°C

3.5. Continuous Operation ☒ Yes ☐ No
Stops per year: 01

4. Dust

4.1. Dust Source: Coal firing in CFB Boiler
4.2. Total Dust Load: 98.4 dry @6% O₂ g/Nm³
4.3. Agglomeration: ☐ low ☒ moderate ☐ high
4.4. Electrostatic Chargeability: ☐ low ☐ moderate ☐ high
4.5. Abrasion: ☐ low ☐ moderate ☒ high
4.6. Dust Composition: SiO₂, Al₂O₃, Fe₂O₃, CaO, MgO, Na₂O, K₂O, TiO₂, SO₃, P₂O₅, Mn₃O₄, Cr₂O₃ etc.
4.7. pH-Value:
4.8. Particle Size Distribution: -106 micron 63%

5. Filter Medium used at present

5.1. Type of Fiber: Nomex Chemical Finish: Acid protected, water & oil repellent
5.2. Weight: 550 g/m² Permeability: 13(+2)
cm³/cm²/s@125Pa l/(dm²min) @ 200 Pa
5.3. Actual Service Life: 3~4 years Actual Emission: 30~50 mg/Nm³
5.4. Differential Pressure: <150 mmH₂O normal, <300 mmH₂O max mbar
5.5. Problems:

6. Requirements

6.1. Emission ≤ 30~50 mg/Nm³
6.2. Service Life ≥ 48 months

7. Remarks/Description/Flowsheet:

Name:
Phone:
e-mail:

Company:
Fax: