SO$_3$ GENERATOR

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For laboratory use
Pentol has been supplying SO₃ generators to the power industry since 1975.

Reliable SO₃ flue gas conditioning is a requisition for continuous operation of coal fired power station to maintain national emission limits.

SO₃ is very interesting for the industry to replace Chrome VI based processes.

SO₃ can be used for a wide variety of processes like galvanization, inertisation of pharmaceutical containers, for processing surfaces before painting, for the glass production industry and so on.

Compared to oleum based processes, the Pentol SO₃ generator has a very high SO₂ to SO₃ conversion efficiency and produces a continuous stream of SO₃. The generator is PLC controlled and runs automatic.
**TECHNICAL SPECIFICATION**

**Exterior dimensions**
H x W x D ......................... approx. 1800 x 1400 x 1200 mm
Maintenance space around ...................... 1000 mm

**Transport weight**
Complete system ......................... approx. 429 kg

**Thermal specification**
- $T_{\text{max}}$ (atmospheric pressure) .................. 1000 °C
- $\Delta T$ (between 300 and 900°C) ....................... $\pm$ 10 K
- Number of heating zones ...................... 1
- Max. heating rate (up to 500°C) without tube .................. 20 K/min
- Cooling down time empty furnace ...................... 4 - 6 h
- Thermocouple type ......................... Typ K
- Thermocouple mantle material .................. ceramic

**Electrical connections**
- Power ........................................... ca. 7 kW
- Voltage ......................................... 400 V
- Current per phase ......................... 30 A
- Pre fuse per phase ....................... 32 A

**Gas supply**
- Gas type .............................................. $\text{SO}_2$
  - Flow rate ....................................... 2 - 200 l/h
  - Intake pressure ................................. ca. 3 bar
- Gas type ..................................... Compressed Air
  - Flow rate ...................................... 100 - 5000 l/h
  - Intake pressure ................................. ca. 3 bar

**Sensors**
- Gas Sensor Type ............................. $\text{SO}_2$
- Possible Sensitivity .......................... 0 - 5 ppm
  - 0 - 20 ppm
  - 0 - 1000 ppm

Tests have been made producing $\text{SO}_3$ for 8 weeks in continuous, automatic mode.

The Pentol $\text{SO}_3$ generator is CE certified and has been produced with safety and reliability in mind.

Visit our website to find out more or contact our sales staff.
www.pentol.com
SO$_3$ Generator

Continuous SO$_3$ Generation in Industrial Applications and Labs.