

Product Info: Mercury-MTP-Probe (EPA PS 12B and 30 B)

For measurement of Hg-Emission with range from 0,03 to 100 $\mu\text{g}/\text{m}^3$.

The **MTP Probe** for Mercury emission monitoring (*Mercury Trap Probe*) as convenient alternative to sampling with impinger.

- ✓ According to US E.P.A. Performance Specifications 12 B (PS 12 B, Ref. Test Method 30 B Adaptation) and future CEN/TS guidelines for the Mercury emission monitoring with sorbent traps.
- ✓ With integrated S-Pitot tube and thermocouple to determine the gas velocity, to calculate the volume proportional suction rate.
- ✓ High accuracy because of the two paired three-partition sorbent traps, according to QA requirements (relative deviation of the results from the two traps max. 10%).
- ✓ Thermocouple inside the gas flow avoids overheating more as 130 °C.
- ✓ No Hg losses in the sampling tube because the gas gets at first in contact with the traps.
- ✓ By adjusting the suction time and volume flow rate, the method can be used universally and independent from the Hg concentration.
- ✓ Low maintenance

Applications:

- coal-fired power plants
- cement plants
- industrial boilers
- biomass power plants
- waste incinerators

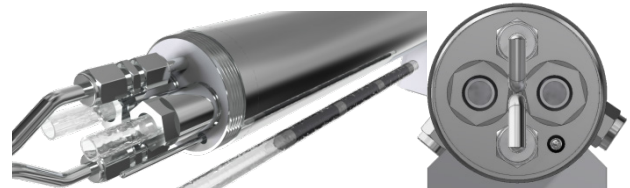
General data:

- possible range Mercury: 0,01 – 1000 $\mu\text{g}/\text{m}^3$
- short and long term monitoring
- flue gas temperature: < 200 °C with heated probe
- max. dust concentration in flue gas: 20 mg/m^3



Suction probe:

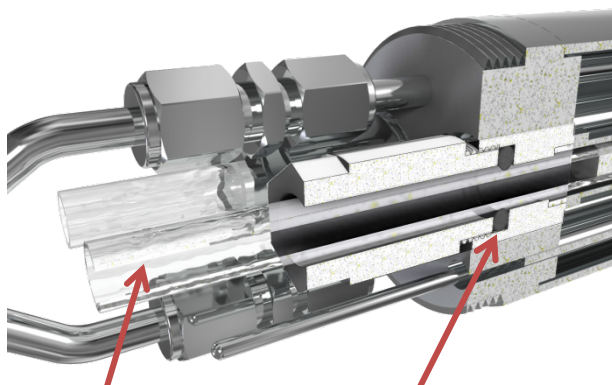
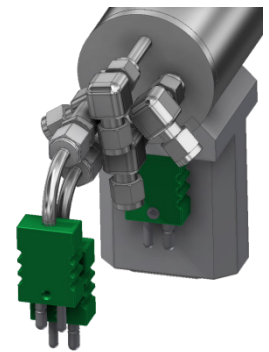
- Length from 500 to 2000 mm
- Probe diameter: 60 mm
- Material: Steel or Titanium



Front: S Pitot and NiCr-Ni and two traps

Rear:

- 4 x cutting ring connections:
2 x for S-Pitot, 2 x for suction
3 x NiCr-Ni
1 x duct temperature
1 x controlling gas temperature
1 x temperature control



The sorbent traps are gas tight closed through Viton O-Rings.

Changes of the traps are very fast, simple and comfortable.

One NiCr-Ni directly behind one sorbent trap for the measurement of the gas temperature prevents temperature over 130 °C.

Our PID - temperature controller prevent temperatures below the dew point.

Art.-No.: 4.8-A: Stainless Steel, length: from 500 mm to 2000 mm

Art.-No.: 4.8-T: Titanium, length: from 500 mm to 2000 mm

(Other lengths available on request)



Sorbent traps with three-partition sorbent:

1. Sampling adsorption section.
2. Control section for the breakthrough $\leq 5\%$ of the complete Mercury concentration from the first section.
3. Spike section (QA with the required recovery rate 75 – 125%).