

Stack Gas Sampling System

PROCESS & EMISSIONS MONITORING SYSTEMS

The **HOFI Box** offers an exclusive sampling system dedicated to heated analyzers (Plug & play sampling solution for: MIR FT, MIR 9000H, Graphite 52M, Topaze 32M,...).



SPECIFIC FEATURES:

- Sampling system equipped with double stage particulate filtration
- Large selection of probes available depending on the process conditions (stack diameter, gas temperature, water content, particulates concentration)
- Automatic & programmable backflush function (Remote and synchronized by ENVEA analyzers)
- Direct injection of span and zero gas at the sampling point
- Sample transfer up to 50m (hot & wet sample) by 140-180°C heated line

The hot filtration technique:
Designed to fit almost all gas sample conditions using heated sampling universal method: ideal for corrosive gases



internal view
with heated line connection

MAIN APPLICATIONS:

- > Waste Incineration (Municipal Energy from Waste or Industrial)
- > Sludge Incineration
- > Gas turbines
- > Power Plants
- > Boilers
- > Paper Mills
- > Glass, Cement, Petro chemistry and Chemical Industry..
- > Fertilizer plants

COMPLIANCE WITH:

EU Regulation IED (WID / LCPD / MCPD directives) and US EPA (40 CFR 60 & 75) - "Sampling system used in/or AMS certification"

Stack Gas Sampling System **HOFI Box**

PRINCIPLE OF OPERATION:

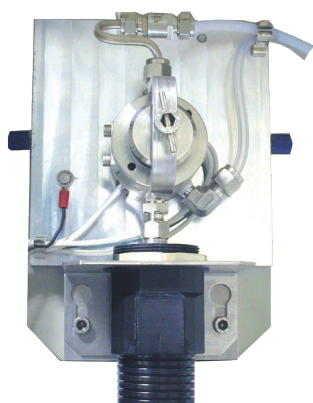
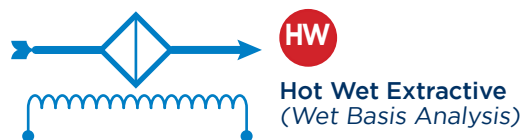
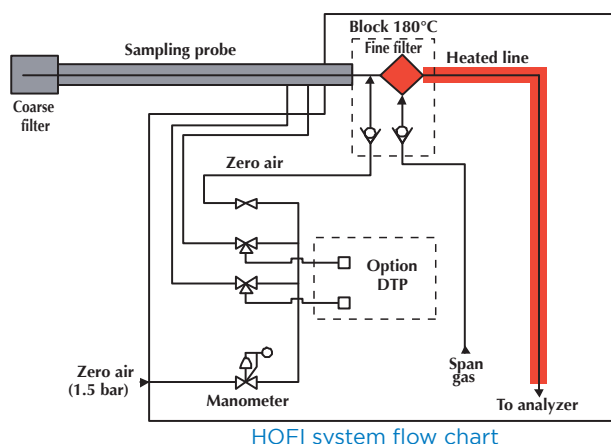
HOFI Box is designed for stack gas sampling, with high particulate and moisture content. The heated filtration block can be adjusted at up to 190°C, to cover most of the CEMs applications.

The flue gas sampled by the analyzer pump/ejector is following a double dust filtration before to be transferred to the analyzer via a 180°C heated line.

2 x built-in solenoid valves allows the backflush of the sampling system as well as the span/zero gas injection at the sampling point (Programmable frequency / remote control by the analyzer)

The HOFI Box is the plug & play ideal sampling solution for all ENVEA' range of heated analyzers, allowing full remote functions (Not exhaustive list of connectable heated analysers: MIR FT/ MIR 9000 H / GRAPHITE 52M / TOPAZE 32M....).

HOFI Sampling system (HOFI Box with CA-PG probes series) allows the injection of span gas or zero gas in the heated block for a complete check of the whole analysis system (From the sampling point to the analyzer)



HOFI
Heated filter block (detail)

Type of probe	Model	Top of the probe
Wet processes T° max 140°C PTFE / Hastelloy	CA-PG-H-x	
Corrosive processes T° max 250°C Hastelloy	CA-PG-R-x	
High Temp. process T° max 550°C Stainless Steel	CA-PG-HT-x	

x = probe length

Available lengths: 0.5 / 0.7 / 1.0 / 1.5 m (others lengths upon request)

TECHNICAL SPECIFICATIONS

Primary filter	20 µm (depending on probe type)
Fine filter (heated filter block)	0.5 µm
HOFI heated filter temperature	180-190°C
Sample flow rate	30 to 120 l/h
Dimensions	400 x 600 x 200 mm (W x H x D)
Weight	15 kg (IP55 enclosure)
Power supply	230 V/50Hz or 110V/50-60Hz
Consumption	approx. 400 VA
Operating temperature	-20°C to +50°C
Flange	DN100-PN20 / 4"-150 lbs (others upon request)

MAIN OPTIONS:

- DTP: Pressure / Flow and Temperature measurement by embeded Pitot tube and T° sensor into the HOFI sampling system (Single flange requirement)
- Sliding flange for insertion optimization inside the stack / duct
- Flexible probe extension (allow the delocalisation from few meters of the HOFI box)

UTILITIES :

- Instrument air: 1.5 bar mini, 2 Nm³/h