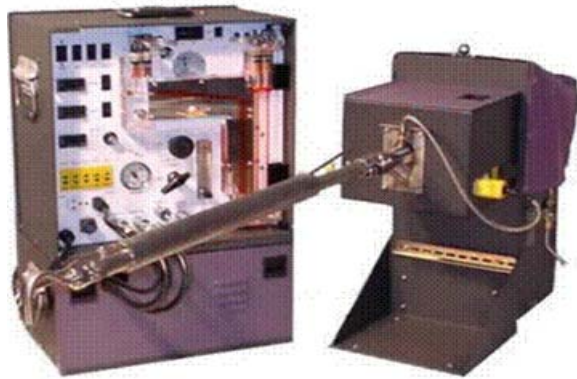




**New Line of Gas Coolers from
AGL Airtesting Limited**



EXISTING BUSINESS – Hire & Sales



Isokinetic Sampling Equipment

- *Particulates, HCL & Dioxins*

Emissions Analysers

- *Gas & Dust*

Gas Conditioning Equipment

- *Heated Lines & Gas Coolers*

Equipment for:

- *Ambient & Water monitoring*

NEW BUSINESS - SYSTEMS BUILD



**From 2007 AGL provide
design and build of:**

Gas Analysis Systems

Gas Conditioning Panels

NEW BUSINESS - DISTRIBUTORS FOR



ADC - Gas Analysers

AGT - MAK Gas Coolers

M & A - Thermo FID Analyser

RAE Instruments - PIDs & Gas Monitoring

AIR | GAS | THERMOTECHNIK



AGT Thermotechnik GmbH Presentation



MAK Gas Coolers and Conditioning Units

Dry sample gases to extractive analysers for:

- Emission Monitoring
- Process Control
- Engine Testing



CEM Applications

- Power Plants
- Waste Incinerators
- Cement Manufacturing
- Chemical Production Plants*
- Gas Production Plants
- Glass Manufacturing
- Timber Processing
- Food Processing



Continuously dehumidify sample streams with:

- stable and constant dew-points
- very low gas dissolution rates
- extremely high availability
- guaranteed sustainability



The performance criteria

- Outlet dew-point +3°C
- Dew-point stability + / - 0,3°C
- Gas inlet dew-point 65 °C
- Ambient temperature +5 - 45°C
- Dissolution rate of SO₂ < 6%



The advantage of the modular design provides:

- compact conditioners
- extended versions
- 19" rack versions



Standard variations of the modular design:

- up to 4 gas paths
- up to 2 pre-separators

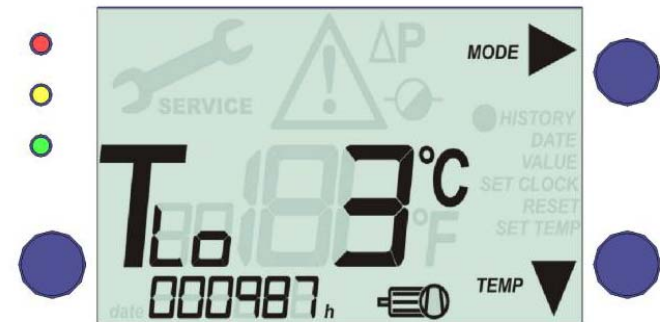
Optional with:

- Teflon-depth filter
- electronic control MS
- flow-meter
- integrated gas pump



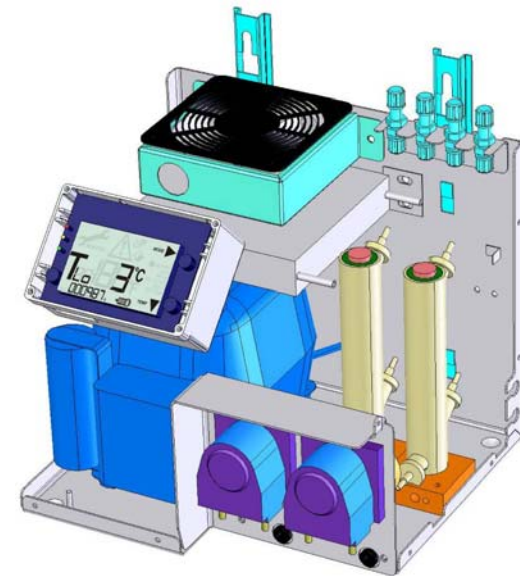
Preventative monitoring through:

- Digital dew-point indicator
- Cooling air temperature indicator
- Condensate pump control
- Precautionary fault diagnosis
- Indication of service intervals



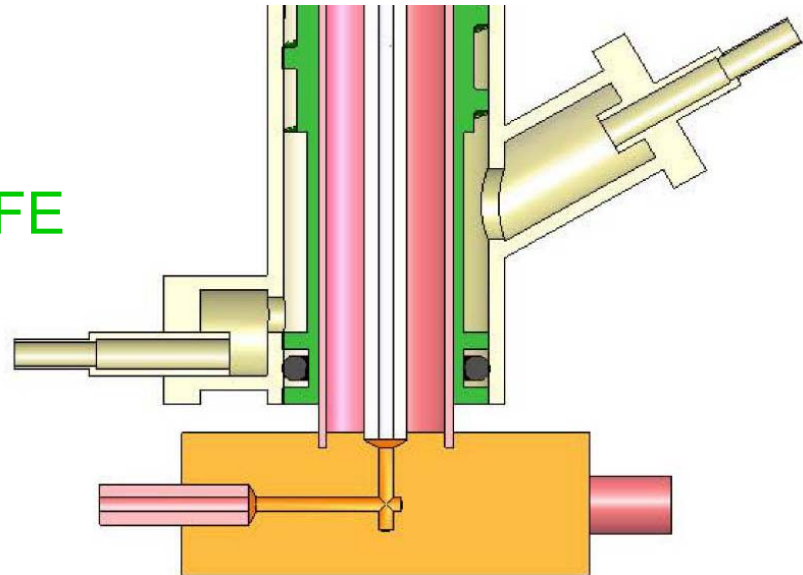
The incorporated beneficial design provides:

- changeable heat-exchangers
- flexible gas connection sets
- cabinet suitability ventilation
- temperature dependent fan control
- visible monitoring display
- integrated condensate pumps



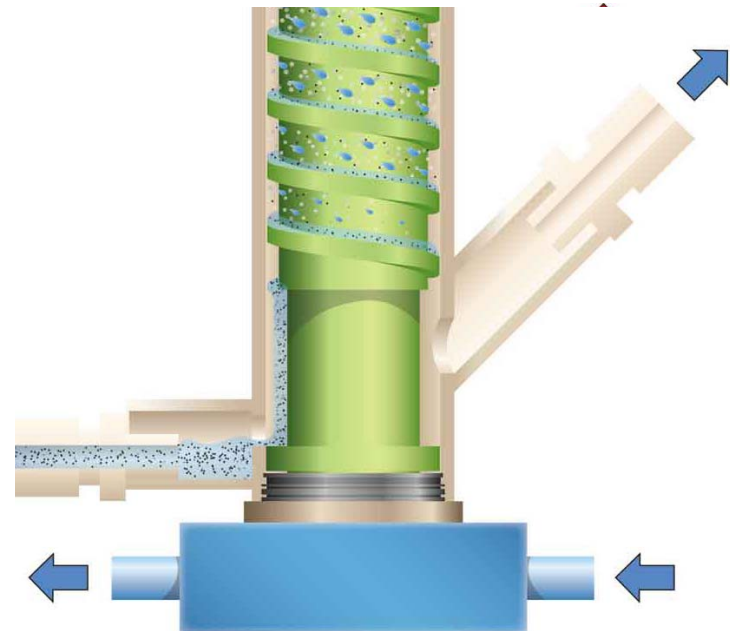
Unique cooler and separating technology with:

- copper cooling agent rod
- aluminium cooling tube **PTFE** coated
- PVDF housing
- Viton O-rings



High and constant dryness rate caused by:

- coldness transfer from inside
- copper TCV of 300 W/m²K
- aluminium TCV of 204 W/m²K
- rectangular spiral gas flow
- spiral performing stream
- calming space separator



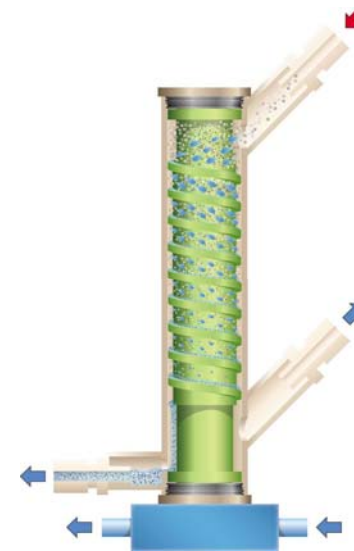
Low dissolution rate e. g. of SO_2 caused by a:

- very small dead space of 26 ml
- extremely short response time
- large drops with a smaller surface
- hydrophobic **PTFE** coated surface
- reduced electro-static current
- separated condensate spiral stream



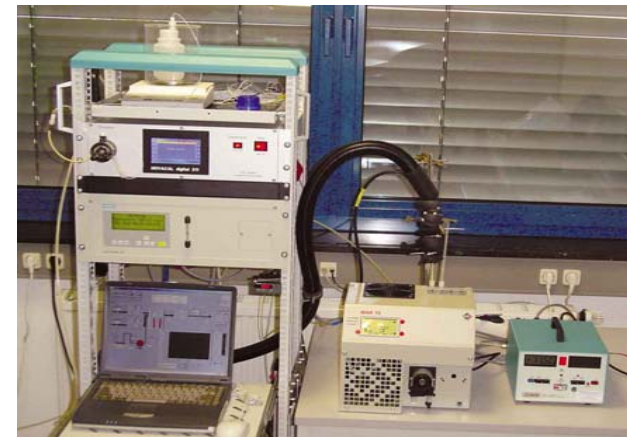
Sustainability through **PTFE** coating:

- chemical resistance
- no oxidisation and corrosion
- no abrasive wear
- no clogging



Comprehensive testing guarantees reliability:

- TÜV-certified calibration
- Gas generator
- Dynamic evaporation at 180°C
- Trace measuring by IR-analyser
- Data processing and storing
- Availability of test certificates



Outstanding Sample Gas Conditioning due to:

- precision, safety, sustainability
- high and constant dryness rate
- very low gas dissolution rate
- innovative solutions
- synergy effects
- modular design

