

TOPAS ®



PARTICLE UNDER CONTROL.
Developed, designed and manufactured in Germany.

OUR PASSION: **AEROSOLS**

We develop aerosol technologies. For you.

Our enthusiasm is for aerosols and airborne particles. Therefore we are specialists in the field of particle technology, especially in aerosol technology. We generate, condition and measure aerosols, and are responsible for the development, manufacture and worldwide export of devices and complete test systems.



EVERY DAY WE LEARN MORE –
WITH OUR COSTUMERS AND FOR OUR COSTUMERS

TECHNOLOGY LEADER

many years of in-house expertise make Topas the technology leader in the field of aerosol technology and filter testing

FOUNDED IN 1991
specialists in particle and aerosol technology since 1991

NUMEROUS PATENTS
innovations with numerous patents

BENEFITS
customer benefits through innovation and quality

ISO9001
certified company

FIRST-CLASS SERVICE

comprehensive after-sales service – inspection & calibration with certificate, service contracts

INTERNATIONAL

network sales and service partners

WIDE RANGE

active in a wide range of industries

SUSTAINABILITY

TECHNICAL INNOVATION CENTER

feasibility studies on various device systems and test benches

STANDARDIZATION COMMITTEES

test systems comply with standards – active in standardization committees

DESIGNED,
DEVELOPED &
MANUFACTURED
IN GERMANY



CLEANROOM

OUR TECHNOLOGY SOLUTIONS

Mobile equipment for standard compliant cleanroom validation tasks.

Applications

- validation of cleanrooms
- testing of safety cabinets
- qualification of operating theatres

Features

- optimized for mobile use
- low maintenance
- compatible with alternative measurement technology
- easy to clean, operate and decontaminate
- fast service (inspection, calibration, repair)





CFG 291
CONDENSATION FOG GENERATOR

generate a well visible, resting fog cloud for visualising air flows

- visualisation of air flows in rooms
- visual leak testing of rooms or enclosed areas
- function testing of various sensors (smoke detectors, PM sensors)

☑ ISO 14644, GMP Annex 1



DIL 544
DILUTION SYSTEM

static dilution (1:100) of aerosols for cleanroom counter (1 cfm = 28,3 L/min)

- filter leakage testing in cleanrooms
- validation of cleanroom technical facilities
- extension of the operating range of aerosol-analytical instruments

☑ ISO 14644, GMP Annex 1



ATM 228
ATOMIZER AEROSOL GENERATOR

generation of droplet aerosols

- integrity testing of HEPA and ULPA filters
- recovery tests of cleanrooms
- generation of calibration aerosols at low air flow rates

☑ ISO 14644, GMP Annex 1





CALIBRATION

OUR TECHNOLOGY SOLUTIONS

Customised generation of aerosols for calibration, validation and verification proposals.

Applications

- calibration of instruments and sensors for the characterization of airborne particles (particle counters, aerosol spectrometers, PM sensors, smoke detectors)
- performance characterization of filters and measurement instruments
- supply of defined tracer particles for flow visualisation

Features

- combinable with other aerosol technologies
- targeted modulation of aerosol properties
- highly reproducible test aerosols





FCS 249

FIELD CALIBRATION SYSTEM

generating of polydisperse reference aerosols

- calibration of mass spectrometers and low-cost PM sensors
- periodic check of environmental particle counters
- calibration of particle counters used for periodical technical inspection (PTI)

☑ STV 23/7355.2/2; CEN/TS 17660-2;
CEN/TS 18086 / ISO 21501



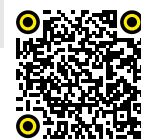
SLG 270

CONDENSATION AEROSOL GENERATOR

production of monodisperse aerosols

- liquid and solid particles for device calibration up to 10 µm
- ideal performance testing of filters and separators (neutral, high concentrated)
- verification of low-cost PM sensors

☑ ISO 21501; EN 61577-4



ATM 222

ATOMIZER AEROSOL GENERATOR

flow rate controlled long-term aerosol generation optional

- optimal for production control tasks (remote controllable)
- ideal for research and development purposes
- performance testing of aerosol technologies

☑ ISO 21501; EN 61577-4





AIR QUALITY

OUR TECHNOLOGY SOLUTIONS

Advanced technologies for precise monitoring of outdoor and indoor air.

Applications

- continuous monitoring of indoor and outdoor air quality
- performance testing of air purification and filtration systems
- calibration of environmental monitoring instruments (PM sensors, spectrometers)

Features

- extending the performance of diverse aerosol instruments
- improving the reliability of measurement data
- ideal for handling of supermicron aerosols (>1 μm)





LAP 324

LASER AEROSOL SPECTROMETER

wide range of aerosol particle characterization

- to reduce measurement artifacts (dual wavelength)
- large size (0,15 μm – 40 μm) and concentration ($\leq 10\,000$ particles/ cm^3) range



DDS 560/C

DYNAMIC DILUTION SYSTEM FOR AEROSOLS

targeted reduction of particle number concentration

- suitable for break and tire emission testing
 - ideal for occupational safety measurements
 - designed for fundamental aerosol research
- ☑ VDI 3491-6 / VDI 3491-15



ATM 221/D

ATOMIZER AEROSOL GENERATOR

generation of test aerosol from liquids, especially from suspension

- calibration and validation of PM sensors and other aerosol technologies
- material characterization and performance of characterization of filter media and filter elements

☑ CEN/TS 18086 / CEN/TS 17660-2





MATERIAL TESTING AND PROCESS SUPPORT

OUR TECHNOLOGY SOLUTIONS

Our high-performance generators and neutralizers deliver reliable results for material characterization and for the support of aerosol-based processes.

Applications

- detailed material characterization
- ensuring optimized testing conditions for separation technologies
- supply of tracer particles for visualization tasks

Features

- modular designed devices for multiple setup configuration
- provision of customized test aerosols
- robust, sustainable and precise equipment





SAG 415
SOLID AEROSOL GENERATOR

generation of airborne particles from dust

- inhalation toxicity testing
- material characterizations for REACH
- targeted coating of components

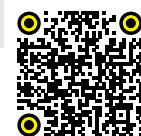


ATM 23X
ATOMIZER AEROSOL GENERATOR

production of airborne particles from liquids

- provision of tracer particles for flow visualization
- supply of precursor particles for surface coating
- high output of particles for filter performance validation

☑ VDI 3491-2 / ISO 21083-1



EAN 581
ELECTROSTATIC AEROSOL NEUTRALIZER

modulation of aerosol charge state

- systematic scientific research on particle charge-related interaction
- performing standardized filter tests
- intensification of particle deposition on surfaces

☑ ISO 11155-1; ISO 19996





FILTER MEDIA TESTING

OUR TECHNOLOGY SOLUTIONS

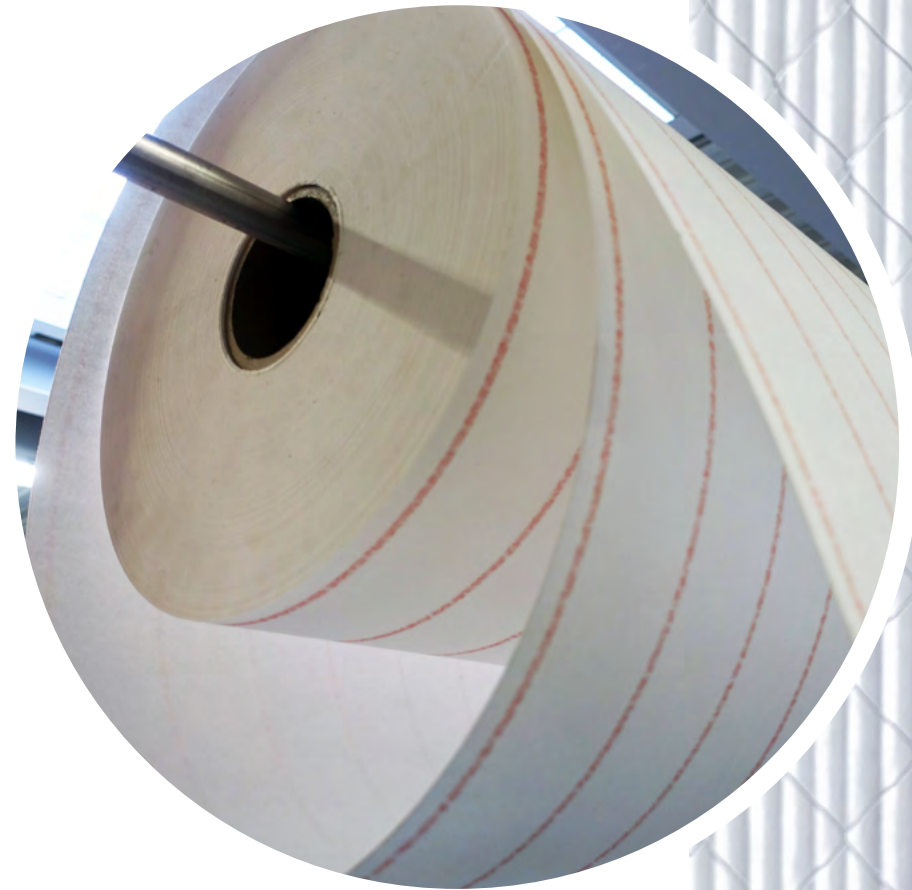
Topas offers high-end test systems for the comprehensive characterization of filter media.

Applications

- testing HVAC, HEPA/ULPA, non-woven media on typical performance parameters
- quality control in the production of nonwovens and glasfibre filter media as well as membranes

Features

- precise determination of fractional separation efficiency and pressure drop
- ensuring the development of high-performance materials for superior air and liquid filtration





PSM 166

PORE SIZE METER

analysis of material structure

- development of porous materials
- inspection of incoming goods, quality control
- testing of nonwovens, membranes, hygiene products
- analyses of sinter metal and metal meshes

☑ ASTM F316-03; ASTM 1284



MBP 116

FILTER MEDIA TEST SYSTEM

testing of filtration efficiency and dust holding capacity

- fast and easy quality assurance of flat sheet filter media
- performance testing of filter materials during research and development process
- PM sensor validation



AFC 132

FILTER MEDIA TEST SYSTEM

characterization of filter media and small filter elements

- development and optimization of filter media in accordance with standards
- quality inspection of flat filter media as final test during production or as incoming inspection before further processing

☑ ISO 16890; ISO 29463; ISO 5011; ISO 11155





HVAC FILTER TESTING

OUR TECHNOLOGY SOLUTIONS

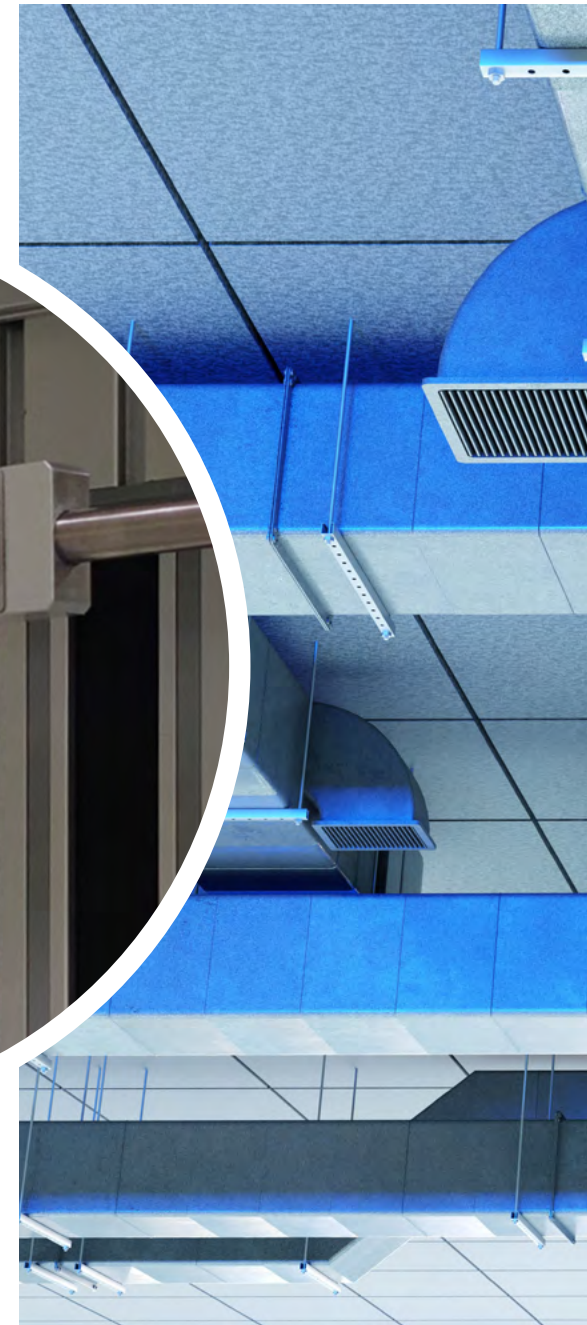
Our testing technology for HVAC filters ensures compliance with global standards including energy efficiency.

Applications

- measurement of filtration efficiency and energy rating
- evaluation of filter performance under real conditions
- quality assurance for residential and industrial HVAC units

Features

- fulfillment of standard requirements
- automated testing routines
- robust and sustainable technology





ALF 114

GENERAL AIR FILTER TEST SYSTEM

determination of the properties of various general air filters

- testing cassette filters, filter cartridges, gas turbine filters by using salt, oil or dust
- energy efficiency rating for filters according to EUROVENT

☑ ISO 16890; EN 779; ASHRAE 52.2



AFS 150

AUTOMATED HEPA/ULPA FILTER
SCANNING TEST SYSTEM

leak detection and integral efficiency testing

- classification of HEPA and ULPA filters
- short test cycles from multiple scan probes
- easy to use control and data acquisition software

☑ ISO 29463-3, -4, -5; EN1822-3, -4, -5



AFS 152/A, AFS 151

MANUAL OR AUTOMATIC HEPA/ULPA
FILTER SCANNING TEST SYSTEM

automatic scanning of panel filters, cassette filters, plane filter media, filter cartridges

- detects leaks and determines local efficiency
- determination of integral efficiency
- differential pressure testing

☑ ISO 29463-3, -4, -5; EN1822-3, -4, -5





MOLECULAR FILTER TESTING

OUR TECHNOLOGY SOLUTIONS

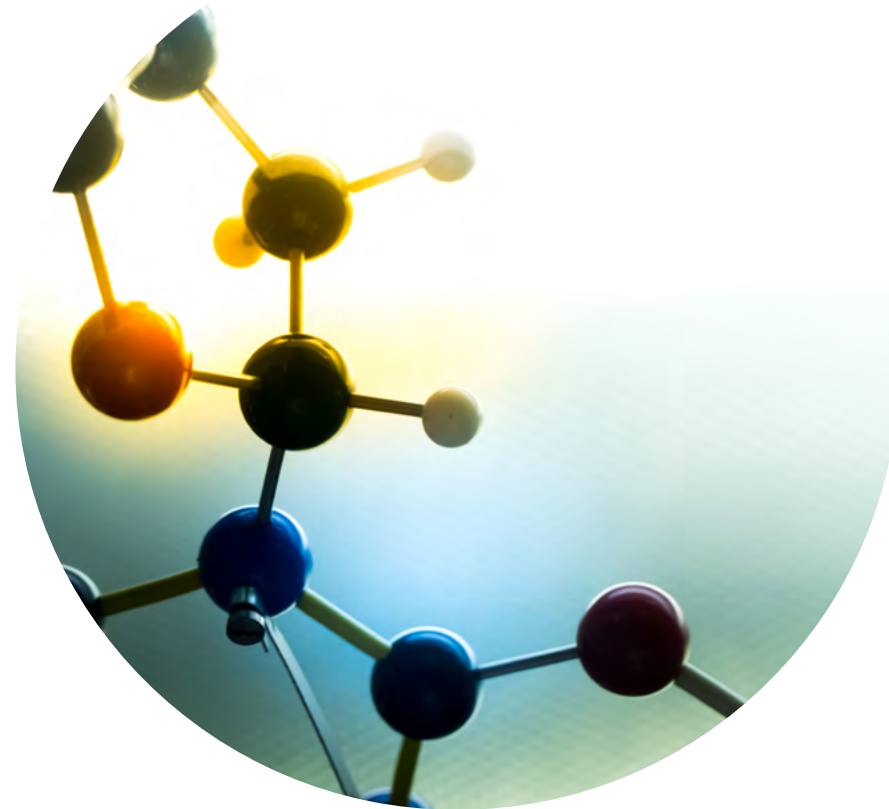
Topas provides specialized systems for the analysis of gaseous pollutants and the efficiency of molecular filters.

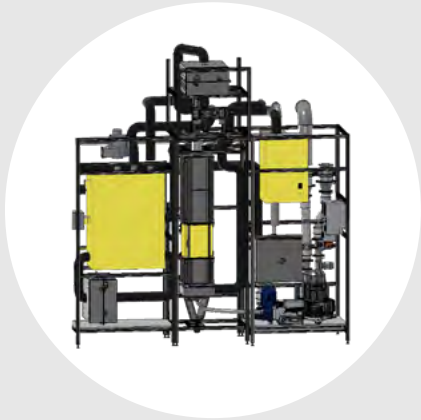
Applications

- efficiency testing against specific gases and odors
- testing of adsorbents and gas phase filtration media
- performance validation of activated carbon filters

Features

- filters that ensure the reliable removal of odors, volatile organic compounds (VOCs), and harmful gases in sensitive industrial and medical applications





QCF 120

QUALITY CONTROL ADSORPTION TEST SYSTEM

testing of raw materials

- adsorptive testing of filter media and bulk materials
- examination of adsorption kinetics

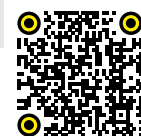


MFT 113

MOLECULAR FILTER TEST SYSTEM

determination of particle removal and gas adsorption, testing of filter elements and filter assemblies

- quality control during filter production
- research and development of new filter materials and filter elements configurations
- fuel cell air intake filter testing
- molecular HVAC filtration



GAF 114

GAS ADSORPTION FILTER TEST SYSTEM

testing of pocket, cassette and cartridge filters

- flow rate range 400 ... 4 500 m³/h
- size of the filter elements:
≤ (610 × 610) mm (variable depth)

☑ ISO 10121





TESTING OF AUTOMOTIVE FILTER AND SEPARATORS

OUR TECHNOLOGY SOLUTIONS

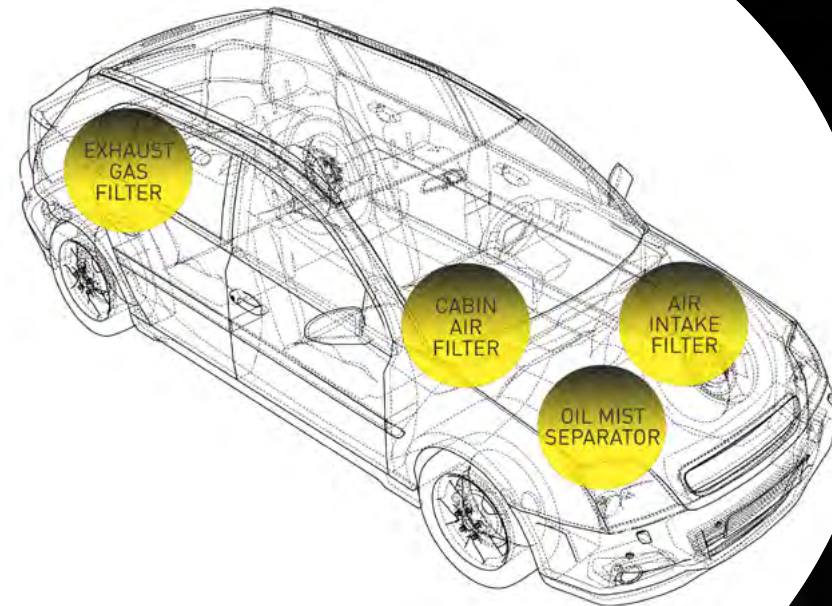
We offer specialized test rigs for the rigorous requirements of the automotive and heavy-duty industries – from cabin air to engine intake filtration.

Applications

- evaluation of engine intake filters, cabin air filters and oil mist separators
- performance analysis under high flow, dust and oil conditions
- validation of industrial dust collectors and gas cleaning systems

Features

- automated testing procedures
- applicable for multiple filter types
- scalable testing conditions





PAF 113

CABIN AIR FILTER TEST SYSTEM

flexible measurements of particle filtration and gas adsorption

- fractional efficiency and gas adsorption tests
- research and development tasks on automotive cabin air filters
- residential HVAC filtration

☑ ISO 11155-1, -2



AFC 136

FILTER ELEMENT TEST SYSTEM

production control of filter elements (e.g. ceramics exhaust filter, HEPA filter)

- production control of integral separation efficiency of exhaust particle filters (GPF, DPF)
- quality control of HEPA filters or filter cartridges of e.g. industrial vacuum systems



ABP 115

AIR INTAKE FILTER TEST SYSTEM

testing of industrial and engine air filters

- powerful two-stage generation of the volume flow
- precise flow rate measurement with adjustment for every application
- scalable to heavy duty applications

☑ ISO 5011; ISO 12103-1





INDUSTRIAL FILTER TESTING

OUR TECHNOLOGY SOLUTIONS

The standards for supply air quality are constantly rising. With Topas testing systems, you can test general-purpose air filters, high-efficiency HEPA and ULPA filters, as well as gas turbine filters, using various test routines in accordance with current standards.

Applications

- testing of larger scale filter assemblies
- characterization of filters at simulated real-life conditions
- validation of vacuum cleaner and room air purifier filters

Features

- standard compliant test setup and test conditions
- accurate and fast testing methods
- fully integrated test systems with database connection
- different functionality levels available





GTS 114

GAS TURBINE FILTER TEST SYSTEM

testing industrial air intake filter systems for rotary machinery

- modular test system setup
- circulation mode for control of the test parameters temperature and humidity
- test with different aerosols (NaCl, KCl, DEHS)
- automated feeding of water droplets and supersaturated vapour

☑ ISO 29461-1, -2, -4



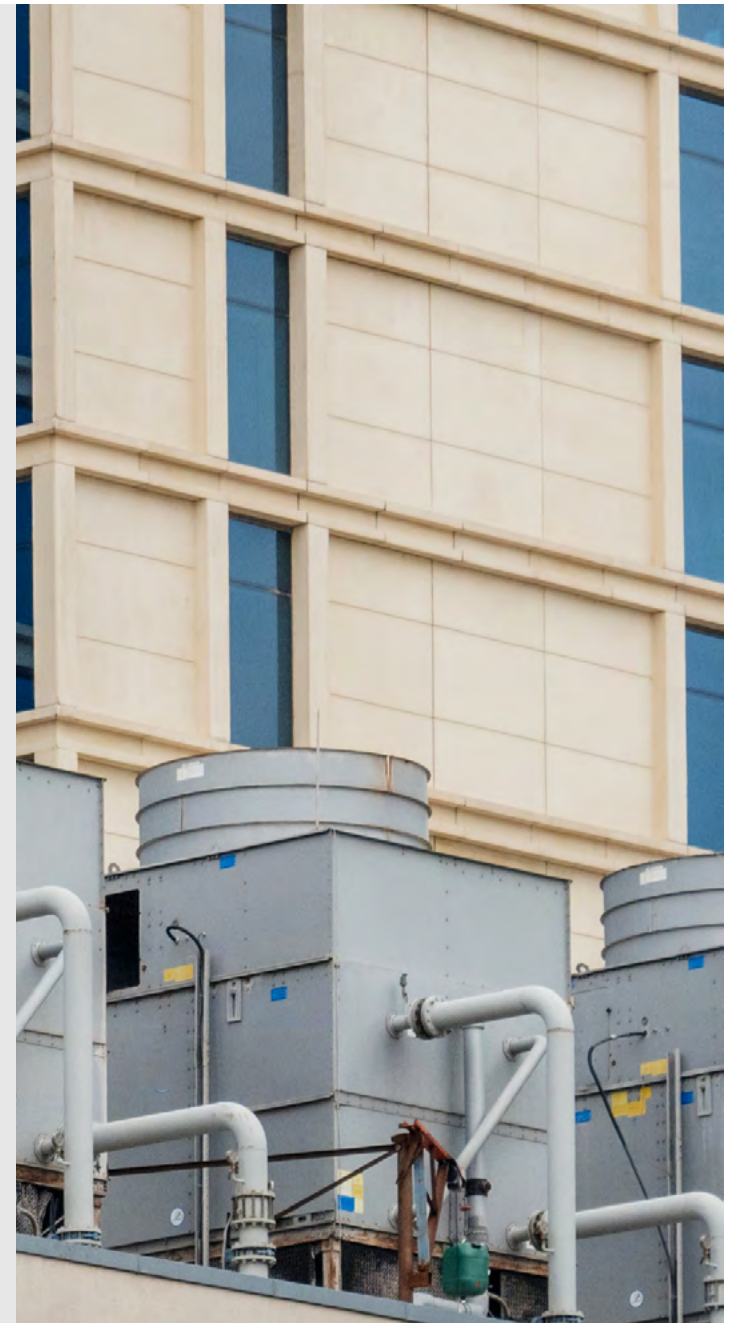
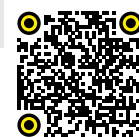
LDP 190

DIESEL FILTER DIFFERENTIAL PRESSURE TEST SYSTEM

liquid filter testing

- differential pressure testing of diesel-water separators
- test at different liquid temperatures
- prepared for an additional test routine

☑ ISO 4020-3





PRODUCTION TESTER

OUR TECHNOLOGY SOLUTIONS

Increasing quality requirements for production processes increasingly demand 100% control in filter testing. Our modules for fully automated filter testing can be flexibly integrated into any production line and can be individually adapted.

Applications

- testing of integrity of medical filters
- integral efficiency measurement of HEPA filter cartridges
- production control of ceramic exhaust filters (GPF, DPF)

Features

- modular concept, individuals scalable
- maximum testing density through the feasibility of a 100% control
- very high degree of automation in the execution of the measurement
- fully automatic data acquisition and traceable measurement data management
- approved for 24/7 operation





IFT 158

INLINE FILTER TESTER

filter measurement in only one second

- end of line integrated quality control of medical filters

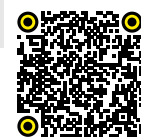


AFS 154

FILTER INTEGRITY MEASUREMENT TEST SYSTEM

100% inline production testing

- testing of industrial and automotive filters



AFC 136/QC

FILTER ELEMENT TEST SYSTEM

modular test system for 24/7 production control

- production control of ceramic exhaust filters (GPF, DPf)

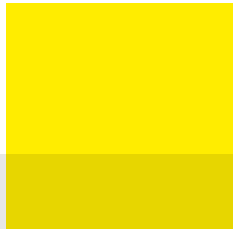
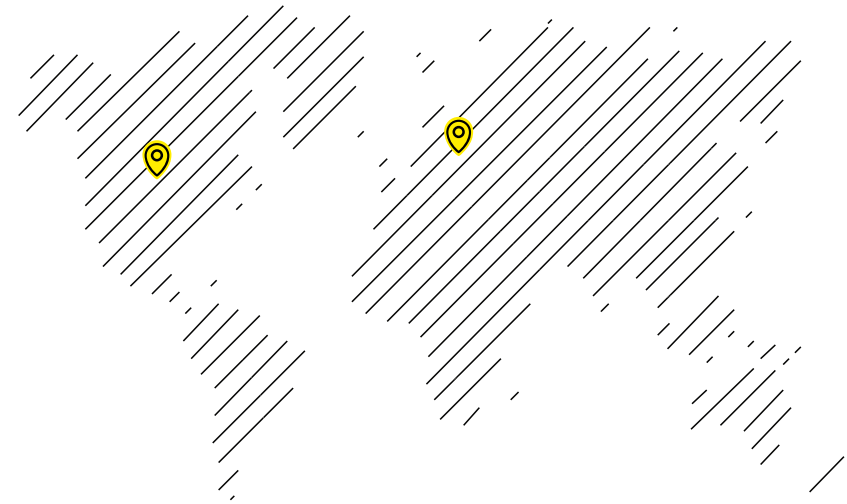




IN MORE THAN 30 COUNTRIES


Global Distribution.

Topas products are in use worldwide –
providing expert personal consultation right where you are.



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