

# Air Hygiene Testing Body

Avoiding and controlling risk



# Your partner in safety and health protection

Installing a filter in the test unit (EN 1822, HEPA/ULPA)



## Individualized test procedures ensure air quality

Ventilation and air conditioning devices are indispensable in many areas of the working world. They protect human health and ensure uninterrupted processes in industrial manufacturing. The correct use of these devices requires precise knowledge of the air conditions prevailing inside the buildings involved. The same is true for the systems themselves. They can function properly only if the separating capacity for critical atmospheric pollutants is determined precisely.

As an impartial service provider, we adhere to applicable standards when testing separating capacities, pressure drops and dust retention capacity not only for air filters, filter media and filter elements but also for dust removers, vacuum cleaners, air cleaners and other systems. The DMT quality seal, in the form of test reports and

certificates, gives manufacturers of air cleaning products a clear competitive advantage. Users benefit from safety in day-to-day work thanks to independent certification of the performance characteristics of the separators or air processing systems used. Our accredited measuring body provides on-site measurements and evaluations of the air quality in indoor areas such as offices or workshops.

The measurement and evaluation technology built into our test rigs makes it possible to handle air flows of between 10 m<sup>3</sup>/h and 100,000 m<sup>3</sup>/h. Depending on the assignment, all the necessary physical, chemical and microbiological parameters are determined, as well. The usual test dusts as per EN 779 (ASHRAE dust) or as per IEC 60312 (test dusts for vacuum cleaner tests) are available for use. We produce test dusts individually for special requirements.

“DMT Type 8<sup>®</sup>”  
is a test dust  
produced by  
DMT



## Our service portfolio

### Ventilation particle separators

- Testing for air filters: surface filter (regenerative) and deep-bed filter (storage). Normative tests on filters and filter media (including EN 779, EN 1822, 71460, VDI 2052, VDI 3926, ISO 5011) and non-normative tests (pressure pulse dedusting examinations for testing of dedustable filters and systems, air permeability, bursting pressure etc.)
- System tests (with test seal applied as evidence of quality) for systems with integrated separators (or filters) such as wet and dry dust removers, cyclonic dust collectors, vacuum cleaners, air cleaners, vehicle cabs, haulage vehicles etc.



Filter damage analysis

### Dusts and particles

- Analysis of dust and particles, ascertaining distribution of particle size (sieve analysis, impactor analysis), ascertaining the dust behavior of bulk materials or materials tending to form dust (e.g. Heubach procedure)
- Production and sale of test dusts, synthetic and mineral test dusts (e.g. DMT Type 8<sup>®</sup> test dust as per IEC 60312, Dolomite test dusts and others as per IEC 60312, A2 fine as per ISO 12103, Aramco test dust and others), production of special dusts to customer specifications

### Air hygiene

- Air measurements
  - Accredited body for workplace measurements as per Section 9 of the Hazardous Substances Ordinance (GefStoffV)
  - Measurement and assessment of indoor air quality as per VDI 4300 (e.g. asbestos, PCBs, PCPs, VOCs, formaldehyde etc.)
- Product tests for air hygiene quality through examination of particle and pathogen separation efficiency, pathogen collection, allergen content, water vapor permeability. Tested products include, for example, vacuum cleaners, fans, room air cleaners, mattress covers and carpets (in conjunction with an accredited microbiology analysis laboratory).

### Special tests

- Examinations in accordance with customer requests with the option of specifying the aerosol or test dust, its concentration, the volumetric flow, the air conditions etc.
- Abrasion tests using dust or sand
- Corrosion examinations using saline aerosols and corrosive gases
- Offgassing tests for wall paints, building materials etc. in an emissions chamber
- Sealing and leakage examinations of ventilation and air conditioning equipment (EN 1507)
- Tests in accordance with foreign standards such as Loss Prevention Standards (e.g. LPS 1263), Underwriters Laboratories (e.g. UL 1046), Aramco or MIL standards

Particle  
measurement



#### Advising and assessing

- Damage inspections or assessments for filters, air conditioning and ventilation units, clean rooms etc.
- Damage examinations or assessments on buildings, including
  - Registering dangerous substances in buildings (asbestos and PCB in particular)
  - Mapping and abatement consulting
  - Preparing mitigation concepts
  - Drawing up specifications and price schedules
  - Expert monitoring of abatement projects
  - Acceptance testing
- Consulting and development services

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