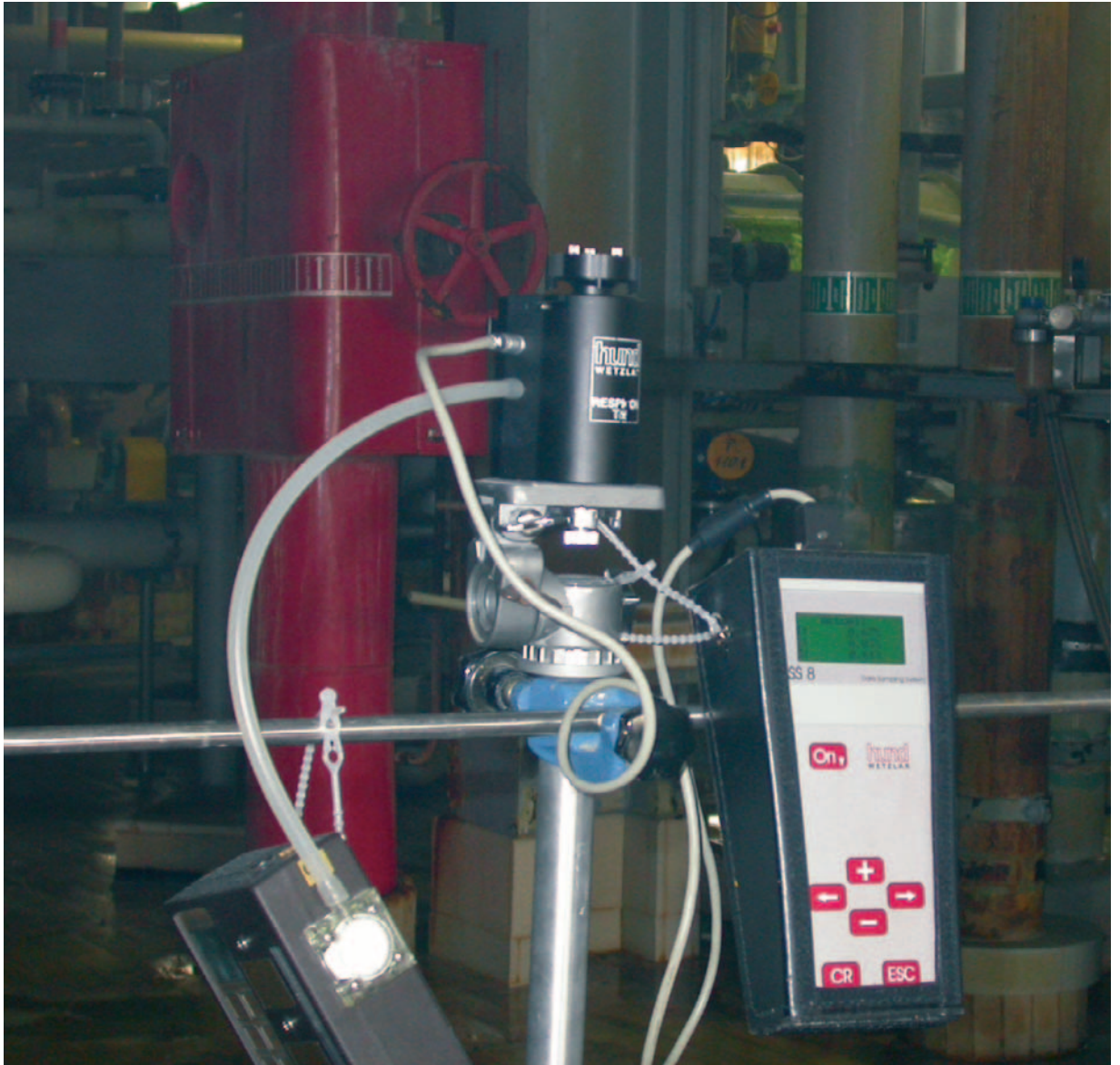


## Environmental Monitoring



**Dust, the levitating danger**

**For a clean environment: reliable measurements and durable products**

# Environmental Monitoring

Immission and emission of dust, fog and various types of smoke and vapour place a high stress on the environment and thus have a negative effect on the environment.

The measurement of fine dust to protect health at workplaces and immission measurement of our environment gains more and more importance. For this purpose, there are legal directives and guidelines

in place to avoid noxious environmental influences or to reduce them to a minimum level. Only constant monitoring of all dangerous areas with high-grade measuring instruments will guarantee the implementation of these legal requirements, thus improving the basis of a more human working environment.

Hund dust measurement instruments are dedicated to a multitude of applications.

The company develops in close cooperation with leading environmental technology institutes continuously since more than 30 years new sensors and instruments to detect dangers in our environment. The products are designed in compliance with national and international standards.

## Our offer on products and services

- A well-balanced program for emission and immission measurement
- Reliable measurements and easy operation
- Standard method through combined gravimetric and photometric system
- Competent consultancy by Hund and distribution partners
- High and constant quality „Made in Germany“
- Qualified calibration and repair service

## Applications



### Workplace Measurement

Measurement of contamination at workplaces

- in industrial environments
- at construction sites and tunnels

Advantages:

- Simultaneous measurement of the inhalable, thoracic and respirable dust fractions
- Online acquisition of data
- Mobile operation for short- and long term measurements



### Monitoring of climate and ventilation

Measurement of the effectiveness of filters to prevent contamination

- for the ventilation or work areas
- for extraction systems of machines

Advantages:

- No influence on the medium under inspection
- Easy handling and operation



### Monitoring of clean rooms

Measurement of the dust concentration at the production and packing of sensitive components in the areas


- Automotive Industry
- Medical engineering and pharmaceutical industry

Advantages:

- Online acquisition of data
- Mobile operation for short- and long term measurements

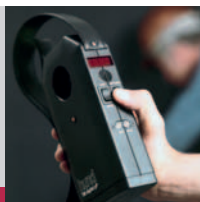
# Application Matrix

The following matrix shows the preferred use of the instruments depending on fields of application.

	Emission Measurement	Immission Measurement	Mobile Operation	Stationary Operation	Workplace Monitoring					Monitoring Ventilation and Air Conditioning					Clean Rooms			
					Construction Sites	Bulk Goods	Tunnel Construction	Wood Processing	Mining (underground & above ground)	Emission from Machines	Filter Monitoring	Oil Dust	Weld Smoke	Supply & Exhaust Air	Production of Medical Goods	Precision Engineering	Plastic Injection Mould	Optical Surfaces
TM data, Scattered Light-Photometer	X		X		X	X	X	X	X	X	X	X	X	X		X	X	
TMF, Scattered Light-Photometer	X			X		X		X	X	X	X	X	X					
Respicon TM, combined gravimetric and photometric measurement of I, T, and R-Dust	X	X	X		X	X	X	X	X			X				X		
TM-M, Scattered Light-Photometer	X	X		X									X	X	X	X	X	
TM-SE, Scattered Light-Photometer	X			X			X	X	X		X		X					

## Products

### TM data



#### Mobile scattered light photometer TM data

- No influence on the medium under inspection through passive sampling
- Low maintenance (no pump)
- Low detection limit of 10 µg/m<sup>3</sup>
- Suitable for short and long term measurements
- Storage of data
- Powerful software for illustration and analysis

### Respicon



#### Combined gravimetric and photometric system Respicon TM

- Simultaneous measurement of the I-, T-, and R- dust fractions
- Easy calibration of the photometer on basis of the gravimetric data detected by the instrument
- Determination of max. concentration and short term values
- Comprehensive software for illustration and data analysis
- Version as dust collection instrument available (Respicon)
- Integrated standard measurement method

### TM-M



#### Mobile scattered light photometer TM-M

- Pre-selectable measuring times
- Simultaneous measurement with time resolution and averaging
- Low detection limit of 5 µg/m<sup>3</sup>
- Online calibration with dust collection filter

### TM-SE



#### Fine dust sensor TM-SE

- Low detection limit of 5 µg/m<sup>3</sup>
- Simultaneous time resolved measurement and average determination
- Automatic zero point alignment
- Comprehensive software for illustration and data analysis

### TM-F



#### Stationary scattered light photometer TM-F

- Suitable for measurements at encapsulated machines and filter systems
- No influence on the medium under inspection through passive sampling
- Adjustable limit value and switchable measuring range
- Low maintenance (no pump)
- Low detection limit of 5 µg/m<sup>3</sup>
- Optional: purge-air pump to keep the measurement chamber clean

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