

## ENVIRONMENTAL EMISSIONS MEASUREMENT

### Determination and monitoring of air quality

#### TASK

The production of plastics can generate by-products or involve compounds whose release into the environment must be prevented. In order to prevent air pollution, legal regulations apply in which emission limits are also specified. These include, for example, EC directives, regulations or permits. In order to ensure compliance with these limits, official measurements are regularly carried out at the manufacturing companies.

#### SOLUTION

Analytik Service Obernburg carries out operational emission measurements (Fig. 1) to optimize and monitor air purification systems. The measurements give the plant operator the certainty that emission requirements are always reliably met, even outside the official inspection cycles. If deviations are detected, corrective measures can be taken immediately. If, for example, the dust limit value is unexpectedly exceeded during operation, targeted measurements in the exhaust air make it possible to detect a filter defect and search for the leakage. However, this measure cannot replace the official control measurement for compliance with the permit.

#### Industries

Chemical companies  
Plastics processors  
Automotive suppliers  
Chemical fibers  
Lacquers and paints

#### Analysis Objectives

Quantification of hazardous substances  
Risk assessment

#### Materials

Indoor air

#### Analysis method

Gas chromatography  
Ion chromatography  
Spectroscopy  
Gravimetry

#### Similar questions

Emission measurements  
volume flow measurements



## **PROCEDURE**

There are regulations/standards for carrying out emission measurements in accordance with VDI, TA-Luft and DIN. In order to do justice to the problem, the emission source must be examined before the measurement, the correct measuring arrangement selected and relevant data collected. It is important to consider the nature of the emitted substances. If the substances are gaseous, the measurements can be carried out continuously, for example using an infrared spectrometer or UV spectroscopy. In contrast, particles such as plastic dust are collected using filters and then analyzed (see Fig. 2).

## **ADVANTAGE**

Analytik Service Obernburg GmbH, based at the Industrie Center Obernburg, has many years of expertise in emission and volume flow measurements in industrial environments. The measurements can be carried out promptly and the customer's problems can be addressed through system optimization and expert advice.

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Fig. 1: ASO-CL employees measuring gaseous emissions

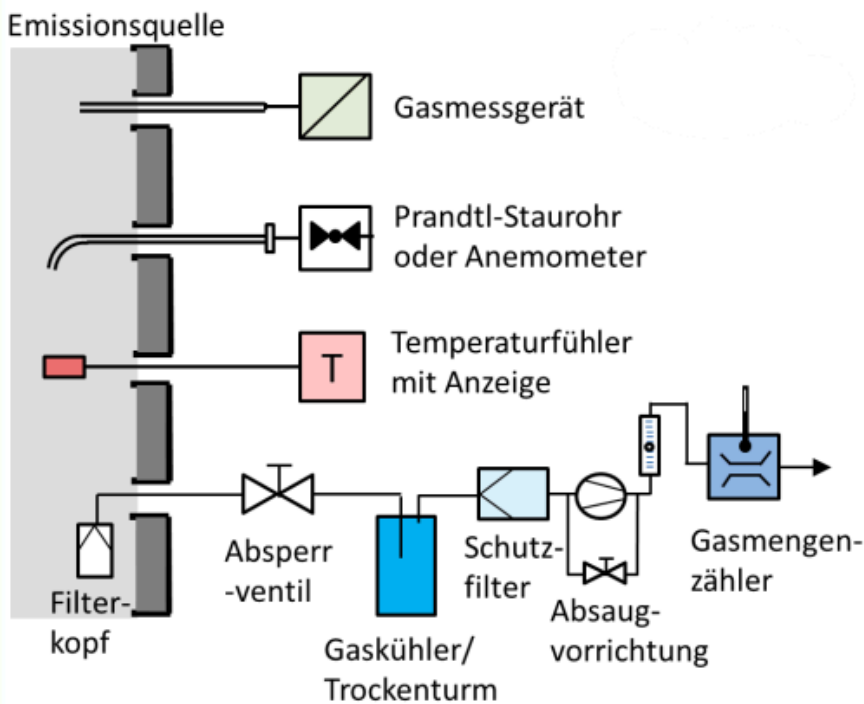


Fig. 2: Measuring devices for the determination of emissions based on VDI 2066. The lower measuring setup in the picture shows an example of a device for the determination of dusty substances