

# HEUBACH DUSTMETER



## Competence in Dust Measurement

For the standardized determination of dust generated by the handling of powders, tablets and granules

# HEUBACH DUSTMETER

## Measurement Principle

Type I: The sample is placed into the steel drum (1). When rotated, three blades inside the steel drum simulate handling and conveying. A precision air flow control system provides a constant flow of air that carries air borne particles through a coarse particle separator (2) onto a filter (3) mounted in a filter housing (4). The dust quantity is measured in the majority of cases by simple weighing the filter. If required, the dust can be extracted from the filter for further analyses as for example determination of particle size distribution or chemical composition.

Type II: Varies from "Type I" by an additional near vertically mounted separator (5) allowing a more sensitive separation of air borne particles.

Type III: Varies from "Type I" by a special dust generation chamber (6) equipped with an impeller (7) and four steels balls (8) causing forces of attrition to the sample, especially to granules or pellets. The released dust resulting from attrition is collected on a filter and available for further analyses.



Type I



Type II



Type III

Rotor

## Why a HEUBACH DUSTMETER ?

The HEUBACH DUSTMETER overcomes the problem of limited operating flexibility in the conventional "falling tube method" by providing consistent handling conditions and precise measurement controls which offer:

- › Consistent and reproducible material movement under precisely defined conditions.
- › Air flow is automatically controlled and can be set to run for a specified time or on a total volume basis.
- › Choice of air flow allows fine tuning of test conditions to the specific product characteristics.
- › Variable drum rotation speed to simulate different handling and conveying situations.
- › Build in microprocessor based control unit with touch screen panel for easy selection of predefined standard test conditions or user defined test parameters.
- › Robust and reliable construction and components.
- › Easy upgrade from type I / II to type III.
- › Single power supply unit adjustable to 110 / 220 V for world wide use.
- › Full spare parts service.
- › Easy operator training.

### Adjustable to Specific Tasks:

<u>Workplace safety:</u>	Selection of lower dusting raw material
<u>R &amp; D:</u>	Development of low dusting products
<u>Quality Control:</u>	Checking the dust generation as part of the production control

### The standardized method for:

<u>Type I:</u>	Suitable for a wide range of particulate products
<u>Type II:</u>	As per EU Regulation 85/157 "Animal Feed Additives", standard method for such products
<u>Type III:</u>	Developed specifically for granular products

Standardized by German Industry Standard DIN 55 992, Part 1

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COMPETENCE IN COLOR

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