

Powder Conditioner

Moisture Equilibration



Precise Humidity Conditioning

The proUmid Powder Conditioner enables precise humidity conditioning of powders, granulates, and pellets. By controlling the relative humidity, material properties are optimized to improve processing steps such as tableting or dosing.



Accurate and Rapid Moisture Equilibration

Precise and fast conditioning of powders, tablets, granulates, pellets, etc. with controlled relative humidity.



Water Activity / Water Absorption Capacity

Determination of the water absorption of the powder at constantly measured temperature an moisture values.

Moisture Equilibration

Moisture equilibration of powders, granules or pellets at controlled relative humidity. The powder conditioner is connected to a MHG32 humidity generator that provides a humidity controlled gas flow. Perfect for pre-treatment of powders for analysis of bulk properties such as rheometric properties, flowability, compactibility or caking behavior. The Powder Conditioner is specialized for powder samples, has flexibility in temperature and humidity, prevents clumping and as an add-on has water content determination.

Dynamic Flow Method

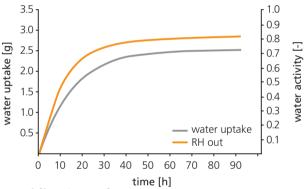
A defined gas flow with controlled relative humidity flows through the powder bed. The formation of lumps or air channels is prevented by continuous agitation.

Fully Automated

The end of the conditioning with the equality of input and output humidity is automatically determined and displayed based on the humidity sensor readings.

Moisture Content

The software determines the water uptake of the powder from the flow rate and the continuously measured temperature and humidity values.



Humidity Control

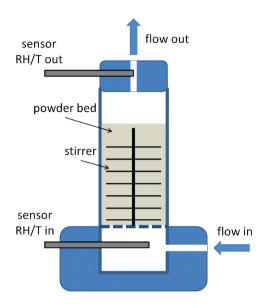
The powder conditioner is operated with the humidity generator MHG32 or a comparable device that provides a humidity-controlled gas flow.

Applications

Pre-treatment of powders for analysis of bulk properties such as rheometric properties, flowability, compactibility and caking behavior.

Technical Data

Powder Conditioner	
Volume	200 ml
Glass cylinder	Ø50 mm, height 150 mm
Humidity range	2 %95 %*
Humidity sensor accuracy	±0.8 % RH (0 95 % RH), ±0.1 K, at 10 30 °C long term stability: better than 1 % per year
Selectable flow rate	0 500 ml / min controlled
Enviromental conditions	Powder Conditioner: +10 °C to +60 °C, max 75 % RH MHG32 humidity generator: +15 °C to +35 °C, max 75 % RH
Water supply	removable tank, 700 ml
Gas supply	compressed air/N2** 2 bar to 10 bar dry, clean, oil-free (class 1, ISO 8573-1:2010)
Power suply	MHG32: 100-120 VAC and 200- 240 VAC, 50-60 Hz, 180 W Powder Conditioner: USB interface



- * The minimum achievable humidity depends on the water content of the carrier gas. Sensor data based on Rotronic HC2A-S.
- ** Other gases on request. By default, flow controllers are calibrated to air as carrier gas.





ProUmid GmbH & Co. KG August-Nagel-Straße 23 89079 Ulm, Germany +49 (0)7305 2030 440 info@proumid.com www.proumid.com

