Appartus for determination of bulk density EN ISO 3923 / ASTM B964 and flow rate 'Hall-Flowmeter' EN ISO 4490 / ASTM B213-13

With assistance of this apparatus the bulk density and the flow rate of metalic powders can be determined.

bulk density EN ISO 3923 / ASTM B964:

Used for the determination of bulk density of metalic powders running unimpeded through a 2,5 mm noozle. The standard also applies for metalic powders not running through the 2,5 mm noozle but passing a 5 mm noozle.

flow rate EN ISO 4490 / B213-13:

The flow rate is determined by measuring the time 50 g of a metallic powder needs to pass a standardized funnel.

Normative Reference:

- Metal powders – Determination of bulk density– part 1: (ISO 3923-1:2008)
- Test Methods for Flow Rate of Metal Powders Using the Carney Funnel ASTM B964
- Determination of flow rate: DIN-EN-ISO-4490-Hall-Flowmeter
- ASTM B213-13-Flow Rate of Metal Powders

Pic: complete apparatus Art. L50566064

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Appartus for Determination of bulk density and flow rate: (Art: L50566064)

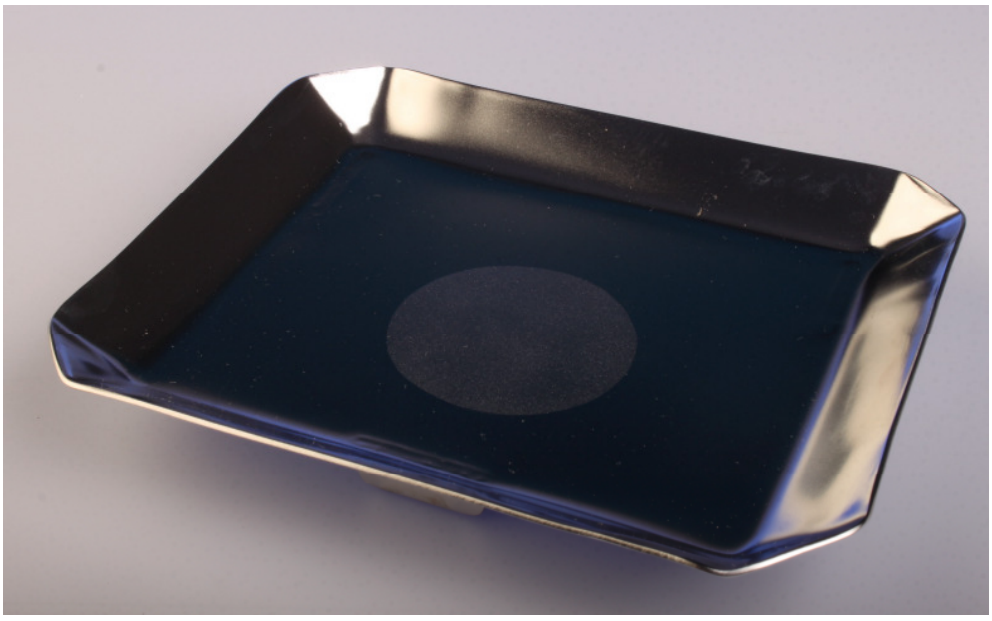
Complete apparatus made of stainless steel including stable and non-slip stand. The funnel height can be varied.
The clear setup allows easy operating and cleaning.

Consisting of:

- funnel, stainless steel
- nozzle, Ø 2,5 mm, stainless steel
- nozzle, Ø 5,0 mm, stainless steel
- calibrated nozzle (calibrated on 40 +/- 0,5 seconds), stainless steel
- measuring beaker 25 ml, stainless steel
- tripod, stainless steel
- wiper blade
- spacer block 25 mm
- manual
- sample test report

Accessories:

- stainless steel tray (Art: 534680W)
- calibration certificate for measuring beaker (Art: 5346802Z)
- calibration certificate for calibrated nozzle (Art: L50566063Z)
- stopwatch 1/100 seconds (Art: 211171000)
- calibration certificate for stopwatch (Art: 904138940)
- Chinese Emery Grit (Art: L50566063S)
- Collecting tub, stainless steel (Art: L505660A)



Pic. Stainless steel tray

Stainless steel tray:

For collection of overflowing sample . The measuring beaker is placed on the mark of the tray to ensure a standardized setup.

Calibration certificate for measuring beaker:

Certification about DIN conformity with 3 comparing measurements.

Calibration certificate for calibrated nozzle:

Certification about DIN conformity with 5 comparing measurements.

Stoppwatch 1/100 seconds:

For measuring the flow rate.

Calibration certificate for stoppwatch:

Calibration certificate from the manufacturer.

Chinese Emery Grit (not contained in delivery scope of apparatus):

Reference powder for calibration of 'calibrated noozle'.

Collecting tub:

The complete apparatus is placed in the collecting tub. Overflowing sample material can be caught by the tub so the laboratory desk stays clean.

Needed laborytory devices/Option:

- Precision balance +/- 0,01 g (Art: 5346804)
- Universal oven ,32 l (Art: 102603030)

Similar apparatuses and their components:

L50566061:
Apparatus for determination of bulk density -DIN-EN-ISO-3923-1 / ASTM B 964
http://www.hll.de/12/1/AD223/TDUwNTY2MDYx/Landgraf HLL L50566061 HLL.html

L50566063:
Apparatus for determination of flow rate - DIN-EN-ISO 4490 / ASTM B213-13
http://www.hll.de/12/1/AD223/TDUwNTY2MDYz/Landgraf HLL L50566063 HLL.html

L50566064:
Apparatus for determination of bulk density DIN-EN-ISO-3923-1 / ASTM B 964 and flow rate DIN-EN-ISO 4490 / ASTM B213-13
http://www.hll.de/12/1/AD223/TDUwNTY2MDY0/Landgraf HLL L50566064 HLL.html

	Article		
Components	**Determination of bulk density- Art. L50566061- DIN-EN-ISO-3923-1**	**Determination of flow rate- Art. L50566063- DIN-EN-ISO 4490**	**Determination of bulk density and flow rate- L50566064- DIN-EN-ISO-3923-1 & DIN-EN-ISO 4490**
Nozzle 2,5 mm	☺	☹	☺
Nozzle 5,0 mm	☺	☹	☺
Calibrated nozzle (40 +/- 0,5 s)	☹	☺	☺
Measuring beaker 25ml	☺	☹	☺
Chinese Emery Grit	☹	☹	☹
Tripod	☺	☺	☺

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