

Appartus for determination and flow rate 'Hall-Flowmeter' EN ISO 4490 / ASTM B213-13

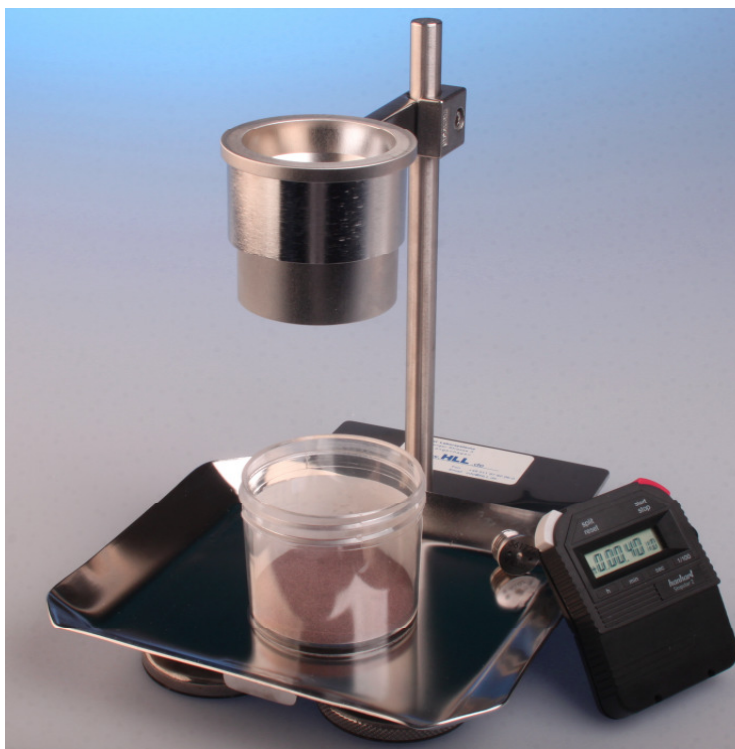
This apparatus is used for the flow rate determination of powders including hard metal powders running unimpeded through a standardized funnel/nozzle.

The flow rate is obtained by measuring the time 50 g of sample material needs to pass the calibrated funnel/nozzle.

This device is used for example in "Additive Manufacturing" (3D-print) for commodity control.

Normative Reference:

- Determination of flow rate: DIN-EN-ISO-4490-Hall-Flowmeter
- ASTM B213-13-Flow Rate of Metal Powders



Pic: complete apparatus art.. L50566063

Appartus for Determination of bulk density and flow rate:

(Art: L50566063)

Complete apparatus made of stainless steel including stable and non-slip stand. The funnel height can be varied.

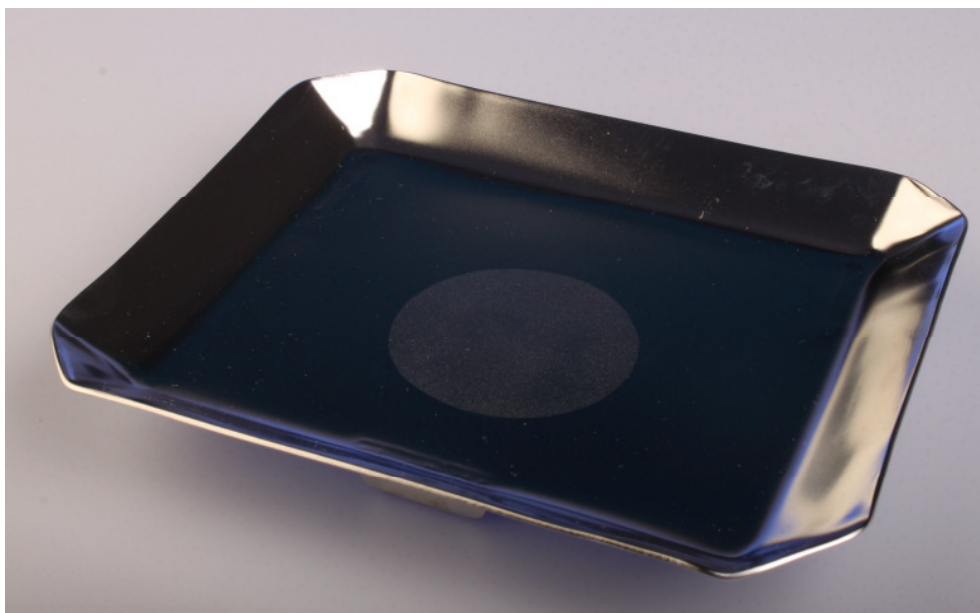
The clear setup allows easy operation and cleaning.

Consisting of:

- funnel, stainless steel
- calibrated nozzle (calibrated on 40 +/- 0,5 seconds), stainless steel
- tripod, stainless steel
- manual
- sample test report

Accessories:

- | | |
|---|-------------------|
| • stainless steel tray | (Art: 534680W) |
| • 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 that ensures a standardized setup.

Calibration certificate for calibrated nozzle:

Certification about DIN conformity with 5 comparing measurements.

Stopwatch 1/100 seconds:

For measuring the flow rate.

Calibration certificate for stopwatch:

Calibration certificate from the manufacturer.

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

Reference powder for calibration of 'calibrated nozzle'.

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 laboratory 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>

<u>Components</u>	<u>Article</u>		
	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	😊	😊	😊