Hofmann.
Intelligent Balancing Solutions

Taring scale for motor car connecting-rods

PHW

Advantages

- Modular design for optimum adaptation.
- Fully automatic operation.
- High precision through
  - Latest weighing technology
  - NC controlled milling units
  - NC controlled stroke step transport.
- Integration with production lines.

Applications

- Measuring and compensation of the oscillating and rotating weight component as well as the total weight of machined motor car connecting rods.
- Application in batch production operation in the automotive and supplier industries and interfaced with production lines.
- Weight correction by milling at the correction pads on the small-end and/or big-end.

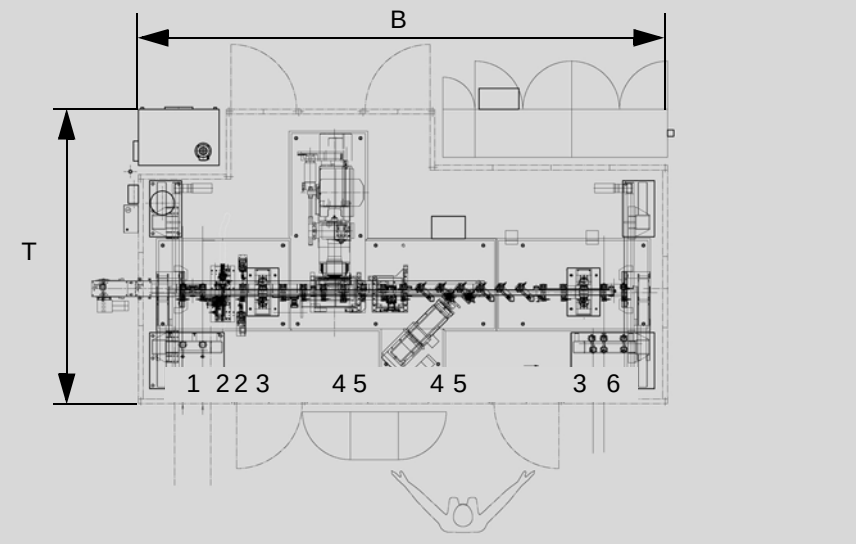
Description

- Modular design taring scale with stroke step transport of connecting rods, as required with:
  - Two loading stations,
  - Two sensing stations for internal diameter, pad width and height, cut position,
  - Weighing station with two industrial weighing cells,
  - Milling station for big-end, face mill cutter with tungsten carbide tips,
  - Deburring station for big-end, hydraulically actuated tungsten carbide tip,
  - Brushing station for big-end,
  - 45° rotation station,
  - Milling station for small-end,
  - Deburring station for small-end,
  - Brushing station for small-end,
  - Checking station,
  - Two unloading stations.

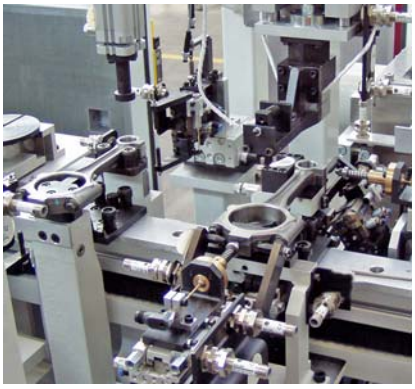
General view

Milling and deburring of small-end

All information without obligation, subject to change without notice



1 Feeding, 2 Sensing, 3 Weighing, 4 Milling, 5 Deburring, 6 Discharging



Sensing station

Technical data

Rotor:		**PHW3-FH12**	**PHW3-FH6**
Machining big-end		x	x
Machining small-end		x	
Total weight, max.	g	1000	1000
Bore gauge[1)]	mm	145 - 180	145 - 180
Bore, big-end[1)]	mm	50 - 65	50 - 65
Bore, small-end[1)]	mm	15 - 30	15 - 30
Machine:			
Width x depth x height	mm	6600 x 3700 x 2500	6100 x 3000 x 2200
Attainable tolerance[2)]	g	± 2	± 2
Measuring uncertainty	g	0,2	0,2
Cycle time	s	< 5	< 6
Stations		12	6

[1)] Other dimensions on request
[2)] Per machined pad, depending on pad form accuracy

Options

- Loading station
- Milling station for small-end
- Deburring station for small-end
- Brushing station
- 45° rotation station
- Unloading station
- Swarf conveyor

Scope of supply

- Stroke step transport
- Sensing station and geometry master
- Weighing station (dual scale) and master part with calibration weights
- Milling station for big-end
- Deburring station for small-end
- Resting position
- Checking station (twin scale)
- Noise control booth
- Switch cabinet
- Measuring computer
- Peripheral supply units (lubrication, hydraulics, pneumatics)

PHW / en / © 01.13 / 372-0024

Hofmann Mess- und Auswuchttechnik GmbH & Co. KG, Werner-von-Siemens-Straße 21, D-64319 Pfungstadt, Germany, phone: +49(0)6157/ 949-0, fax: +49(0)6157/ 949-100, email: germany@hofmann-global.com, internet: www.hofmann-global.com