

Balancing machine for turbocharger compressor wheels

PCXVT-CW



Advantages

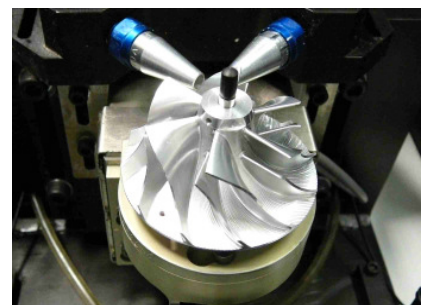
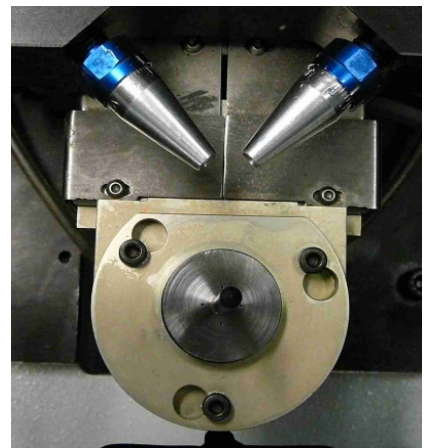
- Easy operating measuring software
- Speed sensing by light sensor, integrated in ring nozzle (no set-up, no sample mark necessary)
- Quick PID-controller for air drive. Parameterization via user interface of measuring electronic
- High-precise air bearings
- Easy and quick tool changing
- Standardized measuring platforms
- Precise and high-resolution measuring due to hard bearing technology
- Customer specified hard- and software features available

Applications

- Vertical balancing machine, developed for measuring of dynamic unbalance
- Application for quality control and development
- Measuring of unbalance in 2 planes, conversion into corresponding correction planes
- Optional: capability of integration in automatic balancing cabin

Description

- Workpieces are adapted by a high-precision hard-metal pin, designed as air bearing
- 2-plane measuring station, force-measuring
- Measuring platform with hard bearing technology (permanent calibration), round bar springs and piezoceramic measuring sensors
- Two platform types R11 and R15 for different rotor sizes available
- Measuring on controlled air bearing
- Measuring drive via closed-loop control circuit



All information without obligation, subject to change without notice!

Technical Specifications

| | | R11 | R15 |
|--|--------|--------------------------------------|-------------|
| Rotor: | | | |
| Weight max. | g | 450 | 1800 |
| Weight min. | g | 10 | 100 |
| Diameter max. | mm | 127 | 127 |
| Measuring device: | | | |
| Measuring planes | | 2 | 2 |
| Measuring speed | upm | 1000 - 6000 | 1000 - 6000 |
| Measuring system | | force measuring with piezo technique | |
| Measuring drive | | controlled pneumatic drive | |
| Measuring time approx. | s | 10 | 10 |
| Sensitivity | gmm/kg | ≤ 0.02 | ≤ 0.02 |
| Dispersion range (95 % confidence interval) | gmm/kg | ≤ 0.1 | ≤ 0.1 |
| Unbalance reduction ratio | % | 95 | 95 |
| Machine: | | | |
| Air pressure | kPa | 450-600 | 450-600 |
| Air volume max. | m³/h | 5.0 | 5.0 |
| Measurements W x D x H | mm | 1650 x 1500 x 2000 | |

Options

- Double speed sensing for scanning of measuring speed and rotating direction w/ o marking of workpiece
- Automatic indexing to 1st correction component
- Integration to a manufacturing cell with interface to loading system and machining centre for fully automatic mass correction in 2 planes



Scope of supply

- Compact machine base (3-point fixing)
- Safety housing with sliding safety guard (electromechanical locked), class B
- Control- and operation cabinet integrated in machine
- Siemens S7 control
- Air drive with proportional valve
- Hofmann measuring software
- Siemens personal computer with touchscreen and keyboard
- Work piece tooling, adapted to your work piece