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Intelligent Balancing Solutions

Balancing Machine for Crankshafts

UHK 16-B1

Advantages

- Bearing pedestals guided in slots for easy changeover.
- Easy operating due to design innovation.
- Economic operating (monitor with correction data directly at the machine).
- Maintenance free and wearless vibration adapters.
- Teaching of the drill head position ensures exact drilling depths.
- Dry processing.
- Chip removal by suction mask and chip suction.
- High-quality German drill spindle.
- Tool management for 99 tools.
- Integrated statistics software.
- Automatic MFU.

Application

- Balancing of passenger car and truck crankshafts for 2 - 12 cylinder V-shafts with mounted bob weights.
- Manual operating and loading.
- Unbalance correction by drilling with one-spindle drill unit.

Description

- 1-station balancing machine with safety fence, access via operating door.
- Measuring system with frequency controlled drive and maintenance-free sensors. Bearing pedestals axially adjustable with hardened measuring rollers and axial start-up. Lifting device for assimilation of drill forces.
- Measuring drive by belt drive.
- Unbalance compensation by a drill spindle (mounted to gantry) with NC-infeed slide. The correction unit will be manually positioned to the correction planes (supported by a linelaser) and pneumatically clamped.
- Control cabinet with all electrical components.
- Operating via touchscreen monitor 19“ (manual functions (WIN CC) and measuring unit operations (Windows®)
- Manual operating panel directly at drilling unit.

Drill unit with chip suction

Without obligation, subject to change without notice!

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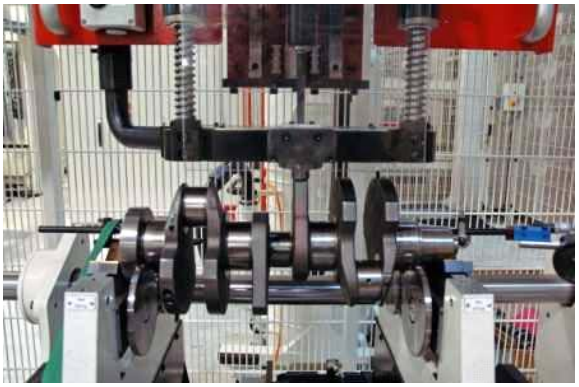
Measuring rollers and lifter



Linelaser at work piece

Technical Data

		UHK 16-B1
Rotor:		
Weight	kg	5 - 115
Total length	mm	300 - 1200
Main bearing diameter	mm	40 - 100
Journal distance, min./max.	mm	90 / 1140
Rotor diameter, approx.	mm	450
Correction		Dry drilling
Correction radius	mm	60 - 225
Machine:		
Measuring planes		2
Measuring system		force measuring with maintenance-free sensors
Cycle time	min.	cycle time chart for each shaft will be supplied
Unbalance reduction ratio	%	95
Measuring drive		Belt drive
Machine data:		
Width x Depth x Height	mm	3600 x 3700 x 2800
Balancing speed	rpm	200 - 650
Measuring uncertainty[1)]	gmm/kg	1

1) depending on work piece

Options

- Loading and positioning for pin drive and slide with NC axis, achieved by either gantry or robot
- Tool monitoring (first-cut, abrasion and breakage)
- Shaft drive
- Pin drive
- Positioning of cross slide with NC-axis
- Complete housing made of steel plate

Scope of Supply

- Siemens or Indramat drive
- Casted machine bed
- Gantry at machine bed
- Infeed-slide with NC-axis
- Bearing pedestals with roller bearings
- Lifter for drilling
- Belt drive
- Suction device
- Separate control cabinet
- Monitor and manually operating panel at machine
- Siemens S7 control
- MC10 measuring electronic (Windows 2000® based software)
- Safety fence with operating panel
- Installation elements

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