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Balancing and Structure-Borne Noise System ebg1500

For balancing grinding wheels,
to increase production,
and monitor grinding processes



Balancing and structure-borne noise system ebg1500



The ebg1500 is a balancing and structure-borne noise system for highest demands. It is used for balancing grinding wheels, to increase production, and to monitor grinding processes. Short production cycles and/or high accuracy requirements are areas where this unit is utilized. The ebg1500 is highly sensitive and is able to recognize within a few micrometers infeed the contact between part and grinding wheel. This reduces the air grinding time considerably.

During wheel dressing larger savings in time and grinding wheel material are obtained. The ebg1500 assists in the setup of parts and grinding wheels.

Fourteen variations of the ebg1500 are available. You pay only what you need! The amount of balancing heads and structure-borne sensors determine which unit will fit best. A large illuminated display shows the signal path for the structure-borne sound. This allows to accurately analyze the grinding process in details. The unit accepts wire-bound or no-contact structure-borne sound sensors. The no-contact sensor is mounted directly on the rotating spindle. The structure-borne sound is transferred through an air gap of approximately 0.5 to 2.5mm to the receiver and from there by wire to the control unit. An elaborate interface with 24V in and outputs as well as analog in and outputs enable an optimal integration with the machine controller. Several parameter data sets are recordable and may be recalled when needed. This saves a lot of time on recurring parts. As a result of the compact unit size the ebg1500 may be installed in most operator panels, thereby increasing the operating convenience dramatically.

Further advantages of the balancing and structure-borne ebg1500 system

- Eliminates the elaborate static balancing
- Optimizes the grinding result
- Safeguards the spindle bearings
- Increases grinding wheel life
- Reduces down time
- Records the balancing status
- Continuous monitoring of machine vibrations
- Continuous spindle rpm display
- Continuous monitoring of the structural noise
- Simple and easy operation
- Reliable and maintenance-free

Components for the ebg1500

- 24V power supply adapter
- Balancing heads in many sizes (external or internal)
- Wire-bound or no-contact collectors
- Vibration transducer (with magnet or mounting flange)
- Cables to connect components
- Machine specific adapter flanges
- Wire-bound ultra-sound sensors
- No-contact ultra-sound sensors
- Customer specific ultra-sound sensors

Technical Data

- | | |
|-------------------------|--------------------------|
| - Power supply | 24VDC |
| - Power consumption | maximum 55W |
| - Protection | IP 65 (built into panel) |
| - Controller weight | maximum 2.5kg |
| - Controller dimensions | 213.4/82/129mm(WxDxH) |