



mechatronics – made in switzerland

elaso 
the mechatronics
since 1967

Balancing Controller eb4500

For fully automatic balancing of
grinding wheels and interface
to machine controller



Balancing system eb4500



The eb4500 balancing controller offers either fully automatic or manual balancing of grinding wheels. A balancing head, which is either built onto the spindle end or within a hollow spindle, is manipulated by the controller. Vibrations from the grinding wheel are recorded with a vibration transducer and displayed on the controller. A collector connects the balancing electronics with the rotating balancing head. Brush type or maintenance-free no-contact collectors are available.

The automatic balancing controller seeks the weights positions after starting the balancing cycle via push button input. Parameter settings determine the balancing quality and the specific machine properties. The unit allows also manual balancing. The weights positions are found by pressing keys while observing the vibration display until the vibration value reaches the required levels.

An electrically isolated interface allows to communicate with the machine controller. The machine controls therefore the balancing aspect without operator activity. The eb4500 may be incorporated into a 19" rack. Also a cable based remote control is available to better integrate the unit with the machine.

Further advantages of the eb4500 balancing 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
- Simple and quick installation and initial operation
- Reliable and maintenance-free
- Compatible to Elaso and Meyer Zuchwil-units of earlier design

Components for the eb4500 system

- eb4500 in table top, rack, or cable remote versions available
- 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

Technical Data

- | | |
|-----------------------------|-----------------------------|
| - Power supply | Switchable 115VAC or 230VAC |
| - Power consumption | maximum 45W |
| - Rpm range | 500 to 10'000 rpm |
| - Vibration display options | [μ m] or [μ m/s] |
| - Protection | IP 65 (when in machine) |
| - Controller weight | 5kg |
| - Controller dimensions | 217/253/89 mm (WxDxH) |