

In-situ Balancing of Grinding Wheels

EasyBalancer EB 3100



Advantages

- Tailor-made solution
- Simple, reliable user menu
- Measuring of unbalance and vibrations with a single unit
- Portable and ready-to-operate
- ICP sensor interface
- Excellent cost / performance ratio

Applications

- In-situ balancing of grinding wheels and/or spindles
- Evaluation of balance quality
- Measuring overall vibration
- Evaluation of machine condition
- Measuring vibrations on bearings and machine housings
- Measuring rotational speed

Description

The HOFMANN EasyBalancer EB 3100 is a microcontroller vibration measuring and balancing unit designed specifically for balancing grinding wheels and grinding machine spindles. The single-plane EB 3100 provides the split angle method for balancing. The user is guided through the single steps by a simple, reliable menu structure. The position of the movable weights for compensation of the unbalance is calculated automatically.

In addition, the EB 3100 enables measuring of the rotational speed related unbalance vibrations and the overall vibration in the range of 10 Hz to 1 kHz. The overall vibration is the basis for the evaluation of the machine condition according to DIN ISO 10816-3.

Automatic ranging ensures that the EB 3100 always operates in the optimum measuring range. The measuring data and configuration settings of up to 30 balancing work-pieces may be stored.



EB 3100 display



Measuring Display EB 3100



Correction Display EB 3100

Technical data

Frequency/speed range	3 Hz - 1,000 Hz	180 - 60,000 RPM
Display range	0 - 2,000 (mm/sec.) _{RMS} , µm, (inch/sec.) _{RMS} , mils	
Resolution	0.01 (mm/sec.) _{RMS} or µm	0.001 (inch/sec.) _{RMS} or mils
Vibration transducer	HMA 1140	100 mV/g
Speed sensor	A1SP30	Optical
Connections	1 BNC vibration input, 1 speed input, 1 output RS232, 1 power socket	
Display	LCD 70 mm x 40 mm	128 x 64 dots
Battery / Run time	4 x NiCd	min. 4 hrs.
Case	106 mm x 224 mm x 41 mm	Protective rating IP54
Weight	approx. 0.7 kg	
Transport case, standard	440 mm x 380 mm x 105 mm	

Options

- Graduated aluminium ring in several sizes
- Thermo-printer DPU-414-30 B
- Protocol software MI2PC

Scope of supply

- 1 EasyBalancer EB 3100
- 1 Power supply/ charging adaptor
- 1 Vibration transducer HMA 1140, cable length 5 m
- 1 Retaining magnet
- 1 Speed sensor A1S30P with magnetic base and connection cable 3 m
- 1 Reflective tape 0,5 m
- 1 Operation manual
- 1 Transport case

All information without obligation, subject to change without notice!