

Measuring Vibrations and Field Balancing

MinIbalancer MI 2100



Advantages

- Field balancing and checking vibrations with one instrument
- Easy to understand and reliable user menu
- Portable and ready-to-operate
- Measuring and balancing protocol
- ICP sensor interface
- Excellent cost / performance ratio

Applications

- Field balancing
- Measuring vibrations on bearings and machine housings
- Measuring overall vibration
- Measuring unbalance vibrations
- Evaluating rolling bearing condition
- Measuring rotational speed
- Balancing in production and assembly under operational conditions

Description

Hofmann's Minibalancer MI 2100 is a single- or dual-plane field balancing instrument. It features a very reliable and simple operating menu while creating optimum measuring and balancing results.

The handy MI 2100 calculates an unbalance correction for a polar mass balancing, for given rotor components or for the spread angle method.

For assessment of machine condition MI 2100 provides measuring of the vibration severity acc. to ISO 10816-3. For comparison and detection of unbalance also the synchronous (once-per-rev) vibrations can be measured.

With the functionality „Rolling bearing condition“ (option) available MI 2100 already can be used for condition monitoring of machines. The rolling bearing condition is being evaluated using the impact momentum method.

Using the serial interface the measurement values or a balancing protocol can be sent to a thermoprinter (option) or to a PC for production of customer-specific protocols (option).



MI 2100 in plastic transport case

Technical data

Speed range balancing	180 - 60.000 1/min
Frequency range overall vibration	10 - 1,000 Hz
Frequency range rolling bearing condition	5 - 50 kHz
Display Range	0 - 2,000 (mm/s) _{RMS} , µm, (inch/s) _{RMS} , mils, gSP
Resolution	0.01 (mm/sec.) _{RMS} or µm, 0.001 (inch/sec.) _{RMS} or mils, 0.01 gSP
Vibration transducer	HMA 1140 100 mV/g
Speed sensor	A1SP30 Optical
Connectors	1 or 2 BNC measuring inputs 1 Speed input
	1 Output, RS 232 1 Power connection
Display	LCD 60 mm x 32 mm 128 x 64 Punkte
Operation time of accumulators	4 x NiCd min. 4 hrs.
Case	100 mm x 205 mm x 35 mm Protective rating IP54
Weight	appr. 0,7 kg
Transport case, standard	440 mm x 380 mm x 105 mm

Options

- Balancing in two planes incl. second vibration sensor
- Measuring of rolling bearing condition
- Precision scale for up to 100 gr. and 1,000 gr.
- Graduated aluminium ring in several sizes
- Balancing putty
- V-Block retaining magnet for vibration sensor
- Thermo-printer DPU-414-30 B

- Thermo-paper roll MM112-402-n
- Aluminium transport case for MI 2100, accessories and thermo-printer with power supplies
- Extension cable for vibration sensor L = 5 m
- Extension cable for speed sensor L = 5 m
- Speed Sensor A1S37P- Laser
- Protocol software MI2PC

Scope of supply

- 1 Minibalancer MI 2100
- 1 Power supply / charging unit
- 1 Vibration transducer HMA 1140, cable length 1.5 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