

SMART BALANCER 2

Field balancing and vibration analysis



- complete package at a low cost-to-benefit ratio
- 2 simultaneous measuring channels for static and dynamic field balancing
- graph of the unbalance and influence meter for all measuring points
- analysis set-up in conformity with DIN ISO 10816-3 built-in
- machine diagnosis with FFT
- standard overall vibration measurement
- laser-optics reference transducer with as much as 0.5 m measuring distance
- direct print-out on a printer or in a PDF file
- lithium-ionic storage battery for at least 8 hours of operation

Range of application

The SmartBalancer is a handy instrument for balancing installed rotors fast, accurately and inexpensively without disassembling machines. You can correct rotors of practically any size or weight on one and two levels (i.e., statically and dynamically). It makes all of the important diagnostic options such as measuring overall vibrations, tracking analysis and FFT frequency analysis of vibrations available. Its comprehensive equipment covers most of the other vibration measuring functions, making it a high-performance tool for machine diagnosis.

The optional software module enables you to analyse roller bearings according to the peak value method and reliably identify incipient damage to the raceway. This extra function is easily released with a password without requiring additional installation.

Design

This battery-operated machine has a complete package in its basic equipment with all of the accessories needed for 2-channel balancing. Its scope of delivery includes two piezoelectric acceleration transducers with magnetic retainers for smooth and curved surfaces and a prod. The laser-optics reference pick-up has a large measuring space in excess of 0.5 m to allow reliable and convenient work.

All of the functions of the SmartBalancer can be operated with one hand via joystick and a couple of function keys. Following the very popular Windows display, the

SmartBalancer works with easily comprehensible pictograms/ icons and a simple file structure. Its large, highly contrasted and illuminated display together with 4 colour LEDs always provides clear information on the machine's present operating state.

You can save all of your findings together with a description of the machine, the measuring point and date and time right in the SmartBalancer. You can also download these data to a PC/laptop making it possible for you to be directly plugged into in the Office world. Or you transmit the protocol to a suitable printer for printing out wherever you are – for saving time and energy.

Scope of supply

1 SmartBalancer measuring instrument with installed rechargeable battery and operator dialogue in German, English, French, Spanish, Russian, Italian, Swedish, Dutch, Polish and Chinese

2 acceleration transducers with:

- 1 prod
- 2 magnetic retainers for flat surfaces and cylindrical surfaces
- 2 service cables 5 m long

1 laser-optics reference transducer, with

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- 1 magnetic stand
- reflective foil
- 1 service cable 3 m long

1 CD-ROM with operating instructions, machine firmware and utility software for processing the measurements on the PC

1 USB connecting cable to the PC, 1.5 m long
1 USB printer cable, 1.5 m long
1 plug-in power supply and charger with UK and US adapters
1 hard shell case for measuring instruments and accessories

Option 01

1 additional acceleration transducer with 1 prod, 2 magnetic retainers and 1 service cable ca 5 m long

Option 02

1 extension cord for the acceleration transducers, 10 m long

Option 03

1 extension cord for the laser-optics reference transducer, 5 m long

Option 04

1 BNC sensor adapter cable

Option 05

1 set of operating instructions in printed and bound Form

Option 06

calibrating the SmartBalancer in the frequency range of 5 Hz-5 kHz with a DKD calibrating certificate

Option 07

calibrating the SmartBalancer in the extended frequency range of 5 Hz-5 kHz with a DKD calibrating certificate (only in connection with Option 06)

Option 08

1 pocket scale with an accuracy of 0.1 g

Option 09

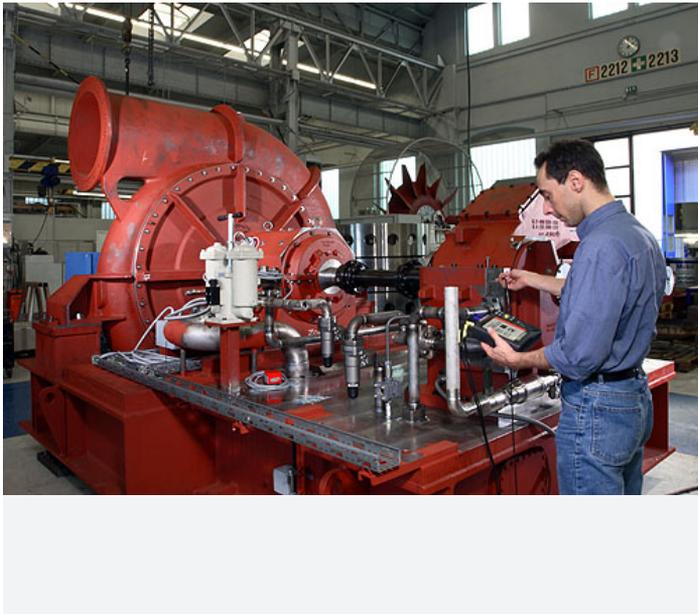
1 kg balancing kit

Option 10

1 software module for assessing roller bearings (release with password)

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Field balancing at Siemens Turbomachinery



SmartBalancer 2



standard scope of delivery SmartBalancer 2

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Technical data at a glance	SmartBalancer
No. of measurement channels	2
No. of measurement points	max. 4
Balancing speed	120 - 60.000 min ⁻¹
Maximum error	5%
PC connection	RS-232 serial interface with 9.600 - 115.200 baud data transfer rate
Power supply and charging unit	100 - 240 V, 50/60 Hz
Power supply	Re-chargeable battery
Battery operating time	Min. 6 hours with continuous measurement
Working temperature range	-10°C bis +50°C
Measurement functions	Field balancing Measurement of overall vibration Frequency analysis Run-up and run-down curves Vibration versus time Oscilloscope function
Display	Monochrome LCD mit 128 x 128 Pixel, backlit
Weight	1,2 kg (Measuring instrument)
Dimensions	220 x 110 x 38 mm (Measuring instrument)