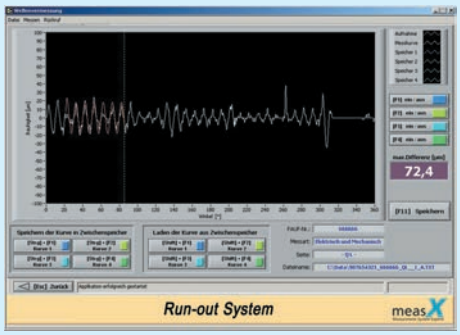
meas X
Measurement System Experts

XConn Runout

Surface Measuring Device for Drive Shafts >30mm

The life of engine shafts depends to a great extent on their concentricity, but also material damage can lead to a failure of the shaft.
measX has developed a mobile, easy-to-handle test system that can detect and visualize both the run-out, surface roughness and, if an inductive sensor is used, material changes of the shafts.
The system can be used for quality control during manufacture and assembly, as well as for predictive maintenance at the location of an installed shaft. The measuring system works very precisely: Even smallest damages and deviations are detected.
The use on large waves, which are contactless monitored during operation by vibration sensors on certain measuring traces for run-outs, is easily possible thanks to the portable version.
Also on these to a minimum degree of roughness polished tracks the high accuracy of the X-Conn Runout of <1 µm allows precise statements.
On channel 1 the connection of a mechanical probe or an inductive distance sensor can be carried out alternatively, whereas the optional second channel is only designed for inductive sensors.



Livedarstellung des Oberflächenprofils

Portable and robust: Can be used directly at the drive shaft location

- For any shaft diameter> 30 mm
- Sensors with an accuracy of 1 µm or better
- Two measuring channels
- Comparative evaluation of measured data
- Display the roundness profile on the screen
- Automatically create and print log pages
- All-in-one system with integrated IPC and 1U-19 „system or as 2U-box for connection via USB to notebook or PC
- Robust for harsh industrial environments
- Proven hardware components from National Instruments
- Acquisition and evaluation software with intuitive operation based on Lab-VIEW from National Instruments

XConn Runout

Surface Measuring Device for Drive Shafts >30mm

Easy to set up

The zero point for measurment is set directly at the device or optionally via an external, cable-connected mechanical push button at the sensor location. This ensures an optimal workflow even in places that are difficult to access.

Maintains profile features

If the desired measuring point is not accessible on the shaft, this can be interpolated with two inductive sensors between their measuring positions. Furthermore, recesses provided by the manufactueres side, such as grooves or bores, are, if necessary, recalculated out from the run-out measurement.

measX GmbH & Co. KG

Headquarter Moenchengladbach
Trompeterallee 110
D-41189 Moenchengladbach

Phone: +49 (0) 2166 9520-0
FAX: +49 (0) 2166 9520-20

info@measx.com
www.measx.com

Office Aachen
Pascalstraße 26
D-52076 Aachen

Office South
Martin-Luther-Straße 55
D-71636 Ludwigsburg

General Technical Data	
Operating System	Windows XP, 7, 8, 8.1, 10
Hardware Driver	compatible DAQmx driver (National Instruments)
Application	Programm Runout System, measX GmbH & Co. KG

Standalone Workbench Version *	
Case Shape	19“ Rack with integrated signal box
PC Hardware	Industrial Flatpanel-PC
Display	integrated 17“ TFT Display
Input Device	integrated foldable keyboard or Front connectors for additional keyboard and mouse
Signal Adapter	Multifunctional PCI Board from National Instruments
Signal Processing	Signal processing in the connection box integrated in a 19“rack
Interfaces	Sensors: 2x inductive , 1x mechanical; Calibration: 1x; USB: 1x

Mobile Version for Use in Field	
Case Shape	19“ 1HE or 19“ 2HE signal connection / processing box
PC Hardware	Any PC, laptop or other Windows computer
Display	n.a. (Display via Host Computer)
Eingabegerät	n.a. (Input via Host Computer Keyboard / Mouse)
Signal Adapter	Measuring module with USB connection
Signalaufbereitung	Signal Processing in the terminal box (Designed for 19 „1U compact housing)
Interfaces	Sensors: 2x inductive , 1x mechanical; Calibration: 1x; USB: 1x
Mechanical Data	Dimensions: 32,0 x 36,5 x 11,5 cm Weight: ca. 4 kg

Characteristic Sensor Data	
Number of Sensors	Inductive: Standard 1 / max. 2; mechnical: 1
Accuracy inductive Accuracy mechanical	< 0,5 µm with Sensor Type Bentley Nevada 3300 < 5 µm with Sensor Type TWK IW 15 A
Resolution Angle Encoder	0,1° (3600 steps) Encoder Type: ROD 426 3600 01-03 from Heidenhain
Shaft Diameter	min: 30 mm max: any

* For mobile use, this version can be used in combination with a printer on a small trolley.