

MEAX LEVEL
2-axis levelling



Meax

Brand of ACOEM

Welcome to our world.

Since the very beginning in 1984, ACOEM AB has helped industries throughout the world to achieve more profitable and sustainable production. We have reached where we are today by having the courage to think beyond the norm and follow slightly unconventional paths. We have had the courage to make mistakes and find new directions. Through our resolve, ambition and knowledge we have become a global player and a leader in innovative, user-friendly measurement tools.



MEAX LEVEL APP

Works with the free MEAX Level app! The app will guide you through the measurement process with our ease-of-use interface fast and easy!



MEAX LEVEL

The future of machine measurement

As ever-increasing demands are being placed on machine tools, we have arrived at the conclusion that an optimally functional machine forms the basis for better business. Modern machine tools must maintain a high level of flexibility, a high degree of utilization and a minimum downtime which calls for the correct geometry in all the machine's movements.

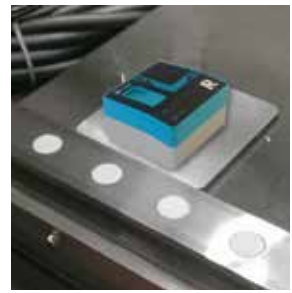
So we created MEAX and started to sketch solutions for machine tool measurements that, in our opinion, are so self-evident that they should have been developed a long time ago.

By performing fast measurements, possessing a logical user interface, smart applications and fewer complicated functions, we can now build a future for machine tool measurement.

The 2-axis angle sensor

The future of machine tool measurement is here. MEAX Level has brought together new technology that generates precision down to 0,01 mm/m with a user interface in modern smartphones and tablet computers. Within of a few minutes, MEAX Level will enable you to determine whether the machine is in level and is receiving data concerning roll/pitch in the machine bed. With the aid of a wireless connection to the smartphone or tablet, MEAX Level reads two angles in the same measurement.





Raw data

	R	M-R
0	+0.21	+0.88
1/2	+0.36	+0.64
	βF	βF

Zero at first point

	R	M-R
β	+0.00	+0.00
1/2	+0.00	+0.00
	βF	βF

Values at second point

	R	M-R
β	+0.02	+0.02
1/2	+0.01	-0.01
	βF	βF

Values at third point

	R	M-R
β	+0.02	+0.03
1/2	+0.01	-0.04
	βF	βF

Values at fourth point

	R	M-R
β	+0.02	+0.03
1/2	+0.01	+0.02
	βF	βF

values at second point

	T	UR	PR	M-R	βM-R
1	0.02	0.01	-0.01	-0.01	-0.01
2	0.02	0.01	-0.01	-0.01	-0.01
3	0.02	0.01	-0.01	-0.01	-0.01
4	0.02	0.01	-0.01	-0.01	-0.01



Two sensors – one complete result

In order to check that the machine tool is in level and that the machine bed is not subject to roll/pitch, a two-sensor solution is required: one sensor that reads the measurement and one reference sensor. In order to measure the machine bed have roll/pitch during motion, you fit the M-sensor to the tool holder and carry out a measurement reading. Use the reference sensor in order to compensate for any motion in the machine's base during measurement.

In this way, you can determine the angle deviation in relation to the machine's base. Both sensors can easily be mounted to the machine using the fixtures supplied.



Logical interface

MEAX Level is equipped with Bluetooth, which you use to connect to your mobile unit (iOS or Android). This is easily achieved using the MEAX Level App which, with an easy-to-understand user interface, displays the machine's angle deviations down to resolution of 0,01 mm/m. The results are saved on your device, and can be shared in any way you wish from your file handling system, through e-mail, etc.

Developed for ease of use

Both sensors come fitted with batteries sufficient for 12 hours' operation. After a completed measurement task, recharging is carried out using the USB charger supplied. Each sensor is also fitted with our unique battery checker, which displays the battery level at the press of a button without activating the sensors or tablet.

The sensors' square shape has been specially adapted to fit into machines, and the turquoise colour enables them to be easily seen in industrial environment.

MEAX Level is also IP65-classed, giving a significant level of protection against liquids and dust.

MEAX LEVEL SINGLE

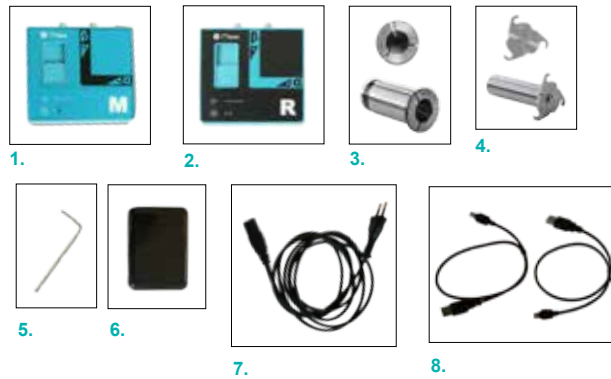


1. Meax LM 201 2. Spindel holder diameter 16 3. Ext. power cable EUR 2 m 4. USB-cable A-mini 0,5 m 5. Collet C25-16 6. Allen key 7. Power supply 4 USB-ports 5 VDC

MEAX LEVEL

Operating Temp:	15 to 30°C (59 to 86°F)
Storage Temp:	-20 to 70°C (-4 to 158°F)
Relative humidity:	10 – 90%
Weight:	386 g (13.6oz)
Dimensions:	77mm x 84mm x 45mm (3.0 in x 3.3 in x 1.8 in)
Environmental protection:	IP 65
Inclinometer:	High performance MEMS inclinometers
Calibrated measuring range:	±50mm/m
Internal resolution:	0.001mm/m
Displayed resolution:*	0.01 mm/m
Inclinometer accuracy:	1% ± 0.005mm/m
Temperature error:	0.015 mm/m/°C
Communication range:	10 m (33 ft)
Warming up time:	30 min
Operating time:	12 hours continuously
Battery Charging time:	8 h
Wireless communication:	Class I Bluetooth transceiver with multi-drop capability.
BLE Bluetooth Low Energy (BT 4.0) and Classic Bluetooth Using MEAX Level App*	

MEAX LEVEL DUAL



1. Meax LM 201 2. Meax LR 201 3. Spindel holder diameter 16 2pcs. 4. Collet C25-16 2pcs. 5. Allen key 6. Power supply 4 USB-ports 5VDC 7. Ext. power cable EUR 2 m 8. USB-cable A-mini 0,5 m black 2pcs.

ACOEM AB is a global player and leader of innovation in monitoring, maintenance and engineering. By helping industries worldwide to become perfectly measured and eliminating anything that might not be, we minimize unnecessary wear and production stoppages. This will ultimately make our customers more profitable and our environment more sustainable.



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