



OSCICHECKER WIRELESS

MEASUREMENT OF MOLD MOVEMENTS

OsciChecker Wireless is a very compact and powerful tool for analyzing the behaviour of an oscillator of a continuous casting machine and optimizing the required maintenance time. Accurate movement of the oscillator is an important factor for reducing downtime, minimizing breakouts of the strand and improving surface quality through optimized lubrication conditions at the mold. OsciChecker Wireless is suitable for the measurement of oscillator movement in all three directions and for the storage and visualization of the measurement data in 3D. It supports plant operators in several tasks like measurement of mold stroke, oscillation frequency and non-sinusoidal value. Movement in and perpendicular to the casting direction can be detected, as well as negative strip time and percentage. OsciChecker Wireless is also able to spot total harmonic distortion of the oscillation frequency. Wireless data connection provides maximum user comfort and flexibility. Annoying handling of cables is totally avoided.

FIELD OF APPLICATION

OsciChecker Wireless can be used for straight and curved oscillations as well as sinusoidal and non-sinusoidal movements and is suitable for slab, bloom and billet casting machines.

FUNCTION

OsciChecker Wireless picks up mold movement spatially using capacitive acceleration sensors. For measuring, the sensor is placed on the mold, pointing horizontally in casting direction and vertically in stroke direction simply placed on the mold or the oscillator and the measurement sequence can be started. Magnetic fixings of the sensor ensure stable measurements and high accuracy.

PRODUCT STRUCTURE

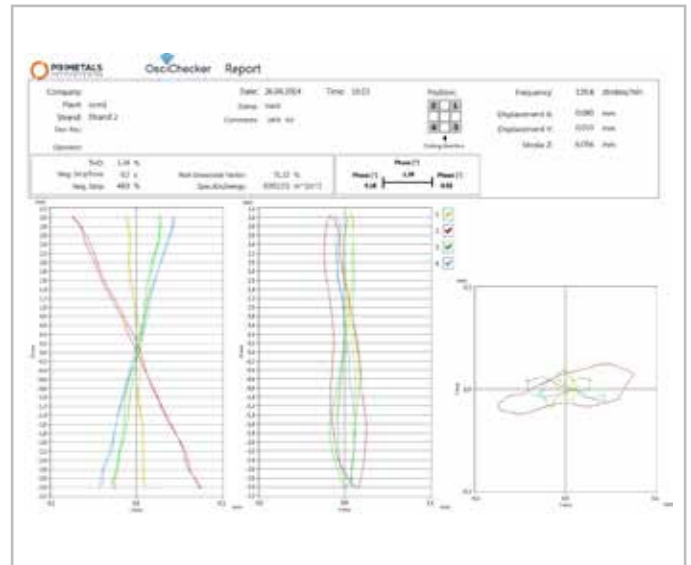
- Up to four measuring sensors
- Calibration plate
- Measurement Unit
- Data acquisition and evaluation program
- Measuring box in heavy duty protection case conducted as trolley for easy handling.



Evaluation screen OsciChecker Wireless



OsciChecker Wireless Sensor



OsciChecker Wireless Main Report

TECHNICAL DATA

Acceleration sensor

Measuring range	30 m/s ²
Operation Temperature range	-5°C to +45°C
Storage Temperature range	-25°C to +70°C
Diameter / Height	100 mm / 113 mm
Sensor Weight	1.5 kg
Protection Class	IP 54
Operation time (battery)	ca. 8 hours
Charging time (battery)	ca. 5 hours
Battery voltage / capacity	3.7 V / 2.5 Ah

Evaluation unit

Measuring range amplitude	±10 mm
Measuring range frequency	60 - 600 strokes/min
Accuracy of measurement	±25 µm ver / ±10 µm hor
Accuracy of measurement frequency	±0.5 strokes/min
Temperature range	+5°C to +35°C
Dimension (measuring box)	- 520 x 370 x 280 mm
Weight (measuring box incl. 4 sensors)	approx. 17 kg

ADVANTAGES

- Wireless measurement (no cables required)
- Transportable System, which can be easily carried from one strand to the other
- Avoidance of shutdowns and breakouts due to predictive maintenance
- Ensured high quality due to known information on the condition of the oscillator guidance
- Intelligent cross check with rigid body model
- Inclination compensated system
- Easy handling
- Charging of sensors via standard USB / mini-USB cable

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