Press release

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**Measuring the rim thickness**

**In the production of metal wheels using the so-called flow forming process, thickness values must be detected reliably and precisely after each forming step. The manufacturer uses optoNCDT laser sensors for this task. They are designed for dynamic measurement tasks in industrial environments and offer an economical overall solution with high measurement accuracy.**

If metal wheels are manufactured using the so-called flow forming process, the thickness distribution on the round body must be checked after each forming step. This ensures compliance with target dimensions, high product quality and cost-effectiveness.

Two optoNCDT 1900-10 laser sensors with a measuring range of 10 mm are used for the measurement. These perform dynamic displacement, distance and position measurements and combine high performance with a compact design and easy integration.

The sensors work with Advanced Surface Compensation, an intelligent surface control system that yields high measurement accuracy even on challenging surfaces with changing reflections. Ambient light up to 50,000 lux is also compensated for thanks to the ultra-high ambient light resistance. The sensors can therefore be used in strongly lit areas.

With a repeatability of 5 µm and a measuring rate of up to 10 kHz, the sensors perform consistently fast and precise measurements of the rim thickness. Thanks to their IP67 protection class and high resistance to shocks and vibrations, the sensors are ideally suited for these harsh environments. The protection class 2 laser offers a further advantage, making additional protective measures unnecessary.

Thanks to the optional integrated Industrial Ethernet interface, the optoNCDT 1900-10 laser triangulation sensors can also be integrated into industrial environments. Depending on the model, users can integrate the full sensor output directly into a PLC via EtherCAT, EtherNet/IP or PROFINET without an additional interface module. Users therefore benefit from real-time data without any time delay and the workload involved for installation and wiring is significantly reduced.

*approx. 2,000 characters*

(PR650\_optoNCDT Rim thickness.jpg)

