

Press Release

Tertiary Air Under Control: PROMECON's New Technology Reduces ID Fan Load, Flattens Process Oscillations, and Lowers SCR/SNCR Operating Costs

[Barleben, 2nd March 2026] – PROMECON GmbH is setting new standards in the cement industry with its latest solution for tertiary air measurement. The infrared-based McON IR Compact measuring system enables simple, continuous, and reliable real-time measurement of tertiary air – without complex maintenance or regular calibration.

Precise tertiary air flow measurement is crucial for stable and efficient rotary kiln operation. The McON IR Compact is based on patented infrared time-of-flight measurement and delivers real time gas flow data. Even under extreme conditions, up to 1200 °C, and with abrasive clinker dust the system operates reliably. Vector-based, digital measurement ensures that results are unaffected by swirl, dust deposits, or drift effects.

A key advantage of the McON IR Compact is its full digital design: the time-of-flight measurement is drift-free, ensuring long-term stability and precision. The system is completely non-intrusive and requires no maintenance at all – not even minimal calibration, K-factors, or readjustments. This allows for years of uninterrupted operation while maintaining full measurement reliability and maximizes plant availability.



The installed McON IR Compact delivers real-time data 24/7 at Warta Cement, Poland.



The McON IR Compact measurement system for real-time, low maintenance tertiary air flow measurement

PROMECON has deployed the McON IR Compact across several cement plants, including Warta Cement in Poland, where it has demonstrated consistent precision and reliability in continuous operation. Operators report that the system has helped to identify blockages, optimize minimum purging times for new gas burners, and supply accurate flow data for ongoing AI-based process optimization studies. These insights contribute to more stable kiln operation, improved process control, and early detection of potential disturbances – reducing downtime and supporting consistent production quality.

By providing precise, real-time TA flow, the McON IR Compact also helps reduce ID fan load, flatten process oscillations, and stabilize the pyro-process. This leads to lower energy and fuel consumption, minimized shutdown times, and reduced NO_x peaks: ultimately cutting SCR/SNCR operating costs while supporting efficient and reliable kiln operation.

With its new tertiary air measurement solution, PROMECON once again underlines its commitment to providing innovative, practical measurement technologies for the cement industry and supporting customers worldwide in optimizing their processes.

About PROMECON

PROMECON are internationally active specialists in flow and velocity measurement for hot and dusty process gases in demanding industrial applications. The company develops and supplies highly precise, low-maintenance measurement systems for the cement, steel, and energy industries.

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