

# NETZSCH SMART MASS FLOW CONTROL

Continuous recording of throughput for easy optimization of machine performance

Business Unit GRINDING & DISPERSING

### Continuous recording of throughput and energy consumption for ea

With the NETZSCH SMART MASS FLOW CONTROL, you can monitor and adjust the throughput of your downstream equipment, such as a mill or classifier, to the second for selected time intervals with little fluctuation. Optimize your production plant and ensure reproducibility and product quality with smart process management.

Particularly for built-in fluidized bed opposed jet mills, stable process control is crucial for a consistent end product. Decisive for stable process control are gas quantity, grinding gas pressure, grinding gas temperature, fluidized bed quantity and classifier speed.

While the throughput capacity of a stand-alone system can be determined relatively easily both through product input and product discharge, for complex production plants this is no longer so easily possible without direct access to the product input/discharge.

The solution from NETZSCH enhances the dosing with a load cell system that can also be retrofitted to mills that are already in operation. The dosing system, which is decoupled both mechanically and in terms of pressure on the process side, supplies a signal that can be continuously evaluated to the control system - a pure transfer of information from the load cells to the data acquisition system with no impact on the dosing.

#### Improvement in Energy Efficiency

With the new system from NETZSCH, the specific energy consumption can be determined via the recorded material quantity and the input energy, thus providing valuable information if you are setting up or have already installed a systematic energy management system in accordance with DIN EN ISO 50001. The certification of your energy management system shows your customers, employees and stakeholders that you are systematically managing your energy efficiency and demonstrates responsibility towards the environment. With an energy management system, energy consumption, CO<sub>2</sub> emissions and thus costs can be reduced.

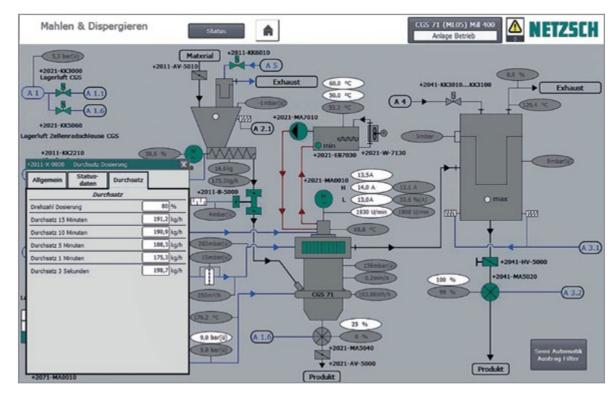
The information you receive with NETZSCH *SMART MASS FLOW CONTROL* helps you to know your processes precisely and to optimize energy consumption.

#### Your benefits:

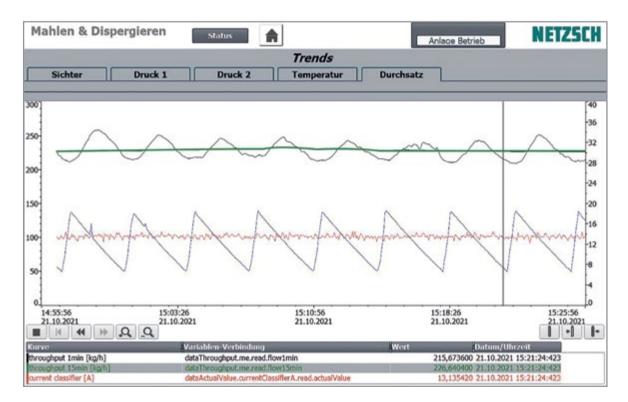
- Direct recording of throughput for mills and classifiers
- Long-term acquisition of the overall balance as an additional feature for productivity, including campaign evaluation
- Flexible adjustment of the refill parameters for dosing with different product properties
- Fast response capability when average throughput is too high or too low
- Production reliability and reduction of rejects
- Parameter for cleaning and maintenance intervals through mass balance
- Provides data for systematic energy management in accordance with DIN EN ISO 50001
- Retrofitting of already installed systems are easily possible

## NETZSCH SMART MASS FLOW CONTROL

## sy optimization of machine performance



Graphic implementation in the user interface



Example of a trend display for a direct evaluation of the throughput performance Black: throughput calculation with a calculation interval of 1 min Green: throughput calculation with a calculation interval of 15 min Red: classifier stream

Blue: weight of dosage including refill arrangement

The NETZSCH Group is an owner-managed, international technology company with headquarters in Germany. The Business Units Analyzing & Testing, Grinding & Dispersing and Pumps & Systems represent customized solutions at the highest level. More than 4,000 employees in 36 countries and a worldwide sales and service network ensure customer proximity and competent service.

Our performance standards are high. We promise our customers Proven Excellence – exceptional performance in everything we do, proven time and again since 1873.

## Proven Excellence.

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