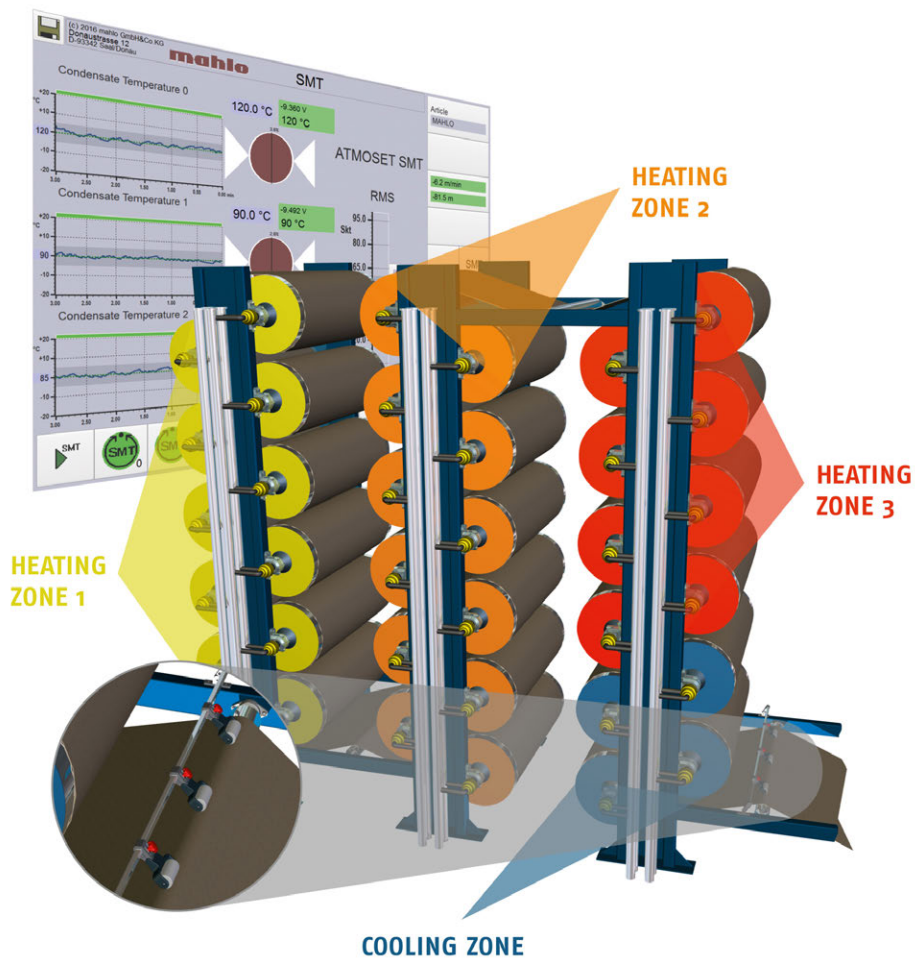


# ATMOSET SMT-15

Optimising the heat output of drum dryers depending on the product



ATMOSET SMT-15



Quality made in Germany



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EXTRUSION

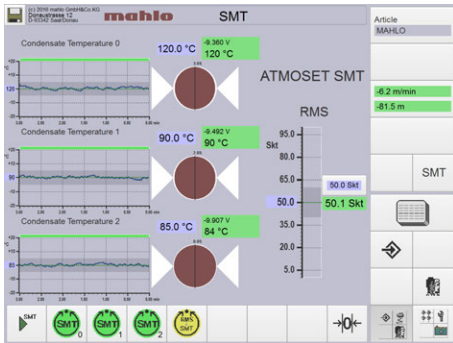
Atmoset SMT

## DRUM DRYER CONTROL

### Atmoset SMT

Optimising the heat output depending on the product

#### Tasks



Main display with profile and trend

Drum dryers can be found in many production and finishing plants in the textile industry. They dry the product after wet treatment, such as continuous bleaching, mercerization, colour or print after-wash. With wet treatment, a certain dwell time of the product in the processing stages may often not be fallen below. Light products pass the process just as fast as heavy products, running over a subsequent drum dryer at the same speed. Heavy products require a longer drying time than light ones. Consequently, the driers are designed for the heaviest product and usually overdimensioned. Heavy products are dried just correctly, but all other products are overdried. Enormous amounts of energy are thus wasted.



#### Product highlights

- ✓ Stable and effective drying process
- ✓ Easy to retrofit
- ✓ Easy to install
- ✓ Intuitive user interface

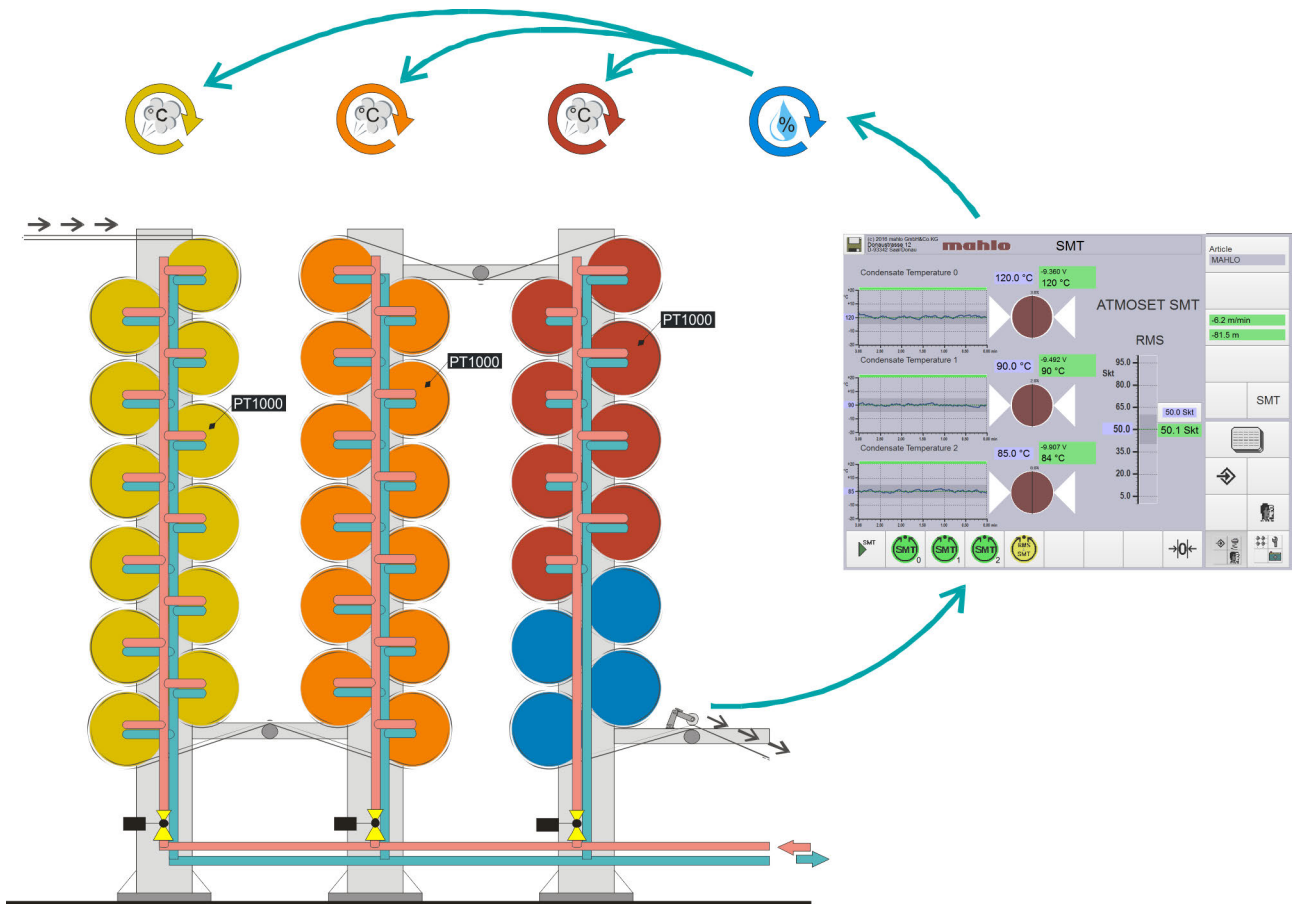


#### Customer benefits

- ✓ Optimised energy efficiency
- ✓ Energy saving
- ✓ Increased process repeatability
- ✓ Improved quality
- ✓ Short amortisation time

#### Solution

The Atmoset SMT controls the residual moisture of the fabric with steam-heated drum dryers. The key to point accuracy and very even residual moisture is found in two superposed control loops. The first control loop is used to measure and control the condensate temperatures of the drum dryers combined in groups. The deviation of the condensate temperature from a preset setpoint is used to directly calculate the amount of energy required for drying. The steam supply is adjusted to the moisture of the incoming product. The second control loop captures the residual moisture of the product after leaving the dryer, using special measuring electrodes. It supplies the pulses to adjusting the setpoint for the condensate temperature control so that the product obtains the desired residual moisture. The intelligent controller algorithms used provide for a rapid and stable control of the residual moisture, taking all input variables into account.



Atmoset SMT Control



**RELIABILITY**

*Our machines do exactly what we build them for: Hour after hour, year after year. Making sure you will always reach your goal.*

**Benefit**

The Atmoset SMT enables a stable and effective drying process. The optimal degree of drying is always reached, regardless of the weight of the product or the web speed. Continuity of the production process and reproducibility of the product quality are ensured. The energy consumption of the dryers drops significantly due to the optimised heat output. This saves energy costs.

The drum dryers can be optimally dimensioned during preparatory project planning with the customers resulting in reduced investment costs.

**Area of application**

On all drum dryers.

## Monitoring and control systems, automation

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