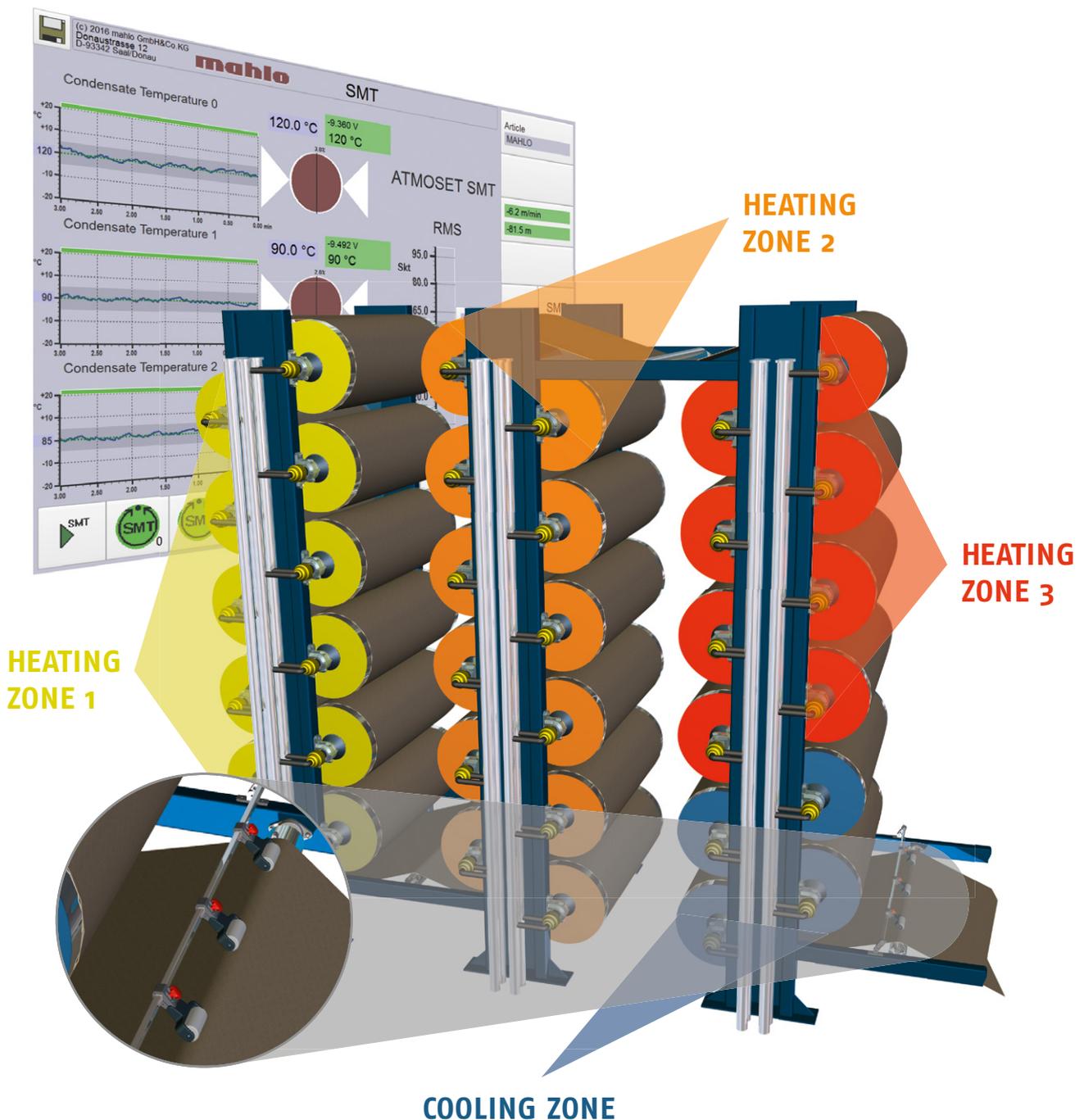


# ATMOSET SMT-15

Optimising the heat output of drum dryers depending on the product



ATMOSET SMT-15

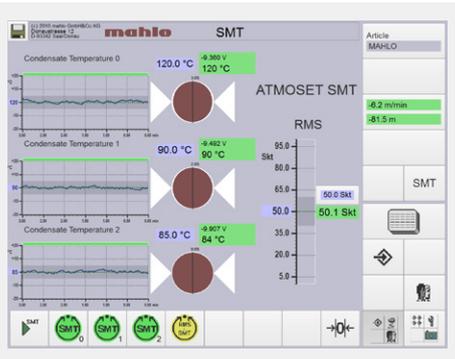


## DRUM DRYER CONTROL



# ATMOSET SMT-15

Optimising the heat output depending on the product



Main display with profile and trend

### Tasks

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 afterwash. 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.

### 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.

### Product highlights

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

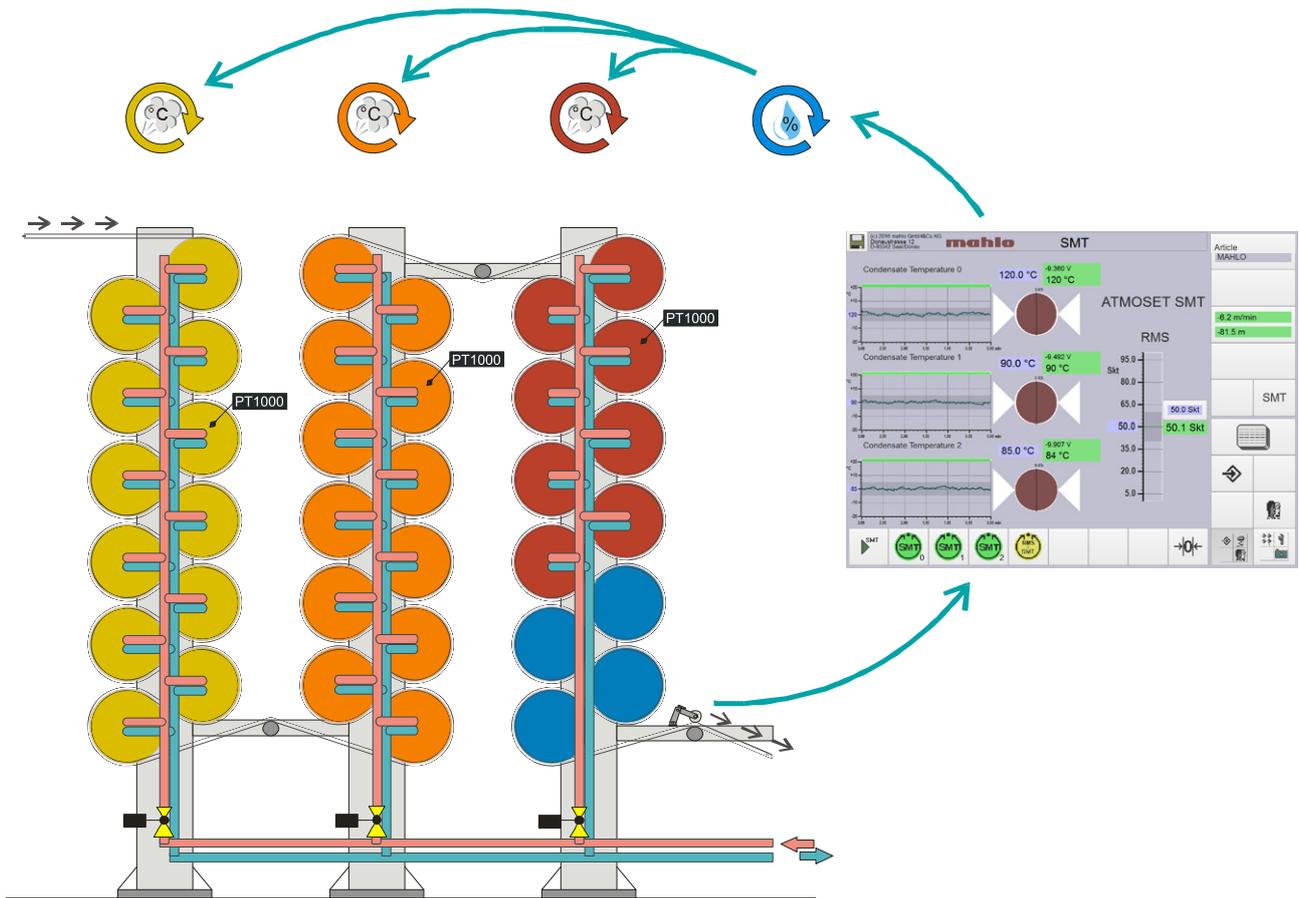
### Customer benefits

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



### RELIABILITY

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



Atmoset SMT regulation

## 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.

## Applications

On all drum dryers.

Monitoring and control systems, automation:

# MAHLO® GUARANTEES QUALITY. WORLDWIDE, IN YOUR VICINITY.

Best-possible technical support and know-how transfer are written in capital letters at Mahlo. Thanks to an international network of agencies and service centres, customers have at their disposal competent support worldwide. We are there for you 365 days a year, 24 hours a day. Just get in touch with us!

- ✓ Over 40 service centres worldwide
- ✓ Service partners in over 100 countries
- ✓ Direct service and spare parts delivery within 24 hours
- ✓ Remote diagnostic system
- ✓ Service Hotline: +49-180-5062456



#### **Mahlo GmbH + Co. KG Germany**

Donaustr. 12, 93342 Saal/Donau  
Telephone: +49-9441-601-0  
Fax: +49-9441-601-102  
Email: [info@mahlo.com](mailto:info@mahlo.com)

#### **Mahlo Italia S.R.L. Italy**

Via Fiume 62, 21020 Daverio  
Telephone: +39-0332-94-95-58  
Fax: +39-0332-94-85-86  
Email: [mahlo.italia@mahlo.com](mailto:mahlo.italia@mahlo.com)

#### **Mahlo America Inc. USA**

P.O. Box 2825, Spartanburg, S.C. 29304  
Telephone: +1-864-576-62-88  
Fax: +1-864-576-00-09  
Email: [mahlo.america@mahlo.com](mailto:mahlo.america@mahlo.com)

#### **Mahlo Ouest S.P.R.L. Belgium**

Quartum Center  
Hütte 79 - Bte 10  
4700 Eupen  
Telephone: +32-87-59-69-00  
Fax: +32-87-59-69-09  
Email: [mahlo.ouest@mahlo.com](mailto:mahlo.ouest@mahlo.com)

#### **Mahlo España S.L. Spain**

Calle Luxemburgo nº 4  
08303 Mataró (Barcelona)  
Telephone: +34-938-640-549  
Email: [mahlo.espana@mahlo.com](mailto:mahlo.espana@mahlo.com)

**WWW.MAHLO.COM**