# BMA Automation – all-inclusive solutions for automation worldwide



BMA Automation, the BMA Group's competence centre for electrical engineering, develops and supplies all-inclusive solutions in the field of industrial automation. Starting with five employees in 2005, the workforce meanwhile comprises 30 staff who supply and commission innovative automation equipment for end users worldwide.

In the course of expanding its international activities, the company changed its name into BMA Automation GmbH at the end of 2009. Thanks to the close collaboration with the branch offices of the BMA Group as well as local representatives, automation systems are executed and commissioned in accordance with the customer's wishes and maintained at the state-of-the-art. Depending on the task at hand, BMA Automation often makes use of the process engineering know-how of the BMA Group for its work and is thus able to offer a comprehensive and 'seamless' automation solution.

In addition to tailor-made solutions for customers within and outside the BMA Group, the range of successful standard products offered by BMA Automation includes the following:

#### BMA centrifugal control units

The control unit for batch-type centrifugals, which has been sold more than 200 times since its market launch in 2005, convinces above all with its sophisticated, clearly structured and user-friendly visualisation. As important are the safety concept and the fact that it is easy to integrate into existing process control systems, thanks to standardised interfaces.

### Switchgear units for beet extraction systems

For many years, BMA has been the world market leader for beet extraction plants. Since the plants have become ever larger in the course of time, precise interaction of the extraction tower drives



Increasing efficiency

by process

automation



is of growing importance in order to ensure an optimum force transmission and not to create excessive point loads for the tower bull gear. The switchgear units are therefore equipped with frequency converters for each individual drive train. A data-logging system (DynFAS DL) provides for the continuous logging of all relevant parameters, gives hints for plant optimisation, and, in the event of a failure, permits a thorough analysis of the sequence of events leading to the failure and its causes.

## DynFAS MW – microwave measuring systems for dry substance content measurements

For many years, the reliable inline measurement of the dry substance content has been playing an important role in process control. Since mid-2009, BMA has been offering microwave measuring systems, and several measuring systems have already been supplied to end users all over the world and commissioned.

With increasing frequency, the microwave measuring systems of type DynFAS MW have been installed also in the evaporator station, in order to measure the dry substance content there and to optimise process control. In such a case, pipe-installed probes are recommended, which can easily be installed in existing pipelines with a diameter of up to DN 150 (6").

## DynFAS FS – electronic filling-level sensor for sugar centrifugals

This patented BMA measuring system allows for optimising centrifugal work. An electronic sensor

located above the centrifugal housing measures the layer thickness inside the centrifugal basket during the entire working cycle and signals the measured value either to the BMA centrifugal control unit or to the control unit supplied with the sensor.

This allows not only determining the optimum switching point for the charging flap; a downstream colour measuring unit and a filling-level sensor in the upstream mixer can also be integrated into the control unit in order to automatically adjust the wash water quantity and optimise the centrifugal filling.

#### Near-infrared moisture sensors

At many points in the sugar factory, the product moisture is an important parameter for process control:

- For bagasse downstream of the dewatering mills
- For pressed pulp upstream of pulp drying
- For dry pulp downstream of pulp drying
- For wet sugar downstream of the centrifugals
- For dry sugar before and after storage

For moisture measurement, BMA Automation uses innovative and reliable devices made by Sensortech Inc., USA, in new orders as well as for retrofitting of existing plants.

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