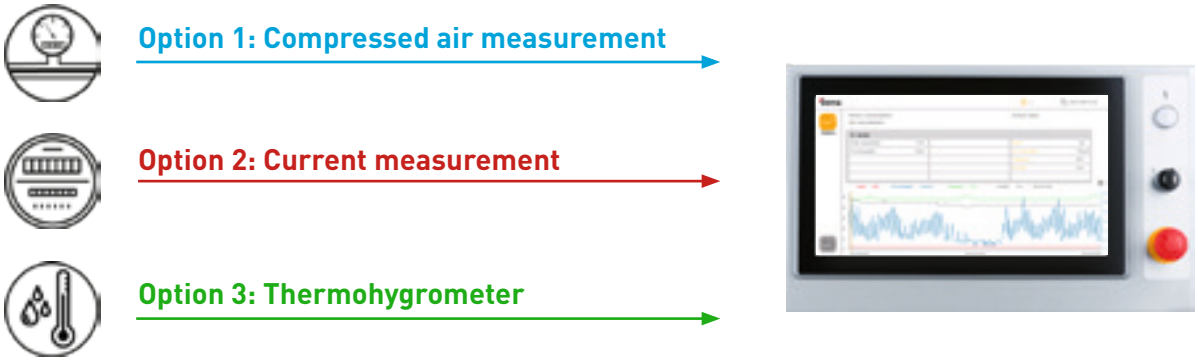
Monitoring of energy consumption and ambient conditions

Manage and save energy easily

Energy and environmental data at a glance

The MagicControl 4.0 central control unit, with its two options for energy and compressed air consumption, forms the basis for energy management in order to monitor energy consumption, make optimizations in day-to-day operation and find ways of saving energy. As a further option, the thermohygrometer measures temperature and humidity during production. Stable environmental conditions are important to maintain a constant application quality.
All this allows a comprehensive view of the energy flows and provides information on the production influences of the individual production processes.
All data is continuously recorded and in the MagicControl 4.0 visualization tool as tables and diagrams displayed on the screen.



Measurement technology options for energy data acquisition for visualization on MagicControl 4.0

Energy management
On the hardware side, one or more measuring modules for power- and compressed air consumption form the base. Depending on the on-site conditions and number of feed measuring points, these are integrated into the overall system already parameterized and communicate via bus system to the central control unit. The information visualized on the main screen of the plant includes the added values of all measuring points and show the present consumption value, the course over time and total consumption.

Environmental conditions
The measuring module, which is integrated in the control cabinet of the plant and fully parameterized, is connected to the central control unit via a bus system. The visualization shows the current temperature and humidity as well as the course over time.

1 Total consumption values of the selected day
2 Consumption values in real time
3 Selection of the month or year
4 Slider to select a specific day or month
5 Selection of the individual category for the graphic displays
6 Graphical display of the marked consumption data
7 Course of the real-time values

Main features:
- Each measuring module can be individually integrated into the system
- Clear, summarized energy and ambient values at a glance
- Easy to use interface through self-explanatory navigation
- Display of data in real time as well as total values
- Energy measurement: Data transfer via Ethernet
- Measurement of compressed air consumption: Signal transmission
- Temperature/humidity: Data transfer via Ethernet
- Data storage for more than ten years in the past

User benefits:
- Basis for the energy management of the powder coating plant
- Identify energy efficiency
- Recognizing savings potentials
- Integration of the measured data into the central control unit MagicControl 4.0
- Clear representation and trend indicator of consumption and ambient values
- Reading the raw data of the SD card from MagicControl 4.0

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