Batch Management

The powder consumption always under control

Partially automated powder quantity recording

The Batch Management System of the central control unit MagicControl 4.0 offers a tracking of the consumed powder, divided into production batches. The recorded data is continuously updated and visualized and displayed as tables on the screen. The additional options “scale” and portable “barcode reader” extend the batch management and enable a semi-automated powder quantity recording.

The system consists of three expansion stages (Options):

1. **Batch management without scale and barcode reader (standard control component)**
   - The easy to use input mask of MagicControl 4.0 is used to enter the most important information of a production batch. All entries of the necessary information about the batch and the approximate powder consumption are made manually. The evaluation and overview of the individual batch production is done in tabular form.

2. **Batch Management with scale (Option 1)**
   - The premium weighing technology is ideal for powder weight measurement due to its robust design. The weighing activities are carried out at an externally placed or mobile terminal, which communicates with the batch management of MagicControl 4.0. Each individual powder container is weighed and the recorded value is assigned to the current batch production. The Batch Management processes this information automatically. Residual powder can be deducted.

3. **Batch Management with scale and barcode reader (Option 2)**
   - Based on option 1, the portable barcode reader is used, which is built for use in industrial environments and communicates with the batch management of MagicControl 4.0. For example, the powder type can be scanned from the powder box and fed directly to the system as information.
Main features:

Scale / Terminal
- Robustness and rigidity
- Max. Load: 120kg
- Support surface: 600 x 800mm
- IP65, ATEX Cat. 3GD
- Terminal size 248 x 164 x 78mm
- Foil keys with tactile feedback
- Backlighting

Barcode reader
- Reading of 1D and 2D barcodes
- Robustness
- IP65
- ESD compliant: IEC 61340-5-1:2016

Main features of the semi-automatic powder quantity measurement:
- Clear visualization and easy to use batch management system software
- Display of data in real time as well as total values
- Robust and industrial quality of scale, terminal and barcode reader
- Ethernet communication technology
- Data storage for more than ten years in the past

User benefits:
- Simple way to record the powder consumption per batch
- Simple and fast operation of the equipment
- Clearly structured listing of the individual production batches
- Automatic integration of the measured data into the central control unit
- Reading the raw data of the SD card from MagicControl 4.0

1 Input information of the current batch (batch number, name, object, color, note). With the handheld bar code readers, this information can be read in directly.
2 Display of the summed values of the current batch (start time, duration, powder consumption)
3 Determining the start and end of a batch production
4 Addition and subtraction of powder quantities. In combination with a scale this input is done automatically via the terminal of the weighing system.
5 Listing of the individual production batches