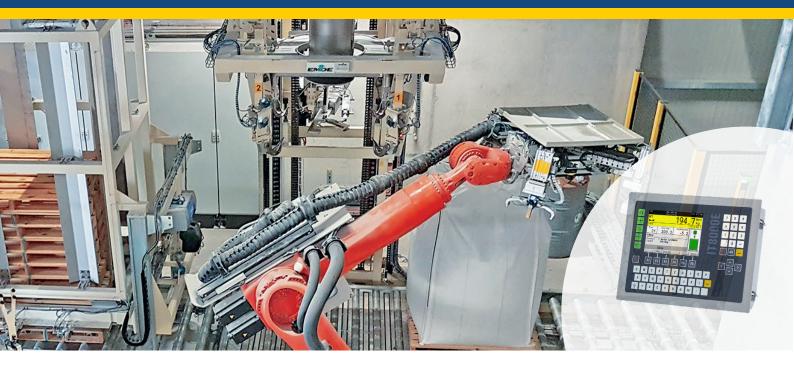


Fully automatic big bag filling station for cristobalite

High throughput with W&M approved SysTec weighing indicators



When it comes to filling raw materials into big bags, high throughputs are crucial. Therefore, **SIBELCO** uses a fully automatic **EMDE station** for cristobalite filling with a W&M approved SysTec weighing indicator.

The key facts

- 40 filled big bags per hour
- 1200 kg kg net weight per big bag
- W&M approved weighing electronics
- Recipe management via PLC
- Fast implementation of the fully automatic filling station by EMDE

Products

- IT8000E: robust SysTec weighing terminal for continuous operation
- SysTec application software BIG BAG E ensures fast big bag filling processes
- Fully automatic EMDE filling station with robot handling

Customer benefits

- Reliable automatic operation saves time and resources
- W&M approved fillings via precisely operating batching systems
- High throughput fast and highly accurate weighing technology
- Control systems configured according to customer requirements
- Optimal big bag filling and stability via compaction system
- Automatic closing for dust & emission protection
- Automatic release and labeling of the filled big bags
- Connection to MES system (Manufacturing Execution System) for monitoring purposes



The customer - SIBELCO

SIBELCO is a global materials solutions company. As a diversified industrial minerals group, SIBELCO sources and transforms a wide range of minerals and is a leader in glass recycling. These include, for instance, silica sand, feldspathic minerals, olivine and clays. With over 114 production sites in more than 30 countries, SIBELCO employs more than 5,300 people worldwide.

Further information: www.sibelco.com



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The fully automatic filling station

In Dessel, Belgium, SIBELCO operates the fully automatic filling station for cristobalite - designed and installed by the plant manufacturer EMDE within a short period of time.

Thanks to the powerful weighing and control technology, up to 40 big bags can be filled per hour. Each big bag has a net weight of 1200 kg. To ensure the legal for trade requirements of the filled bags, the W&M approved SysTec weighing indicators are used. EMDE has been installing SysTec's innovative weighing systems and controllers on demanding filling lines for many years.

To optimize the performance of the filling station, a weighed hopper was installed above the filling station to discharge the cristobalite into the big bag. This allows simultaneous filling of the container above during the big bag handling times.



© photo SIBELCO

Cristobalite - the material to be filled

Cristobalite is a high-temperature modification of quartz and occurs only very rarely in nature. For this reason, cristobalite is produced synthetically for industrial purposes from pure quartz in a rotary kiln at approx. 1500 °C. Main applications of cristobalite are dispersion-bound exterior paints and plasters, dental impression compounds, artificial marble or countertops.



© photo EMDE



IT8000E weight indicators with application software BIG BAG E



At a glance: weighing terminal IT8000E

- Ease of operation: simple operator prompting, bright TFT color display 5.7" with wide viewing angle and large weight display, alphanumeric keypad
- W&M approved as non-automatic or automatic scale (approved in the EU, USA, Canada, and others)
- Universal use: a wide range of standard programs for a variety of weighing applications
- Customer-specific modifications: Freely programmable
- Robust: stainless steel housing (ingress protection IT8000E: IP69K)
- Hazardous area: for installations in hazardous area zone 2/22 the IT8000E Ex2/22 version is available, and for zones 1/21 the IT8000Ex unit
- Various designs: for wall-mount/desk-top and panel-mount installation
- Variety of interface options: 2 internal and up to 6 external scale interfaces, connection for PC networks and WLAN, label and network printers, PLC connection via fieldbus
- High operational security: power-fail safe storage of data, password protection, battery-backed realtime clock, remote diagnosis possible over internet



Graphic: © EMDE





"The W&M approved SysTec weighing terminal was easy to parameterize. I especially appreciate that the entire filling process is shown very clearly on the graphic display. This makes weighing technology fun!"

Daniel Schaab, Software Engineering, EMDE

Further information about the project service providers



SysTec Systemtechnik und Industrieautomation GmbH

Since 1994 SysTec has been developing and producing W&M approved industrial weighing indicators and filling controllers for static and dynamic scales.

More than 150,000 installations are successfully in use worldwide. The innovative SysTec weighing systems work reliably in numerous applications: These include filling systems for liquids and bulk materials, shipping / receiving scales, beltweighers, vehicle scales, checkweighers, piece counting scales, mobile weighing systems and all kinds of customerspecific applications. In addition to standard products, SysTec also offers customer-specific system solutions and custom-made hardware and software. Comprehensive technical advice completes the range of services.

The production and development site for Sys-Tec weighing terminals and software solutions is Germany. The company is located in Bergheim-Glessen, near Cologne. The production of the weighing terminals and software is subject to international OIML standards.



EMDE Group

The EMDE Group, with the EMDE Automation GmbH, EMDE Technologies GmbH and EMDE MoldTec GmbH companies, is a technology Group in the two fields of bulk material technology and mold making with approximately 150 employees in Germany.

Solutions for discharging, filling, mixing, conveying and charging bulk materials are developed and manufactured at the Nassau plant (EMDE Automation) with international sales and service (EMDE Technologies). From conceptual design through innovative individual components to complete turnkey plants, EMDE delivers everything to customers from a single source. EMDE offers innovative system solutions and plants for bulk material handling in the chemical, food, plastics, recycling and building materials industries.

Also at the Nassau site (EMDE MoldTec), EMDE develops and manufactures injection molding tools and cold-channel needle valve assemblies for LSR mold design.

Discover more: www.emde.de

Discover more: www.systecnet.com