

SSMD

Modular drying
and dehumidifying system



SSMD

Modular drying
and dehumidifying system



Modular solutions provide intelligent management of the drying process.

Products based on a modular design are being increasingly used in modern industry. The main advantage of this solutions is a flexibility and the possibility of fast adjustment to the user's needs in terms of required performance. Shini Brand develops innovative solutions in the field of modular construction. SSMD series enables drying and dehumidifying of several materials at the same time with a minimum energy consumption.

Siemens controller automatically divides a stream of dry air with a dew point of -40°C to each drying hopper. Installed inverter reduces fan speed when the amount of dry air is too high. It allows to maximise the energy efficiency of the device. SSMD gives the possibility of drying a few or only one material. In this case the throttling valve of the other tanks are automatically closed and the flow of dry air goes to the currently operated hopper.

SSMD system consists of a dehumidifier equipped with a rotary molecular sieves, providing a continuous, very low dew point and modular dryers.

Hoppers placed on a supporting frame, easily combine with each other to form one unit. Dehumidified air passes through the main channel installed in a supporting frame and then, using Belimo electronic throttle valves is distributed to each hopper. After passing through the dryer's material hopper, the air is returned to the dehumidifier to remove moisture and to minimise energy losses.

The whole process is precise controlled by advanced PLC controller, working with precisely positioned placed air flow, temperature and dew point sensors. A large colour control panel provides easy and intuitive operation. It also allows to preview the history of drying (eg. the observation of dew point decreasing), generating the drying curves for each hopper and of course set-up and save drying formula for each different material.

Features of SSMD series:

- advanced PLC controller
- Siemens high-quality automation
- Siemens large display HMI
- Belimo throttle valves
- intuitive control
- colour desktop
- ABB inverter
- ease of operation
- modular construction
- easy installation
- energy-saving
- Plug & Play

SSMD

Modular drying
and dehumidifying system

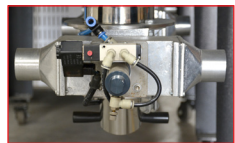
SHINI EUROPE



Modern control boards

Modern control boards

Each container is equipped with precise PID system, ensures exact drying temperature



Pneumatic shut-off box

Ensures connecting with a central distribution system of material



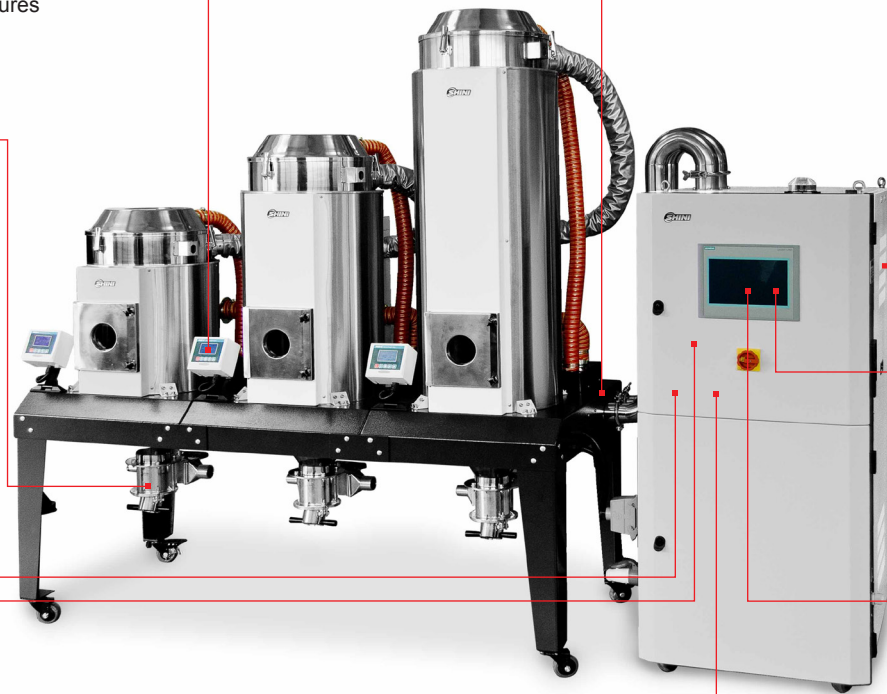
ABB inverter

Ensures proper rotation speed of blower's motor and as a result - energy-saving



Advance automation

Siemens S7 brand controls each process, same time cares about best drying parameters and energy consumption



Belimo valves

Together with air flow sensors ensure proper flow of dry air to each drying hopper



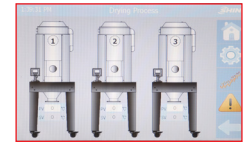
Rotary Honeycomb

Ensures stable dew point -40°C



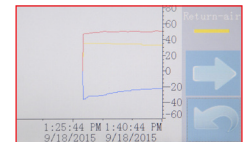
Control panel

Colour, big and intuitive allows easy use of device



Control panel

Gives possibility to generate drying diagrams which allows better planning of production



Dew point sensor

Ensures energy-saving work of regenerative heaters

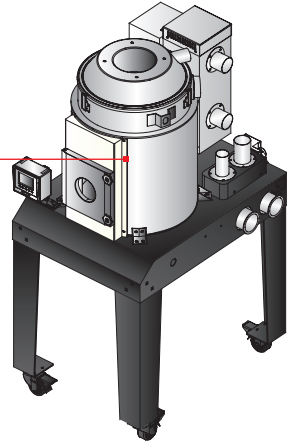
SSMD

Modular drying and dehumidifying system



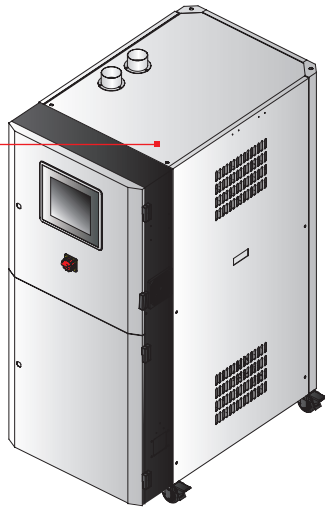
Drying section

Modular construction based on supporting frame allows easy connection with other sections



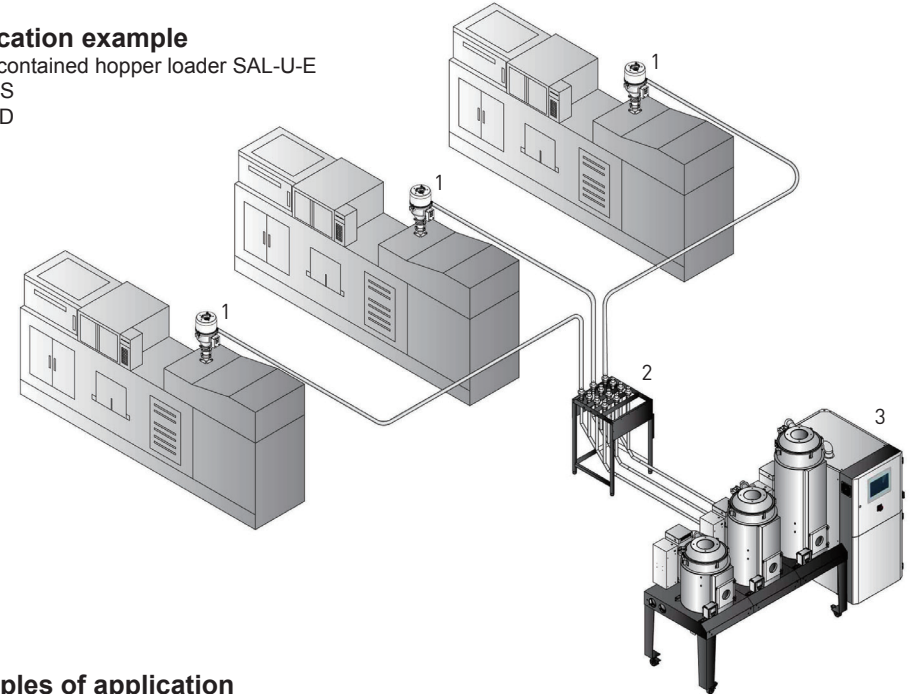
Dehumidifier section

Central control system allows proper working of all devices and relevant dew point temperature



Application example

1. Self-contained hopper loader SAL-U-E
2. SMDS
3. SSMD



Examples of application

