



# Mould Sweat Dehumidifiers



SMD-500H-D

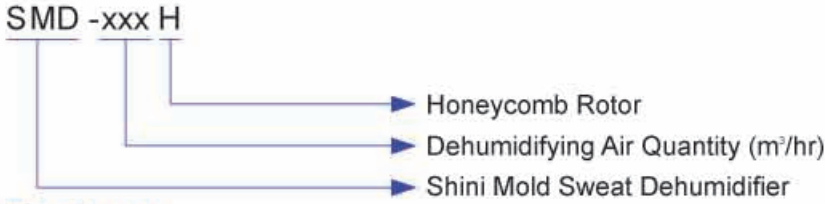


Refer carefully to the manual before using products.



# SMD Series

## ■ Coding Principle

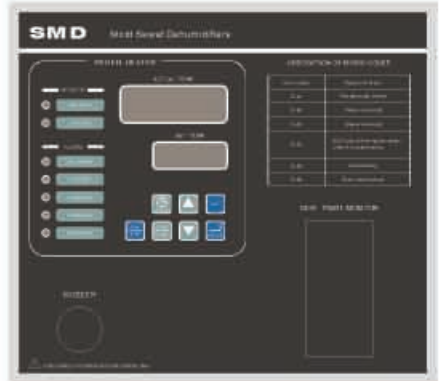


Note \*  
D=Dew-point Monitor  
CE=Conformity

## ■ Features

### Standard configuration

- Accurate control and display of regenerative temp. by using P.I.D. control.
- Honeycomb rotor is used to ensure constant air dehumidifying effect.
- Microprocessor board is fitted to indicate machine running status and to diagnose malfunctions.
- Motor overload and phase reverse alarm functions are included.
- Return air cooling and filtering are included.
- Under normal state and atmospheric conditions, the humidity content of air can be controlled exactly all year round.
- Inhibits corrosion and prolongs service life of the mould, and yet reduces moulding cycle time.
- Air temperature generated by this series of machine is about 30°C, this ensures moisture condensation in the moulding area will not occur on the view window of the moulding machine.



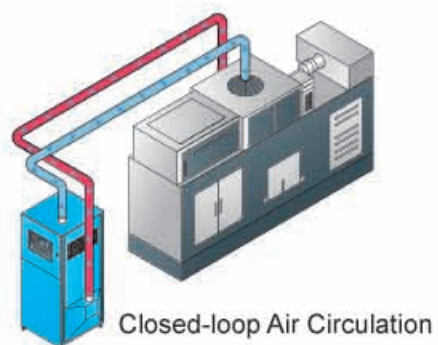
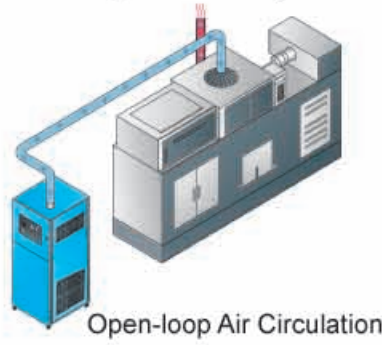
Control Panel

### Accessory option

- Return air collector is optional, a return air collector is used to collect return air from the moulding area back to this machine and to form a closed-loop air circulation, which is particularly practical in tropical climate.
- Dew-point monitor can be fitted as option to detect dry air quality.

## ■ Application

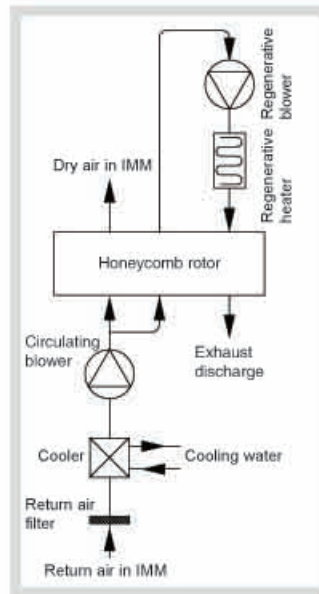
SMD series mould sweat dehumidifiers are designed to remove the moisture sweat from condensing on the mould surface. Forming of moisture sweat on the mould surface is due to the use of chilled water for reducing the moulding cycle time, particularly while moulding of the PET preforms. To bring about the moisture sweat on the mould surface is because the mould surface temperature is lower than the dew-point temperature of surrounding air, thus the water vapor comes into being, then causes corrosion of mould and effects quality of moulding parts as well as production efficiencies. This series of machine uses honeycomb rotor to carry out dehumidifying function, which generates a dry airflow with dew-point ranging from +5°C~-10°C, and ensures the surrounding air of mould remaining in a low dew-point temperature. It provides constant low dewpoint surrounding air to the mould surface all year round without being influenced by the change of seasons.



## Working Principle

The large amount of air created by centrifugal blower will directly blow to the models of IMM after being moisture absorbed by rotator honeycomb to form drying air with low dew-point. And then air discharges through air outlet of mold closing chamber and returns to mold sweat dehumidifier through return air pipe. In this way, a circle finished.

The air around mould is very dry with dew-point less than or equal to 5 °C . Environmental temperature drops fast during the mould rapid-cooling, but temp. would not fall to 5°C. Therefore, dewdrop would not come into being during mould rapid-cooling.



## Outline Drawings



## Model Selection Guide

Model	SMD-500H	SMD-1000H		SMD-1500H	SMD-2000H	
Cavity Number	12	16	24	32	48	56
Cavity Array	(2 x 6)	(2 x 8)	(4 x 6)	(4 x 8)	(4 x 12)	(4 x 14)
Cavity Distance	Standard	Standard	Standard	Standard	Standard	Standard
Max. Shot Weight (kg/hr)	200	270	400	420	560	560
Auxiliary Equipment Model Selection Guide						
Dryer Model	SHD-1500U	SHD-2000U	SHD-3000U	SHD-3000U	SHD-4000U	SHD-4000U
Dehumidifier Model	SD-700H	SD-1000H	SD-1500H	SD-1500H	SD-2000H	SD-2000H
Hopper Loader Model	SAL-2HP-UG	SAL-2HP-UG	SAL-3.5HP-UG	SAL-3.5HP-UG	SAL-5HP-UG	SAL-5HP-UG

## Specifications

Model	Regen. Heater (kW)	Regen. Blower (W) (50 / 60Hz)	Process Blower (W) (50 / 60Hz)	Process Air Flow (m <sup>3</sup> / hr)	Process Pipe Diameter (inch)	Regen. Pipe Diameter (inch)	Water Connection	Ave. Process Air Temperature (°C)	Dew-point Temp (°C)	Process Air Pressure (Pa)	Cooling Water Flow (L / Min)	Cooling Water Pressure (kg / cm <sup>2</sup> )	Dimensions (mm) H X W X D	Weight (kg)
SMD-500H	4	0.4 / 0.5	0.75/0.85	500	4	2	3/4" PT	30	-10~+5	3000	45	3~5	1730 x 650 x 700	260
SMD-1000H	7.2	0.75/0.85	1.5 / 1.8	1000	5	2.5	3/4" PT	30	-10~+5	3000	90	3~5	1780 x 800 x 805	335
SMD-1500H	15	2.2 / 2.6	1.5 / 1.8	1500	8	4	3/4" PT	30	-10~+5	1400	135	3~5	2040 x 1150 x 1075	350
SMD-2000H	24	2.2 / 2.6	1.5 / 1.8	2000	8	4	2" PT	30	-10~+5	1230	180	3~5	1940 x 1300 x 1075	450

Note: 1) Noise level ≤85dB (A).

2) Condition for Open-loop application: Ambient dry bulb temp. ≤30°C, relative moisture ≤70%.

3) Cooling water required temp.: 7~10°C.

4) Power: 3Φ, 230 / 400 / 460 / 575VAC, 50 / 60Hz.

We reserve the right to change specifications without prior notice.



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