



# WHEEL TO DRY

## Honeycomb rotor dehumidifier

WHEEL TO DRY is an high performance dehumidifier, very useful for a correct handling of plastic materials. The Wheel to Dry series is a powerful tool for a proper dehumidification of plastic materials and, consequently, an increase in quality of the final products with a decrease of defectiveness and an optimisation of energy costs.

### OPERATING PRINCIPLE

Air goes through the desiccant rotor, and releases the moisture extracted from the material in the hopper. The part of the rotor saturated by water is regenerated with hot air; this air, once humid, is then exhausted. Finally, once regenerated, the section of the rotor is cooled down and then ready to absorb again humidity from plastic materials.

The possibility to reduce the airflow from 100 to 40% and the Dew Point from -40°C to 0°C is an huge "advantage" in the plastic industry.



### MAIN FEATURES

#### COMPACT AND EFFICIENT

The small number of movable parts allows the system to have a footprint very compact. Filters are easily accessible from the front of the machine, for a fast and safe cleaning maintenance.

#### HIGH PERFORMANCE

Possibility to choose the Dew point between 0 and -40°C. PID integrated control for an accuracy in heating of  $\pm 1^\circ\text{C}$ .

The normal of cooling, necessary only for few kinds of materials or in certain conditions, allow also a supplementary energy reduction.

#### REDUCTION OF POSSIBILITY OF FAULT

Because of smaller number of movable parts the Wheel to dry dehumidifier has a low "Index of Fault", and consequentially a reduction of possible stops of the equipment, with an higher shelf life.

#### WIDE RANGE OF MODELS

Wide range, starting from 40 to 4.000 mc/h flow rate (50 to 4500 mc/h at 60 Hz).

#### FLEXIBILITY

Air flow regulation.  
Modularity, using one or more hoppers with different flow rates and process temperatures.

#### INDUSTRY 4.0 & IoT

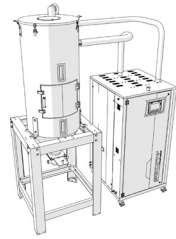
Thanks to HMI control and integrated OPC-UA standard protocol the machine can be easily connected to an ERP MES System running in "Industry 4.0"

#### OPTIONS

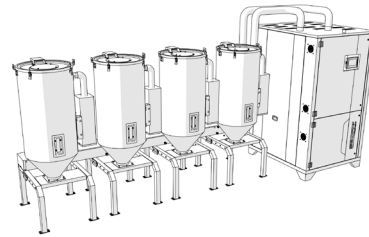
Built-in Dew Point Supplementary Monitor.  
Energy Drying Management System: Adjustment from 100% down to 40% of flow rate.  
Multi-Hopper Version.

CONFIGURATIONS / OPTIONS

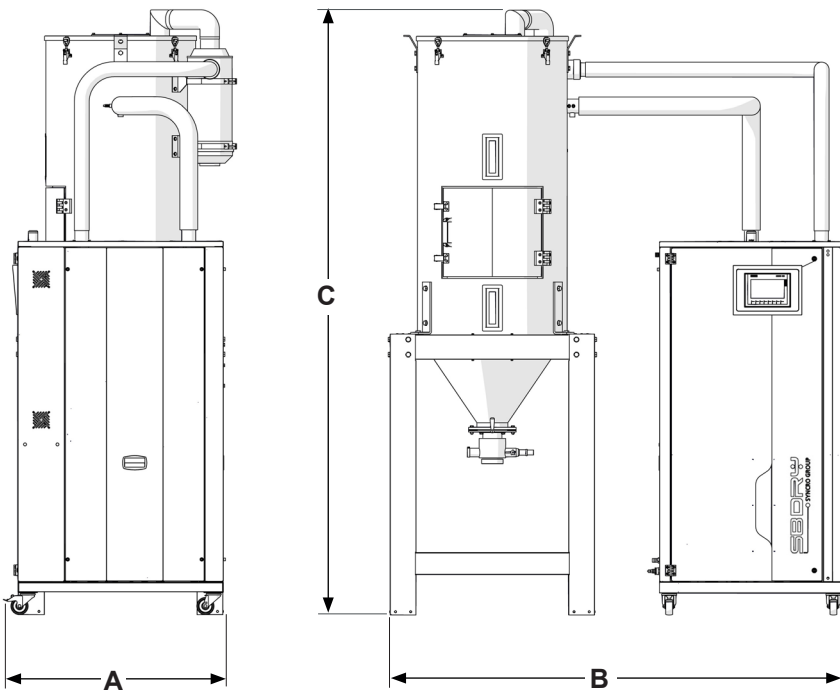
Mono-Hopper version



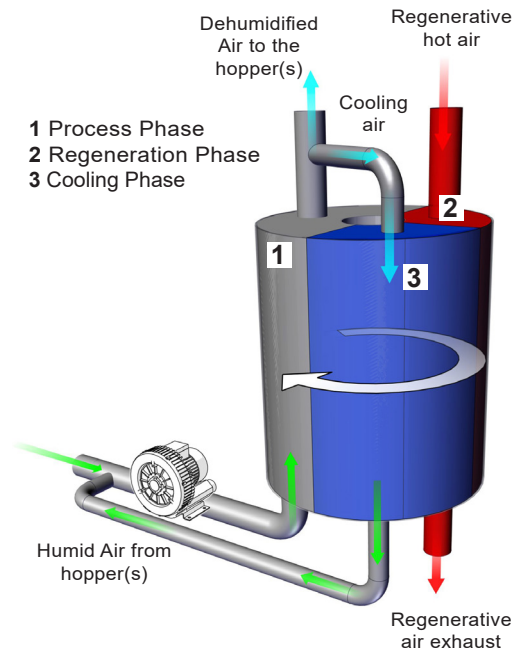
Multi-Hopper version



TECHNICAL DATA



Continuous loop operation



Model	WTD40	WTD80	WTD120	WTD200	WTD400	WTD700
Flow rate (m <sup>3</sup> /h 50/60H z)	40/47	80/95	120/135	200/220	400/450	700/780
Process Heater	4 kW		6 kW	12 kW	18 kW	24 kW
Rege Heater	3 kW		4 kW		7.2 kW	10 kW
Cooling Water Flow Rate	5 L/min	10 L/min	15 L/min	30 L/min	50 L/min	80 L/min
Dimension A	520 mm			1050 mm	1255 mm	1380 mm
Dimension B	820 mm			660 mm	700 mm	900 mm
Dimension C	1260 mm			1560 mm	1750 mm	1935 mm
Weight	145 kg	170 kg		265 kg	330 kg	480 kg