



WHELTDry·MINI

Honey Comb Rotor Dehumidifier

WHELLTODRY MINI is a high performance compact dehumidifier, very useful for a correct handling of plastic materials, designed for small productions indicatively up to 25 kg/h. Thanks to its compact dimensions it can be installed directly above the transforming machine or above the doser, to dehumidify also additive materials just where it is needed. The WheeltoDry series is a powerful tool for a proper dehumidification of plastic materials and, consequently, an increase in quality of the final products and an optimization 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, in a continuous loop. The compactness, portability and the possibility to reduce the airflow from 100 to 40% and the Dew Point from -40°C to 0°C is a 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. Moreover all the parts are also easily accessible 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 absence of cooling, necessary only for few kinds of materials, allow also a supplementary energy reduction.

REDUCTION OF POSSIBILITY OF FAULT

Because of smaller number of movable parts the whelltodry mini dehumidifier has a lower "Index of Fault", and consequentially a reduction of possible stops of the equipment, with an higher shelf life.

FLEXIBILITY

Adjustment of Dew Point is the key-point, because it allows machine to work according to customer's requirements.

RANGE OF MODELS

Three models with three sizes of hoppers, for a hourly production up to 25 kg/h depending of the material.

EASYNES

Designed to be fitted directly above the Transforming Machine or on the dosing stations to treat also additives or masterbatches.

AUTOMATIC OPTIMIZATION

Adaptive Energy Saving Function (Optional) adjusts automatically drying airflow and process temperature, according to different materials and outputs, and reduces also risk of over-drying.

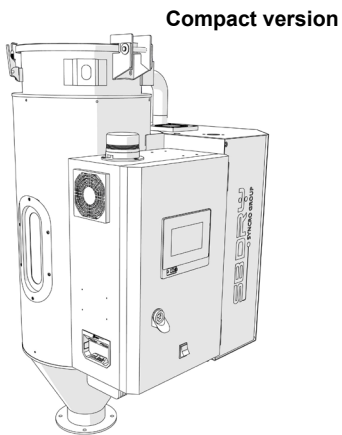
OPTIONS

Built-in Dew Point Supplementary Monitor.
Energy Drying Management System (Adjustment from 100% down to 40%).

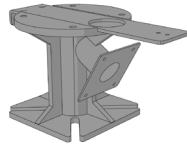
INDUSTRY 4.0 & IoT

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"

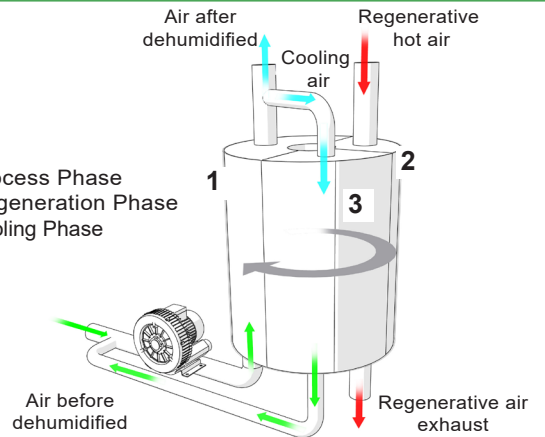
CONFIGURATIONS / OPTIONS



interface (optional)

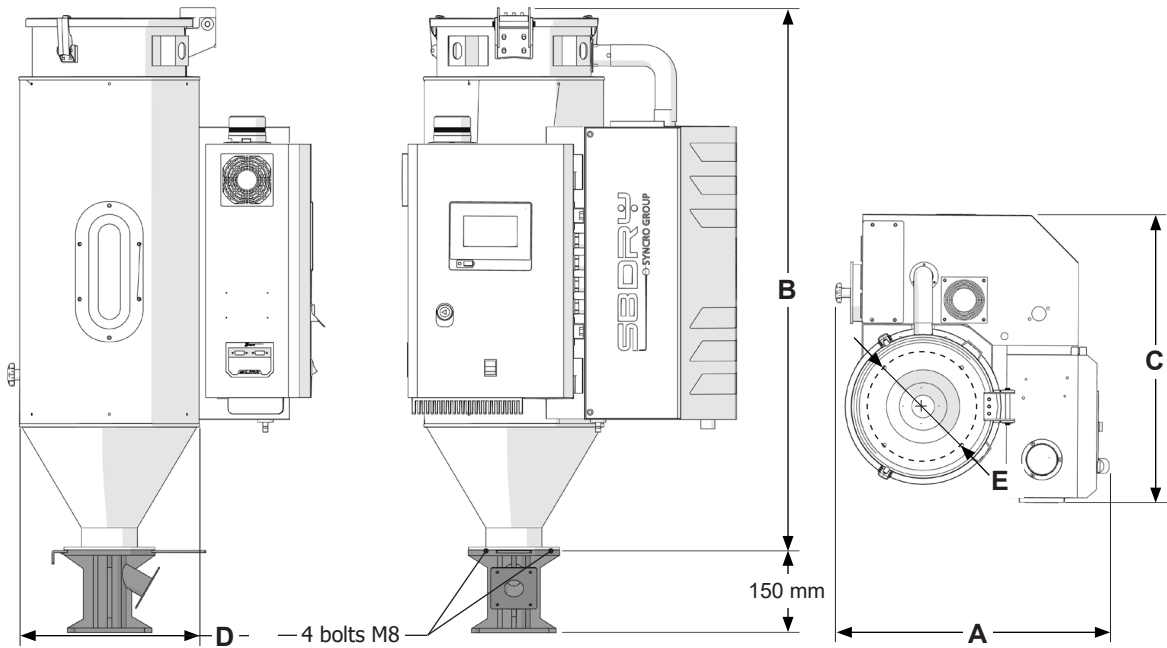


- 1 Process Phase
- 2 Regeneration Phase
- 3 Cooling Phase



TECHNICAL DATA

PICTURE INCLUDES OPTIONAL EQUIPMENT TOO (IN DARKER GREY)



Model	MDD20U-20	MDD40U-20	MDD80U-30
Power Supply	230 V / 1Ph. 50-60 Hz		
Process Blower	0,19 kW		0,4 kW
Process Air	20 mc/h		30 mc/h
Process Heater	0,85 kW		1,2 kW
Regeneration Blower	0,18 kW		
Regeneration Heater	1,2 kW		
Dimension A	565 mm	583 mm	653 mm
Dimension B	685 mm	1003 mm	1290 mm
Dimension C	574 mm	578 mm	672 mm
Dimension D	280 mm		341 mm
Interaxis for receiver E	231 mm		255 mm
Weight	24 kg	32 kg	52 kg