

# HR series

## Desiccant Wheel Dryers

*Efficiency of operation at the lowest cost possible*

### **Benefits:**

- Reduction down to 30% of the electric energy usage.
- Constant dew point
- Dew point controlled operation without dew point probe.
- No cooling water.
- Regeneration power recovery.
- Guaranteed absence of dust and of material contamination.
- Patented circuit design.



By adopting the honeycomb desiccant rotor technology, the HR Series is able to ensure maximum energy efficiency and versatility of application in small and medium productions. Airflow ranging from 50 up to 300 m<sup>3</sup>/h, with constant Dew Point value. Desiccant material (zeolite molecu-

lar sieves) is coated on the internal surface of the honeycomb structure guaranteeing a large absorbing capacity and zero dust emission. Continuous regeneration process and close loop cooling phase for high performance and constant dew point level.

# PIOVAN

*Customers. The core of our innovation*

## Customer oriented solutions:

### Power saving versatility of application.

No expense for the consumption or connection of cooling water or compressed air. The unit simply requires electricity for functioning.

### Intelligent energy management:

- honeycomb rotor solution and complete recovery of the regeneration air.
- Intelligent Energy Supervisor: in accordance with the effective requirements of the processing machine, the IES system optimises and adjusts the energy utilisation
- Intelligent Material Drying: optimises and adjusts the energy utilisation to prevent material thermal degradation or over-drying.

### Flexible and modular configuration:

Hoppers capacity from 100 to 800 dm<sup>3</sup>. The drying hopper can be installed on the processing machine or beside it, or placed on a trolley.

Both single-hopper and PTU multi-hopper versions are available

The HR Series is equipped with a microprocessor system which keeps constant the set temperature.

From the control keypad it is possible to display and set the parameters and the working modes and see warning messages.

Once the process temperature has been selected, the microprocessor automatically sets the safety temperature within the whole range of func-

tioning temperatures, thus ensuring the maximum operational safety.



TECHNICAL DATA		HR 50	HR 100	HR 150	HR 200	HR 300	HR 450
Process airflow *	m <sup>3</sup> /h	50	100	150	200	300	450/500 **
Process blower *	kW	0.4	0.85	1.3	1.6	3	4/4.6 **
Heating power (process)	kW	2.5 /3.5 **	3.5/5 **	5/7 **	5/7 **	9/12 **	12/15 *
Regeneration blower	kW	0.2	0.2	0.4	0.4	0.55**	0.55/0.66 **
Heating power (regeneration)	kW	3.5	3.5	5	5	9	9
Installed power	kW	7.1/8.1 **	8.5/10.5 **	12.2/14.2 **	12.5/14.5 **	22/25**	26/29**
Max process temperature	°C	150/200 **					
Standard electrical connection	V/-/Hz	400/3/50 - 380/3/60 - 460/3/60					
Dimensions (LxWxH)	mm	400 x 815 x 1354				1000 x1050 x 2005	1050 x 1000 x 2005
Weight	kg	150 - 200				450	460

\* 50 Hz \*\* HT version

CONFIGURATION WITH ONE SINGLE DRYING HOPPER		T50	T75	T100	T150	T200	T300	T400	T600	T800	T1000	T1500
HR 50												
HR 100												
HR 150												
HR 200												
HR 300												
HR 450												

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