

Rotor Wheel Dryers

Drywell Series

The desiccant wheel dryer is the new generation of desiccant dehumidifying dryers. It is far more efficient, more compact and requires less maintenance.

Traditional dehumidifying dryers use a large volume of molecular sieves in pellet form composed by at least 30% of clay, which tends to degrade very easily over time.

The desiccant wheel instead is completely different where the pure molecular sieve is applied to a synthetic substrate, rolled into a cylinder forming a honeycomb structure and covered by a steel protection.

Key Features

- ▶ Dryer installed on the drying hopper to save floor space
- ▶ Dryer is removable from hopper to allow easier maintenance
- ▶ Drying temperatures up to 180°C
- ▶ Constant and adjustable dew point of down to -50°C
- ▶ Energy saving up to 40% and more
- ▶ Energy monitoring system
- ▶ Smart Mode: automatic adaption of the drying process to the production needs by monitoring the return air temperature - no waste of energy
- ▶ MPM (Material Protection Management): protects the material from over drying and degradation by monitoring the loading system or return air temperature
- ▶ Material selection table with pre-set or programmable drying parameters
- ▶ SLS (Safety Loading System): prevents that undried material is reaching the production machine by monitoring the drying time
- ▶ Large backlight controller full text display
- ▶ No need of compressed air or cooling water
- ▶ Automatic or manual adjustable process air flow
- ▶ Visual and acoustic alarm
- ▶ 5 Years warranty on the desiccant wheel

Optional

- ▶ Weekly timer
- ▶ Integrated or external portable dew point sensor
- ▶ Bio-material version for drying temperatures below 50°C
- ▶ Automatic throughput control in combination with the HALO
- ▶ Integration in the Vismec Supervision system 4.0 to operate from a PC, tablet or smart phone or other external management systems
- ▶ Clean room version for medical and pharma applications
- ▶ Remote control
- ▶ Filter sensor to prevent filter clogging
- ▶ Various mobile and stationary frames with and without castors
- ▶ Selection of suction boxes with different outlets and diameters
- ▶ Integrated brushless conveying system "feeding kit"



How does it work?

The wheel is rotating driven by a step motor through 3 main sections: drying, regeneration and cooling:

- 1.** In the first section the humid process air coming from the material hopper through a return air filter is dried in two stages and the dry air is returned by the process blower through a heating chamber to the material in the drying hopper
- 2.** Parallel to that a part of the turning wheel is in regeneration with its own dedicated heat chamber and regeneration blower
- 3.** In the cooling section a part of the wheel is cooled down before it returns back into the drying process.



+44 (0) 1827 265 800

info@summitsystems.co.uk

www.summitsystems.co.uk

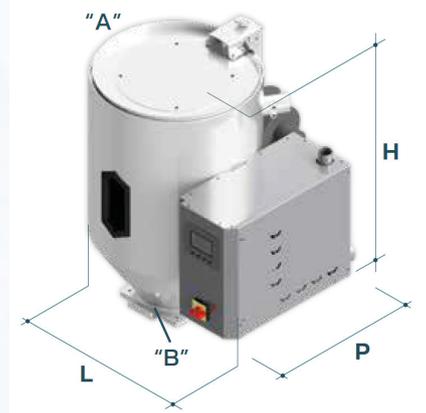
Rotor Wheel Dryers

Drywell Series

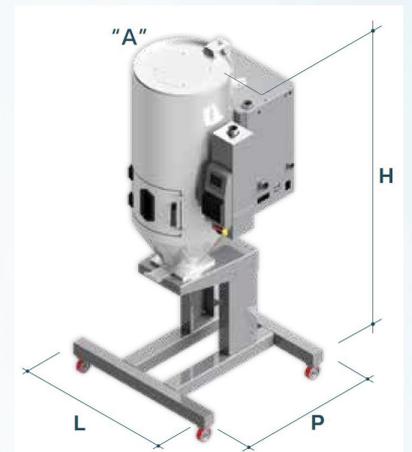
Features	DW14	DW25	DW50	DW80	DW160	DW250
Temperature (°C)	50 - 185	55 - 185	55 - 185	55 - 185	55 - 185	55 - 150
Air Flow (m³/h)	3 - 14	6 - 25	20 - 50	30 - 80	75 - 160	120 - 250
Power Supply	1P + N 240V	1P + N 240V	3P + N 400V			
Heating Power (kW)	0.45	1	2.5	3.5	7	7
Installed Power (kW)	0.95	2.07	4.2	5.5	12.1	12.9
Dew Point (°C)	0 / -40	0 / -40	0 / -45	0 / -45	0 / -50	0 / -50
Energy at 80°C (kW/kg/h)	0.06	0.06	0.06	0.06	0.06	0.06
Energy at 120°C (kW/kg/h)	0.08	0.08	0.08	0.08	0.08	0.08

Model	Hoppers (litres)	Version without Trolley (mm)			Version with Trolley (mm)			Air Hose (mm)	Hopper Base Flange Hose "B" (mm)	Lid Flange Hose "A" (mm)
		L	P	H	L	P	H			
DW14	6	478	531	497	940	852	1209	38	4 x M8 Dia.125	4 x M6 Dia.100
	15	523	603	640	940	852	1352	38	4 x M8 Dia.125	4 x M6 Dia.180
	30	639	603	702	940	852	1414	38	4 x M8 Dia.165	4 x M6 Dia.280
DW25	30	757	677	702	940	852	1414	38	4 x M8 Dia.165	4 x M6 Dia.280
	50	757	677	978	940	852	1490	38	4 x M8 Dia.165	4 x M6 Dia.280
	75	820	719	1007	940	852	1719	38	4 x M8 Dia.210	4 x M6 Dia.280
DW50	75	808	829	1007	940	881	1719	50	4 x M8 Dia.210	4 x M6 Dia.280
	100	807	828	1227	940	880	1939	50	4 x M8 Dia.210	4 x M6 Dia.280
	150	868	919	1337	940	933	2049	50	4 x M8 Dia.210	4 x M6 Dia.280
DW80	100	807	868	1227	940	880	1939	50	4 x M8 Dia.210	4 x M6 Dia.280
	150	865	959	1337	940	933	2085	50	4 x M8 Dia.210	4 x M6 Dia.280
	200	865	959	1646	940	972	2358	50	4 x M8 Dia.210	4 x M6 Dia.280
DW160	300	-	-	-	1069	1280	2510	63.5	4 x M12 Dia.350	4 x M6 Dia.280
	400	-	-	-	1069	1280	2760	63.5	4 x M12 Dia.350	4 x M6 Dia.280
	600	-	-	-	1232	1480	2686	63.5	4 x M12 Dia.350	4 x M6 Dia.280
	800	-	-	-	1232	1480	3046	63.5	4 x M12 Dia.350	4 x M6 Dia.280
DW250	300	-	-	-	1069	1280	2510	63.5	4 x M12 Dia.350	4 x M6 Dia.280
	400	-	-	-	1069	1280	2760	63.5	4 x M12 Dia.350	4 x M6 Dia.280
	600	-	-	-	1232	1480	2686	63.5	4 x M12 Dia.350	4 x M6 Dia.280
	800	-	-	-	1232	1480	3046	63.5	4 x M12 Dia.350	4 x M6 Dia.280

Without Trolley



With Trolley



GET IN TOUCH TODAY

We solve the most technically advanced plastics automation problems across all industries.



+44 (0) 1827 265 800

info@summitsystems.co.uk

www.summitsystems.co.uk

April 2023