

ADP SERIES

Desiccant Wheel Dryers

Technical Specifications

Since 1957, AEC has been the leader in drying equipment for the plastics processing industry. The ADP Series Desiccant Wheel Dryer leverages the AEC legacy and expertise to provide a system that is suited for most drying applications including extrusion, injection molding, and blow molding.

Desiccant wheel dryers are the new generation of desiccant dehumidifying dryers. They are far more efficient, more compact, and require less maintenance. Traditional dehumidifying dryers use a large volume of molecular sieves in pellet form composed of 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.



Features

Standard Features

- Dryer installed separate from the drying hopper
- Drying temperatures up to 356°F
- Constant and adjustable dew point down to -58°F
- Energy monitoring system saving up to 40% or more
- No need for compressed air
- No need for cooling water
- Adjustable process air flow
- Material selection table with pre-set or programmable drying parameters
- Visual and audible alarm
- 7" vertical touchscreen display with viewing angle, large capacitive screen with immediate response, clear and bright; intuitive user-oriented interface
- 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
- SLS (Safety Loading System): prevents that undried material is reaching the production machine by monitoring the drying time
- 5 Year warranty on the desiccant wheel

Optional Features

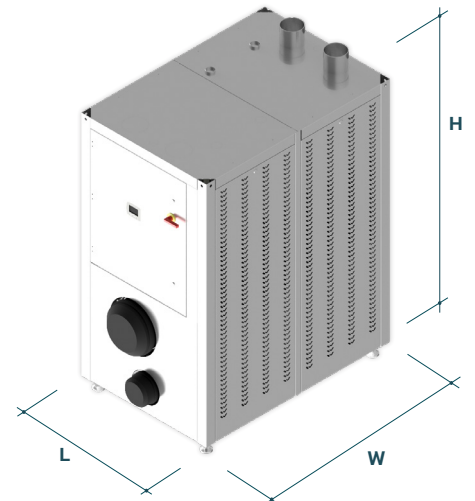
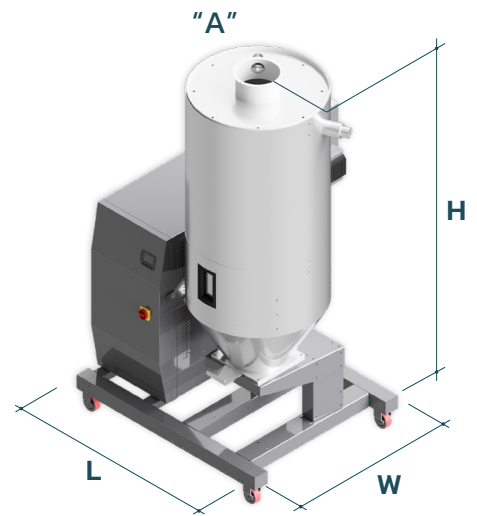
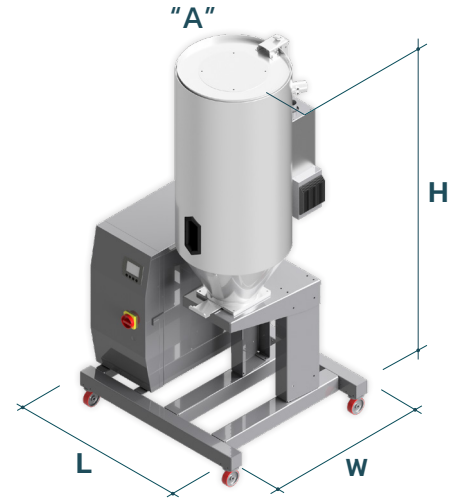
- Weekly timer
- Integrated or external portable dew point sensor
- Bio-material version for drying temperatures below 122°F
- Automatic throughput control in combination with HALO
- Clean room version for medical and pharma applications
- Remote control
- Filter sensor to prevent filter clogging
- Various mobile and stationary frames with and without castors
- Selection of suction boxes with different outlets and diameters
- Integrated brushless conveying system "feeding kit"

Dimensions

Dryer & Drying Hopper Combinations

Model	Hoppers Ft ³	Dimensions in Inches (mm)			Air Hose in.	Lid Flange Holes "A" in.
		L	W	H		
ADP 50	H75 - 2.6	37	33.5	67.7	2	4 x M6 D 11
ADP 50	H100 - 3.5	37	33.5	77.8	2	4 x M6 D 11
ADP 50	H150 - 5.3	37	33.5	80.7	2	4 x M6 D 11
ADP 80	H100 - 3.5	37	33.5	77.8	2	4 x M6 D 11
ADP 80	H150 - 5.3	37	33.5	80.7	2	4 x M6 D 11
ADP 80	H200 - 7.1	37	33.5	92.3	2	4 x M6 D 11
ADP 160	H200 - 7.1	56.7	45.5	90.5	2.5	4 x M6 D 11
ADP 160	H300 - 10.6	56.7	45.5	94.4	2.5	4 x M6 D 11
ADP 160	H400 - 14.1	56.7	45.5	103.8	2.5	4 x M6 D 11
ADP 160	H600 - 21.2	66.1	45.7	105.7	2.5	4 x M6 D 11
ADP 250	H300 - 10.6	56.7	45.5	94.4	2.5	4 x M6 D 11
ADP 250	H400 - 14.1	56.7	45.5	103.8	2.5	4 x M6 D 11
ADP 250	H600 - 21.2	66.1	45.7	105.7	2.5	4 x M6 D 11
ADP 250	H800 - 28.3	66.1	46.5	119.9	2.5	4 x M6 D 11
ADP 400	H600 - 21.2	72	49.2	106.4	4.5	4 x M6 D 11
ADP 400	H800 - 28.3	72	49.2	120.7	4.5	4 x M6 D 11
ADP 400	H1200 - 42.2	72	49.2	144.1	4.5	4 x M6 D 11

Model	L in.	W in.	H in.	Air Hose in.
ADP 630	25.6	62	62	4.5
ADP 900	43.1	78.9	63.3	6.3
ADP 1200	43.1	78.9	63.3	6.3
ADP 1700	45.9	81.3	88.4	8.7



Technical Table ADP Series

Model	Temperature °F	Air Flow Ft ³ / min	Power Supply	Amps	Heating Power kW	Installed Power Hp	Dew Point °F	Energy at 176°F kWh/kg	Energy at 248°F kWh/kg
ADP 50	122 - 365	12 - 29	460V 3 Phase 60 Hz	10.4	2.5	5.71	0 / -49	0.06	0.08
ADP 80	131 - 365	18 - 47		11.3	3.5	7.48	0 / -49	0.06	0.08
ADP 160	131 - 365	44 - 94		20.5	7	16.45	0 / -58	0.06	0.08
ADP 250	131 - 302	71 - 147		25	7	17.5	0 / -58	0.06	0.08
ADP 250	131 - 365	71 - 147		35	14	27.1	0 / -58	0.06	0.08
ADP 400	131 - 302	106 - 235		46.2	14	33.9	0 / -58	0.06	0.08
ADP 400	131 - 365	106 - 235		56.9	21	43.4	0 / -58	0.06	0.08
ADP 630	131 - 302	177 - 371		69.7	21	52.1	0 / -58	0.06	0.08
ADP 630	131 - 365	177 - 371		80.4	35	71.1	0 / -58	0.06	0.08
ADP 900	131 - 302	200 - 530		113	35	79.8	0 / -58	0.06	0.08
ADP 900	131 - 365	200 - 530		123.6	42	89.3	0 / -58	0.06	0.08
ADP 1200	131 - 302	265 - 706		153.6	42	105.9	0 / -58	0.06	0.08
ADP 1200	131 - 365	265 - 706		175	56	124.9	0 / -58	0.06	0.08
ADP 1700	131 - 302	530 - 1000		214.7	56	144.9	0 / -58	0.06	0.08
ADP 1700	131 - 365	530 - 1000		246.6	77	172.9	0 / -58	0.06	0.08