

ADC Series

Desiccant Wheel Dryer

Technical Specifications

Since 1957, AEC has been the leader in drying equipment for the plastics processing industry. The ADC 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.

The ADC Series Dryer combines the efficiency of a wheel dryer with an integrated pneumatic conveying system, a receiver for the drying hopper, a receiver for the injection molding machine and all related accessories. The ADC Series is particularly suitable as an independent flexible dryer to be positioned next to the processing machine.



Features

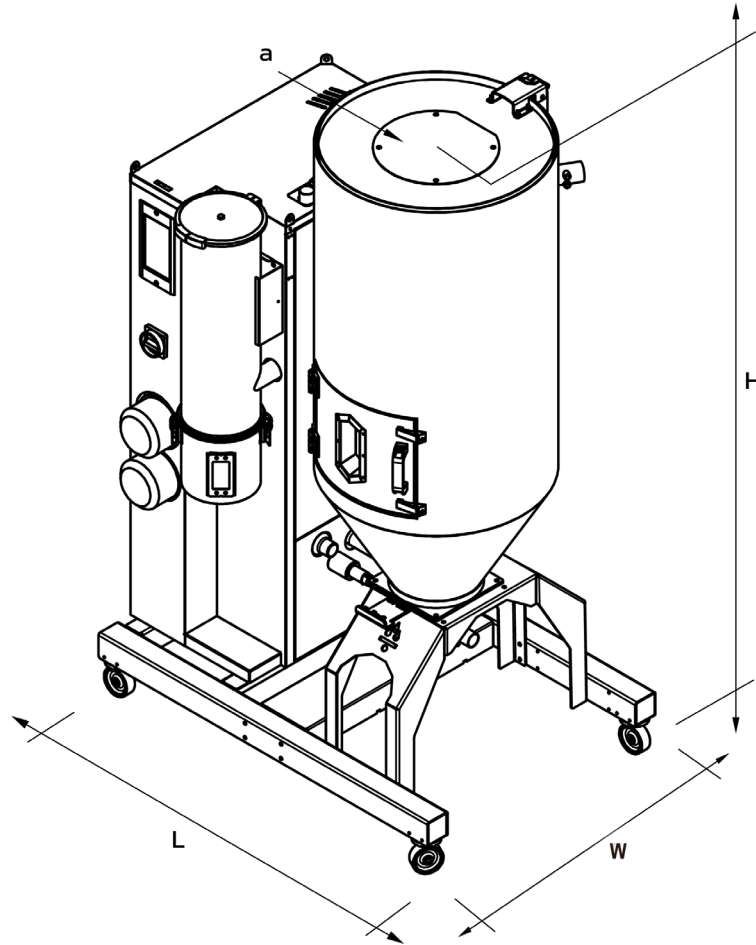
Standard Features

- Drying temperatures up to 365°F/185°C
- Constant and adjustable dew points down to -58°F/-50°C
- Energy usage shown on HMI
- No need for compressed air
- No need for cooling water
- Automatic or manual adjustable process air flow
- High resolution 7" vertical touchscreen and proven, proprietary PLC technology
- Material selection table with pre-set or programmable drying parameters
- Visual and audible alarm
- Weekly timer
- Smart Mode: automatic adaption of the drying process to the production needs by monitoring the return air temperature - no waste of energy or material overdrying
- 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 undried material from reaching the production machine by monitoring the drying time
- 5 year warranty on the desiccant wheel, 1 year warranty on parts
- Pneumatic conveying with double stage brushless blower and cyclone/fabric filter
- Air heat exchanger for the conveying of hot materials in closed circuit
- ASPUL suction valve which also integrates the line cleaning valve
- Compact frame with side access for the hopper unloading
- 460V/3 ph/60 hz

Optional Features

- Internal dew point sensor
- Automatic throughput control with HALO
- Pre-cooler for drying temperature below 150°F/66°C
- Remote control
- Filter sensor to detect filter clogging
- Selection of take off boxes with different diameters
- Integrated brushless conveying system "feeding kit"
- Alternative voltages (230V, 575V)
- Modbus RTU communications

Specifications



Model	Hoppers Ft ³	Dimensions in Inches (mm)			Door	Filter	"a" In. (mm)
		L	W	H			
ADC-50	AH75 - 2.6	45 (1140)	32 (790)	63 (1603)	yes	cyclone - fabric	11" (280)
ADC-50	AH100 - 3.5	45 (1140)	32 (790)	72 (1823)			
ADC-50	AH150 - 5.3	45 (1140)	32 (790)	76 (1928)			
ADC-80	AH100 - 3.5	45 (1140)	32 (790)	72 (1823)			
ADC-80	AH150 - 5.3	45 (1140)	32 (790)	76 (1928)			
ADC-80	AH200 - 7.1	45 (1140)	32 (790)	88 (2242)			
ADC-160	AH300 - 10.6	56.7 (1440)	48 (1233)	94 (2396)			
ADC-160	AH400 - 14.1	56.7 (1440)	48 (1233)	104.2 (2648)			
ADC-160	AH600 - 21.2	66 (1680)	49 (1247)	105.7 (2684)			
ADC-160	AH800 - 28.3	66 (1680)	49 (1247)	120 (3046)			
ADC-250	AH300 - 10.6	56.7 (1440)	48 (1233)	94 (2396)			
ADC-250	AH400 - 14.1	56.7 (1440)	48 (1233)	104.2 (2648)			
ADC-250	AH600 - 21.2	66 (1680)	49 (1247)	105.7 (2684)			
ADC-250	AH800 - 28.3	66 (1680)	49 (1247)	120 (3046)			

Specifications

ADC Model	UNIT	ADC-50	ADC-80	ADC-160	ADC-250
Process air flow • Cubic Feet per Minute CFM/Cubic Meters per Hour CMH	Min [ft3/min]/ CMH	12/20	18/30	44/75	71/121
	Max [ft3/min]	29.5/50	47/80	94/160	147/250
Regeneration air flow • Cubic Feet per Minute CFM/Cubic Meters per Hour CMH	Min [ft3/min]	3/5	5.9/10	5.9/10	5.9/10
	Max [ft3/min]	8.9/15	35.5/60	35.5/60	53/90
MIN Processing Temperature	[°F]/C	122/50	131/55	131/55	131/55
MAX Processing Temperature Standard (MT)	[°F]/C	365/185	365/185	365/185	302/150
MAX Processing Temperature HT = high temp	[°F]/C				365/185
DEWPOINT	[°F]/C	-49/-45	-49/-45	-58/-50	-58/-50
Drying heater - standard temperature power	[kW]	2.5	3.5	7	7
Drying heater - high temperature power	[kW]	2.5	3.5	7	14
Regeneration heater power	[kW]	1.5	1.5	3.5	3.5
Conveying blower power	[kW]	1.1	1.1	2.2	2.2
Total combined power - standard temperature	[kW]	5.1	6.1	12.7	12.7
Total combined power - high temperature	[kW]	5.1	6.1	12.7	19.7
Power supply voltage	(V)	3 phase 460V 60Hz	3 phase 460V 60Hz	3 phase 460V 60Hz	3 phase 460V 60Hz
Full load amps Standard Temp	(A)	15	16	22	25.6
Full load amps High Temp	(A)	15	16	22	34.8
Inlet / Outlet hose diameter	[in], cm	2/5.1	2/5.1	2.5/6.4	2.5/6.4
Regeneration hose diameter	[in], cm	1.5/3.8	1.5/3.8	2/5.1	2/5.1
Conveying line size	[in], cm	1.5/3.8	1.5/3.8	2/5.1	2/5.1
Weight (excludes hopper & receivers)	[lbs], kg	308/140	330/150	tbd	tbd
Conveying parameters	FT	6' H, 8' V	6' H, 8' V	tbd	tbd