ADC SERIES

Desiccant Wheel Dryer

Technical Specifications

Sterling brings a century of experience to provide premium value and quality. The ADC Series Desiccant Bed Dryer leverages the Sterling 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

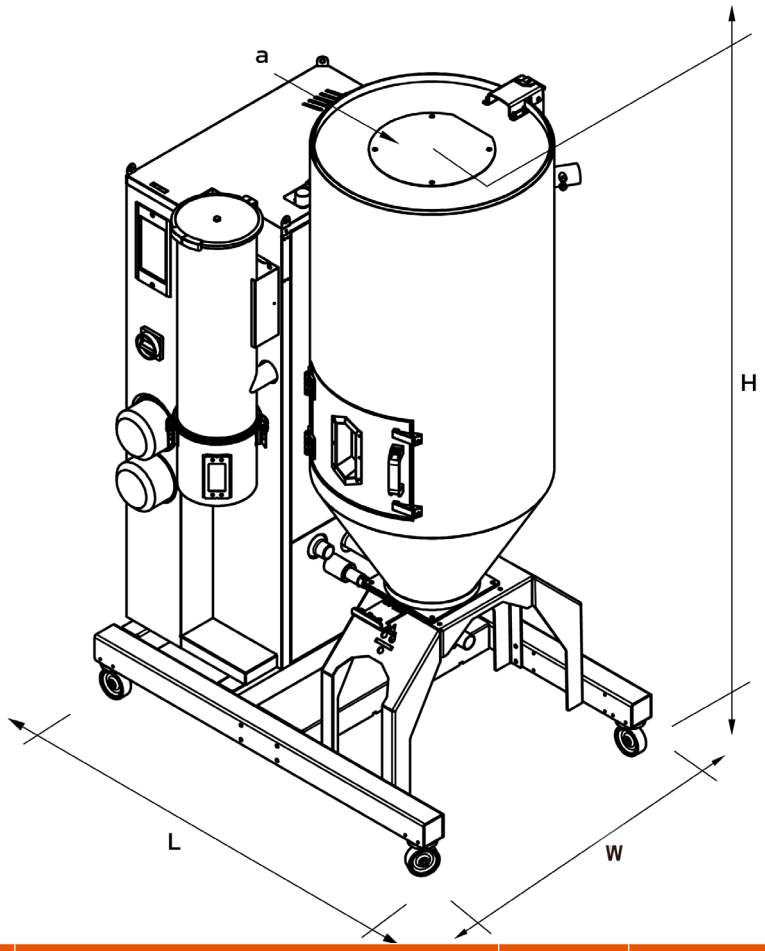
Standard Features

- Drying temperatures up to 356°F/180°C
- Constant and adjustable dew point of down to -58°F/-50°C
- Energy saving up to 40% and more
- Energy monitoring system.
- No need of compressed air
  No need of cooling water
- Automatic or manual adjustable process air flow
- 7" vertical touchscreen display with viewing angle, large capacitive screen with immediate response, clear and bright; intuitive user-oriented interface
- Material selection table with pre-set or programmable drying parameters
- Visual and acoustic alarm
- 5 Years warranty on the desiccant wheel
- Smart Mode: automatic adaption of the drying process to the production needs by monitoring the return air temperature - nowaste 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
- Pneumatic conveying with double stage brushless blower and cyclone/fabric filter
- Air heat exchanger for the conveying of hot materials in closed circuit and automatic circuit valves
- ASPUL suction valve which also integrates the line cleaning valve
- Compact frame with side access for the hopper unloading
- Receivers 2 - 4 liters for ADC 25 d40 e d38 (D1,5")
- Receivers 6 liters for ADC 50-80 d40 e d38 (D1,5")
- Receivers d50 (D2") for ADC 160-250

Optional Features

- Integrated or external portable dew point sensor
- Automatic throughput control in combination with our HALO
- Remote display code
- Integration to supervisory system from PC, tablet, or smart phone

Specfications



Model	Hoppers Ft³	Dimensions in Inches (mm)			Door	Filter	"a" In. (mm)
		L	W	H			
ADC-25	AH30 - 1.05	45 (1140)	32 (790)	52 (1298)	no	fabric	11" (280)
ADC-25	AH50 - 1.7	45 (1140)	32 (790)	62 (1573)			
ADC-50	AH75 - 2.6	45 (1140)	32 (790)	63 (1603)		cyclone - fabric	
ADC-50	AH100 - 3.5	45 (1140)	32 (790)	72 (1823)	yes		
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)			

All units listed are 460/3/60

Specfications

ADC Model	UNIT	ADC-25	ADC-50	ADC-80	ADC-160	ADC-250
Process air flow • Cubic Feet per Minute CFM/Cubic Meters per Hour CMH	Min [ft3/min]/ CFM	7.5/12.5	12/20	18/30	44/75	71/121
	Max [ft3/min]	14.8/24.7	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]	1.8/3	3/5	5.9/10	5.9/10	5.9/10
	Max [ft3/min]	5.9/9.8	8.9/15	35.5/60	35.5/60	53/90
MIN Processing Temperature	[°F]/C	122/50	122/50	131/55	131/55	131/55
MAX Processing Temperature Standard (MT)	[°F]/C	365/185	365/185	365/185	365/185	302/150
MAX Processing Temperature HT = high temp	[°F]/C					365/185
DEWPOINT	[°F]/C	-40/-40	-58/-50	-58/-50	-58/-50	-58/-50
Drying heater - standard temperature power	[kW]	1.0	2.5	3.5	7	7
Drying heater - high temperature power	[kW]	1.0	2.5	3.5	7	14
Regeneration heater power	[kW]	1.0	1.5	1.5	3.5	3.5
Conveying blower power	[kW]	1.1	1.1	1.1	2.2	2.2
Total combined power - standard temperature	[kW]	3.2	5.1	6.1	12.7	12.7
Total combined power - high temperature	[kW]	3.2	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	3 phase 460V 60Hz
Full load amps Standard Temp	(A)	5.0	15	16	22	25.6
Full load amps High Temp	(A)	5.0	15	16	22	34.8
Inlet / Outlet hose diameter	[in], cm	1.5/3.8	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	1.5/3.8	2/5.1	2/5.1
Conveying line size	[in], cm	1.5	1.5/3.8	1.5/3.8	2/5.1	2/5.1
Weight (excludes hopper & receivers)	[lbs], kg	275/125	308/140	330/150	tbd	tbd
Conveying parameters	FT	6' H, 8' V	6' H, 8' V	6' H, 8' V	tbd	tbd

Riser option required when using SSR/SSL receivers