

SDA SERIES



Medium Capacity Dehumidifying Dryer

90-225 CFM MEDIUM CAPACITY DEHUMIDIFYING DRYER

The SDA Series medium capacity desiccant dryers create dehumidified process air. This dry air stream moves through the hygroscopic materials and efficiently removes moisture. The saturated air passes again through the desiccant, releasing moisture to the desiccant. The closed-loop system dries and reheats the airstream. The dryers are available in 90, 100, 150 and 225 CFM (150, 170, 250 and 380 m³/hr) models.

SDA Series medium capacity dryers are available with numerous options. Sterling also provides a complete line of drying hoppers with capacities from 0.40 to 425 cu. ft. (11 to 12,035 liter).



Features

- Two blower/twin bed design
- Cartridge-type process return and regeneration air filters
- Compressed air-operated cast aluminum valves
- NEMA 12 control enclosure
- Low compressed air supply alarm
- Type 4A desiccant
- Casters
- Two 12-foot (3.66 m) lengths of flexible high temperature hose
- LED readout of set point and process temperatures
- Off-the-shelf PID temperature controller
- Graphic display with indicator lights
- Mercury process heater contactor(s)
- Branch fusing
- 460/3/60 supply voltage
- Three-year temperature controller warranty

Options

- 208 or 230/3/60; 380, 400 or 415/3/50, 575/3/60 (de-rate dryer airflow cfm by 5/6th for 50 hz voltages)
- Dewpoint meter with dirty filter indicator
- Dewpoint bed switching
- Non-fused disconnect switch with door-mounted handle
- NEMA 12 window kit
- 7 day timer
- External communication: SPI protocol dual ports, or NX protocols types RS-232C/422/485 single port
- 13X molecular sieve
- 12 ft. insulated process hose
- Audible/visual alarm for high temperature and low compressed air
- Heater burnout indicator (consult factory for lead time)
- High temperature process air return filter (consult factory)
- High temperature process air delivery filter with canister (consult factory)

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SPECIFICATIONS

	SDA150	SDA170	SDA250	SDA380
Process air flow, cfm (m ³ /hr)	90 (150)	100 (170)	150 (250)	225 (380)
Hose conn. dia., in. (mm)	2.5 (63.5)	2 (50.8)	2.5 (63.5)	4 (101.6)
Temp. range, °F (°C) ¹	140-400 (60-204)	185-400 (85-204) ²	160-400 (71-204)	160-400 (71-204)
FLA (@460/3/60)	20	23	34	45
Process blower, hp (kW)	1 (.75)	4 (3)	4 (3)	5 (3.75)
Regen. blower, hp (kW)	0.25 (0.19)	0.25 (0.19)	0.33 (0.25)	0.33 (0.25)
Length, in. (cm)	27 (69)	27 (69)	37 (79)	37 (79)
Width, in. (cm)	27 (69)	27 (69)	37 (79)	37 (79)
Height, in. (cm)	68 (173)	68 (173)	79 (200)	87 (220)
Shipping weight, lbs. (kg)	440 (200)	475 (216)	750 (341)	850 (386)

¹ After-cooler required above 250°F (121°C)

² WD100 operation below 185°F (85°C) requires a pre-cooler

AFTER-COOLERS AND PRE-COOLERS

After-coolers are used in high-temperature drying applications (process temperatures above 250°F [121°C]) as well as with materials that emit volatiles. After-coolers are designed to reduce return air from 250°F to 150°F (121°C to 66°C); incoming water rises from 85°F to 95°F (29°C to 35°C).

AFT30/100 through AFT225 after-cooler models include aluminum housing, copper tube heat exchanger, and flexible hose and clamps.

Pre-coolers should be used in low-temperature drying applications to hold consistent process temperatures below 170°F (77°C).

	SDA150	SDA170	SDA250	SDA380
After-cooler model	AFT 30/100	AFT 30/100	AFT 150	AFT 225
Water flow, gpm (lpm)	3 (11.4)	3 (11.4)	4 (15.1)	6 (22.7)
Fitting size, in. (mm)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)	0.5 (12.7)
Diameter, in. (cm)	8 (20.3)	8 (20.3)	12 (30.5)	12 (30.5)
Height, in. (cm)	36 (91.4)	36 (91.4)	36 (91.4)	49 (124.5)
Shipping weight, lbs. (kg)	35 (16)	35 (16)	35 (16)	60 (28)

