

WSA HOT AIR DRYERS AND PRE-HEATERS



STANDARD FEATURES

- 460/3/60 supply voltage
- 85-4000 CFM size range
- Control panel features through-the-door main disconnect and pilot lights
- Process air filter with cyclone and cartridge filtration
- Temperature control is solid state electronic type
- Process air heaters are mounted externally and are drawer-type with slide in and out
- Low power consumption
- The process air heater and other components are accessible from unit exterior
- Direct drive fans – no belts, no sheaves
- Simple maintenance and high reliability
- Compact design

OPTIONS

- Gas-fired process heater
- Remote heater
- PLC control options
- Other supply voltages available

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WSA
ACS GROUP • WALTON/STOUT

ACS Group • Walton/Stout
2900 S. 160th Street
New Berlin, WI 53151

Phone: 262-641-8600
Fax: 262-641-8653
Email: waltonstout@waltonstout.com

www.waltonstout.com

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Suggested Residence and Temperature Selection Guide for Non-Hygroscopic Plastic Materials

Material	Residence Time (Hours)	Average Drying Temperature °F (°C)
Polyethylene H.D.	1-2	200-220° (95-105°)
Polyethylene L.D.	1-2	150-160° (65-70°)
Polypropylene	1-2	160-170° (70-75°)
Styrene	1-2	170° (75°)
Vinyl	1-2	150° (65°)
P.V.C	1-2	150-160° (65-70°)

Consult factory for any materials not shown.

NOTE: for non-critical parts with surface finishes which are not critical, use short residence time per the chart. Where the part is critical in extrusion or molding processes, use the longer residence times. This allows you to get the material very dry, eliminating more moisture for an excellent finished product.

This chart represents suggested material residence times and temperatures based upon ACS Group • Walton/Stout test and experience for sizing ACS Group • Walton/Stout drying equipment. No other use is intended or implied. For further information on your specific material, contact your material supplier.

For proper dryer application, review the residence time guide at left.

Select Hopper

Determine the pounds per hour your process requires and multiply the residence time x lbs. per hour to determine the hopper capacity. If the hopper size is marginal, always select the larger size.

Select Dryer

The proper pre-heater or hot air dryer is selected by matching the CFM of the unit to the desired through put of the process. Always use a .5 CFM per pound of material per hours.

Application Demonstration

If your process requires 1000 lbs. per hour to mold or extrude styrene from the residence guide, you would select approximately 2 hours residence in the dryer hopper. 2 hours x 1000 lbs./hr. = 2000 lb. hopper capacity. Select this hopper from the SD chart. Utilizing .5 CFM per pound of material per hour, you would require a dryer with 500 CFM. The selected system would be WSA600 – SD 60.

SD Hopper Insulated ^A				
Model	Capacity lbs (kgs)	Nominal Dimensions in (mm)		Weight lbs (kgs)
		Diameter	Height	
SD 6	210 (95)	22 (559)	56 (1,422)	110 (50)
SD 9	315 (143)	22 (559)	68 (1,727)	160 (72)
SD 12	420 (191)	28 (711)	68 (1,727)	210 (95)
SD 17	595 (270)	28 (711)	88 (2,235)	260 (118)
SD 23	805 (365)	28 (711)	110 (2,794)	300 (136)
SD 30	1,050 (476)	34 (863)	99 (2,514)	450 (204)
SD 45	1,575 (715)	34 (863)	137 (3,480)	650 (295)
SD 60	2,100 (953)	44 (1,117)	120 (3,048)	850 (386)
SD 75	2,625 (1,190)	44 (1,117)	141 (3,582)	980 (445)
SD 90	3,150 (1,429)	54 (1,311)	126 (3,200)	1,300 (590)
SD 135	4,725 (2,143)	54 (1,311)	163 (4,140)	1,750 (794)
SD 180	6,300 (2,858)	68 (1,727)	156 (3,962)	2,050 (930)
SD 240	8,400 (3,810)	68 (1,727)	185 (4,699)	2,350 (1,065)
SD 300	10,500 (4,762)	78 (1,981)	186 (4,724)	2,700 (1,225)
SD 425	14,875 (6,747)	78 (1,981)	225 (5,715)	3,100 (1,406)

^A For detailed dimensional data see bulletin number WMH1-140 and WMH1-175

WSA Model	Airflow CFM	Nominal Dimensions in (mm)			Weight lbs (kgs)
		Width	Length	Height	
WSA 85	85	32 (812)	33 (838)	56 (1422)	350 (158)
WSA 125	125	34 (3175)	42 (1066)	68 (1727)	450 (204)
WSA 185	185	34 (3175)	42 (1066)	68 (1727)	575 (261)
WSA 255	255	34 (3175)	42 (1066)	68 (1727)	610 (277)
WSA 400	400	39 (990)	42 (1066)	68 (1727)	780 (354)
WSA 600	600	44 (1117)	42 (1066)	72 (1828)	790 (358)
WSA 750	750	49 (1244)	54 (1371)	72 (1828)	800 (363)
WSA 1000	1000	58 (1473)	54 (1371)	72 (1828)	1000 (454)
WSA 1200	1200	61 (1549)	54 (1371)	72 (1828)	1250 (567)
WSA 1500	1500	61 (1549)	54 (1371)	72 (1828)	1400 (635)
WSA 2000	2000	61 (1549)	59 (1498)	80 (2032)	1525 (692)
WSA 2500	2500	72 (1828)	59 (1498)	80 (2032)	1750 (794)
WSA 3000	3000	78 (1981)	68 (1727)	80 (2032)	2000 (907)

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