

# Consolidated Resin Drying Hopper Systems

Conair ResinWorks™ systems offer a new level of manufacturing efficiency. By consolidating resin handling and pre-conditioning into a central area, material changes can take place quickly, cleanly, and safely away from the processing machine. Simplified resin dehumidification is the heart of the ResinWorks system, where multiple hoppers are supplied on a common, pre-plumbed, pre-wired sled, and connected to a dehumidifying dryer to provide superior drying and maximum productivity. Individual sleds can be connected to form an efficient, centralized resin drying area supplying large numbers of processing machines with a wide array of dried resins.



**ResinWorks™ System**  
W400 Dryer shown with  
RWH33-21, RWH24-12  
and RWH 16-6 hoppers

## Rugged Hopper Stands Incorporate Heat/Air Control

ResinWorks™ central drying systems are designed to solve real-world productivity challenges. Energy and time saving features create an efficient central drying system. Starting with simplified shipping and installation, ResinWorks continually improves your bottom line.

Integral supply and return manifolds carry dehumidified air from your central dryer. Individual hoppers are easily isolated for clean out by dual air valves opened and closed with a single hand lever. This 3-position lever located beside the temperature controller provides fool-proof On/Off operation for both heat and airflow. Three phase disconnects at each sled conveniently distribute power to all hoppers.

Stainless steel drying hoppers provide exceptional air distribution and material mass flow. Removable air spreader cone and extra-large access door minimize clean out time. Use the hopper's extra-long sight glass with optional sensor bracket and sensor kits to easily adjust and indicate material level.

### ► Quick-clean hoppers

Located within easy operator reach, each hopper includes the industry's largest clean-out doors, a removable cone, and smooth all-stainless steel construction.

### ► Superior mass flow

Design assures that all material is evenly exposed to dry air and heat. Funnel flow and material hang-up points are eliminated for superior drying.

### ► 100% insulated

From the base of the cone, to the oversized door, to the full body wrap, each hopper is designed to preserve heat and save energy.

### ► Long life tube heaters

Highly accurate, compact tube heaters are located at the inlet of each hopper for superior temperature control and minimal energy loss.

### ► Super safe hopper control

Air is turned on and off with the exclusive ResinWorks control lever. Safe. Simple. Foolproof.

### ► Automatic airflow balancing

Earlier designs meant having to independently adjust each hopper for proper airflow now, with this new design, there will never be any adjustment needed.

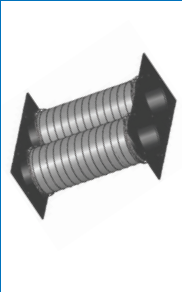


## Options



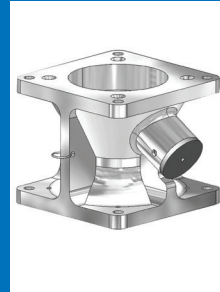
### Adjustable Purge Valve

This valve controls material flow from material source to destination. This easy to clean and install valve has a discharge that rotates 360 degrees to allow complete purge of material lines.



### Multiple Sled Connection Kit

This option allows the connection between multiple sleds for the integral supply, return and conveying manifolds. For each junction between sleds, a kit is required.



**Hopper Discharge Drain Port**  
Facilitates hopper draining and clean out.



### Slide Gate

Use the Slide Gate to prevent material leakage when no purge valve or distribution box is specified on the hopper.

### Temperature Setback RTD

Automatically reduces the drying temperature to a lower standby mode when the machine throughput is reduced or stopped.

### Communications

Options include: Modbus and DeviceNet.

## Specifications

Models	RWH 10-1	RWH 10-1.5	RWH 14-2	RWH 14-3	RWH 14-4	RWH 18-6	RWH 24-12	RWH 24-18	RWH 33-21	RWH 33-28	RWH 39-35 <sup>***</sup>	RWH 39-42 <sup>***</sup>	RWH 44-58 <sup>***</sup>	
Figure Number	Figure 1										Figure 2			
Performance characteristics														
Volume ft³ {liter}	1.0 {28}	1.5 {42}	2.0 {56}	3.0 {85}	4.0 {113}	6.0 {170}	12.0 {340}	18.0 {509}	21.0 {595}	28.0 {793}	35.0 {991}	42.0 {1189}	58.0 {1643}	
Capacity @ 35 lb/ft³ lb {kg}	35.0 {16}	52.5 {24}	70.0 {31}	105.0 {48}	140 {63}	210.0 {95}	420.0 {191}	630.0 {286}	735.0 {333}	980.0 {445}	1225.0 {556}	1470.0 {667}	2030.0 {921}	
Capacity @ 52 lb/ft³ lb {kg}	52.0 {23}	78.0 {35}	104.0 {47}	156.0 {71}	208.0 {94}	312.0 {142}	624.0 {283}	936.0 {425}	1092.0 {495}	1456.0 {660}	1820.0 {826}	2184.0 {991}	3016.0 {1368}	
Air inlet/outlet OD {mm}	2.5 {64}								5.0 {127}					
Inside diameter OD {mm}	10.0 {254}		14.0 {356}			18.0 {457}	24.0 {610}		33.0 {838}		39.0 {991}		44.0 {991}	
Material inlet	IT06					IT07								
Material outlet ID {mm}	2.38 {60}										3.0 {76}			
Material discharge (bottom)	IB02										IB03			
Voltages full load amps <sup>s</sup>														
Heater kW	4						10				30			
208 V/3 phase/60Hz	11.4						21.2*				N/A			
230 V/3 phase/60Hz	10.3						25.3				N/A			
400 V/3 phase/50Hz	5.9						14.5				43.7			
460 V/3 phase/60Hz	5.1						12.7				38.0			
575 V/3 phase/60Hz	4.1						10.2				30.4			
Standard sled dimensions inches {cm}														
A - Overall height†	65.5 {166}	78.5 {199}	65.5 {166}	78.7 {200}	86.5 {220}			110.8 {281}	90.4 {230}	115.3 {293}	128.7 {327}	138.9 {353}	144.5 {367}	
B - Height below mounting flange	32.6 {83}		29.3 {74}			25.6 {65}	20.6 {52}		24.0 {61}		27.0 {69}		22.0 {56}	
C - Panel height	41.3 {105}										41.8 {106}			
D - Sled width	25.0 {64}						36.0 {91}		45.0 {114}		69.0 {175}		74.0 {188}	
E - Depth	51.3 {130}										59.0 {150}		64.0 {162}	
Approximate weight lb {kg}														
Shipping weight	300 {136}	310 {141}	335 {152}	350 {159}	365 {166}	450 {204}	670 {304}	700 {318}	1000 {454}	1250 {567}	1700 {771}	1750 {794}	2000 {907}	

### Specification Notes

\* Uses 230 V heater derated to 7.5 kW.

† For multi-hopper sled, be sure to use the largest hopper as the reference for the overall height.

‡ Conair 39 and 44 inch hoppers are mounted on individual sleds.

§ FLA ratings are per hopper. FLA ratings for a ResinWorks sled is the sum of the sled's individual hopper FLA ratings.

\*\* The optional gaylord-loading stand (available only on RWH39 and RWH44 sizes) increases overall height by 34 inches {86cm} on RWH39 models and 39 inches {99 cm} on RWH44, and weight by 100 lbs {45 kg}. It provides 60.5 inches {154} clearance below the flange.

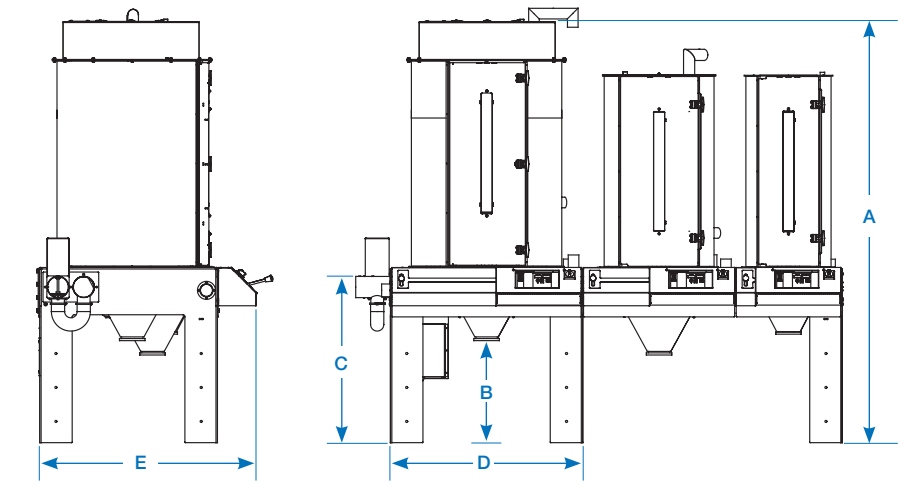
Specifications can change without notice. Contact a Conair representative for the most current information.



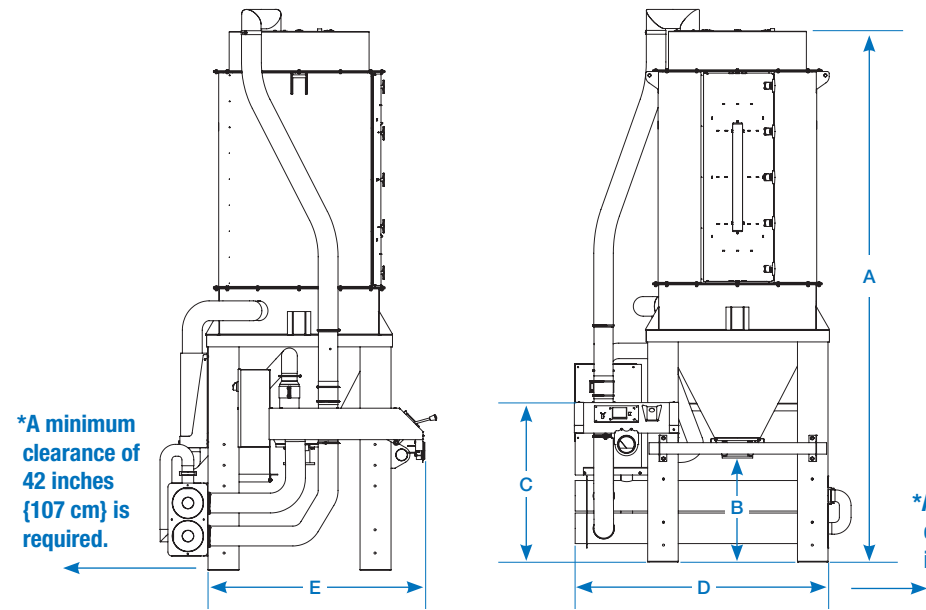
Specifications

Depending upon hopper requirements, ResinWorks drying systems may be configured with single-hopper sleds, multiple-hopper sleds or a combination of both.

Multi-Hopper Sled (Figure 1)



Single-Hopper Sled (Figure 2)



Available Hopper Combinations (Figure 3)						
RWH Hopper Models possible sled combinations				Sled Total Length		
				inches {mm}	ft. {cm}	
33				45 {1143}	3.8 {116}	
33	33			90 {2286}	7.5 {229}	
33	33	24		126 {3200}	10.5 {320}	
33	33	10/14/18		115 {2921}	9.6 {293}	
33	24			70 {1778}	5.8 {177}	
33	24	24		95 {2413}	7.9 {241}	
33	24	10/14/18	10/14/18	131 {3327}	10.9 {332}	
33	10/14/18	10/14/18	10/14/18	120 {3048}	10.0 {305}	
24				36 {914}	3.0 {91}	
24	24			72 {1829}	6.0 {183}	
24	24	24		108 {2743}	9.0 {274}	
24	24	14/18		97 {2464}	8.1 {247}	
24	24	10/14/18	10/14/18	122 {3099}	10.2 {311}	
24	10/14/18	10/14/18	10/14/18	111 {2814}	9.3 {283}	
10/14/18				25 {635}	2.1 {64}	
10/14/18	10/14/18			50 {1270}	4.2 {128}	
10/14/18	10/14/18	10/14/18		75 {1905}	6.3 {192}	
10/14/18	10/14/18	10/14/18	10/14/18	100 {2540}	8.3 {253}	

**Note:** Conair 39 and 44 inch hoppers are mounted on their own individual sleds. (see Figure 2)

Use **Figure 3** to identify the available hopper combinations that would be right for your operation, and determine the overall width of each multi-hopper sled. More specific dimensions for hoppers can be found on the previous page, in the specifications table.

Hoppers that are 33 inches {84 cm} in diameter and smaller may be joined together onto a single sled and shipped as a unit, installed as a unit and connected into your drying system as a single unit (see **Figure 1**). This consolidation greatly saves time and expense and once connected to the proper central drying unit, provides an optimum dehumidification system for all of your resins. Hoppers 39 inches {99 cm} and over in diameter are provided on their own individual floor stands (sleds) and each is equipped with air connections, heater, control, etc. (see **Figure 2**).

## Features

Systems that are conceived, configured and designed to make you more competitive, efficient, productive and profitable.

- **Provides full flexibility** – any material to any machine at any time.
- **Ten minute material changes** – pre-dried, pre-blended material always ready.
- **Clean, neat processing** – removes drying and blending equipment from the machine area.
- **Convey small batches** from dryer or blender to machine.
- **Conveying lines purged** after every cycle.
- **Minimizes labor**, energy, material and inventory costs.



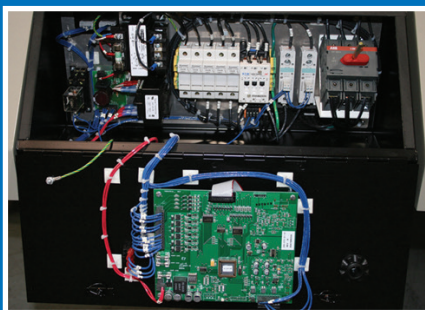
ResinWorks **drying hopper sleds** can accommodate **up to four drying hoppers**, each sized specifically for either multi-machine, long run or single machine, short run operations. The sled is shipped with drying hoppers, heaters, controls, dry air manifolds and purge valves pre-assembled or easy installation.



Integrated supply and return air manifolds replace the externally mounted bulky manifolds for a simplified installation of material conveying lines to each hopper.



The Conair ResinWorks mass flow, stainless steel, drying hopper is equipped with an oversized door for quick, easy clean out and thorough material changes. A full length sight glass with level indication lets you see your material level at a glance.



We've eliminated the need for additional clearance behind the sled by relocating all electrical access points to the front of the sled. Now you can save valuable floor space and reduce troublesome equipment location problems.



The new, fully-automatic airflow balancing valve eliminates the need for tedious individual air flow adjustments at each hopper.



Each hopper is now equipped with individual 3-phase disconnects allowing you to independently shut off one hopper without disrupting production.