

Additional Insulation for Higher Temperature Materials

DH Series Drying Hoppers save you time, energy and money by delivering consistent, efficient drying.

Conair hoppers are designed to promote even heat distribution and mass material flow to ensure adequate drying throughout the hopper. Large access doors and smooth interior surfaces keep downtime for material changes to a minimum.

We offer a wide range of hopper sizes, with capacities from 70 to 487 ft³ {1.98 to 13.79 m³}.



DH Hopper

(Shown with W Series Dryer and optional hard piping kit.)

Greater Volume of Hot Material; Less Energy

All hoppers may look the same, but they're not. Hopper design can influence three critical parameters that affect overall drying performance: airflow, drying temperature and drying time.

The shallow cone angles and perforated material spreaders found in some hopper designs can cause surface friction that holds dry material in the hopper while wet material flows into the process.

Conair hoppers have steep cone angles and smooth interior surfaces that promote mass material flow. This ensures that all material has dried at the same rate before it leaves the hopper.

Our insulated side walls prevent the heat loss that can drive up energy costs and keep material along the outer walls of the hopper from attaining the required drying temperature.

- ▶ **Quick-clean design**
Large hinged doors, smooth walls and removable spreader cones make cleaning fast and easy.
- ▶ **Uniform material flow for more consistent drying**
Don't let your material leave the drying hopper before its time. Conair's air inlet design, smooth material/air spreaders and steep cone angles promote uniform mass material flow. This means material at every level has been exposed to drying air for the same amount of time before leaving the hopper.
- ▶ **Engineered to optimize drying throughout the hopper**
Conair hoppers introduce heated drying air low in the cone of the hopper, ensuring that material at all levels in the hopper will be dry when you're ready to process it. The spreader of the DH Series has been redesigned for improved air distribution in the cone section, and better process air to resin contact throughout the hopper.
- ▶ **Thicker insulation prevents heat loss, saves energy**
Compared to our CH Series Hoppers, the DH Series has three inches of additional insulation all the way around, and has been engineered to keep large volumes of material at high temperature for a longer amount of time. Insulated side walls prevent the heat loss that occurs with uninsulated hoppers. This means consistent temperature levels throughout the hopper, better overall drying performance, and energy savings for you.

Benefits

Select the right hopper for your application

Hopper design can determine whether your material is dry when it enters the process, as well as how easy the hopper is to clean between material changes.

Extra insulation in the side walls

maintain temperature at desired level, prevent heat loss and protect workers from hot surfaces.

Mass material flow

Smooth surfaces and steep cone angles ensure that each pellet is exposed to heated drying air for the specified drying time.

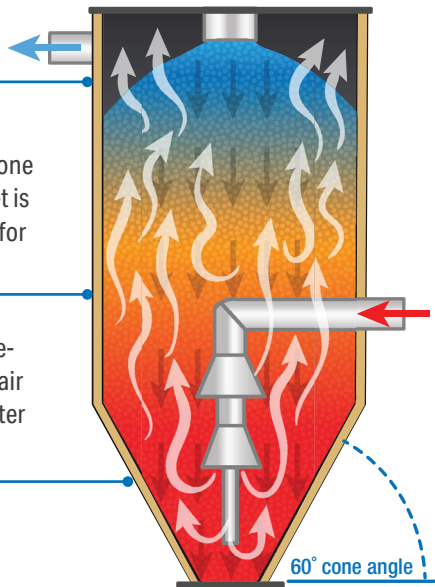
Even air/heat distribution

throughout the hopper. The re-designed spreader improves air distribution and provides better process air to resin contact throughout the hopper.

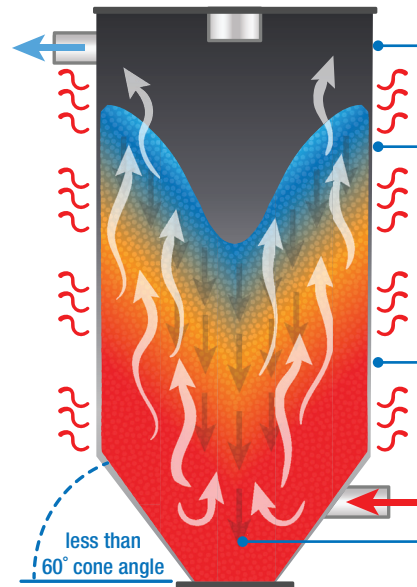
A large access door, and smooth interior walls

minimize downtime for clean-out and material changes.

Conair Drying Hopper



Other Hopper Designs



Heat loss through uninsulated side walls

Center "funnel" flow induced by a shallow cone angle allows wet material to enter the process.

Perforated metal inhibits mass material flow and can be difficult to clean.

Uneven heat distribution. No drying air is forced into the bottom of the hopper.

Options

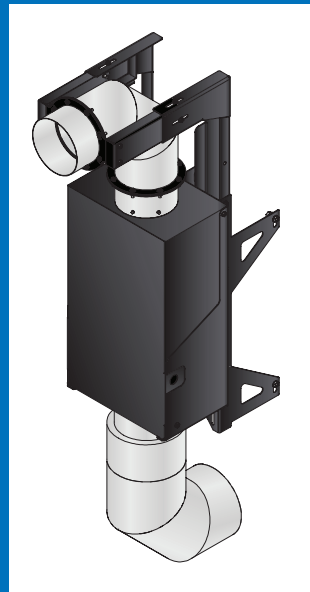
- **Optional hard pipe kit**
Recommended for pipe sizes 8 inches and above, provides better airflow and a more finished look with less maintenance required than typical flex tubing.
- **Optional access ladder with handrail**
For safety and ease of access.
- **Optional hopper mounted cyclone**
The cyclone can be mounted left or right for your application needs.
- **Optional special paint**
Automotive or non-automotive paint.
- **Optional heater pack**
The heater packs for these hoppers mount so that air flows in the top and out the bottom. This keeps the area under the heat pack clear and keeps the hose off of the floor.
- **Optional gaylord floor stand**
Allows for gaylord bin to fit below the hopper.
- **Optional distribution boxes**
Mount beneath the hopper to help convey the dried material to the processing machine.



Features

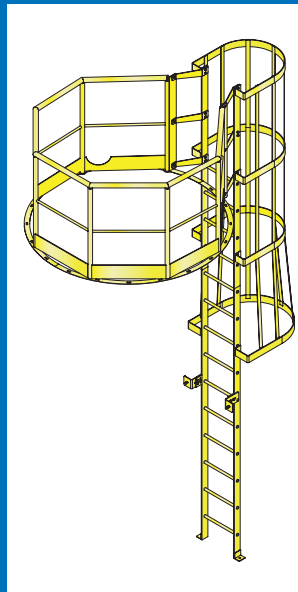
- **Hopper loader mounts**
Conair vacuum loaders and receivers mount easily to the top of the hopper. Select from a wide range of capacities to accommodate your throughput.
- **Drying monitor probe anchor**
The cones of the DH series hoppers include an anchor location for the drying monitor probe near the bottom of the hopper for increased stability. The RTD units inside the probe can be replaced without removing the probe.
- **Strip sight glass**
For viewing material levels within the hopper.
- **Floor stand**
Stands can be bolted to the floor.

Accessories

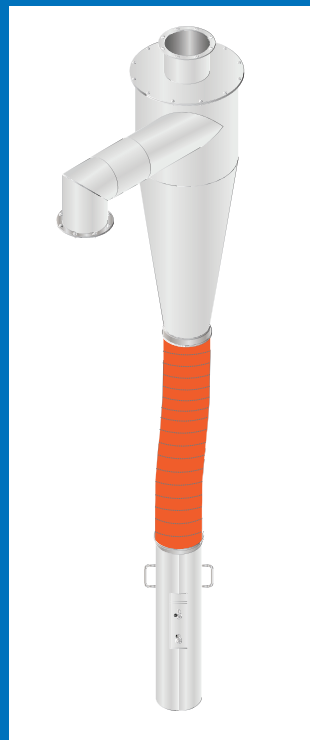


A **Heater Pack** designed specifically for applications requiring a DH hopper, has been engineered to increase efficiency and ease installation. Design advantages include:

- hot air from the Heater Pack enters directly into the bottom of the hopper.
- more efficient routing to the Heater Pack inlet for hard piping or flex hose.
- increased open floor space between the dryer and hopper since hoses are not routed along the floor.



The optional **Ladder and Hand Rail** provide sturdy, safe and easy access to the top of the hopper. Having the ladder and hand rail simplifies maintenance and installation tasks for loaders, RTD probes, and other accessories that are on top of the hopper. Simple maintenance procedures are convenient and quick, saving time and money. Made from industrial grade steel and painted safety yellow, the ladder and hand rail are not only functional, but add to the professional finished look of the hopper and your plant.



An optional **Hopper Mounted Cyclone** can be placed on either the right or left side of the DH hopper, based on what works best for your application. The cyclone provides an added layer of protection for your dryer. Ideal for PET applications or applications which utilize regrind with dust and particles, the cyclone:

- has no moving parts, and no filter to clean. Simply dump the canister when necessary.
- uses cyclonic action to separate dust from the air before it reaches the dryer.
- is mounted directly to the hopper, decreasing footprint size and floor space requirements around the hopper.



An optional **Hard Piping Kit** (Conair highly recommends this accessory for line sizes of eight inches and above) can be used as an upgrade over standard flex hose. Hard piping kits are recommended because they:

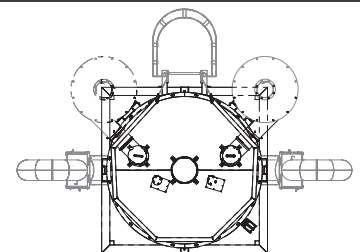
- eliminate the possibility of sag or collapse, especially around corners where these are common issues with flex hose.
- eliminate the possibility of restricted air flow due to hose damage (collapse, puncture, leaking, moisture infiltration).
- minimize maintenance needs.
- create a more permanent finished appearance.
- reduce air flow drag due to the smooth interior surface.

Options / Accessories Notes

Heater pack adds to the overall width of the DH Hopper. Spacial considerations are: All models add 17.5 inches {44.5 cm} to overall width for box (not including piping).

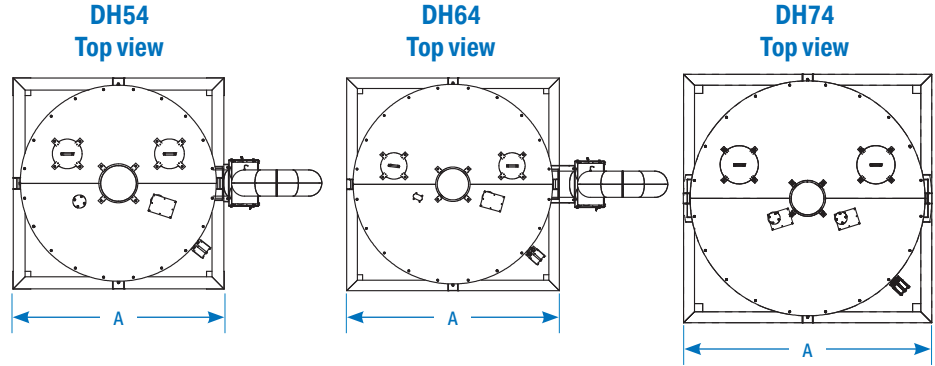
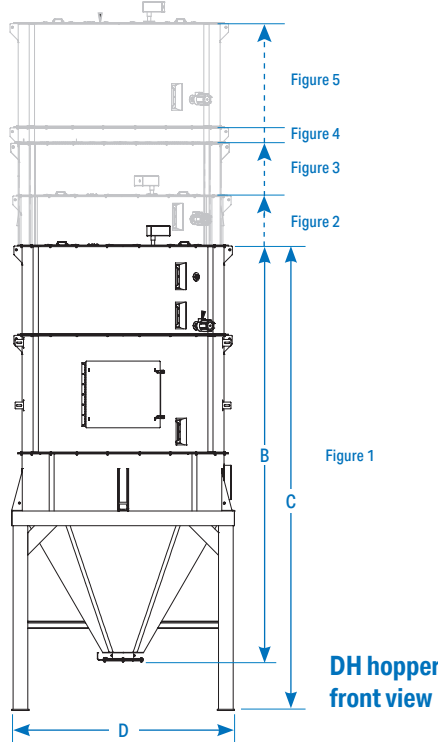
Optional cyclone adds to the overall width of the DH Hopper. Spacial considerations are: DH54 add 9.4 inches {24.0 cm}, DH64 add 15.0 inches {38.1 cm} and DH74 add 15.0 inches {38.1 cm}.

Optional access ladder and handrail add 41 inches {104 cm} to height and 40 inches {102 cm} to depth of the hopper.



Top view with options added

Specifications



Mounting Interfaces	
<p>Top for hopper loaders</p> <p>IT07</p> <p>4 equally spaced mounting clips on a 16.375 inches (416 mm) diameter bolt circle</p>	<p>Bottom at discharge</p> <p>IB09</p> <p>16 bolt holes, 7/16 inches (11 mm), on a 16.25 inches (413 mm) square plate</p>

Model	DH54-70	DH54-85	DH54-99	DH54-114	DH54-129	DH64-158	DH64-187
Figure Number*	Figure 1	Figure 2	Figure 3	Figure 4	Figure 5	Figure 1	Figure 2
Performance characteristics							
Capacity ft ³ [liter]	70 {1982}	85 {2407}	99 {2804}	114 {3228}	129 {3653}	158 {4475}	187 {5296}
Capacity @ 35 lb/ft ³ lbs	2450	2975	3465	3990	4515	5530	6545
Dimensions inches [cm][†]							
A - Inside diameter	54 {137}			64 {163}			
B - Hopper height	107 {272}	119 {301}	137 {347}	140 {354}	153 {387}	147 {373}	162 {411}
C - Height with stand	127 {324}	139 {353}	157 {399}	160 {406}	173 {439}	167 {424}	182 {462}
D - Footprint w/stand in [cm] sq.	71 {181}			81 {206}			
Inlet size (OD)	8.0 {20}						
Outlet size (OD)	8.0 {20}						
Material discharge (ID)	6.0 {15}						
Weight lb [kg]							
Installed weight (hopper only)	1568 {706}	1828 {823}	1953 {879}	1973 {888}	2066 {930}	2320 {1044}	2439 {1098}
Mounting interfaces							
Hopper loader (top)	IT07						
Material discharge (bottom)	IB09						

Model	DH64-215	DH64-248	DH74-245	DH74-300	DH74-366	DH74-487
Figure Number*	Figure 4	Figure 5	Figure 1	Figure 2	Figure 4	Figure 5
Performance characteristics						
Capacity ft ³ [liter]	215 {6089}	248 {7023}	245 {6938}	300 {8496}	366 {10365}	487 {13,792}
Capacity @ 35 lb/ft ³ lbs	7525	8680	8575	10500	12810	17045
Dimensions inches [cm][†]						
A - Inside diameter	64 {163}		74 {188}			
B - Hopper height	175 {445}	196 {498}	170 {431}	191 {485}	212 {539}	261 {663}
C - Height with stand	195 {495}	216 {549}	190 {483}	211 {537}	232 {590}	281 {714}
D - Footprint w/stand in [cm] sq.	81 {206}		91 {231}			
Inlet size (OD)	8.0 {20}			12.0 {30}		
Outlet size (OD)	8.0 {20}			12.0 {30}		
Material discharge (ID)	6.0 {15}			8.0 {20}		
Weight lb [kg]						
Installed weight (hopper only)	2551 {1148}	2929 {1318}	2847 {1281}	3285 {1478}	3485 {1568}	4185 {1883}
Mounting interfaces						
Hopper loader (top)	IT07					
Material discharge (bottom)	IB09					

Specification Notes

* Note that the different figures represent different hopper sizes within a single model size range. For example, Figure 1 represents a DH74-215, the grayed extension to the height shown at Figure 2 represents a DH74-300, and so on. Depending on which model DH hopper you order, and what options you choose, your hopper may appear slightly different than the graphic. Refer to the specifications chart for specific dimensions.

† Note that adding options changes overall dimensions of the hopper. See the notes on the Options and Accessories pages for more details.

Specifications may change without notice. Consult a Conair representative for the most current information.

