

# Efficient Drying with Minimum Downtime

CH series drying hoppers save you time, energy and money by delivering consistent, efficient drying and fast, easy clean outs.

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 ft<sup>3</sup> {1.98 to 13.79 m<sup>3</sup>}.



Model CH14-3

Model CH24-8

Model CH10-1

## Improve Product Quality, Lower Operating Costs

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.

### ▶ Consistent drying time

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.

### ▶ Uniform air/heat distribution

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.

### ▶ Prevents energy loss

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.



# Features and Options

## 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.

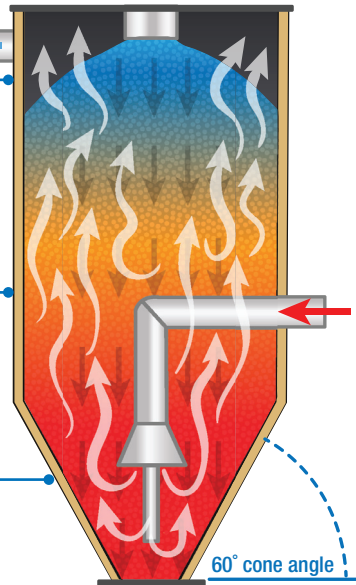
**Insulated side walls** maintain temperature at desired level, prevent heat loss and protect workers from hot surfaces.

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

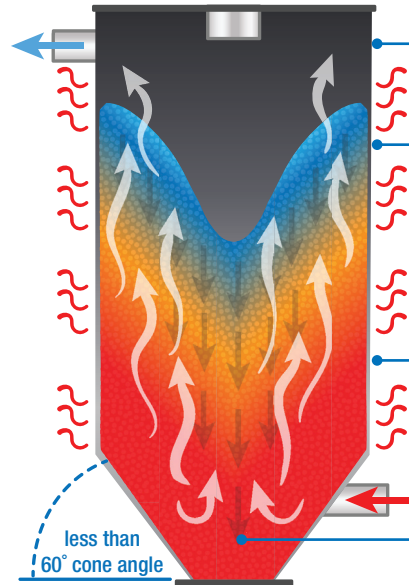
**Even air/heat distribution** throughout the hopper. The air spreader has a drop tube that forces drying air to material at the bottom of the hopper.

**A large access door, easily removable spreader cone 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 and Accessories

### All Models

#### Floor Stand

Stands can be bolted to the floor or fitted with casters. Stands designed to fit over a gaylord are available.



#### Hopper Loaders

Conair vacuum loaders and receivers mount easily to the top of the hopper. Select from a wide range of capacities to accommodate your throughput.



#### Distribution Boxes

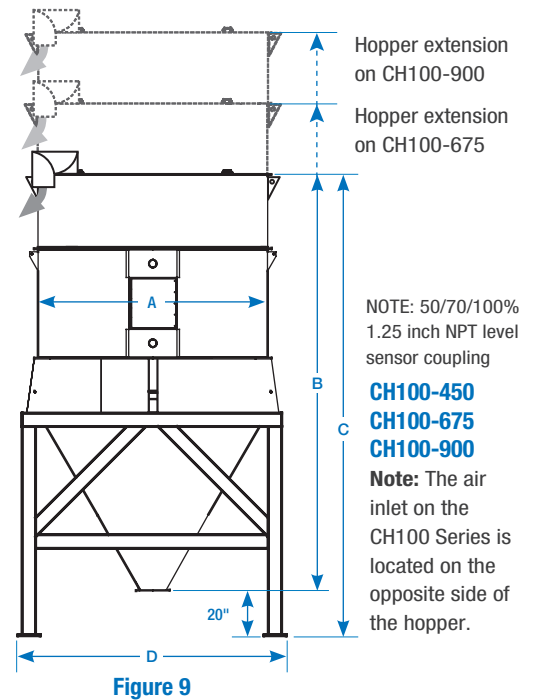
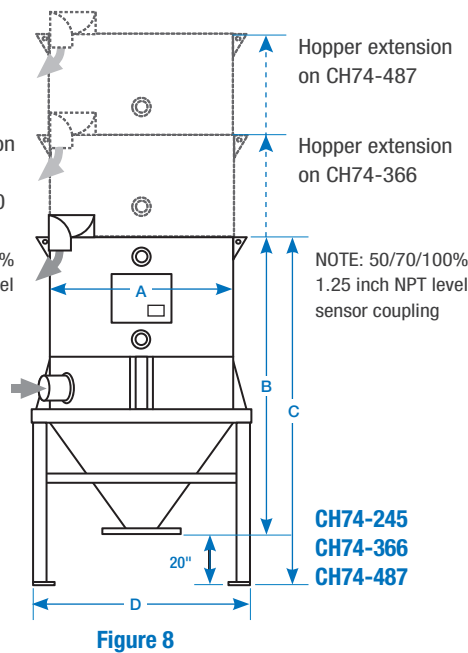
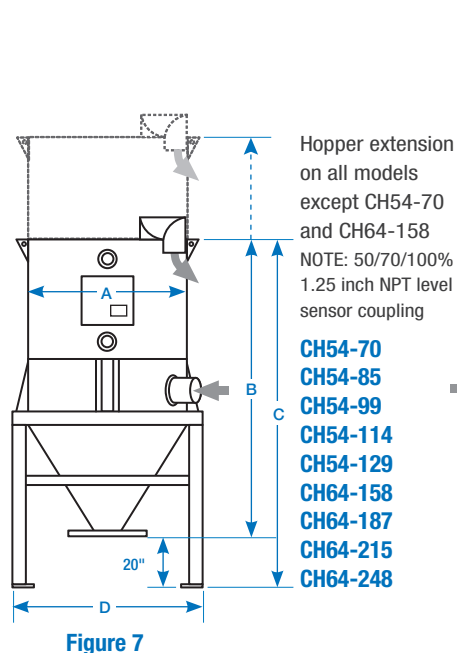
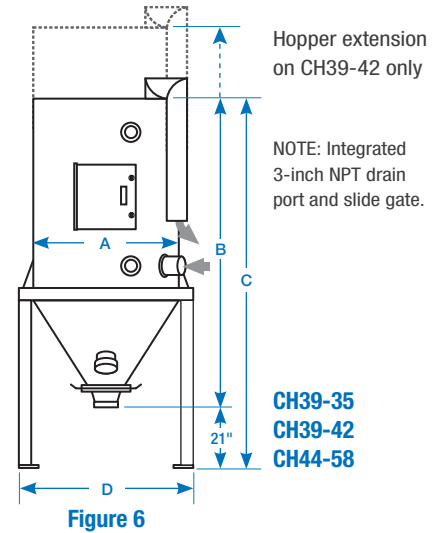
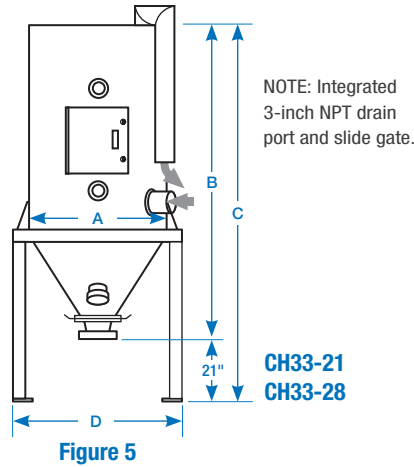
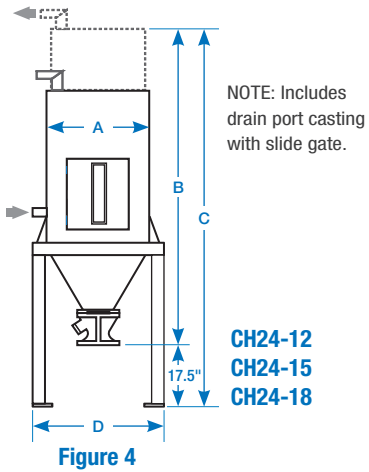
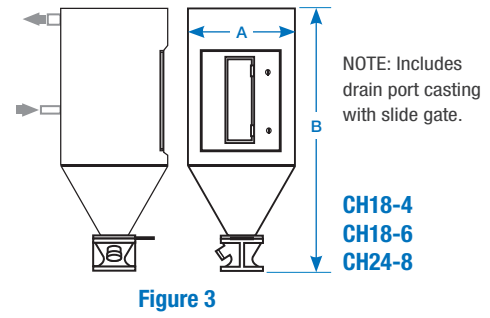
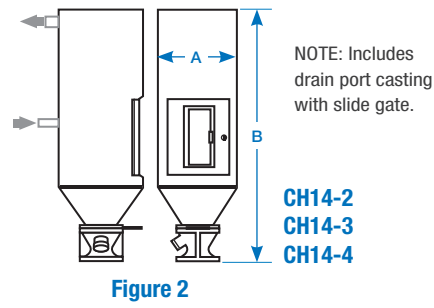
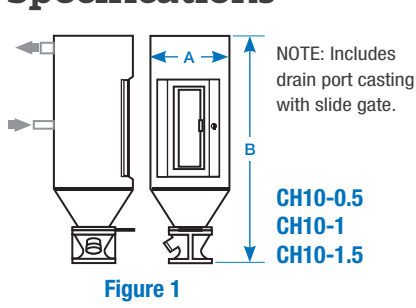
Mount beneath the hopper to convey the dried material to the processing machine.

	Small hoppers (CH10-24)	Medium hoppers (CH33-44)	Large hoppers (CH54-100)
<b>Feature</b>			
MedLine®	○	○	
Stainless steel contact points	○	○	○
Passivation treatment	○	○	○
Thermometer for inlet or outlet	○		
Manual slide gate	●	●	●
Precision manual slide gate	○		
Drain port	●	●	○
Strip sight glass	●	○	
Material level sensor bracket	○	○	○
Floor stand	○	○	○
Gaylord-fill floor stand	○	○	○
Floor stand casters	○		
Cyclone on hopper outlet			○
Ladder and handrail			○
Special paint	○	○	○
50/70/100% 1.25-inch NPT level sensor coupling			●

● Standard ○ Option



# Specifications



Key	Top for hopper loaders (refer to loader specs for more info)	Bottom at discharge
<p>☉ Sightglass</p> <p>← Air inlet/outlet</p>	<p><b>IT06</b> 3 equally spaced mounting clips on a 10.5 in. {267 mm} diameter bolt circle</p> <p><b>IT07</b> 4 equally spaced mounting clips on a 16.375 in. {416 mm} diameter bolt circle</p>	<p><b>IB02</b> 5 x 5 in. {127 x 127 mm} bolt pattern; 4 bolt holes, 7/16 in. {11 mm}</p> <p><b>IB03</b> 7 x 7 in. {178 x 178 mm} bolt pattern; 4 bolt holes, 9/16 in. {14 mm}</p> <p><b>IB09</b> 16 bolt holes, 7/16 in. {11 mm}, on a 16.25 in. {413 mm} square plate</p>



# Specifications

Model	CH10-0.5	CH10-1	CH10-1.5	CH14-2	CH14-3	CH14-4	CH18-4	CH18-6	CH24-8	CH24-12	CH24-15
<b>Figure Number</b>	Figure 1			Figure 2			Figure 3			Figure 4	
<b>Performance characteristics</b>											
Capacity ft <sup>3</sup> {liter}	0.5 {14}	1.0 {28}	1.5 {42}	2 {57}	3 {85}	4 {113}		6 {170}	8 {227}	12 {340}	15 {425}
Capacity @ 35 lb/ft <sup>3</sup> lbs	18	35	53	70	105	140		210	280	420	525
<b>Dimensions inches {cm}</b>											
A - Inside diameter	10 {25}			14 {36}			18 {46}		24 {61}		
B - Hopper height†	25 {64}	39 {99}	50 {127}	41 {104}	52 {132}	58 {147}	44 {112}	64 {163}	60 {152}	75.5 {192}	91.5 {232}
C - Height with stand*†	54 {137}	68 {173}	79 {201}	70 {178}	81 {206}	87 {221}	73 {185}	93 {236}	89 {226}	89.5 {227}	105.5 {168}
D - Footprint w/stand in {cm} sq.	31 {79}									34 {86}	
Inlet size (OD)	1.75 {4.4}			2 {5.1}			2.5 {6.4}				
Outlet size (OD)	2 {5.1}			2.5 {6.4}			3 {7.6}				
Material discharge (ID)	2 {5.1}						2.5 {6.4}				
<b>Weight lb {kg}</b>											
Installed weight (hopper only)	40 {18}	50 {23}	70 {32}	80 {36}	95 {43}	110 {50}	145 {66}	170 {77}	210 {95}	230 {104}	240 {109}
<b>Mounting interfaces</b>											
Hopper loader (top)	IT06						IT07				
Material discharge (bottom)							IB02				
Model	CH24-18	CH33-21	CH33-28	CH39-35	CH39-42	CH44-58	CH54-70	CH54-85	CH54-99	CH54-114	CH54-129
<b>Figure Number</b>	Figure 4	Figure 5		Figure 6			Figure 7				
<b>Performance characteristics</b>											
Capacity ft <sup>3</sup> {liter}	18 {509}	21 {595}	28 {793}	35 {991}	42 {1189}	58 {1643}	70 {1982}	85 {2407}	99 {2804}	114 {3228}	129 {3653}
Capacity @ 35 lb/ft <sup>3</sup> lbs	630	735	980	1225	1470	2030	2450	2975	3465	3990	4515
<b>Dimensions inches {cm}</b>											
A - Inside diameter	24 {61}	33 {84}		39 {99}		44 {112}	54 {137}				
B - Hopper height†	105.5 {268}	88 {224}	102 {259}	103 {262}	113 {287}	123 {312}	103 {262}	121 {307}	133 {338}	139 {353}	151 {384}
C - Height with stand*†	119.5 {304}	109 {277}	123 {312}	124 {315}	134 {340}	144 {366}	123 {312}	141 {358}	153 {389}	159 {404}	171 {434}
D - Footprint w/stand in {cm} sq.	34 {87}	43 {109}		49 {125}		54 {137}	66 {168}				
Inlet size (OD)	2.5 {6.4}	5 {12.7}				5 {12.7} or 8 {20.3}					
Outlet size (OD)	3 {7.6}	5 {12.7}				5 {12.7} or 8 {20.3}					
Material discharge (ID)	2.5 {6.4}	3 {7.6}				6 {15.2}					
<b>Weight lb {kg}</b>											
Installed weight (hopper only)	250 {113}	450 {204}	700 {318}	800 {363}	900 {408}	950 {431}	1100 {499}	1250 {567}	1450 {658}	1550 {703}	1650 {748}
<b>Mounting interfaces</b>											
Hopper loader (top)	IT07										
Material discharge (bottom)	IB02	IB03					IB09				
Model	CH64-158	CH64-187	CH64-215	CH64-248	CH74-245	CH74-366	CH74-487	CH100-450	CH100-675	CH100-900	
<b>Figure Number</b>	Figure 7				Figure 8			Figure 9			
<b>Performance characteristics</b>											
Capacity ft <sup>3</sup> {liter}	158 {4475}	187 {5296}	215 {6089}	248 {7023}	245 {6938}	366 {10365}	487 {13792}	450 {12743}	675 {19114}	900 {25485}	
Capacity @ 35 lb/ft <sup>3</sup> lbs	5530	6545	7525	8680	8575	12810	17045	15750	23625	31500	
<b>Dimensions inches {cm}</b>											
A - Inside diameter	64 {163}				74 {188}			100 {254}			
B - Hopper height†	145 {368}	159 {434}	175 {445}	194 {493}	173 {439}	221 {561}	268 {681}	186 {472}	234 {594}	283 {719}	
C - Height with stand*†	165 {419}	179 {488}	195 {495}	214 {544}	193 {490}	241 {612}	288 {732}	206 {523}	254 {645}	303 {770}	
D - Footprint w/stand in {cm} sq.	76 {193}				86 {218}			120 {305}			
Inlet size (OD)	8 {20.3}				12 {30.5}			12 {30.5}			
Outlet size (OD)	8 {20.3}				12 {30.5}			12 {30.5}			
Material discharge (ID)	6 {15.2}				8 {20.3}			11.875 {30.2}			
<b>Weight lb {kg}</b>											
Installed weight (hopper only)	1850 {839}	2050 {930}	2150 {975}	2250 {1021}	3230 {1465}	3830 {1737}	5030 {2282}	9750 {4423}	10800 {4899}	11850 {5375}	
<b>Mounting interfaces</b>											
Hopper loader (top)	IT07										
Material discharge (bottom)	IB09										
<b>Specification Notes</b>											
* Add 5 inches {12.7 cm} to the height, if you order optional casters.											
† Gaylord fill stand adds approximately 60 inches {152 cm} to the overall height and clearance below hopper in sizes 24-8 and smaller. It adds 50 inches {127 mm} to 24-12 and larger models. It also adds 50 lbs {23 kg} to the weight. It increases stand width and depth to 62x44 respectively for CH24 and CH33 models, and 62x50 for CH39 models.											
Specifications may change without notice. Consult a Conair representative for the most current information.											

