

Convert Amorphous PET to Usable Crystalline Material

With the increased use of PET in plastic processing, the efficient use of amorphous regrind material is critical. A Conair Crystallizing System allows you to convert amorphous PET to a crystalline state that then can be dried. The drying can occur at elevated temperatures to obtain low moisture levels without the fear of agglomeration.

The Conair Crystallizing System consists of a high temperature heat source, an insulated hopper with an agitator and a rotary discharge valve. This equipment can be easily integrated with other material handling equipment.



Reliable, High-Quality Material Output

As amorphous PET material is loaded into the agitating hopper, the processing temperature is set on the control. When the system is turned on, the Crystallizer automatically directs heated air to the material through the bottom spreader cone of the agitating hopper. Constant, slow agitation of the blades prevents agglomeration and material degradation during heating.

Once material is crystallized, determined by a system monitor located in the hopper, a rotary discharge valve meters the material into a surge bin and distribution box. Material can then be transferred by your conveying system to storage or processing hoppers. Material is metered away at an appropriate rate depending on the temperature profile in the hopper. If the temperature profile falls below a selected level, the Crystallizing System automatically stops the material discharge until the correct temperature profile is obtained.

► Continuous, automatic operation

Automatic monitoring of the temperature inside the hopper ensures a reliable output of high-quality crystallized material.

► A configuration to meet your needs

Use in-line crystallizing for direct discharge into your processing or batch processing for storage of the crystallized material to re-use at a later time.

► Agitating hopper prevents agglomeration

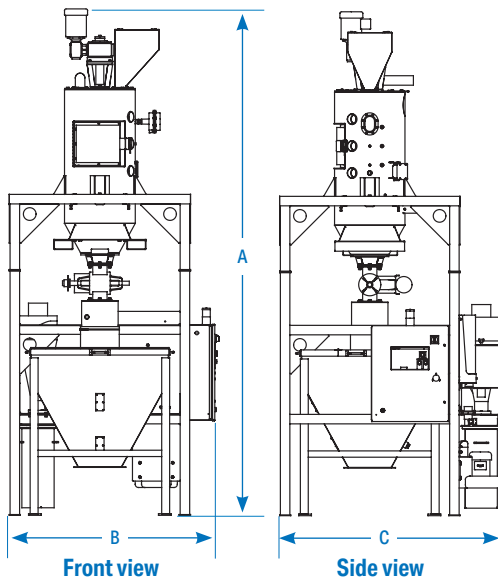
The combination of the agitator blades and stationary bars in the CR Series Crystallizers provide constant tumbling of the material breaking apart any clumps that may form and preventing agglomeration during processing.

► Safe design, convenient clean out

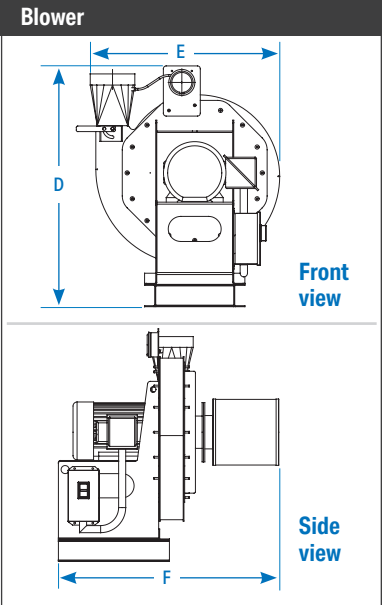
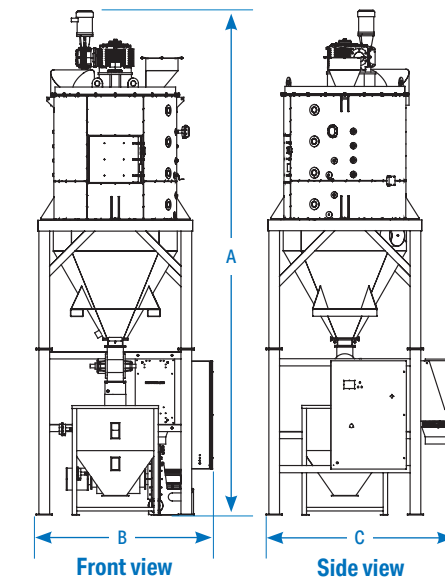
Access doors and removable cone section have safety interlocks. The flexible design of these units allow the agitator weldment to be removed from the top or bottom. Internal breaker bars are removable to simplify clean out.

Specifications

Model CR4 and CR10



Model CR21 - CR135



Models	CR4 †	CR10 †	CR21 †	CR42 †	CR85 †	CR135 †
Performance characteristics						
Throughput ft³/hr {l/hr}	4 {113}	10 {283}	21 {595}	42 {1189}	85 {2407}	135 {3823}
Heater energy source	electric or natural gas					
Air circuit	open or closed loop					
Dimensions inches {mm}						
A - Overall crystallizer height	159.2 {4044}	169.0 {4293}	192.5 {4890}	226.8 {5761}	261.8 {6650}	281.1 {7140}
B - Overall crystallizer width	66.0 {1676}		69.0 {1753}	79.1 {2009}	86.3 {2192}	98.3 {2497}
C - Overall crystallizer depth	70.5 {1791}	75.0 {1905}	70.1 {1781}	81.4 {2068}	94.2 {2393}	106.3 {2700}
D - Blower height†	N/A		37.8 {960}		45.8 {1163}	
E - Blower width†	N/A		32.5 {826}		37.5 {953}	
F - Blower depth†	N/A		68.4 {1734}	70.4 {1788}	77.5 {1969}	80.6 {2047}
Approximate weight lbs {kg}						
Crystallizer installed	2863 {1299}	3130 {1420}	3315 {1504}	4422 {2006}	6590 {2989}	7754 {3517}
Surge bin installed	270 {122}		650 {295}			
Blower installed	N/A		700 {318}	800 {363}	900 {408}	1100 {499}
Voltage full load amps ‡						
230V/3 phase/60 Hz	38.8	N/A				
400 V/3 phase/50 Hz	22.3	55.6	107.5	159.1	292.5	305.3
460 V/3 phase/60 Hz	19.3	48.4	93.5	138.4	254.4	265.5
575 V/3 phase/60 Hz	15.5	38.7	74.8	138.4	203.5	212.4
Discharge type (via rotary air lock)						
Surge bin 10 ft³ {281 l/hr}	standard			N/A		
Surge bin 17 ft³ {481 l/hr}	N/A			standard		
Blower noise level						
	<90 dbA @ 5 ft.					

Specification Notes

* Shown with optional cyclone mounted on stand. This applies to model CR4 only.

† The blowers on models CR4 and CR10 are located on the stand. Blowlers on models CR21, CR42, CR85 and CR135 are independent of the stand. Adequate space will need to be planned for positioning of the blower on these models.

‡ FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams of the equipment order and the nameplate applied to the machine.

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

Options

- **Electric Heat or Natural Gas Energy Source**
- **Open-loop or Closed-loop Air Circuit**
- **Gaylord Discharge**
- **Exhaust Filter** – choose a cyclone or a dust collection unit to keep fines contained. For particularly dusty applications both can be applied.
- **Special Paint** - Automotive or non-automotive.