



Continuous PET Crystallizer System

CCR Crystallizers provide trouble-free conversion of amorphous PET resin into a crystallized form, in preparation for drying.

Novatec CCR systems are designed to provide constant temperature hot air at the rate of up to 1 cfm/lb/hr (0.77m³/kg/hr) Typical process temperatures range between 250-350°F (121-177°C) and residence time is typically one hour.



› Reliable Material Flow

A robust agitating hopper, direct-coupled to a gear reduced drive motor assures reliable material flow through the crystallization process while specially outfitted material supply and take away components assure continuous operation.

› Electric Heater/Blower

The frame mounted agitating hopper is fitted with a hopper-mounted heater/lower module.

› Gas-Fired Process Heater Option

This popular option can reduce energy usage by as much as 50%.

› Clean Operation

System includes a separate cyclone filter that traps and collects carry-over fines for a clean operation.

› Bridging and Agglomeration Prevention

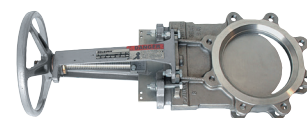
Large automatic knife gate eliminates bridging of regrind or flake and prevents agglomeration of amorphous material in the vacuum receiver due to hot air exposure from the crystallizer.

› Hinged Hopper Door with Safety Interlock

Stops agitator to avoid accidental injury.

› Color Touch Screen PLC Control in NEMA 12 Enclosure

Built-in interface with all common control systems.



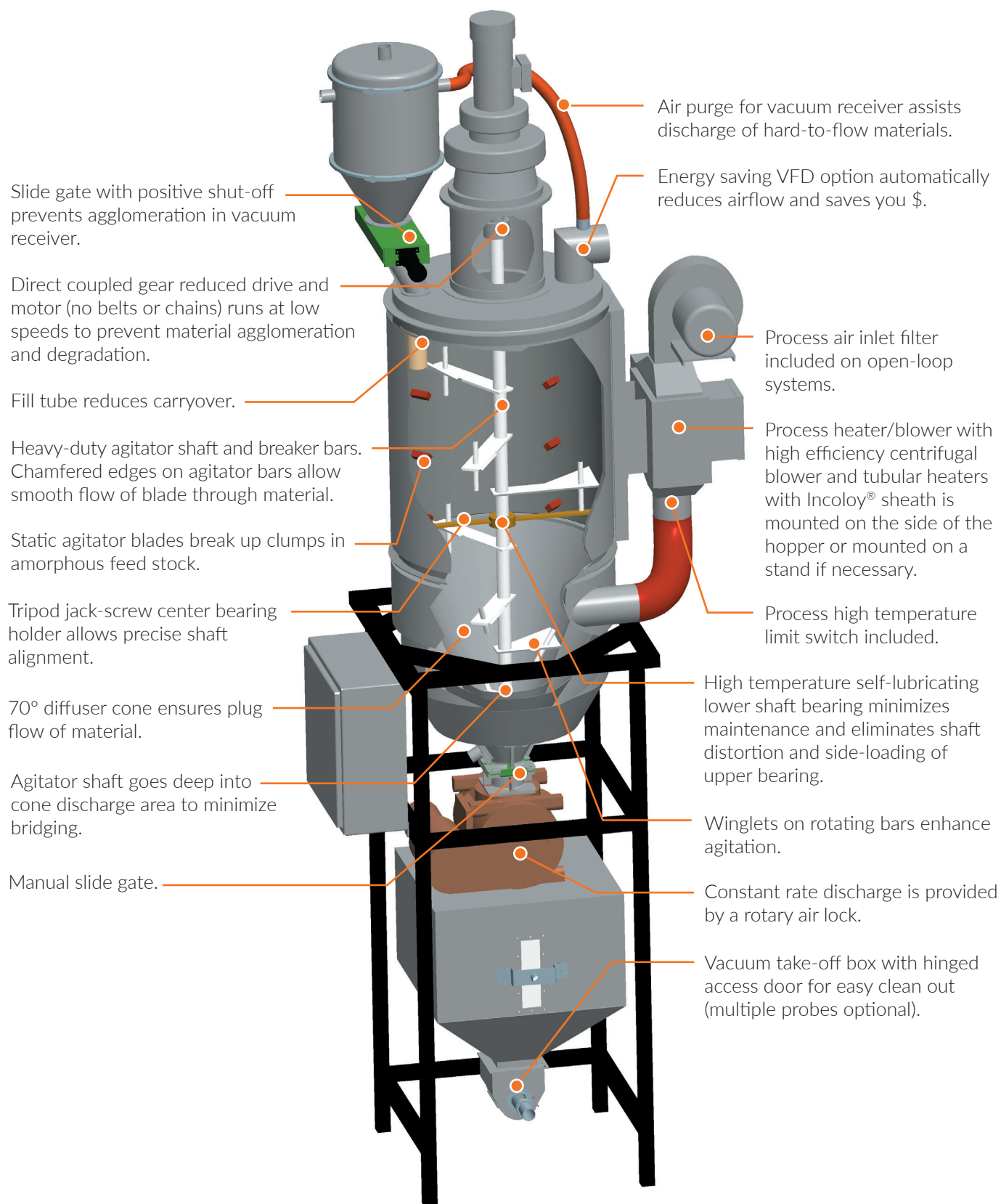
Custom gear drive slide gate standard on CCR-1500 through CCR-4000

Plus

- › Stainless steel vacuum receiver
- › Multiple sight glasses on hopper
- › Air inlet, outlet and hopper temperature sensors
- › Rotary airlock on hopper discharge
- › Enclosed surge bin with take-off box
- › High and low material level sensors automatically prevent overfilling of crystallizer and indicate low material level
- › Three inches of energy-saving insulation surround the lid, upper body and cone of the hopper
- › 460V/3ph/60Hz
- › Five-year lowest total cost of ownership warranty

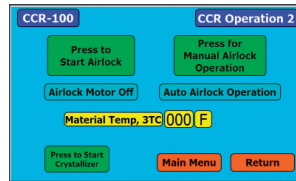
Look closely at a **Novatec CCR System...**

...see the standard features that make your crystallization process run efficiently with uncomplicated reliability!



7-inch Color Touch Screen PLC Control

- › Built-in prompts simplify use.
- › Components available locally.
- › Greater reliability than standard microprocessor controls.
- › Issues warnings on process and system failures and holds memory of error messages with time and date stamp record of operator acknowledgment. Alarm resets upon correction of condition.
- › Real-time clock with seven-day timer.



Custom controller options:

- › SanDisk® (SD) memory cartridge
- › Modem option allows diagnostics and reprogramming of equipment from a remote location
- › Multiple communications platforms including: Modem, Modbus, Profibus
- › MPI, Ethernet and ASI
- › Battery back-up for real-time clock

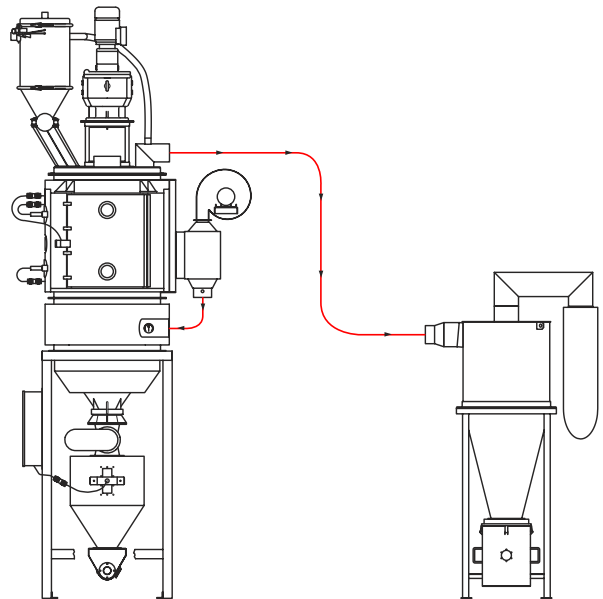
Cyclone Dust Collector

- › Cyclonic action catches up to 99% of fines that would normally clog a cloth filter.
- › High-efficiency dust bag collects remainder of fines.
- › Quick-release clamps on airtight collection pan allow easy access for disposal of fines.

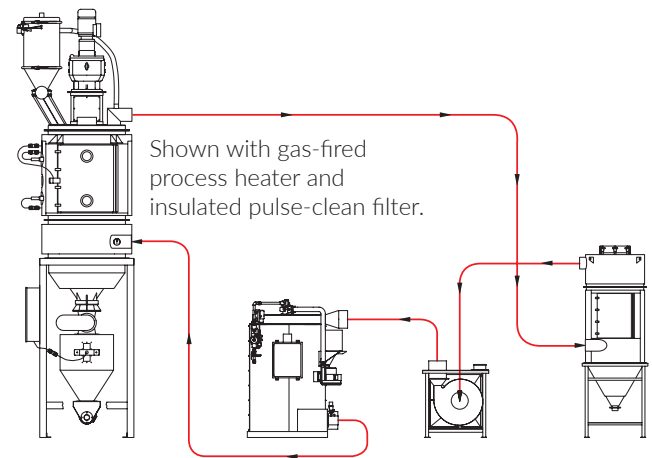


Standard Open-Loop CCR System with Integral Heater-Blower

Open-loop and closed-loop configurations are available with either an electric or gas-fired process heater.



Custom Energy-Saving, Closed-Loop CCR System



SPECIFICATIONS*

Model Number	Hopper Capacity		Overall Width		Overall Depth		Overall Height	
	ft ³	liters	in	cm	in	cm	in	cm
CCR-100	4.5	127	42	107	50	127	130	330
CCR-250	11.5	326	42	107	50	127	194	493
CCR-500	23	650	42	107	50	127	200	508
CCR-750	34	960	42	107	50	127	209	531
CCR-1000	46	1300	52	132	60	152	209	531
CCR-1500	68	1925	56	142	64	163	221	561
CCR-2000	91	2575	60	152	68	173	269	683
CCR-3000	136	3850	64	163	72	183	262	666
CCR-4000	182	5150	70	178	78	198	274	696

Standard voltage 460V/3ph/60Hz

† Optional voltage 575V/3ph/60 Hz

* Dimensions may vary depending on specific system requirements and options.

NOTE: Consult factory for throughput estimate based on material type and bulk density.

OPTIONS

- › Audible alarm horn or light
- › Stainless steel hopper
- › Stainless steel agitator and breaker bars
- › Cooling hopper for storing crystallized resin
- › Closed-loop system with insulated pulse-clean filter
- › Pneumatic or gear-driven hopper discharge slide gate
- › Installation and start-up training

Note: All custom features will be priced accordingly and lead times will be extended beyond those of standard packages and accessories.

ACCESSORIES

- › Cartridge filter kit
- › Cyclone collection drum

Note: See separate data sheet on cyclone dust collectors.

Gas-Fired Process Heater Custom Option*

- › Up to 90% plus thermal efficiency can produce as much as 50% savings over electric heaters.
- › Safe, indirect gas heating isolates process from hot gas.
- › Process air temperature adjustable from 160-400°F (71-204° C).
- › Stainless steel combustion chamber.
- › NFPA-86 gas train standard or optional IRI.
- › UL/C-UL listed flame control panel with main disconnect switch as standard.

* See separate data sheet

