

Designed for Efficient Processing

Engineered for maximum processing performance, Vector's VFC Flo-Coater systems provide the fastest possible spray rates and the most efficient drying results. Exhaust filters are located well above the effective processing area, keeping the filters cleaner and improving processing yields. Product flows more uniformly within the tapered expansion chamber (as opposed to a straight-sided expansion chamber), providing benefits for both top spray granulation and fluid bed drying processes.



VFC-500 Top Spray Granulator and Dryer Flo-Coater system. Shown with 1900L Product Container, Ceiling Flange, 2 piece construction, and Optional Cartridge Filter Lowering Device

Superior Top Spray Granulation

An atomizing spray gun with a tri-axial wand is the standard spray gun used with Vector's VFC Flo-Coater systems. Solution, atomization air, and spray air are supplied through the wand, creating a non-cluttered, easy-to-use spray gun. The number of nozzles is determined by the spray area associated with each VFC Flo-Coater system. The three-nozzle system, shown below, is used for top-spray granulation processes ranging from 220L to 1100L.



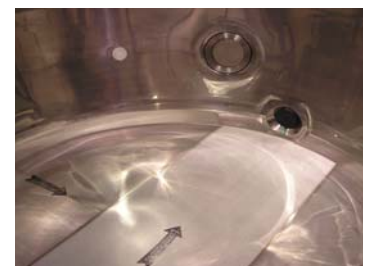
Three-Nozzle Spray Gun Assembly for Top Spray Granulation or Coating

Conidur Plate Improves Drying and Granulation Processes

The Conidur Plate, standard on all Vector VFC Flo-Coaters, provides a more consistent distribution of airflow across the product plate, significantly reducing 'rat-holing' problems. For granulation processes, the Conidur Plate provides improved product movement through the spray zone. For drying processes, it improves consistency with the finished product. Another advantage of the Conidur Plate is its ability to provide directional airflow, which assists in the vacuum discharge of product.



Close up view of Conidur Plate



Directional Conidur Plate for Vacuum Discharge

VECTOR CORPORATION

675 44th Street, Marion, IA 52302-3800

Phone: 319-377-8263 Fax: 319-377-5574

Email: vector.sales@vectorcorporation.com

www.vectorcorporation.com

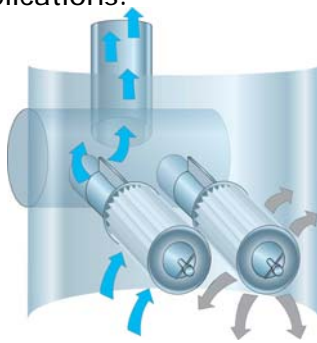
Flo-Coater® Technology

Cartridge Filters Provide Superior Product Containment, Reduced Change-Over Times

Containing product to 2 microns, Vector's polyester Cartridge Filters provide the most efficient filtration method available for fluid bed processing. Filters are alternately cleaned by pulses of air blown back through the filters. The cartridges are lighter in weight and easier to handle than bag filters, reducing the time required to clean and change-over filters. Filters are easily removed for cleaning and maintenance with the automated filter lowering option. Stainless steel cartridge filters are also available for CIP applications.



Polyester, 2 micron Cartridge Filters



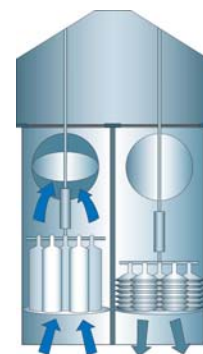
Cartridge Filter Cleaning showing blowback pulse

Filter Bags Remain a Common Method of Fluid Bed Filtration

Rated normally at 20 micron retention, Vector Corporation provides bag filters in both single and double bag construction. With single bag construction, process air is interrupted as the bag shakes particulate back into the product container. With double bag construction, process airflow flows through one bag while the other bag shakes. Using this method, airflow is not interrupted and process times can be reduced. Bag filters are not recommended for CIP or potent compound applications.



Single Bag Filter



Double Bag Filtration System for continuous processing



Three-Piece Construction Provides Processing Flexibility

The Flo-Coater system can be executed in three-piece construction. With this design, additional processing inserts of different sizes and functions can be incorporated into the system. The 12 Bar Flo-Coater system, at left, is shown with a tapered Wurster insert. By changing the expansion chamber and processing insert, the Flo-Coater system can be easily configured for top spray granulation or rotor processing.

Providing equipment and processing solutions around the world since 1972, Vector is a subsidiary of Freund Corporation located in Tokyo, Japan. Globally, the Freund/Vector team has thousands of system installations in the pharmaceutical, healthcare, chemical, agricultural, and food industries.

VECTOR CORPORATION

675 44th Street, Marion, IA 52302-3800

Phone: 319-377-8263 Fax: 319-377-5574

Email: vector.sales@vectorcorporation.com

www.vectorcorporation.com



Your Global Equipment and Processing Solution

11/2007