

# Excel 2000<sup>®</sup>

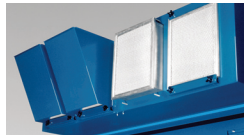
## Powder Spray Booth

Powder spray booth that delivers superior airflow management for efficient powder coating.

### Features and Benefits

#### Filter Technology

- PowderGrid<sup>®</sup> Plus polyester cartridge filters provide long service life, enhanced booth efficiency and reduced powder waste.
- Internal mounting of final filters simplifies installation and routine maintenance.
- Longer cartridges reduce powder loading and increase service life.
- Unique cartridge pleat design increases effective surface area and reduces powder waste by 80 percent.



Internal mounting of final filters (shown with optional deflectors) provides for easy installation and maintenance.

#### Collector/Color Module

- Enlarged booth opening in collector module reduces load on the fan and provides more uniform airflow.
- Inflatable pneumatic seal provides an airtight connection between the collector module and the fan section.
- Center-mount cartridge design and unique seating plate automatically set gasket compression without torque specifications to eliminate leaks and ensure faster filter changes.
- Quick disconnect collector module speeds color changes.
- One-piece, low-durometer gaskets maintain excellent sealing properties throughout the recovery system.



Center-mount design and unique seating plate set gasket automatically to eliminate leaks.

#### Booth Base and Canopy

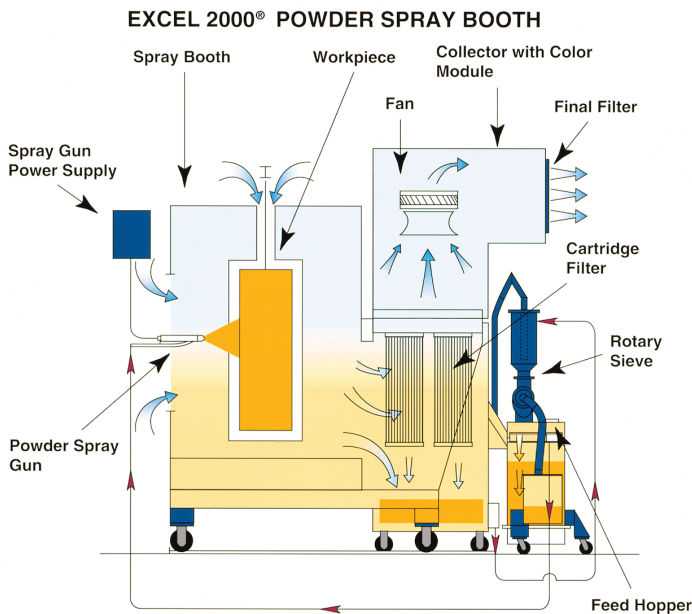
- Aerodynamic canopy design minimizes dead zones and reduces turbulence for more consistent airflow throughout the booth.
- Polypropylene canopy does not attract powder to the booth walls for efficient coating and reduced booth clean-up.
- Integrated booth base and collector is supported by four legs for fast leveling and easy installation.

#### Fan Assembly

- Exceptionally quiet operation for improved work environment.
- Unitized construction of integrated booth base, collector and fan section provides a better seal.
- Factory preassembled for fast installation and start-up.



# Excel 2000® Powder Spray Booth



Uniform spray booth airflow is key to powder coating performance and operating efficiency. All components of an integrated system must work together to provide the optimum coating environment.

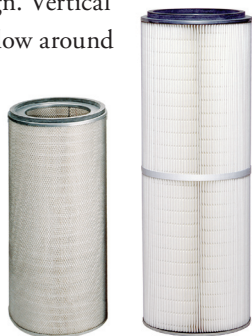
Each major component of the Nordson Excel 2000® powder spray booth, including the filters, collector/color module, canopy and fan section, have been designed to facilitate uniform, constant airflow. The result is a total air management system that brings powder coating to a new standard of performance.

This integrated system approach delivers more efficient powder recovery, enhanced collector efficiency and superior part coverage. Models 2001, 2002 and 2003 of the Excel booth are available to accommodate a variety of production requirements.

## Advanced Cartridge-filter Technology

The Excel 2000 powder spray booth uses vertically mounted cartridge filters in a side-draft design. Vertical cartridge mounting allows free airflow around all sides of the cartridges for more efficient use of the total filter area.

Plus, Nordson cartridge-filter recovery systems do not require expensive ductwork and explosion venting. Air used to contain and recover oversprayed powder is filtered through primary and final filters, and returned to the plant as clean air.



**PowderGrid® Plus cartridges (right) used in the Excel 2000 booth are 38 percent longer than standard cellulose filters for longer life.**

## PowderGrid® Plus Cartridge Filters for Peak Performance

PowderGrid Plus cartridge filters are the heart of the Excel 2000 recovery system. PowderGrid Plus filters deliver improved booth performance, long filter life and reduced powder waste. The innovative design of PowderGrid Plus cartridges eliminates the need for an outer screen, which can impede airflow and reduce booth efficiency. The filters are constructed of durable polyester-fiber media, which is bonded to an inner structural support membrane. This open-pleat design increases the effective surface area of the filter and allows a constant, unobstructed flow of air along the complete surface of the media.

The rugged polyester PowderGrid Plus media is far more tear and abrasion resistant than paper and paper-blend filters. And the smooth, tubular-shaped fibers have smaller, more uniformly distributed openings for efficient powder recovery.

PowderGrid Plus filters also release more powder during reverse-pulse cleaning. Conventional filters can hold as much as 14 to 30 pounds of powder, which must be discarded when the filters are replaced. PowderGrid Plus filters retain only 3 to 5 pounds of powder. And seasoning of the cartridge booth can be accomplished in less than 30 minutes, compared to the two to eight hours typically required with conventional filters.

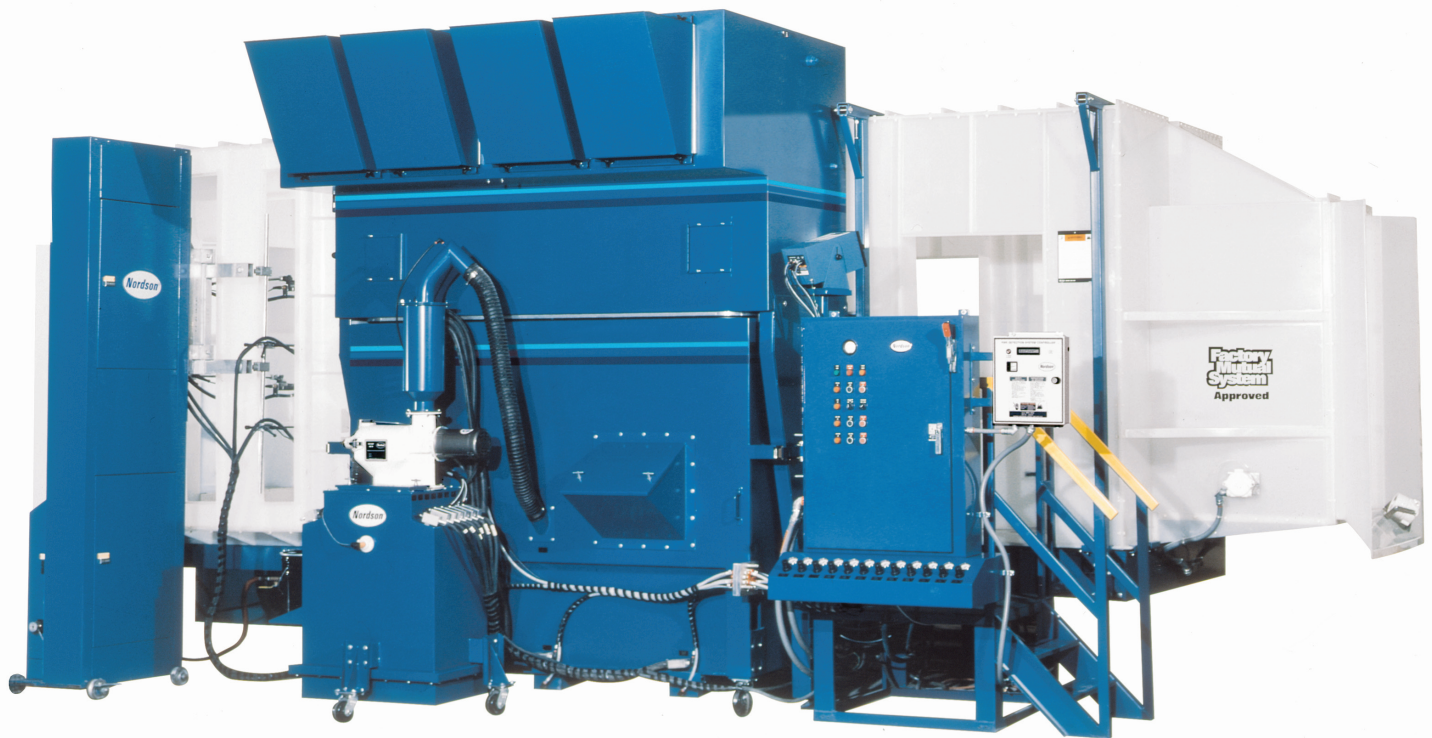
Plus, the cartridges are 38-percent longer than standard filters. There is far more surface area, so powder loading is reduced and service life increased.

The Excel 2000 booth system features final filters that are 99.9-percent efficient at one micron. The internal mounting of the final filters simplifies installation for fast start-up and easy routine maintenance.





# Excel 2000<sup>®</sup> Powder Spray Booth



## Collector Module Improves Airflow

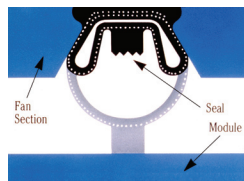
The collector module is designed to reduce restrictions on airflow. An enlarged booth opening at the front of the collector module, and large hole diameters in the tube sheet reduce load on the fan.

Air deflectors, located in front of the primary filters, uniformly disperse air around the cartridges. In operation, the average face velocity can be maintained very close to the design face velocity without varying the fan speed, for better control of the coating process.



The “quick disconnect” feature of the collector module and pump ensures easy operator access for cleaning and color change operations. A unique inflatable pneumatic seal provides an airtight connection of the module to the fan section.

One-piece molded gaskets for the cartridges, collector module and fan section resist degradation from contact with powder paints. The seamless, low-durometer gaskets maintain excellent sealing characteristics for maximum efficiency.



## Aerodynamic Canopy Design

The curved canopy of the Excel 2000 booth minimizes dead zones and reduces turbulence inside the spray booth. The canopy is constructed of strong, high-performance polypropylene materials for enhanced coating efficiency.

The low conductivity of the polypropylene minimizes the amount of overspray that is attracted to the interior surfaces of the canopy. Booth walls are extended at the gun openings for added space between the gun tip and the wall. As a result, more powder is attracted to the part, increasing operating efficiency. This also speeds booth cleaning during color changes.

The translucent polypropylene material allows ambient light into the spray booth for improved visibility without separate light fixtures.



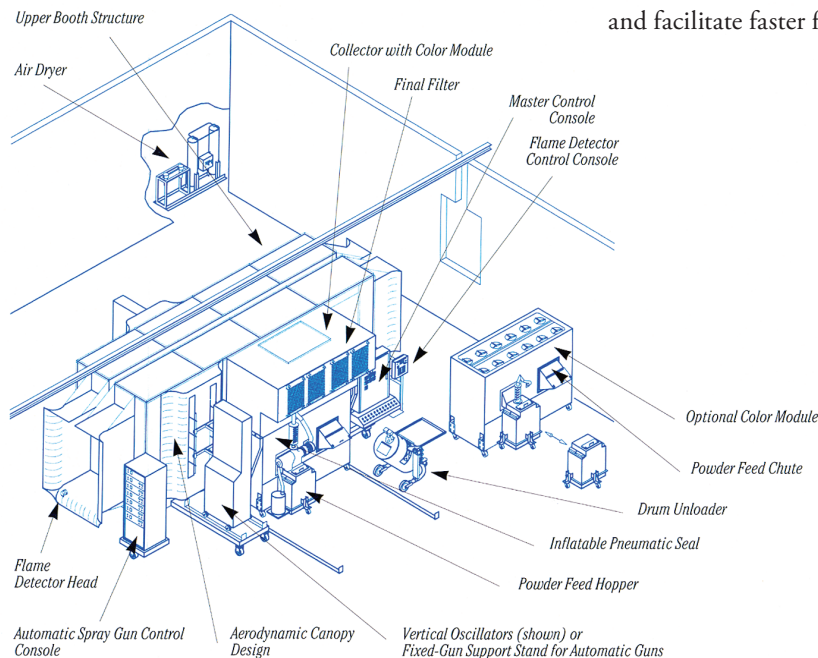
## Factory Mutual-approved System Meets Strict OSHA Standards

The Nordson Excel 2000 booth, collector and recovery system has Factory Mutual system approval. It has been extensively tested and proven to meet all stringent conditions FM requires to ensure maximum safety.

The superior airflow management of the Excel 2000 spray booth is reflected in its exceptionally quiet operation. Design improvements to the fan and mounting assembly section reduce noise levels for improved operator safety and a quieter work environment.

## Fast Installation and Start-up

The Excel 2000 spray booth features an integrated base and collector. The system is supported by two cantilever legs at the base and two legs at the collector module. Support of the booth at only four points facilitates leveling during installation. All four legs are easily adjustable to compensate for minor variations in the plant floor.



The integrated design of the Excel 2000 booth allows substantial factory pre-assembly of the booth prior to shipment to your plant. Factory pre-assembly reduces installation time and associated costs, and simplifies start-up.



Integrated cantilever booth-base design allows for fast, easy leveling.

## Easy to Operate and Maintain

The Excel 2000 spray booth is designed for trouble-free operation and maintenance. The inflatable pneumatic seal between the color module and fan section is easy to operate for fast color changes. All electrical and pneumatic controls and gauges are located in a single control panel for convenient operator access and maintenance.

Other features, including dual-function disconnects, pump disconnects, sieve receptacle accessories, and level sensors and limit switch for collector module interlock, reduce color-change time and facilitate routine maintenance.

The center-mount cartridge design and unique seating plate set gasket compression automatically without torque specifications to eliminate leaks and facilitate faster filter changes.

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