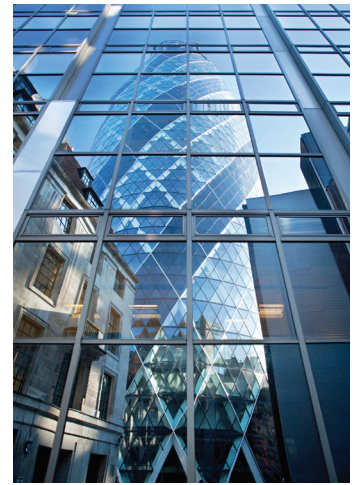




# Powder Application Technologies

**for the Architectural Industry**





## Turn to Nordson for the Most Innovative Powder Coating Systems

When it comes to powder coating for architectural applications, finishers around the world choose Nordson for high line speeds and fast, efficient color change. What's more, Nordson understands the challenges faced by manufacturers coating for the architectural industry today – specifically, the need to achieve superior coverage that meets demanding AAMA (American Architectural Manufacturers Association) and Qualicoat standards.

As the world's largest supplier of precision dispensing and fast color change technologies, Nordson offers engineered system solutions for both horizontal and vertical painting processes. These include:

- **Quick, contamination-free color change booth technologies**
- **Self-cleaning booth option** for vertical extrusion applications
- **True, closed loop digital flow control** for consistent, repeatable application
- **Reduced film build variation**, allowing you to meet minimum thickness specifications without material waste
- **Automatic guns and application technologies** designed for superior coating performance at line speeds up to 25 fpm plus for both vertical and horizontal extrusions
- **Electrostatic control with AFC® (Automatic Feedback Control)**
- **High transfer efficiency** to reduce powder reclaim
- **HDLV® (high-density, low-velocity)** available for softer spray at the gun tip

From monumental and light commercial buildings to commodities, interiors and fixtures, Nordson systems deliver superior coverage, high line speeds and fast color change to keep you productive and profitable.

## Quick, Contamination-Free Color Changes

For color changes in 5 to 10 minutes or less, manufacturers of horizontal and vertical extrusions turn to Nordson's ColorMax® booth system. Our fully integrated system offers speed and efficiency, with less powder-in-process, easy booth cleaning and fast color changes. As a result, ColorMax systems substantially reduce labor cost, downtime and material waste in multi-color powder coating applications.

The ColorMax system incorporates several innovative features to maximize material use and eliminate contamination. First, the booth's streamlined canopy is constructed with patented Apogee® composite material for higher system efficiency, structural strength and minimal powder retention/attraction to the booth. Apogee material allows for rapid powder recycling, easy cleaning and improved color-change time. In addition, the ColorMax's powder feed center is designed for fully automatic recovery, sieving and recycling of powder suppliers' boxes, for maximum powder usage and minimal loss. The feed center features an easy to disassemble sieve, solid pick-up tube lance, and in-line pump design that enhance quick and thorough cleaning.



## Customers around the world that have benefitted from Nordson powder coating equipment and systems —

AIC  
Alucofer  
Alumil  
Aluset  
Amerock  
Arch Aluminum  
Beijing Ruicheng  
Biltbest Windows  
CCSI International  
Cullman Products

Elixir Industries  
Extal  
Florida Extruders  
Fushun Feili AI  
Haicheng Yuanzhen Industrial  
Hebei Hualong  
Hebei Langfang Dingsheng  
Hydro Aluminum  
Indalex  
Lacalum

Liaoning Liaoshen AI  
Newell Window Furnishings  
Ningbo Kexin Anti-Corrosion  
Pella  
Plascore  
Prospero Metals  
Public Supply  
SAS  
Shanxi Xinghang AI  
Shenyang Liaoshen AI

Steelmet  
TOSTEM  
Yantai Nanshan AI  
Yingkou Liaohe AI  
Yingkou Ruida AI  
Zhejiang Aoxiang AI  
Zhejiang Donglian AI  
Zhejiang Hongfeng AI  
Zhejiang Kaier Industrial

## Specializing in Both Proven & Cutting-Edge Extrusion Applications

### iControl® Integrated Control System

The iControl Integrated Control System builds on our extensive controls knowledge and technology to incorporate all powder control functions into an easy-to-operate, all-inclusive system. Ideal for use with any Nordson gun technology, this production-proven system features closed-loop digital flow modules for optimum gun performance and the consistent coating quality so critical in the architectural industry. In addition, a 12" LCD full-color touch screen display with icon-based graphics allows easy set-up and operation in any language. Finally, the iControl features up to 255 presets for application, gun movement and part identification parameters. These presets can be tailored to each color and each part for up to 30 percent powder material savings and consistent, repeatable film build. iControl is a recipe based system that optimizes process control, improves repeatability, lowers reject rates, and reduces material usage.



### More Automatic Gun Options for Added Versatility



Nordson spray booths can be configured with a variety of automatic Nordson spray guns to provide superior coverage and meet specific application needs.

### Encore® Automatic Powder Coating Gun

The Encore automatic gun delivers superior coating coverage and efficiency across all types of architectural applications. The gun incorporates an air-purge cleanable design for fast, easy cleaning – both inside and out – without gun disassembly.

### Prodigy® Automatic Powder Spray Gun

Nordson HDLV (high-density powder, low-velocity air) technology focuses on dense-phase powder transport and application of powder materials. Providing a softer spray at the gun tip, HDLV technology moves more powder with less air for reduced material consumption and even higher transfer efficiencies.



The Prodigy HDLV gun, pump and controller offer an integrated solution for precision dispensing and sophisticated color-change control. The state-of-the-art in HDLV technology, the Prodigy system provides automatic purging of guns and pumps, reducing downtime and labor costs. In addition, this easy-to-use system ensures contamination-free, ultra-fast color change for improved productivity.

### Liquid Spray Technology

As the world's largest supplier of high-speed, precision dispensing and fast color change technologies, Nordson can supply engineered system solutions for both liquid and powder applications. With decades of experience in liquid dispensing technologies, Nordson applies its expertise to systems for horizontal aluminum extrusions. You'll achieve fast color changes, increased productivity and superior coverage to meet AAMA and Qualicoat standards.

For example, the production-proven, Nordson RA-20 rotary atomizer delivers painting efficiency and superior finishing quality. It incorporates close-in painting for superior recess penetration and film build control and also offers good flow and leveling properties. With a spray pattern ranging from 8 inches to 42 inches, the RA-20 provides added versatility for a variety of profiles.



For more information on Nordson systems for powder coating in the architectural industry, talk with your Nordson representative or visit our website at [www.nordson.com/powder](http://www.nordson.com/powder).

## Depend on Nordson for Experience and Reliability

### Cartridge Booth Technology

Manufacturers in the architectural industry routinely turn to Nordson for cartridge technology that delivers an enhanced application environment, long filter life with patented pulse cleaning system, and superior powder containment. Our cartridge booths are designed for complete system integration – from controls and booth design to application technology – providing uniform spray booth airflow in an optimum coating environment. As a result, these systems provide reliable and efficient operation for both long as well as short production runs.

Nordson cartridge booths are designed with curved efficiency extensions at the automatic gun stations – to optimize containment and reduce turbulence at the spray zone. Constructed of strong,



high-performance polypropylene materials, the canopy enhances coating efficiency and minimizes the amount of overspray that

is attracted to the interior surfaces of the canopy. Therefore, more powder is attracted where it needs to be – to the part. This innovative design increases operating efficiency and speeds booth cleaning during color changes to further enhance productivity.

## Nordson's Vertical and Horizontal Powder Systems Technology Delivers High-Speed Production and Fast Color Change

- **Superior gun moving and application technology** provide superior coating performance at line speeds up to 25 fpm plus.
- **Self cleaning booth and automatic color change capability** result in fast, contamination-free color change.
- **Apogee canopy material** resists powder attraction for faster color change and the ultimate in total system efficiency.
- **The iControl Integrated Control system** offers programmable gun settings, and automatic part identification for precision dispensing and reduced material savings.
- **Our vertical system technology** is superior to existing technology that is high in powder material usage and disposable waste.



## Advantages of Vertical and Horizontal Powder Systems for Aluminum Extrusion

Profiles include:

- **Reduced VOCs (volatile organic compounds) and no solvents**, so no need for thermal oxidizers.
- **99.9% reclaimability and reuse of powder overspray.**
- **More durable and weather resistant coatings** meeting AAMA 2603, 2604 and 2605 specifications for stain resistance, salt spray resistance and weatherability.
- **A wide range of high gloss, flat and textured finishes** for PVDF, Kynar<sup>®</sup>\*, colors, metallics and clear coats.

\* Kynar is a registered trademark of Atofina Chemicals, Inc.

For more information, speak with your Nordson representative or contact your Nordson regional office.

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