

Nordson Colormax FC Powder Paint Booth System

Powder Coating Type: Organic

Design Conveyor Speed: 30 FPM

Conveyor System Type: Monorail

Parts Coated: Range Components

Coating Thickness Desired: 1.5 – 3 mils Average on Selected Surfaces

Largest Part Size: 2'6" W x 6'4" H x 3'0" L

Profile End Opening: 4'0" W x 7'4" H

Number of Reclaimed / Recycling Powders: 10+

Number of Powders: 10+

Encore LT Manual Gun Rail Mount System

2 - *Encore Rail Mount System*

2 - *150mm Lance Extension*

Sturdy Operator Platform, 3'-0" wide x 3'-0" long is constructed of welded, heavy-gauge steel with safety rails.

2 - *Operator Platforms*

Smart Coat Control System

- * Allen Bradley Panelview Plus 15" with Pedestal
- * Fifteen dual iFlow closed-loop mass flowmeters (accuracy +/- <1%)
- * Fifteen dual gun driver cards
- * Ethernet gateway to Allen Bradley ControlLogix located in main electrical panel
- * Multi-level password protection
- * Print functionality
- * Gun fault diagnostics
- * Gun mover diagnostics
- * Motor overload and VFD diagnostics
- * Gun status screens
- * Automatic Feedback Current control for operating parameter control
- * Line speed indication
- * Gun maintenance timers
- * Accommodates up to 255 presets for gun control parameters
- * Four patented advanced coating modes - Standard, Recoat, Deep Recess, Special (dry blend metallics and micas) and User Programmable.
- * Percent adjust function for global adjustment to all preset airflow settings.
- * Easy inspection and access to all gun related electronics and pneumatics

Encore Automatic Guns

- * 100 kV gun for highest transfer efficiency
- * Air purge cleanable design without manual disassembly

- * Wide nozzle selection. Optional ion collector available

30 - *Encore Guns, Mounts, Cables*



Oscillator and Gun Positioning Equipment

- * Oscillator with a maximum stroke length of 18 inches.
- * Cam and eccentric design for long life and smooth operation
- * Gun Positioning for constant gun-to-part distance control
 - 2** - *Vertical Oscillator(s)*
 - 2** - *VFD Powerflex with Ethernet for Oscillators*
 - 2** - *39" Kevlar Belt Driven In/Out Positioner Base, DC drive*

Apogee II Canopy

- * High performance non-conductive material.
- * Smooth interior surface with minimal seams.
- * Ceiling panels include translucent light panels.

Apogee Canopy features:

- * *Four (4) automatic gun slots,*
- * *Two (2) manual spray gun openings, 30" wide x 78" high with upper and lower door*
- * *Part entrance door to facilitate color change with conveyor interlock*
- * *Four (4) Four Tube Fluorescent Fixture(s) T5 Lamps*
- * *Segmented Floor Blowoff for compressed air savings and high performance floor cleaning*
- * *Inspection cleanout door for cyclone inlet*

ColorMax Base Assembly

5'-9" wide x 19'-6" long (1.75M x 6M) including:

- * *Modular design base*
- * *Colormax powered roller base with 4 wheel drive system*
- * *High load lateral roller carriages to prevent crabbing*
- * *Separate drive "cells" to prevent misalignment due to torsional twisting of drive shaft.*

- * *Roller base utility deck system has a series of channels with routinely spaced pass-through openings for service access of powder hoses, pneumatics and electrical services.*
- * *Roller base assembly will be pre-fitted with all gun movers, feed centers, operator painting platforms, cyclones and after filter, complete with all utilities and appropriate cross-over points prior to shipping.*
- * *Roller base sections will be coupled together with a series of coupling pins.*
- * *Operator pendant for mover control*
- * *Booth positioning and Alignment Stop Accurate to +/- 1/16" at the pin point.*
- * *Programmable segmented floor blow off*
- * *Booth Base Hose and Cable Trays with cam clasp lids for easy access*
- * *Engineered hose routing and hose/cable identification system*

16,000 cfm After-Filter Assembly featuring:



- * *75 HP direct drive motor, 95.3% efficient with loss of phase protection*
- * *Duct inlet elbow with support stand*
- * *Nine (9) final filters 95% efficient at .30 microns*
- * *Clean air section with "pulse on demand" cartridge filter blow-down*
- * *Primary filter section with twenty-one (21) cartridge filters*
- * *Two (2) fluidizing plenums*
- * *One (1) transfer pump each plenum*
- * *One (1) drum lid for collection of fines*
- * *Silo bin fluidizers*

16,000 CFM Cyclone with Prodigy™ HDLV™ High Capacity Pump

- 2** - *High Capacity HDLV Pump*
- 1** - *Push button color change panel*
- 1** - *Backup HDLV Pump*
- 1** - *Close Coupled 16,000 cfm Twin-Cyclone*
95% cyclone efficiency with standard grind powders



Ductwork and Slide Gate

- 1** - *Air Operated 28" Diameter Slide Gate complete with four way valve with 120/60 solenoids with NEMA 12 junction box.*
Square to round duct transitions.
- 1** - *28" Diameter Ductwork, 18 gage galvanized pipe with required quantities of elbows, straight pipe and nipples.*

Powder Feed Center and Supply Equipment for 36 Guns

- 1 - Powder Feed Center, Including 3000 cfm fan section with 5 hp exhauster motor, cartridge filter section, final filter section, vibratory table and fluidized bed with transfer pump. Controlled from central system PLC.
- 1 - 15" Vibratory Sieve with Vibrasonic deblinding system featuring;
 - * Sieves both virgin and reclaim material
 - * Vibrasonic deblinding system
 - * 100 Mesh stainless steel screen.
 - * 1/3hp 230-460/3/60 vibratory motor with adjustable weights
 - * Stainless steel sieve deck and under-pan assembly
 - * (4) Quick release clamps
 - * Nylon coated aluminum base
- 4 - Pickup Tube Lance Assembly
- 4 - Purge Assembly Manifold with latching assembly for enhanced seal during the purge cycle
- 1 - Feed Center Panel
- 2 - High Capacity HDLV Pump (Virgin Feed)
- 1 - Level Control for Box Feed
- 1 - Level Control for Virgin Replenishment
- 1 - Main Header with Filter
- 10 - PFC Fluidizing Hopper for Feed Center, 18" x 33"
- 32 - Inline, Encore Pump
- 3200- Antistatic Powder Feed Tubing, 11.mm (0.43") 2 sets of powder feed hose with ends of hoses labeled on both ends.



Bulk Unloader for HDLV

- 1 - Drum Dolly's

Standard Electrical Control Panel Featuring:

- * *Allen Bradley ControlLogix PLC*
- * *Control Logix I/O chassis with required I/O*
- * *Industrial grade managed switch*
- * *20% spare panel space*
- * *Nema motor controls*
- * *Series 800T pushbuttons*



Fire Detection System Control Panel

- 2** - *Flame Detector, FS10R-30*
- 1** - *Flame Detection Indicator Panel*



Fire Suppression/Deflagration System

- 1** - *Deflagration Suppression System*
- 1** - *Installation Checkout and Startup (by Fenwal Engineer)*

Booth Control Functions:

- a. Monitor and Shut Down due to Compressed Air Quality (Dew Point).
- b. Monitor and Alarm on Cartridge Filter Pressure.
- c. Monitor, alarm, and shut down on Final Filter Pressure.
- d. Powder level control and alarm in Hopper/Feeder System.
- e. Piezoelectric Beeper that sounds until alarms are acknowledged or cleared.
- f. One Button system start via the Operator Interface. Includes individual motor start/stop.
- g. Motor Status Display, including motor starter overload and other interlock diagnostics.
- h. System will store filter media pressure history.
- i. Configurable Reclaim/Non Reclaim Operation. Setup for sieve and transfer pump control
- j. Cycle On/Off Cartridge blow down sequence based on cartridge filter pressure.
- k. Loss of phase detection equipment
- l. Part out of position detection and conveyor shut-down assembly