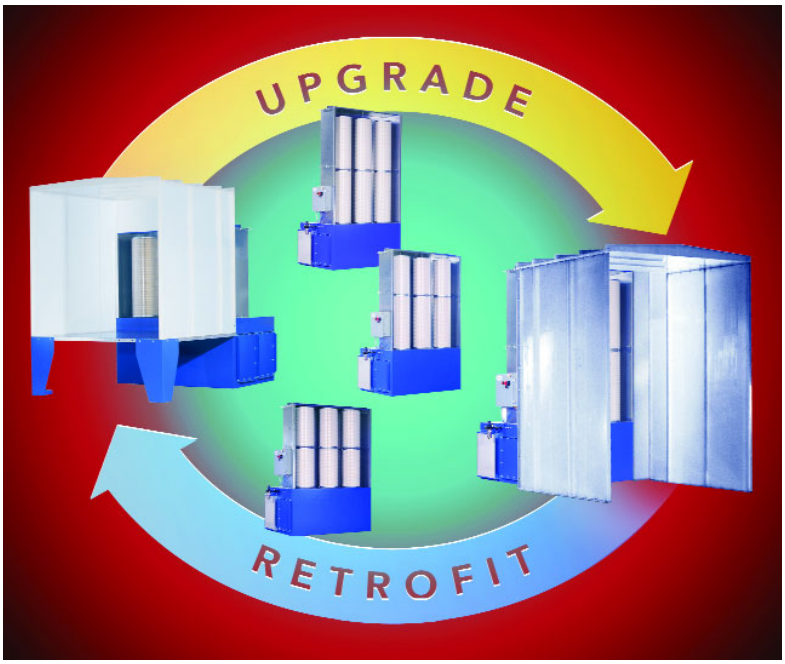
Econo-Coat® Series Powder Booth/Collector Systems

Interchangeable component design for maximum operating flexibility



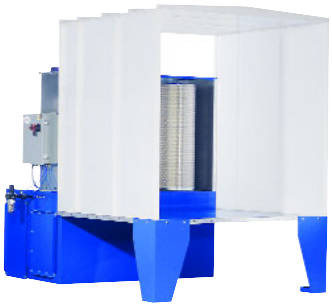
Modular, cost-effective Econo-Coat Series manual powder booth/collector systems meet changing production requirements.

Nordson's compact Econo-Coat powder spray booths are designed to meet a wide range of manual coating requirements for increased production flexibility. The expandable design includes a variety of powder collection modules to minimize the number required for conveyorized booths or larger, walk-in-batch booths. This reduces overall floor space and lowers capital investment and maintenance costs. The configurable modules are easily upgraded with optional components to increase airflow capacity to meet changing production requirements.

The Econo-Coat Series of powder spray booths offer the same reliability and durability of Nordson's engineered, fully automated systems. They are ideally suited for manual batch production and laboratory applications, short-run batch and conveyorized custom-color coating operations, as well as a companion to large engineered systems.

Wide Range of Collectors Available

An expanded range of airflow capacities is featured with Nordson's Econo-Coat collector modules. This may minimize the number of modules required for conveyorized booths or larger, walk-in batch booths. The need for fewer modules minimizes floor space and provides more flexibility in designing a system that delivers reliable performance. Collector modules are available in 2000, 3400, 5300 and 6000 CFM of air flow capacity, and are easily upgraded with a system retrofit kit to meet changing production requirements.



Durable Construction

The smaller Econo-Coat 2001 spray booth canopy is constructed of durable, high-performance polypropylene to minimize powder attraction to booth walls and increase coating efficiency. For larger booths where the spray area is farther away from the booth walls, wall panels are constructed of durable, galvanized steel or optional stainless steel to provide easy clean-up and long service life. Clear panel insets are used on select roof panels allowing ambient light into the booth, eliminating the need for special light fixtures.

Fast Installation, Upgrade and Start-up

All Econo-Coat Series collector modules include a fan section, final filters, and electrical control panels, which are factory pre-assembled for fast, easy installation and start-up.

Proven Cartridge-filter Technology

Nordson filter-cartridge powder recovery systems use a two-step filtration system that eliminates the need for air make-up systems.

Cartridge filters are cleaned using a reverse-pulse of air. The vertical cartridge-mounting design ensures effective filter cleaning and provides easy access for filter replacement.

Control Features

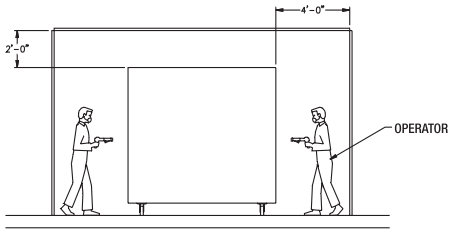
Special control features of Econo-Coat Series powder booths deliver superior operating performance. A solid-state timer allows for adjustment of sequential pulse cleaning to increase filter performance and filter life. A standard differential pressure gauge monitors filtration system performance. A safety interlock switch automatically shuts down the system when air pressure exceeds its normal operating range, indicating filter blinding, to prevent system damage and powder escaping from the booth.

Design Considerations

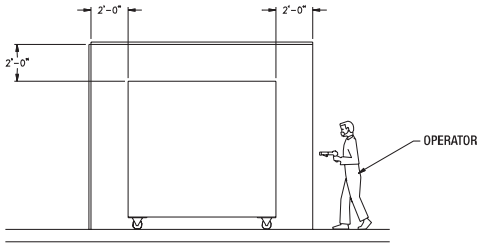
Batch Booth

Nordson Econo-Coat batch booths are designed for the operator to roll a part or a rack of parts into the booth for coating. General guidelines for selecting the work area are to maintain a minimum two-foot clearance between the top of the part and booth roof.

(a) If the operator enters the booth and sprays the part, a clearance of four feet should be maintained between the side of the part that is being sprayed and the booth wall.



(b) If the operator sprays the part from outside the booth, a clearance of two feet must be maintained between the part and the booth walls.



There should be adequate clearance (at least three feet) between the powder collection modules and surrounding objects such as walls, etc., to ensure unobstructed air flow out of the final filters.

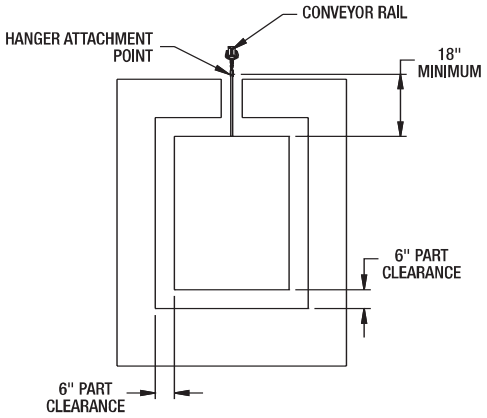
For ease of reference, a list of standard booth sizes is provided in ascending order by inside work area height (see specifications).

Conveyor Booth

Econo-Coat conveyor booths are designed for the operator to coat one or both sides of a part and/or rack of parts with a manual spray gun as they pass through the booth. (Automatic powder coating systems must meet stringent safety requirements and require fire detection and suppression systems.)

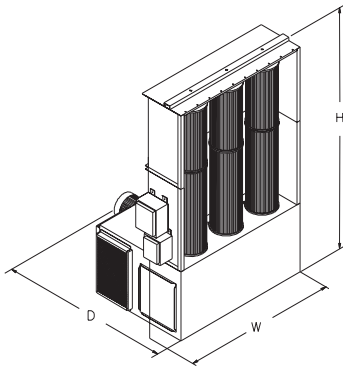
Manual openings allow adequate access to apply powder to passing parts/racks.

Part-rack entry and exit openings provide a 6-inch clearance around the part/rack envelope. Booths are sized to deliver 100 feet per minute of airflow velocity through all booth openings to ensure complete oversprayed powder containment.



Calculation to properly determine a booth's air flow requirements with its total open area is exhibited below.

Two standard conveyor booths are available. Customized booths can be engineered.



Calculations

a.) (Part/rack height + 1 ft.) x (part/rack width + 1 (ft.) x (2) = ( ) sq. ft.
b.) Conveyor slot width x length = ( ) sq. ft.
c.) Keyhole height x width x (2) = ( ) sq. ft.
d.) Operator opening height x width x number of openings = ( ) sq. ft.
e.) Total square feet of opening x 100 FPM = total CFM required.

* *This module sold only with canopy. Other modules available separately.*

*Model EC-2001**

Model EC-34M1

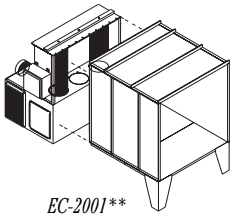
Model EC-53M1

Model EC-60M1

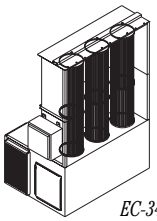
Econo-Coat Module Specifications

Model	Footprint H W D	CFM	Approx. Weight (lbs.)	Motor hp (a)	High-efficiency Primary Filter 26"	36"	High-efficiency Final Filters
EC-2001	7'-3" x 5'-9" x 9'-2"	2000	825	3	0	2	2
EC-34M1	7'-3" x 5'-9" x 4'-9"	3400	775	5	6	0	3
EC-53M1	8'-3" x 5'-9" x 4'-9"	5300	875	10	3	3	4
EC-60M1	9'-3" x 5'-9" x 4'-9"	6000	875	10	0	6	4

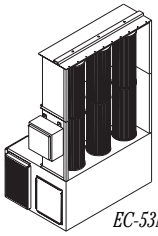
Configurations



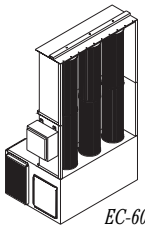
*EC-2001***



EC-34M1



EC-53M1



EC-60M1

(a) – 460 VAC, 3-phase, 60Hz standard. Other voltages optional.

Model enclosure: Base of module with a durable powder coated finish. Filter cartridges housed in galvanized steel (stainless steel optional) with a powder coated lid.

Control panel: Starter, fuses, solid-state timer for sequential pulse cleaning, standard differential pressure gauge and safety interlock switch, Nema-12 enclosure. UL listed.

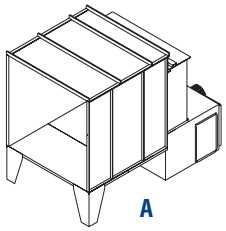
Automatic reverse air pulsing: delay setting 1.5 –30 seconds, duration setting .05 – .5 seconds.

**Only available complete with canopy.

Econo-Coat Batch Booths

Model	Inside Work Area H W D	Footprint H W D	Number of Modules	Module Configuration	CFM
EC-2001	5'-0" x 5'-0" x 5'-0"	7'-3" x 5'-9" x 9'-9"	1	A	2000
EC-3401	7'-0" x 5'-0" x 5'-0"	7'-3" x 5'-9" x 9'-9"	1	B	3400
EC-6003	10'-0" x 6'-0" x 10'-0"	10'-3" x 6'-3" x 14'-9"	1	B	6000
EC-5301	8'-0" x 7'-0" x 10'-0"	8'-3" x 7'-3" x 14'-9"	1	B	5300
EC-6001	9'-0" x 7'-0" x 10'-0"	9'-3" x 7'-3" x 14'-9"	1	B	6000
EC-3403	8'-0" x 8'-0" x 10'-0"	8'-3" x 17'-6" x 10'-3"	2	C	6800
EC-5307	12'-0" x 8'-0" x 10'-0"	12'-3" x 17'-6" x 10'-3"	2	C	10600
EC-3402	7'-0" x 9'-0" x 10'-0"	7'-3" x 18'-6" x 10'-3"	2	C	6800
EC-5302	8'-0" x 10'-0" x 10'-0"	8'-3" x 19'-6" x 10'-3"	2	C	10600
EC-5306	10'-0" x 10'-0" x 10'-0"	10'-3" x 19'-6" x 10'-3"	2	C	10600
EC-5303	8'-0" x 12'-0" x 10'-0"	8'-3" x 21'-6" x 10'-3"	2	C	10600
EC-5305	9'-0" x 12'-0" x 10'-0"	9'-3" x 21'-6" x 10'-3"	2	C	10600
EC-6004	10'-0" x 12'-0" x 10'-0"	10'-3" x 21'-6" x 10'-3"	2	C	12000
EC-5304	8'-0" x 14'-0" x 10'-0"	8'-3" x 15'-0" x 14'-9"	2	D	10600
EC-6002	9'-0" x 14'-0" x 10'-0"	9'-3" x 23'-6" x 10'-3"	2	C	12000

Configurations



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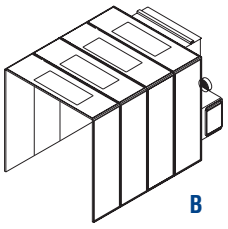

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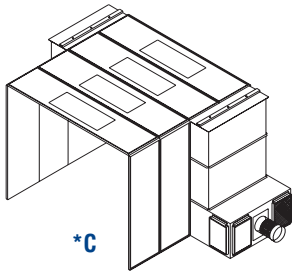
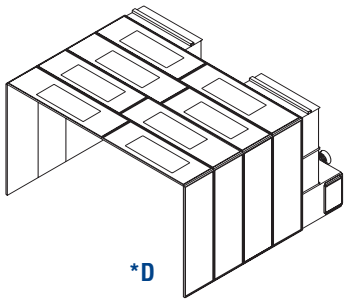


*C

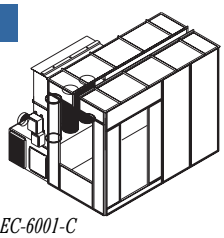


*D

Econo-Coat Conveyor Booths

Model	Part Size Opening	Canopy Height	Number of Manual Guns
EC-5301-C	36" x 60"	8' to 12' (in 6" increments)	1
EC-6001-C	30" x 60"	8' to 12' (in 6" increments)	2

Options: Stainless steel canopies, powder collection tray on rollers, air manifold.
Specifications: 18-gauge galvanized steel roof and wall panels and clear roof panels to allow ambient light into the booth.



EC-6001-C

Econo-Coat® Series Powder Booth/Collector Systems

Optional Powder Application Equipment

Econo-Coat powder booth/collector systems are designed for optimum performance with Nordson application equipment, such as Sure Coat®, Econo-Coat® and Tribomatic® manual gun systems.

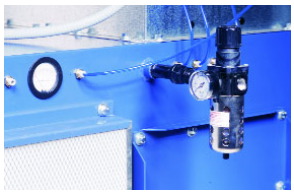
Manual powder spray systems feature a corona or tribostatic spray gun, control unit, cable, powder feed hopper and pump. The control units can be mounted on a booth wall or mobile dolly system. The Nordson Sure Coat® System features patented Select Charge® technology for unmatched performance across the widest range of part profiles. Plus, the user-adjustable Automatic Feedback Current (AFC) control to provide maximum operating flexibility to meet a variety of coating requirements including parts with deep recesses and re-coating of already cured parts. The Econo-Coat® Gun/Manual System combines production-proven powder spray gun and AFC control technology and performance in an exceptionally affordable and versatile powder coating package.

Nordson powder collection booths and spray systems meet the broadest variety of production requirements, and assure highly efficient, versatile and economical performance.

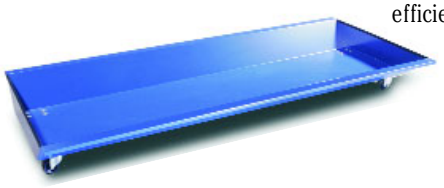
Features and Benefits

- Configurable booth modules can be upgraded with optional components to meet a wide range of operating requirements.
- Pre-installed, UL listed, factory tested control panel ensures safe, reliable performance.

- Factory preassembled fan assembly and controls ensure fast, easy assembly, installation and reliable operation.
- Galvanized or optional stainless steel wall panels for high durability and long service life.
- High efficiency filters contain powder in the booth as well as prevent fine powder particles from escaping to the work area for a clean, efficient operation.
- Clear roof panels eliminate need for special lighting fixtures.
- Automatic reverse air pulse cartridge cleaning delivers optimum booth air flow, reliable filter performance and long filter service life.



  - Differential pressure gauge monitors air pressure increases to detect filter cartridge blinding.
  - Optional air manifold is available to further minimize installation time.
- Safety interlock switch automatically shuts down system when air pressure exceeds its normal operating range to prevent system damage.
- Installation and start-up manual provides complete installation instruction with easy-to-read operating and maintenance procedures.
- Optional powder tray with rollers helps contain powder that is pulsed off cartridges for greater efficiency and reduced maintenance.



Nordson reserves the right to make design changes to products to improve their function. These changes may occur between printings.

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

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