

Sure Coat® Manual Spray Gun System



Selectable product-specific coating modes provide peak performance in all applications.

The Nordson Sure Coat® powder spray system provides a solution with patented Select Charge® technology, which allows you to choose the ideal electrostatic parameters for your particular application. With it, you can achieve a level of coating quality, efficiency and consistency never before possible.

For most applications, the standard kV-adjustable coating mode used with Automatic Feedback Current (AFC) control provides unmatched performance across the widest range of part profiles. You can select from three advanced coating modes, each optimized for difficult applications such as recoating, touch-up, and painting parts with deep cavities. Plus, there is also a user-programmable mode that enables you to set custom electrostatic parameters that work best for your coating application. This gives you unparalleled flexibility in operating parameters.

Automatic Feedback Current (AFC) Control.

All coating modes can be operated with Automatic Feedback Current (AFC) control, which automatically maintains the gun current at an optimal operator-selectable level. In the AFC mode, the Sure Coat controller automatically adjusts the high-voltage output to maintain the optimal powder charge and external field strength regardless of the gun-to-part distance. This precise control is crucial for penetrating Faraday-cage areas and for uniform powder deposition across the part. This provides the most consistent overall coating coverage and highest finish quality.

Operation is fast and easy. Simply press the AFC button on the controller and set the maximum current level. The Sure Coat controller will automatically adjust the gun voltage to maintain the current within the preset level.

Operator-friendly control of the coating process.

The Sure Coat control unit is designed for ease of operation, with simple, easily identifiable controls. The operator simply selects the coating mode and begins to spray. To operate the Sure Coat system as a conventional spray gun, just press the "Standard" button and adjust the voltage.

The Sure Coat control also provides "constant-read" gauges, which display air-pressure and electrostatic parameters even when guns are not triggered on. This makes it fast and easy to control and maintain proper settings.



Ease of troubleshooting and maintenance.

The system includes self-diagnostics to reduce downtime, minimize rejects and facilitate troubleshooting. Each time the control unit is powered on, it conducts a self-test to ensure proper system operation. If an operating parameter falls outside a normal operating range during operation, the control will display a fault-condition icon corresponding to the failed parameter. By pressing the Nordson logo button on the front panel, the control unit will activate a self-diagnostics cycle to identify the specific fault.

An automatic, operator-resettable timer displays the cumulative time the gun has been in operation. This feature helps the operator monitor part wear to facilitate scheduling of preventive maintenance.

Designed for your operation.

Several configurations are available to meet your requirements, including dolly- and wall-mount packages with your choice of gun-cable lengths, hoppers and box feeders, as well as a wide range of spray nozzles and extensions.

Setting a new standard in spray gun design.



Standard Mode:
*Operator-adjustable voltage
Highest transfer efficiency and uniformity
across a wide range of part profiles*



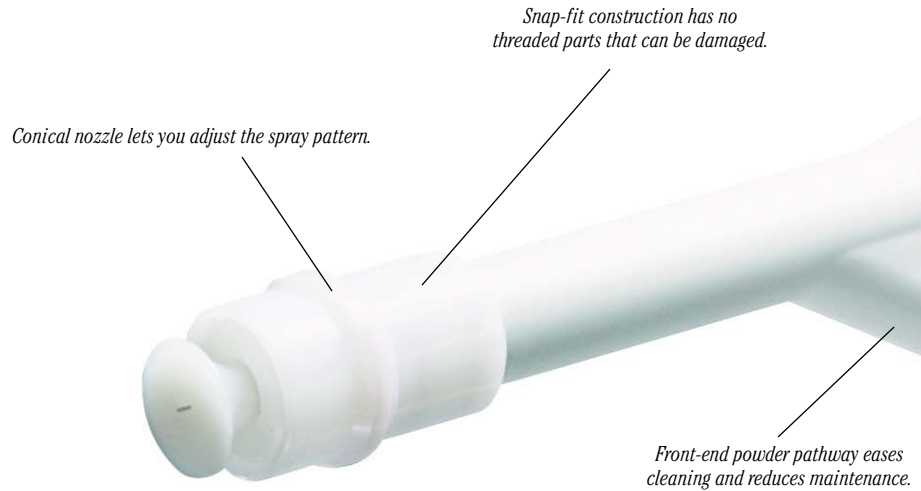
Coating Mode 1:
*Recoating painted parts
Delays back ionization for uniform
coverage and reduced orange-peel effects*



Coating Mode 2:
*Touch-up operations
High transfer efficiency and enhanced
Faraday-cage penetration*



Coating Mode 3:
*Deep cavity areas
Enhanced penetration when the gun
is placed inside a cavity*



The Sure Coat spray gun is designed for superior performance, durability and operator comfort. No other powder spray gun on the market offers all these important features:

- **Extremely well balanced**, for better control and less operator fatigue.
- **Two handle inserts** allow the operator to customize the handle size for the most comfortable grip.
- **Purge button located on the handle** allows operators to spray air through the gun when needed to minimize the potential for powder build-up and surging. This feature is particularly effective when using powders that can agglomerate and impact fuse in the gun.
- **Front-end powder pathway** provides ease of disassembly for fast cleaning and maintenance.
- **Few parts inside the gun are exposed to powder impact**, which keeps replacement parts to a minimum.



Choice of two lengths minimizes the need for gun extensions.

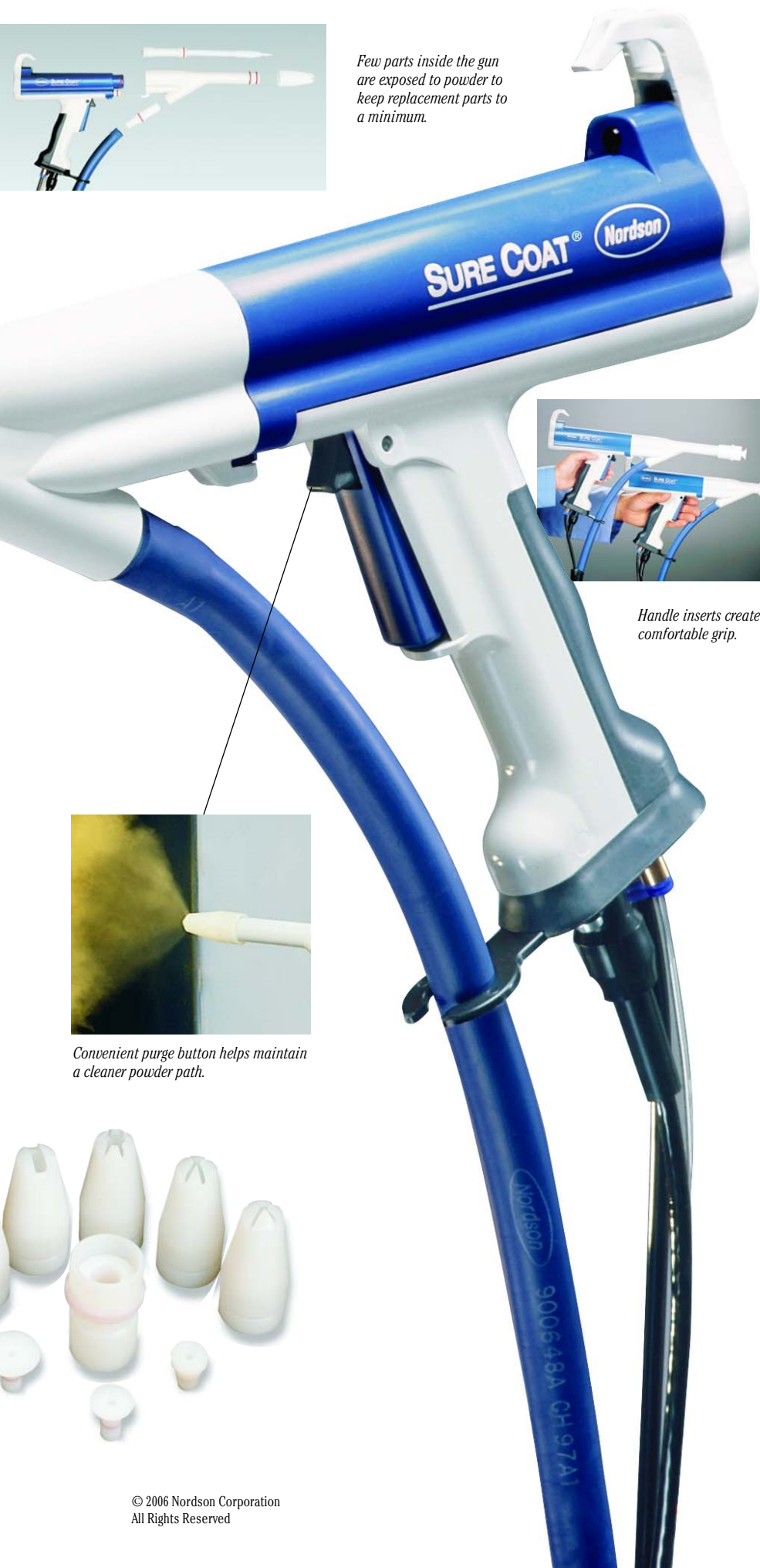
- **Snap-fit construction** eliminates the maintenance problem of threaded parts that can be damaged or caked with powder.
- **Choice of two gun lengths** reduces the need for lance extensions when coating parts with deep recesses.
- **Pattern-adjustable conical nozzle** for improved spray-pattern control.
- **Standard air-wash feature** delivers a very low-velocity stream of clean air to keep powder from accumulating on the electrode. The air-wash feature can improve coating performance with metallics and low-temperature-cure powders.



You can select from a wide range of spray nozzles.



Few parts inside the gun are exposed to powder to keep replacement parts to a minimum.



Handle inserts create a more comfortable grip.

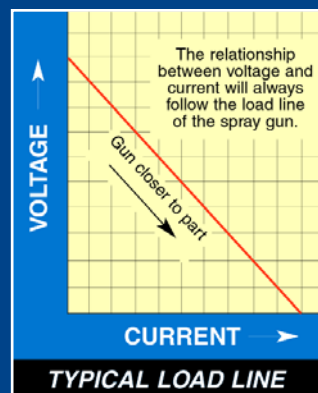


Convenient purge button helps maintain a cleaner powder path.



The Select Charge Process.

The key to Select Charge technology is its ability to provide different load lines, each optimized for a specific application. A load line represents the relationship between the gun voltage and current. As seen in the illustration, as the gun is moved closer toward the grounded part, the voltage decreases while the current increases.



The flatter the load line, the higher the gun voltage at a given current. Flat load lines deliver the high voltage needed for applications such as coating flat panels. Steep load lines deliver lower voltage relative to current, which enhances penetration into Faraday-cage areas.

Conventional powder spray guns are designed with only one fixed load line. Operators can adjust voltage and limit current, but the gun will maintain the same voltage/current relationship. This is why guns that provide excellent performance on flat panels can be less effective coating recesses.

Nordson Select Charge technology provides four operator-selectable load lines, each optimized for a specific coating requirement. This allows powder coaters to achieve superior performance across a wide variety of parts for consistently high transfer efficiency and finish quality.

Sure Coat System Specifications

Sure Coat Spray Gun

Input Voltage

6 – 21 VDC

Maximum output 95 kV

Maximum output current 100 +/-µA

Length

Long version: 17.25 in. (438 mm)

Short version: 14.75 in. (375 mm)

Reach

Long version: 11 in. (279 mm)

Short version: 8.5 in. (216 mm)

Height

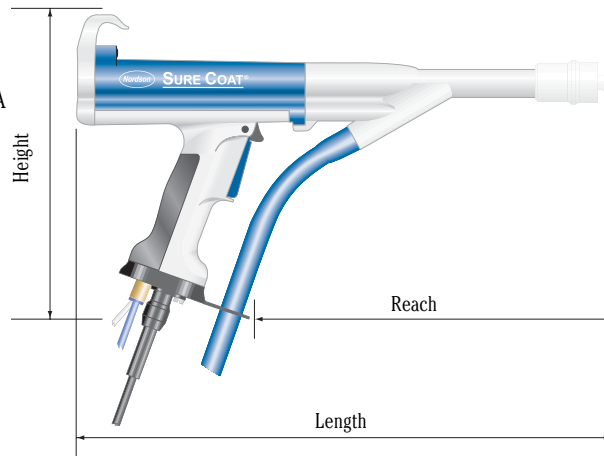
10 in. (254 mm)

Gun Weight

(w/o hose and cable)

Long version: 560 g

Short version: 510 g

**Sure Coat Control Unit****Height**

10 in. (254 mm)

Width

13 in. (330 mm)

Depth

6.25 in. (155 mm)

Input Voltage

85 – 240 VAC, 1 phase, 50-60 Hz

Output Voltage

6 – 21 VDC

Input Air Pressure

60 psi (4 bar) minimum

100 psi (7 bar) maximum

Air Filtration

Air must be clean and dry.



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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