Encore[®] Porcelain Enamel (PE)

Powder spray guns

Combine proven performance with advanced design for the high-efficiency application of porcelain-enamel powder coatings.

Encore

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The Encore® PE manual and automatic powder spray guns* for applying porcelain-enamel powder incorporate the proven industry-leading designs and application performance of their predecessor – Versa-Spray® PE guns. However, with many design enhancements, Encore PE guns take operating efficiency and coating performance to an even higher level.

Both the Encore PE automatic and manual guns feature a 100 kV voltage multiplier, assuring maximum first-pass transfer efficiency. For the Encore PE manual gun, this is a significant increase compared to previous-generation guns.

A new, positively retained deflector and locking pattern adjustment sleeve ensures consistent, repeatable spray performance. The addition of electrode air wash in the Encore design helps keep the gun charging electrode clean. This maintains maximum

electrostatic charging efficiency. It also help prevent agglomerated powder from disturbing the spray pattern or dislodging and inadvertently being applied to the part causing possible surface finish defects.



An adjustable mounting bracket enables automatic gun positioning from 90-degrees up (from parallel to gun bar) to 90-degrees down, to efficiently coat the tops and bottoms of parts. The bracket also enables "lead and lag" positioning for improved coverage on part edges.

*Patents applied for

Available in automatic and manual configurations

Nordson





Specially engineered materials

The powder-contact parts for the Encore PE guns and pump are made of engineered materials specially designed for porcelain-enamel powder to maximize spray performance and wear life.

Commonality of parts

The Encore PE manual and automatic guns share the same nozzles, pattern adjuster sleeve and voltage multiplier, assuring consistency from manual to automatic coating operations. Parts commonality also helps minimize replacement parts inventory.

Easy maintenance, field repairable design

The Encore guns and pump are easy to disassemble for routine cleaning and maintenance. They are also completely field repairable.

Optional nozzles and lon collector

Optional straight and angled flat-spray nozzles enable highly directional spray patterns for efficient, effective coating coverage on specific



part areas, such as returns on washer and dryer panels and other flatware, and interior corners of oven cavities. An optional ion collector, sometimes useful in controlling finish appearance, is also available.

Encore[®] PE pump

As with the Encore PE guns, the Encore PE pump builds upon proven prior-generation technology for porcelain-enamel powder, with improved design for increased operating efficiency.

Compared to its predecessor, the Nordson 100 Plus PE pump, the new Encore pump delivers up to 30 percent more powder at comparable compressed air settings – or comparable output at significantly reduced settings. In typical high-gun-count porcelain-enamel powder coating operations, this improved efficiency translates to substantial savings in compressed air consumption.



The new Encore PE pump increases operating efficiency



Encore PE multi-gun arrangements for coating cavities

Features and benefits

- Builds upon and enhances the proven industry- leading designs and application performance of their predecessor – Versa-Spray[®] PE guns
- A 100 kV voltage multiplier assures maximum first-pass transfer efficiency
- A new, positively retained deflector and locking pattern adjustment sleeve ensure consistent, repeatable spray performance.
- **New electrode air wash** keeps the gun charging electrode clean, maximizing electrostatic charging efficiency and preventing surface finish defects.
- Adjustable mounting bracket enables automatic gun positioning from 90-degrees up (from parallel to gun bar) to 90-degrees down, to efficiently coat the tops and bottoms of parts.
- The Encore PE pump delivers up to 30 percent more powder at comparable compressed air settings.
- Commonality of parts between the Encore auto and manual guns assures consistency when switching operations and minimizes inventory.
- Easy disassembly for routine cleaning and maintenance; completely field repairable.
- Optional ion collector device draws excess ions from spraying zone for enhanced coverage and finish appearance.
- A choice of gun controllers, both with digital, closed-loop pneumatic control, based on specific application needs – from basic to more advanced operation.

A choice of control systems

Encore PE guns are available with a choice of two gun controllers, both with digital closed-loop pneumatic control, based on specific application needs – from basic to more advanced operation.

The iControl[®] 2 automatic gun control system features a central color touch-screen operator interface, with all of the individual gun controller electrostatic and pneumatic components housed in a single enclosure. Additional gun mover and triggering controls, combined with multi-language capability and extensive diagnostics, provide unsurpassed system control in a single unit.

The Encore manual gun and automatic gun controllers combine a more conventional form factor with advanced, all-digital electrostatic and pneumatic control. Designed for more basic gun control operation, their simple, touch-pad layout, lighted icons and large, brilliant-blue LED displays make it easy to adjust and monitor all of your electrostatic and pneumatic settings. Both the iControl 2 and Encore gun control units feature digital, close-loop pneumatic control, for consistent, repeatable powder output, resulting in the best attainable coating coverage and efficiency.

The iControl 2 and Encore gun control units also feature Nordson patented Select-Charge® technology, providing total flexibility of electrostatic operating parameters, for optimum performance with porcelain enamel as well as other coating materials. Each also features AFC (automatic feedback current) control, configurable for the appropriate current limit range for porcelain-enamel powder applications, to assure optimum finish appearance.



iControl 2 automatic gun control system



Encore manual gun controller



Encore automatic gun control system

Technical specifications

Encore PE bar mount automatic gun	
Length	15.93 in (40.4 cm)
Height	5.30 in (13 cm)
Width	2.28 in (5.8 cm)
Weight	1.98 lbs (897 grams)
Encore PE manual gun	
Length	13.83 in (35.1 cm)
Height	10.39 in (26.4 cm)
Width	2.40 in (6.1 cm)
Weight	1.57 lbs (711 grams)



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Why choose Nordson

In highly competitive manufacturing markets, productivity is vital and performance is essential. That's why we apply both to everything we do, whether it's our products, expertise or outstanding customer service. We'll always be there to help maintain the new standards you've set, with expert service and support delivered through our teams working across the globe.

This unique Nordson approach helps you reach new levels of production, while working more accurately, efficiently and competitively than ever. Precisely why manufacturers who demand quality, can rely on Nordson.

Nordson Industrial Coating Systems

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Performance by design