



NORDSON ENCORE™

THE FUTURE OF POWDER COATING:
A Guide to Upgrading Your Coating
System



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Executive Summary

In today's competitive manufacturing landscape, staying ahead means embracing the latest technologies. This whitepaper explores the critical need for manufacturers to upgrade their powder coating systems, focusing on the transition from older Nordson models like Sure Coat and Versa-Spray to the advanced Encore™ system. We'll delve into the benefits of upgrading, the risks of maintaining outdated equipment, and the long-term value proposition of investing in cutting-edge powder coating technology.

Introduction

Powder coating has become an indispensable process in many industries, prized for its durability, efficiency, and environmental benefits. As with any technology, the field of powder coating has seen significant advancements in recent years. This guide aims to help manufacturers understand the importance of staying current with these technologies and the specific advantages of upgrading to the Nordson Encore™ Powder Coating System.



The Evolution of Powder Coating Technology

The journey of powder coating technology at Nordson reflects the rapid pace of innovation in manufacturing. The Versa-Spray system, introduced before 2000, set the standard for its time. This was followed by the Sure Coat system, which was the industry workhorse from approximately 2000 to 2022. Now, the Encore™ system, introduced in 2009-2010, represents the pinnacle of powder coating technology.

This evolution isn't just about newer models; it's about fundamental improvements in the coating process. The Encore™ system brings advancements in electrostatic charging capabilities, powder flow control, and digital interfaces. Moreover, it integrates IoT and data analytics for process optimization, allowing manufacturers to fine-tune their operations like never before.

The Nordson Encore™ Advantage

The Encore™ system's superior transfer efficiency stands out as a key benefit. Users typically see a 10-15% improvement in transfer efficiency compared to older systems, with some cases showing up to a 30% improvement. This translates to significant powder savings – in practical terms, you could potentially coat 40 parts for the same powder cost as 30 parts previously.

Advanced features like Select Charge® technology and HDLV® dense phase pump applications contribute to this efficiency. These innovations ensure optimal charging and coating coverage, even on complex surfaces. The Automatic Feedback Current (AFC) control maintains consistent finish quality, reducing waste and rework.

Operationally, the Encore™ system shines with faster colour changes that don't require system disassembly. This feature, combined with reduced maintenance requirements and improved component durability, significantly reduces downtime and increases productivity.

Transfer Efficiency Improvement				
Current Transfer Efficiency	10%	12.5%	15%	
	30%	25%	29%	33%
	50%	17%	20%	23%
	70%	13%	15%	18%

An example of a transfer efficiency increase from 30% to 40% lets you coat 40 parts for the same cost of powder as 30 parts previously.

Before

Cost: \$100

x 30

\$3.33 /part

After

Cost: \$100

x 40

\$2.50 /part

The Cost of Inaction

While the benefits of upgrading are clear, the risks of not upgrading are equally important to consider. As Nordson phases out support for older systems like Sure Coat and Versa-Spray, finding replacement parts is becoming increasingly challenging. Critical components such as nozzles, wear tubes, and multipliers are becoming scarce, with multipliers alone costing around \$2,500 each.

The obsolescence issue extends to control systems as well. For instance, if an iControl 1 screen fails on an older system, there are no replacements available. This scarcity of parts poses a significant risk to production continuity.

The potential for extended downtime is perhaps the most critical risk. If a vital component fails and can't be replaced, manufacturers could face weeks of production halt. Consider that the lead time for an Encore™ system upgrade is 12-14 weeks, plus an additional week for installation. This timeline underscores the importance of proactive upgrades rather than reactive replacements.

ROI Analysis

The return on investment for upgrading to the Nordson Encore™ system is multifaceted and compelling. The most immediate benefit comes from powder cost savings. With typical improvements in transfer efficiency of 10-15%, and up to 30% in some cases, annual savings on powder costs can be substantial. For high-volume operations, this could translate to savings of up to 33% on powder costs.

Beyond material savings, the ROI extends to efficiency improvements, leading to reduced waste, increased production capacity, and enhanced finish quality. These factors contribute to a more streamlined operation and improved product quality, positively impacting customer satisfaction and repeat business.

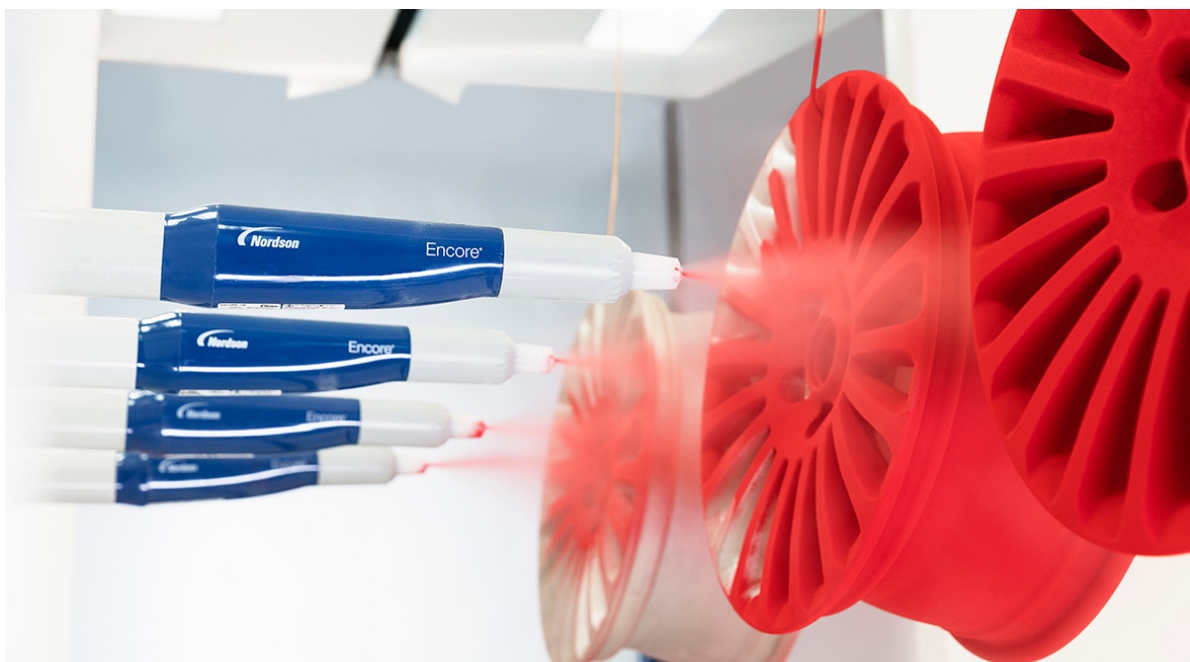
Long-term cost considerations also play a crucial role. The Encore™ system's reduced maintenance requirements and lower risk of production interruptions contribute to overall operational savings. Additionally, improved energy efficiency can lead to reduced utility costs over time.

While the initial investment for an upgrade can range from \$150,000 to \$400,000 or more, depending on the system configuration, the potential cost of inaction could far exceed this amount. A single extended production halt due to obsolete part failure could result in losses that dwarf the upgrade cost, making the investment in an Encore™ system a prudent decision for long-term operational stability and efficiency.

Implementation Process

Upgrading to the Nordson Encore™ system is a carefully managed process designed to minimize disruption to your operations. The process typically unfolds as follows:

1. **Assessment and Planning:** Our team conducts an on-site evaluation of your current system and analyzes your production requirements. This thorough assessment allows us to create a customized upgrade proposal tailored to your specific needs.
2. **Proposal and Approval:** We present a detailed upgrade plan, including costs, timeline, and expected benefits. Once approved, we begin the procurement process for your new Encore™ system.
3. **Pre-Installation Preparation:** While your new system is being manufactured (typically 12-14 weeks), we work with you to prepare your facility for the upgrade. This may include making any necessary modifications to your production line or electrical systems.
4. **Installation:** The actual installation process is relatively quick, typically taking about one week. We schedule this at a time that minimizes impact on your production schedule.
5. **Training and Optimization:** Once installed, we provide comprehensive training for your operators and maintenance staff. This ensures that you can take full advantage of the Encore™ system's advanced features from day one.
6. **Post-Installation Support:** Our team remains available for ongoing support and optimization, helping you fine-tune your new system to achieve maximum efficiency.



From Insight to Action

Upgrading to the Nordson Encore™ Powder Coating System represents more than just an equipment update – it's a strategic investment in your manufacturing future. With improved efficiency, reduced operational costs, and enhanced product quality, the Encore™ system positions your business for long-term success in an increasingly competitive market.

The risks of maintaining outdated equipment are clear: increasing difficulty in sourcing parts, rising maintenance costs, and the looming threat of extended downtime. By contrast, the Encore™ system offers state-of-the-art technology, superior performance, and the peace of mind that comes with reliable, well-supported equipment.

As we've seen, the potential for significant powder cost savings alone can justify the upgrade investment. When combined with the additional benefits of improved finish quality, reduced waste, and increased production capacity, the case for upgrading becomes even more compelling.

We encourage you to take the next step in securing your production line's future. As a leading distributor of Nordson powder coating equipment, HMFT is here to help you navigate the upgrade process.

Contact us today to schedule a consultation and discover how upgrading to the Nordson Encore™ system can transform your powder coating operations.



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