

Nordson EFD Solutions:

Precision Fluid Dispensing for Machine and System Building



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Photo courtesy of Applied Automation.

Introduction

As products and solutions grow in complexity, machine builders are faced with increasing demands to design, develop, and install machines that increase business agility and productivity while lowering cost of ownership for customers.

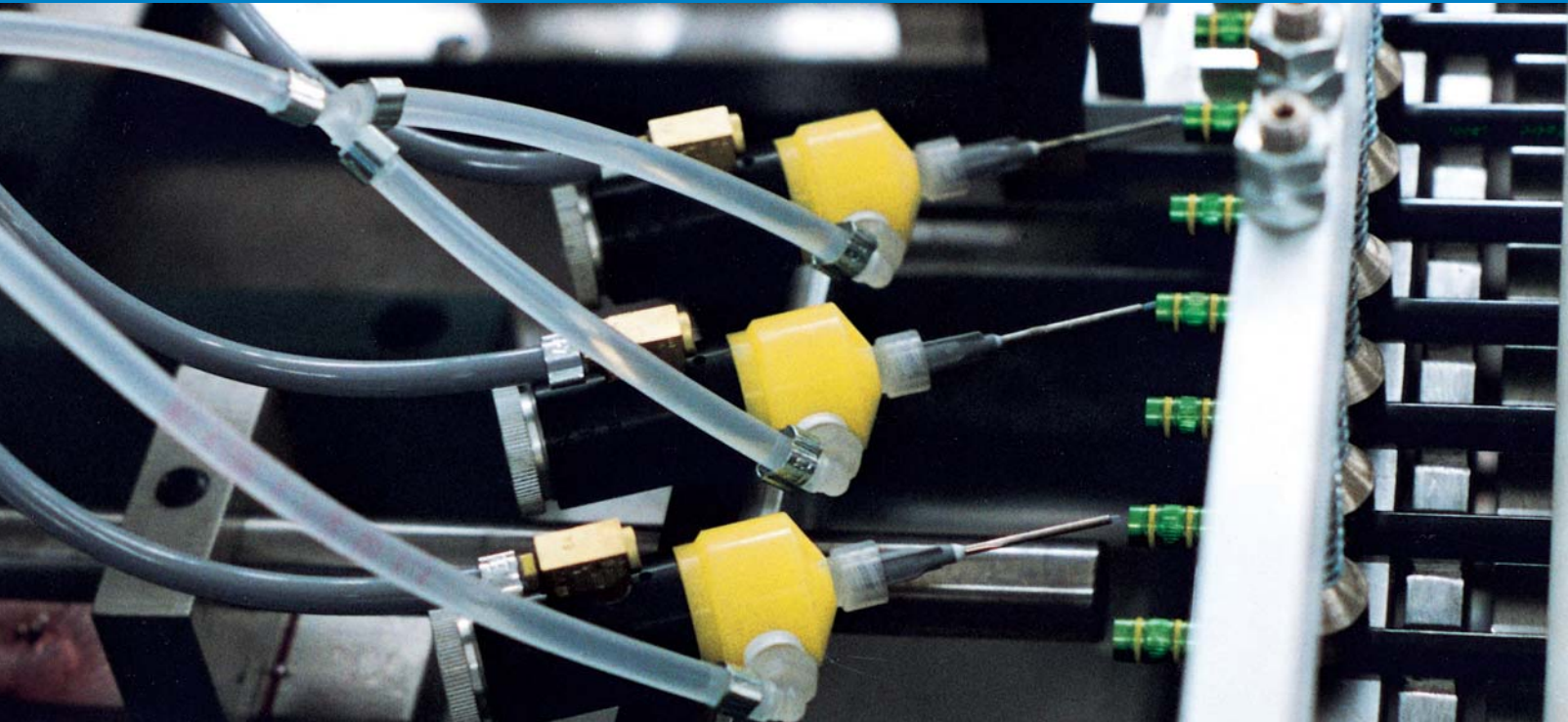
That's why it's more important than ever to partner with an experienced, innovative vendor, especially when it comes to precision fluid dispensing applications.

Benefits of Working with Nordson EFD

- Reliable solutions that deliver best-in-class precise, repeatable fluid dispensing outcomes
Performance that's proven for millions of cycles
- Wide range of fluid dispensing solutions that match nearly every application, all from one vendor
Expertise to match the right dispensing solutions to your customers' specifications
- Eliminate the hassle of working with multiple vendors
Simplified selection process — which saves time
- Long history of partnerships with machine builders
Prompt assistance paired with global technical support
- Innovative solutions to help you and your customers succeed
Help your customers increase production and reduce costs with versatile, modular dispensing systems

Consider Nordson EFD your fluid dispensing partner in each stage of your process — from design to development to installation and global aftermarket support.





Reliable Performance

When you think of the anatomy of a machine, fluid dispensing may not be the most complex part. It may not be the most costly. But when you're dealing with fluid, few things can compromise the performance of a machine faster than unreliable dispensing equipment.

Reliable performance is a major reason people specify Nordson EFD. Often our first contact with machine builders is through your customers who request EFD equipment.

And with offices in more than 40 countries, Nordson EFD supports each project before, during, and after installation. No matter where you are in the world, we're a partner you can rely on.

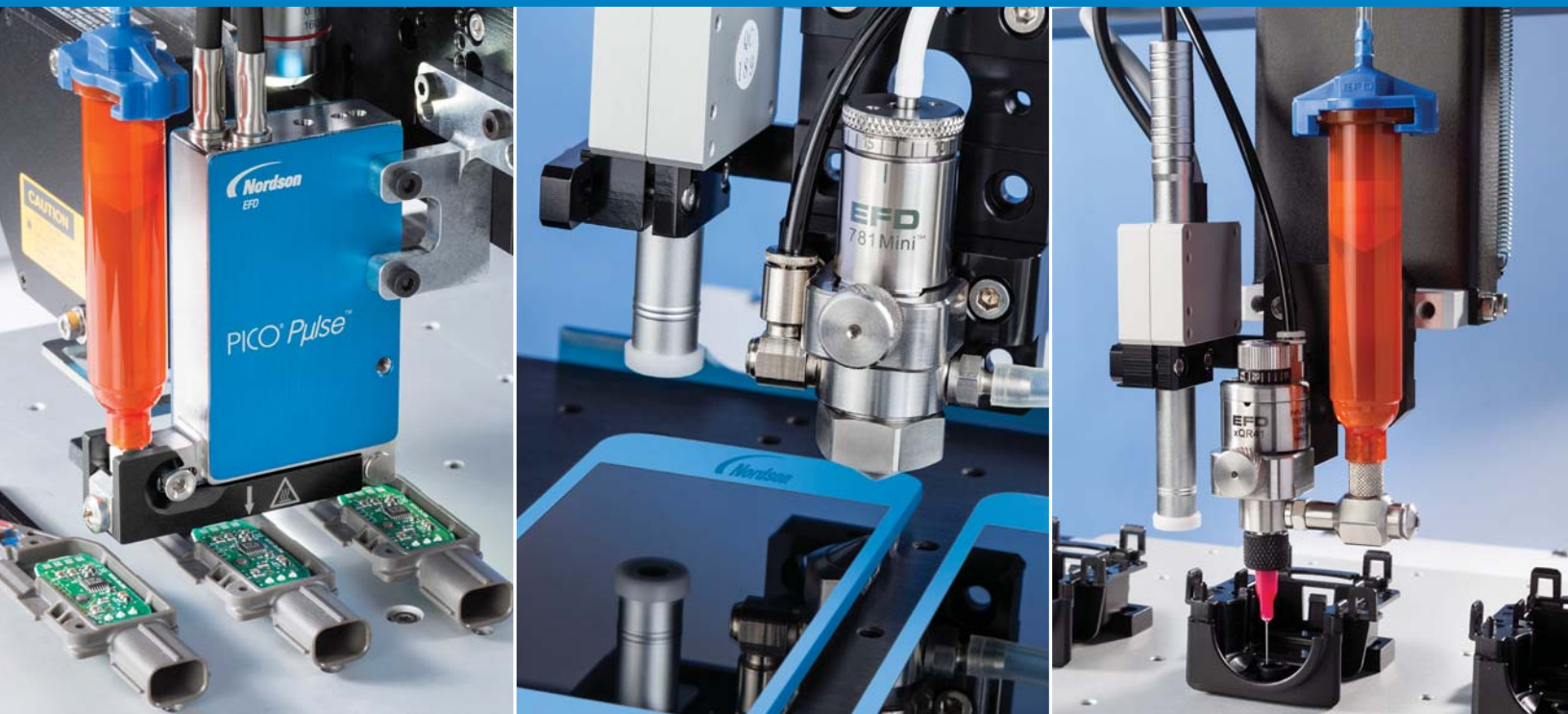
"In manufacturing, reliability is everything. That's what we get from EFD valves. If all our equipment worked as well ... our jobs would be easier."

— FORD MOTOR COMPANY

APPLICATION VIDEOS

Visit our video gallery to access 100+ application, how-to, and promotional videos. View the reliability of EFD dispense and jetting valves in live dispensing footage.

[VIEW VIDEO GALLERY](#)



Wide Range of Products

Less is not more when it comes to fluid dispensing options for your machine or system. Because there are so many types of fluids, and more being developed each year, you need options. A broad range of dispensing solutions paired with the expertise to choose the best fit per project within budget is a win-win for machine builders and your end users.

With more than 130 types of valves, specified valve controllers, dozens of fluid reservoir and valve fitting options as well as essential dispensing accessories, and high-quality dispensing tips and components – there’s a lot to choose from. Depending on the fluid, you may need a specific type of dispense tip or syringe barrel or valve fitting to ensure the success of the application.

It’s important to work with an experienced EFD application specialist to match the right equipment to each application.

“The benefits of working with EFD include product support, product reliability, and a wide range of products to handle almost anything we encounter.”

— MICRO INSTRUMENT CORP.

VALVE SELECTION GUIDE

Quickly find valves by application and fluid type to get an idea of the breadth of dispensing solutions provided by Nordson EFD.

[VALVES BY APPLICATION](#)

Fluid Application Examples

Adhesive Dispensing



Adhering magnets inside an electric motor with precise, repeatable amounts of anaerobic adhesive dispensed at a high speed.

Recommended Solution:
Liquidyn P-Jet valve



Applying an extremely precise, repeatable bead of UV-cure adhesive onto micro speakers for mobile devices.

Recommended Solution:
PICO Pulse contact dispense valve and PICO Touch controller



Applying precise, repeatable deposits of cyanoacrylate to bond small automotive parts.

Recommended Solution:
752V diaphragm valve and ValveMate 7100 controller



Applying a micro-deposit (400 µm diameter) of UV-cure adhesive in an electronics assembly process.

Recommended Solution:
PICO Pulse jet valve and PICO Touch controller

Fluid Application Examples

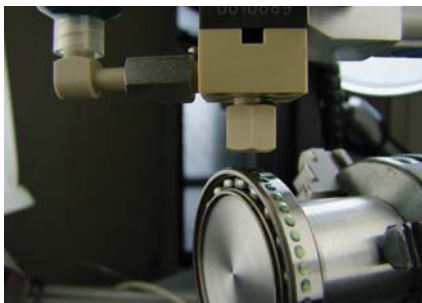
Adhesive Dispensing



Applying an extremely precise, small bead of UV-cure adhesive to bond drain plugs to medical bandage dressings.

Recommended Solution:

PICO Pulse jet valve and PICO Touch controller



Applying precise amounts of anaerobic adhesive onto automotive bearings casings at a high speed.

Recommended Solution:

Liquidyn P-Jet valve



Applying an accurate, repeatable amount of heat-cure sealant epoxy in the process of manufacturing batteries.

Recommended Solution:

741V needle valve



Applying a consistent amount of adhesive promoter to the plastic runners on the side steps of trucks.

Recommended Solution:

781S spray valve and ValveMate 7140 controller

Fluid Application Examples

Fill Dispensing



Filling plastic sleeves with an exact amount of medical gel.

Recommended Solution:
752V diaphragm valve



Filling plastic containers with a uniform amount of condiments.

Recommended Solution:
725HF high flow piston valve

Lubricant Dispensing



Consistent lubrication of O-rings in an automotive assembly process.

Recommended Solution:
781S spray valve



Lubricating the internal diameters of automotive engine blocks.

Recommended Solution:
782RA radial spray valve and ValveMate 7160RA controller

Fluid Application Examples

Grease Dispensing



Applying precise, repeatable amounts of grease onto automotive speedometer gears in a high-speed automated production line.

Recommended Solution:

Liquidyn P-Jet valve



Apply a consistent amount of very light grease inside a medical device in two locations.

Recommended Solution:

Radial spinner system and 752V diaphragm valves



Applying extremely precise, repeatable amounts of contact grease on electric switch connectors at a high speed.

Recommended Solution:

PICO Pulse jet valve and PICO Touch controller



Applying an accurate, consistent amount of grease to rotating struts in an automotive assembly process.

Recommended Solution:

741V needle valve and ValveMate 8000 controller

Fluid Application Examples

Primer Dispensing



Applying an extremely precise, repeatable micro-spray of highly volatile primer to sub-assemblies such as volume and power buttons on mobile devices.

Recommended Solution:
787 MicroSpray valve



Apply consistent, uniform 360° coating of primer into automotive DC motor casings with no mist or overspray.

Recommended Solution:
782RA radial spray valve and ValveMate 7160RA controller

Silicone Dispensing



Applying extremely precise, repeatable micro-deposits of silicone onto medical components.

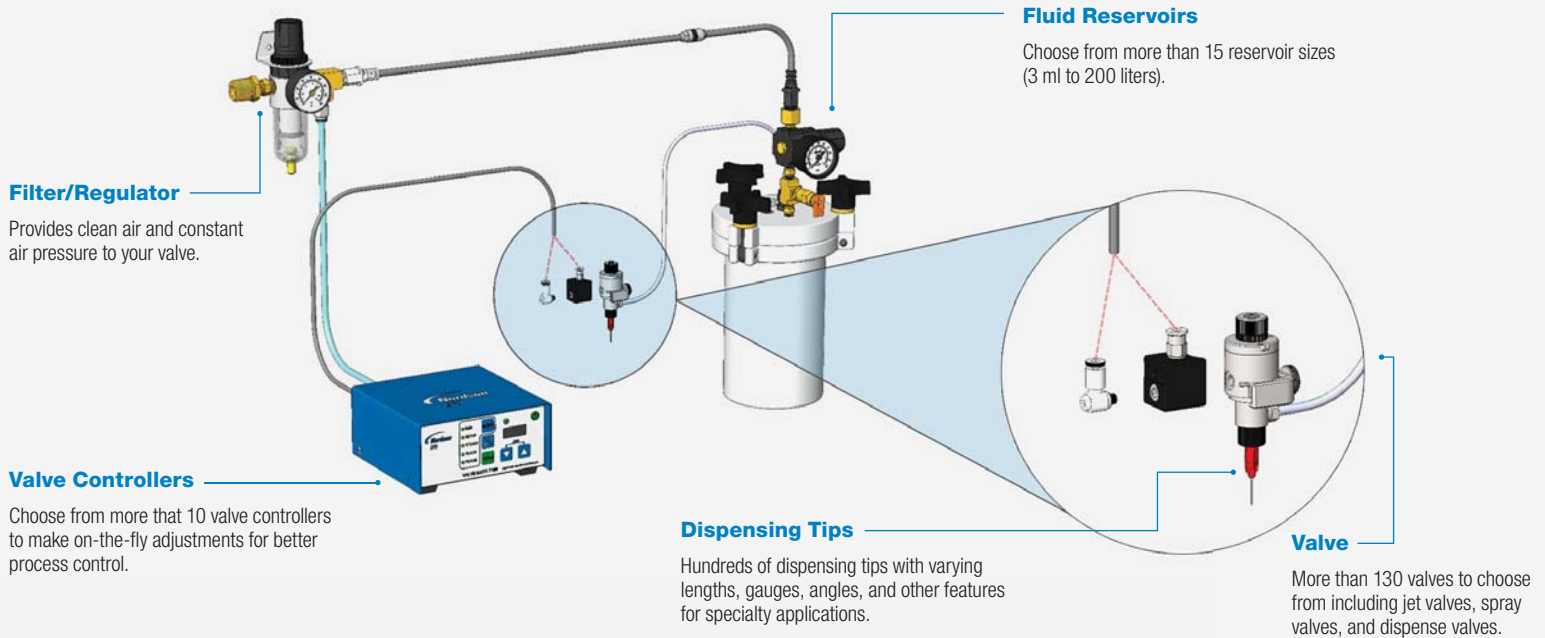
Recommended Solution:
PICO Pulse jet valve and PICO Touch controller

Solution Dispensing



Applying a repeatable, micro-deposit of low-viscosity solution onto medical test strips.

Recommended Solution:
xQR41 MicroDot needle valve



The Complete Dispensing System

One benefit of using the entire Nordson EFD dispensing system — including valve, valve controller, valve fittings, and reservoirs — is that we offer worldwide technical assistance to support our dispensing systems.

Perhaps even more important is the peace of mind in knowing your customers are experiencing higher throughput with less fluid waste, less rework, and fewer rejects.

More Dispensing Options

Automated Dispensing Systems

Nordson EFD automated dispensing systems deliver market-leading repeatability and accuracy in fluid placement and positioning. Specialized dispensing software simplifies setup and programming. Optimize dispensing results with features such as laser height sensing and smart vision CCD cameras.

Benchtop Dispensers

Nordson EFD offers a wide range of benchtop fluid dispensers to dispense nearly any type of assembly fluid. Our dispensers are designed to increase productivity and process control. Special features such as operator lockout ensure dispensing parameters remain consistent from operator to operator.



Simplified Selection Process

Time is money. Choosing a vendor with fluid dispensing expertise saves time. At Nordson EFD, we leverage 50+ years of precision dispensing experience when advising machine builders on the best possible solution.

We use our knowledge of thousands of documented, proven dispensing applications in nearly every industry to recommend the dispensing system that not only works, but also delivers lasting value to your end-users.

Key End-User Benefits

- *Increased productivity*
- *Flexibility to meet multiple application requirements*
- *Less downtime for maintenance and service*
- *Lower cost of ownership*
- *Significantly reduced fluid waste*
- *Much less rework and fewer rejects*

It's as simple as picking up a phone and discussing the fluid application with an experienced EFD application specialist. Less than 24 hours later, you'll receive a custom recommendation.

"Our applications support from Nordson EFD has been exceptional. Whenever we have new projects, they are quick to respond and give us the information needed. A large number of 3D CAD products are available for quick design integration."

— PREH IMA AUTOMATION

EASY PART NUMBER SEARCH

It's easy to search our digital catalog to find products based on part numbers and keywords.

[VIEW DIGITAL CATALOG](#)

Partnering for Success

When you choose EFD, you choose a partner from design concept to post-sale support. We have the knowledge and resources to make your job easier. We understand your dispensing process and we respond quickly.

We know 3D CAD models are a necessity, so we make them easy to access from our website. We also know you need to think about the dispensing system early in your design process as there are specific considerations to make.

Key Design Considerations

- *If you're using a tank reservoir, consider where the tank will be located to ensure the fluid line is the right length for the application.*
- *If you're using a valve, consider how easily an operator will be able to access the valve to change out fluid or perform maintenance.*
- *If you're dispensing a cyanoacrylate or other complex fluid, consider specific dispensing components that you'll need and process issues you may run into.*
- *If you're dispensing a very thin or very thick fluid, consider the different dispensing tips that work most effectively to generate higher throughput for your end user.*

With more than 15 global application testing labs, we can validate our dispensing solutions for specific applications. We can also visit end users to answer questions and demonstrate the value of our dispensing systems. And we can send our technicians to Final Acceptance Trial (FAT) and Site Acceptance Trial (SAT) visits to make sure dispensing processes are set up properly.

We can also sign non-disclosure agreements (NDAs) so you can be assured that we won't discuss your project with anyone outside of your team.

FIND 3D CAD MODELS

Easily locate all of the 3D and 2D CAD models of EFD valves, controllers, dispense tips, tanks, components, fittings, and more.

[3D CONTENT CENTRAL](#)

"We've installed many EFD dispensing components into our custom automated systems in the past and have had nothing but great experiences. The quality of their product, as well as their knowledge and support have been nothing short of excellent."

– LORIK TOOL & AUTOMATION INC.



Innovation for a Competitive Advantage

When you partner with EFD, you partner with innovative solutions for your most challenging dispensing projects. You partner with innovative solutions to improve end users' productivity and profitability. You partner with innovative solutions to differentiate your bid amid a competitive global landscape.

Mini Case Study

Nordson EFD helped one machine builder design a cell that replaced multiple contact dispense valves with one non-contact jet valve.

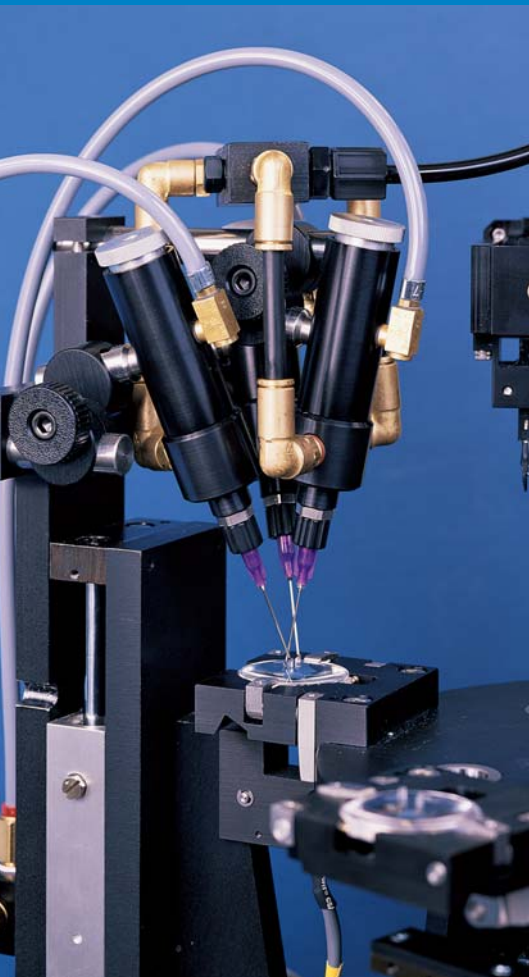
Results

Replacing multiple dispense valves with one jet valve created a faster, cleaner, and easier-to-adjust process adaptable to different dispensing tasks. And because less dispensing equipment was needed, the size of the cell was reduced. Because of the reduced footprint, the end user purchased an additional machine to install on the plant floor, increasing production capabilities.

APPLICATION TESTING

Request an application test with your fluid and parts to validate our dispensing systems for your customers. Fill out this simple form to get started.

[REQUEST APPLICATION TEST](#)



Useful Resources

Expert Recommendations

Most Nordson EFD fluid application specialists have at least 10 years of experience helping customers find the right dispensing solutions for their fluid and application requirements.

Just call 800-556-3484 or email info@nordsonefd.com to get an expert recommendation today.

Find CAD Models

Easily locate all of the 3D and 2D CAD models of EFD valves, controllers, dispense tips, tanks, components, fittings, and more.

[3D Content Central »](#)

Application Videos

Visit our video gallery to access 100+ application, how-to, and promotional videos. See how EFD dispense and jetting valves actually work in real-life dispensing footage.

[Video Gallery »](#)

Valve Selection Guide

Quickly find valves by application and fluid type to get an idea of the breadth of dispensing solutions provided by Nordson EFD.

[Valves by Application »](#)

Application Testing

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[Request Application Test »](#)

Easy Part Number Search

It's easy to search our digital catalog to find products based on part numbers and keywords.

[Digital Catalog »](#)

Request More Information

Nordson EFD's worldwide network of experienced product application specialists are available to discuss your dispensing project and recommend a system that meets your technical requirements and budget.

Call or email us for a consultation.

800-556-3484

info@nordsonefd.com

www.nordsonefd.com/recommendations

Connect with us



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com

Global

East Providence, RI USA
800-556-3484; +1-401-431-7000
info@nordsonefd.com

Europe

Dunstable, Bedfordshire, UK
0800 585733; +44 (0) 1582 666334
europe@nordsonefd.com

Asia

China: +86 (21) 3866 9006; china@nordsonefd.com
India: +91 80 4021 3600; india@nordsonefd.com
Japan: +81 03 5762 2760; japan@nordsonefd.com
Korea: +82-31-736-8321; korea@nordsonefd.com
SEAsia: +65 6796 9522; sin-mal@nordsonefd.com

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