



Precision Dispensing Solutions

The Global Leader in Precision Dispensing Solutions | [Enter Date xx/xx/xx]



EFD
Introduction

Agenda

- Nordson Corp.
- About EFD
- Market Solutions
- Applications
- Dispensing Solutions

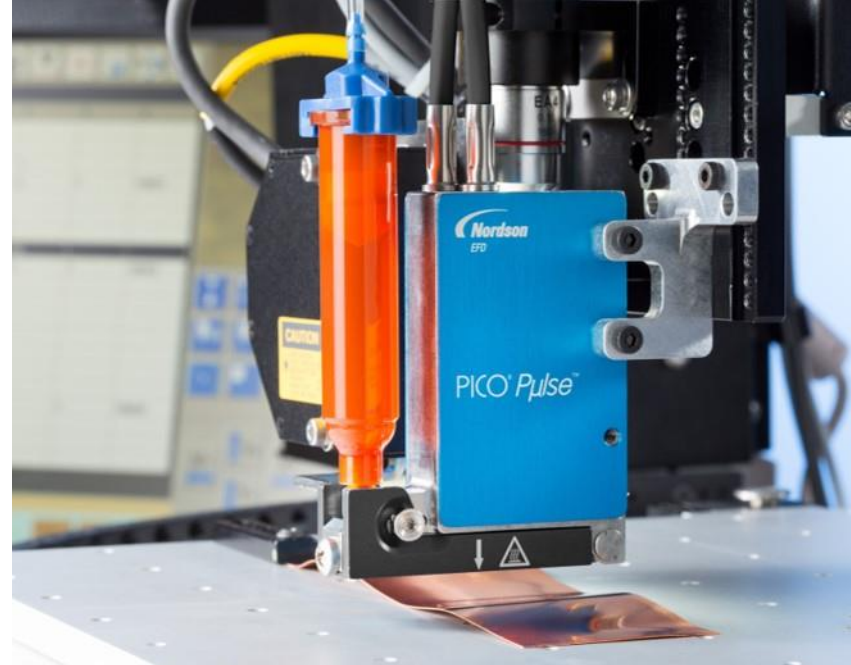
About Nordson Corp

- \$2.3B in Sales
- 25,000 Customers
- 7,500+ Employees



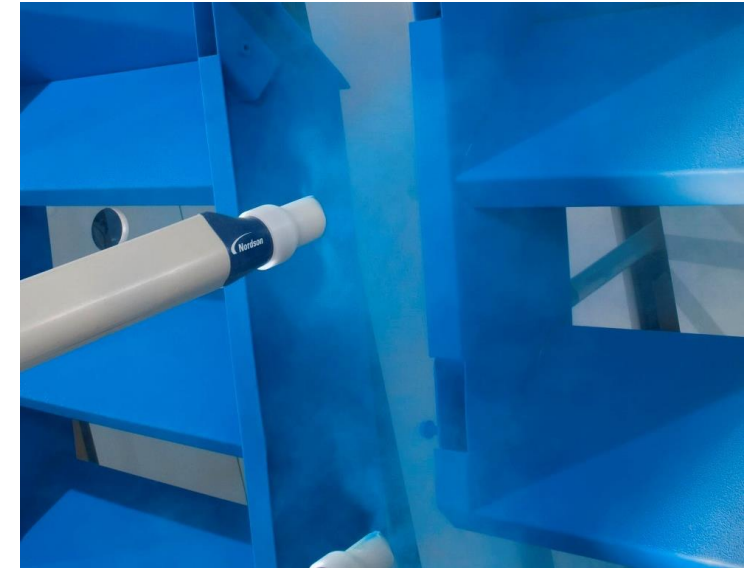
ADHESIVE DISPENSING SYSTEMS

42%



ADVANCED TECHNOLOGY SYSTEMS

46%



INDUSTRIAL COATINGS SYSTEMS

12%

Nordson EFD is part of Advanced Tech

About Nordson EFD

1963

Founded in Rhode
Island, USA

1,000+

Solutions in virtually
every industry

700+

Employees

50+

Offices around
the world



Nordson EFD Global Reach

We're everywhere our customers need us.



USA

Connecticut
New Jersey
Rhode Island

AMERICAS

Argentina
Brazil
Colombia
Costa Rica
Dominican Republic
Mexico
Puerto Rico

AFRICA/MIDDLE EAST

Algeria
Morocco
North Africa
South Africa
Tunisia
UAE (Dubai)*

EUROPE

Belarus*
Belgium
Czech Republic
Denmark*
Finland*
France
Germany
Hungary
Ireland
Israel*
Italy
Netherlands
Norway*
Poland
Portugal
Romania
Russia
Slovakia
Spain
Sweden*
Switzerland
Turkey*
United Kingdom

ASIA PACIFIC

Australia
China
India
Indonesia*
Japan
Korea
Malaysia
Philippines*
Singapore
Thailand
Vietnam

** Distributors*

EFD Mission

Provide best-in-class fluid management solutions, built on EFD's continued investment in applications knowledge, innovative products, operational excellence, superior customer service, and a lasting commitment to quality.

and Vision

Be the global leader in providing our customers premium fluid management solutions for low-volume precision dispensing markets.

We help customers make better products at lower cost

- Fewer rejects
- Less fluid waste
- Greater process control
- Higher yields



Market-leading technology

50+ new products released in last 5 years



WORLD-CLASS
INVESTMENT IN R&D



LEADING INDUSTRY
DESIGN AWARDS



HANDS-ON
TECHNICAL SUPPORT



Clean Packaging



Global Customer Service



Six 6 σ Quality

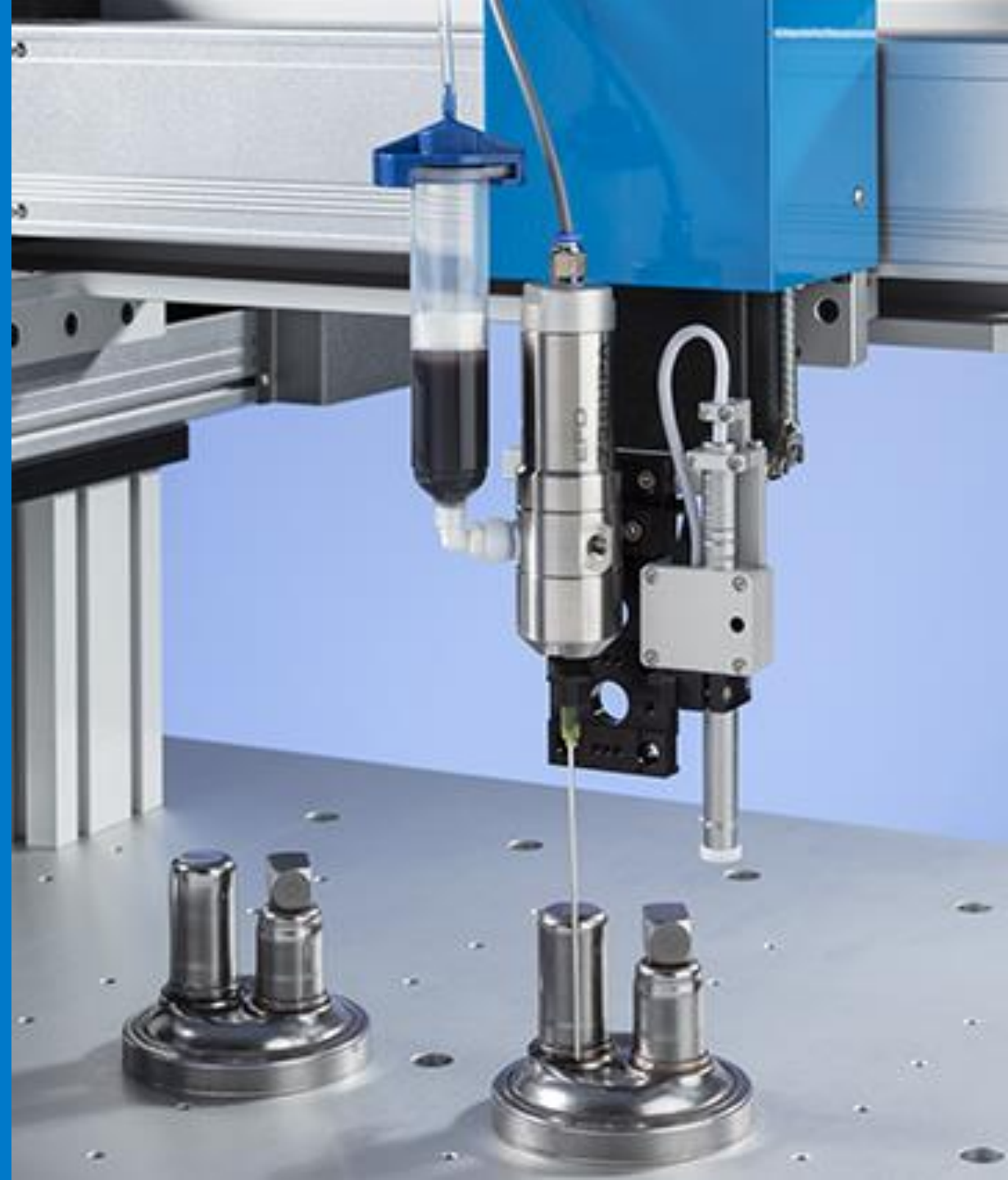


Global Warehouses

Adding significant value to your manufacturing assembly every day

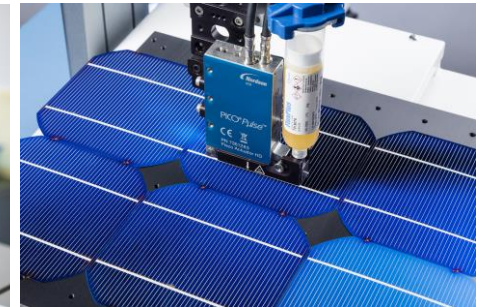
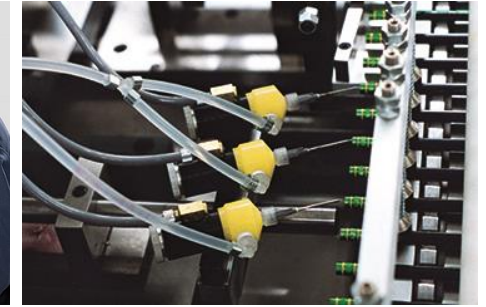


Market Solutions and Applications



50+ Years

Experience in dispensing
application development
in dozens of industries



Life Sciences

From catheter bonding to vial filling, plus stent coating to syringe lubrication, and more.

- Documented manufacturing controls
- Complete traceability
- Get the consistent, controlled dispensing your process demands



Automotive

From sensors and suspensions to brakes, body panels, and 100s of other areas of cars and trucks.

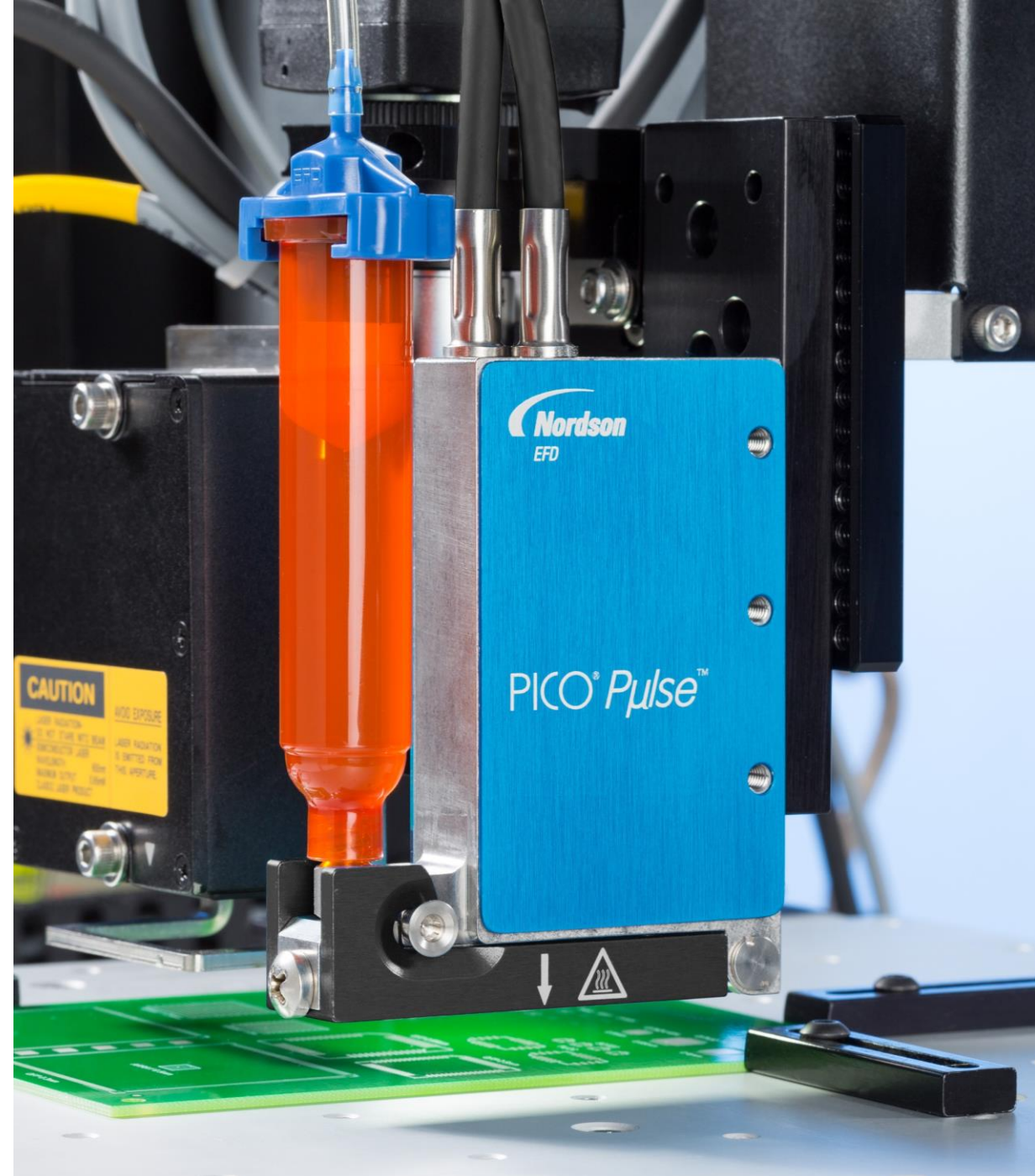
- Eliminate over-deposits and cut fluid waste by 50%
- That can total up to big savings – especially with high-performance materials



Electronics

From PCBs, capacitors, and electronic chips to electro-mechanical assemblies and 1,000s of other electrical products.

- Improve your first-pass yield with accurate, precise fluid placement
- Get better product quality, without rejects or rework



Wireless and Display

From touch panels and protective treatments to keypads, cover glass, seals, and more.

- Market demands faster cycle time than ever
- Improve throughput speed and consistency
- Get better quality, reduce waste, and increase profitability



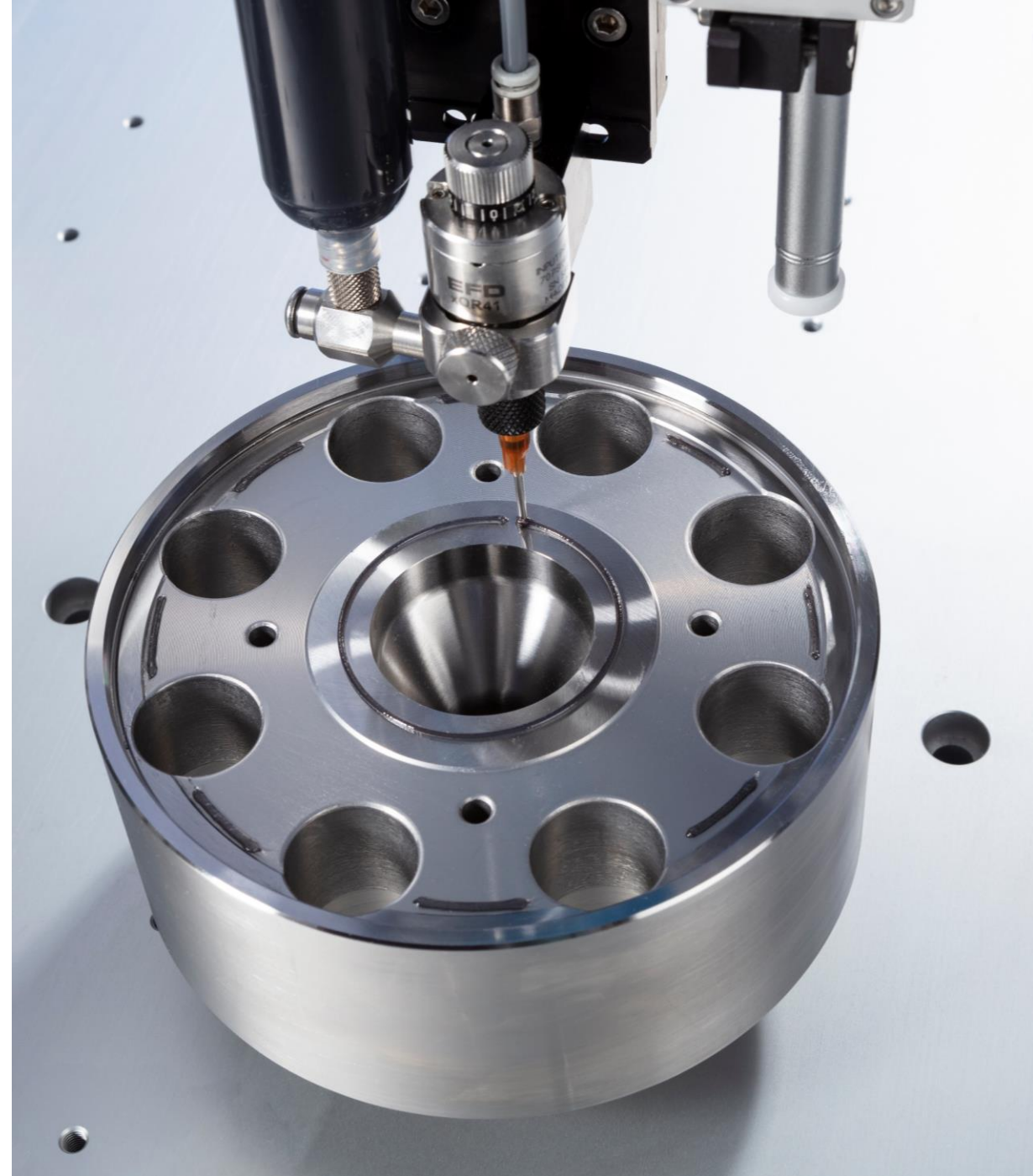
Wireless Device
Applications



Aerospace

From turbines to flight recorders, plus GPS systems, cockpits, electrical systems, propellant parts, and more.

- Get precise dispensing dependability
- It's critical to the performance and reliability of your equipment



Aerospace Device
Applications

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Food Production & Packaging

From foil packets to food coatings or release agents, plus clamshells and tamper-resistant shrink wrapping.

- Take advantage of FDA-compliant dispensing equipment
- Accurate fill volume, shot size, and uniform coating





Dispensing Systems

Diverse and High-Precision Solutions

Optimum® Syringe Barrels

Engineered to work as an integrated system



MOLDED FROM CLARIFIED
POLYPRO IN EFD
SILICONE-FREE FACILITIES



SMOOTHFLOW™ PISTONS
FOR UNOBSTRUCTED FLOW
AND CLEAN WIPING



360° SAFETYLOK™ THREAD
FOR SECURE ATTACHMENT



Optimum
Overview

Nordson
EFD

Optimum Cartridges

- Precision molded threads ensure secure, leak-proof seal
- Consistent piston-cartridge fit
- Dual-wiping pistons eliminate wasted residue
- Retainer ribs prevent splitting when installing fittings or nozzles



Optimum Tips

- Produced in our silicone-free facilities – free of flash and burrs
- Available in variety of sizes and styles to meet any dispensing application
- Color-coded SafetyLok™ hubs provide easy size ID & safe, secure attachment
- Ceramic tips can produce precise micro-deposits as small as 100 µm



Optimum
Overview

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EFD

2K Two-Component Products



PACKAGE TWO-PART EPOXIES,
ACRYLICS, AND MORE



EXPERT ASSISTANCE.
RELIABLE, ON-TIME DELIVERY



CUSTOM MIXERS FOR SPECIFIC
MATERIALS & APPLICATIONS



2K
Overview

Benchtop Dispensers



ULTIMUS: PRECISE DISPENSING
TO HANDLE CHANGING
FLUID VISCOSITY



PERFORMUS:
THREE MODELS, SPECIFIC
TO YOUR REQUIREMENTS



PORTABLE:
DISPENSGUN AND
HAND-OPERATED VALVES

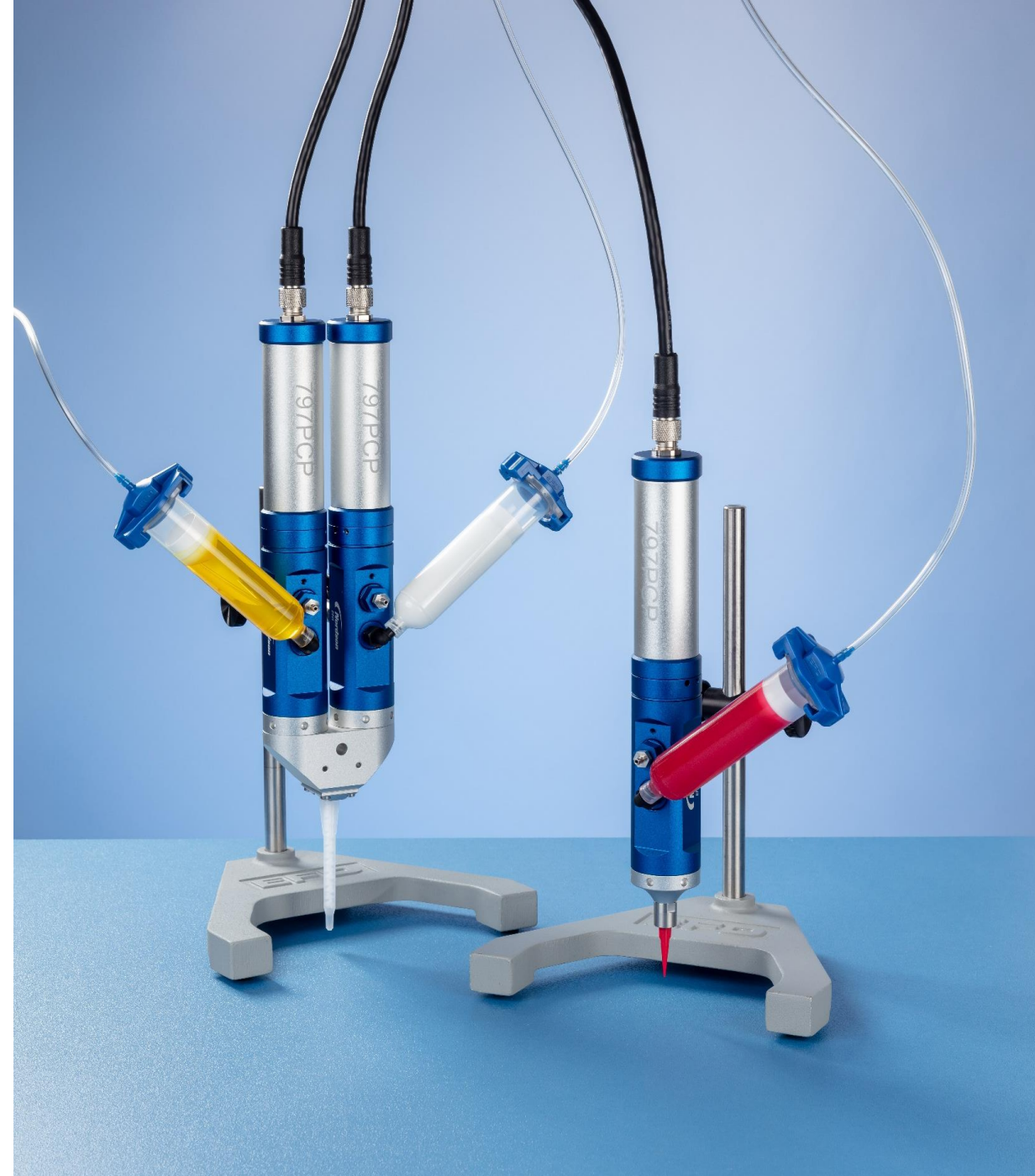
Maintain consistent fluid temperature with TC100



UltimusPlus
Overview

Volumetric Systems

- Continuous volumetric dispensing
- 797PCP-2K allows for two component meter-mix dispensing
- ValveMate controllers feature touchscreens for easy programming
- 7197PCP-DIN controllers provide modes including Line, Volume, Weight, or Timed

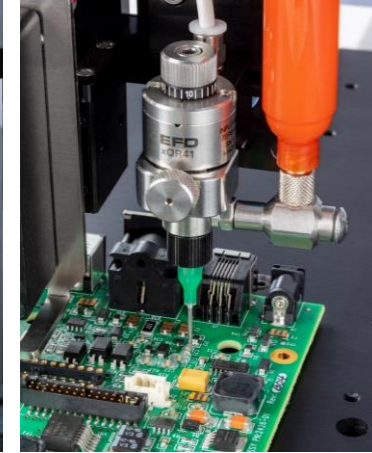


Progressive Cavity Pump
Applications

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Semi-Automated Dispense Valves

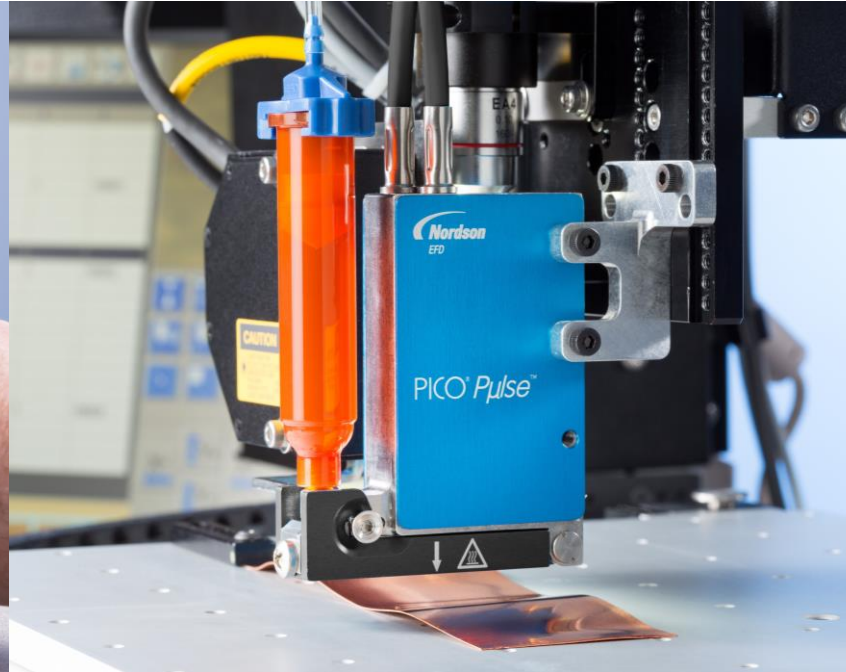
- EFD valves run for tens of millions of cycles
- More than 50 valve types
- ValveMate controllers allow on-the-fly adjustment for up to 4 valves



PICO® Piezo Jet Valves



INTUITIVE TOUCH™
CONTROLLER



DEPOSITS AS SMALL AS 0.5 NL
WITH PICO $P_{\mu}LSE$ ®

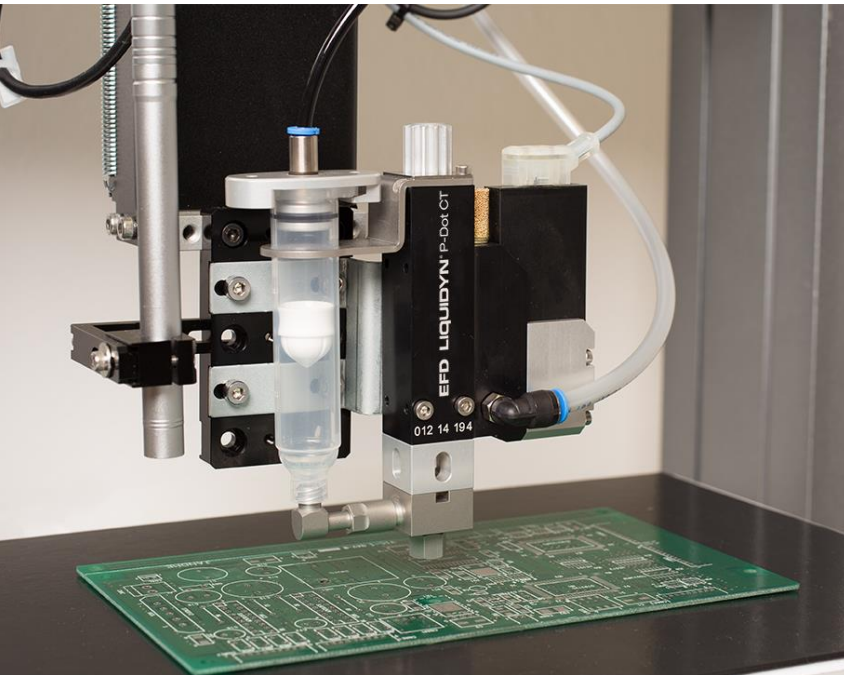


SERVICE WETTED PARTS
IN SECONDS

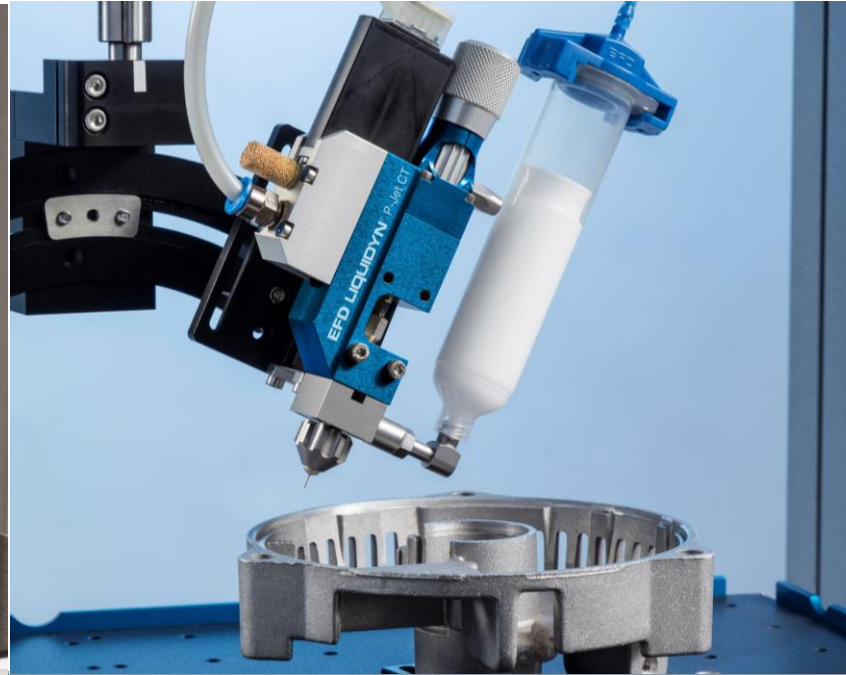


PICO Pulse
Overview

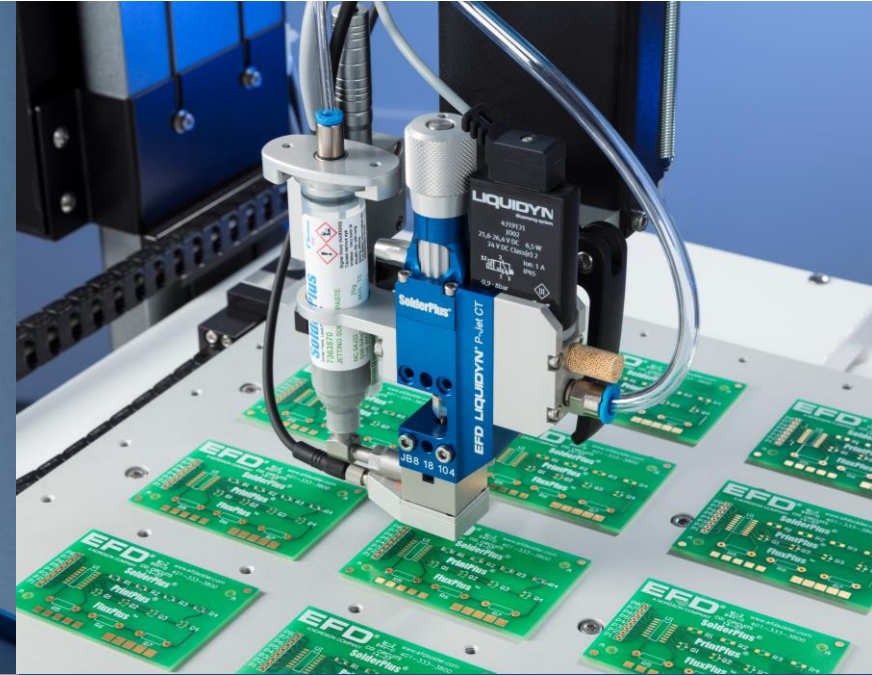
Liquidyn® Pneumatic Jet Valves



DEPOSITS AS SMALL AS 3 NL
AT UP TO 250HZ



IDEAL FOR DISPENSING
ONTO UNEVEN SUBSTRATES



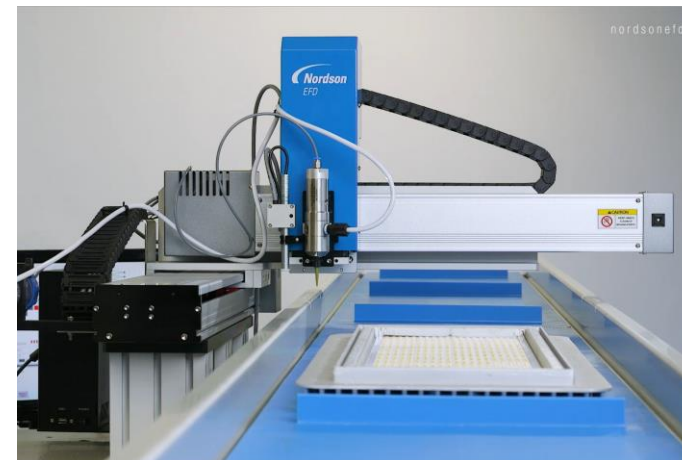
COMPLETE SOLUTION
FOR SOLDER PASTE JETTING



P-Jet Application
Video

Automated Dispensing Systems

- Smart Vision, laser height sensing, tip detection, and more
- Available in 3 or 4 axis for ID and OD dispensing
- GV Series gantry system easily integrated into conveyor-fed assembly lines



Automated Dispensing
System Overview

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SolderPlus® Paste

- Specialized formulations for low-temp and high-temp reflow
- ISO 9001:2000 certified
- SolderPlus® solder pastes for dispense applications
- PrintPlus® solder pastes for stencil printing
- FluxPlus™ flux pastes



Solder PCB
Application



Summary

- Experienced application specialists
- Global customer support
- Precise, repeatable dispensing results
- Ready to help you improve your process and increase productivity

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Your Global Partner in
Precision Dispensing



Watch more videos
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