



Lighting your way

Asymtek[®]
A NORDSON COMPANY

EFD[®]
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LIGHTING YOUR WAY

GLOBAL LED MARKET

Estimates by Communication Industry Researchers indicate that the global LED market will reach US\$ 5.6 billion in 2008. The global LED market will continue to be segmented: one sector commoditized with simple, inexpensive LED's for mass-produced goods; and another sector focused on high brightness and efficiency.



ASYMTEK and EFD

Asymtek® and EFD® are wholly owned subsidiaries of the Nordson Corporation, the world's leading producer of precision dispensing equipment. Asymtek supplies award-winning automated fluid dispensing systems. With more than 20 years of experience, Asymtek is committed to providing innovative dispensing solutions and the best support to customers worldwide.

EFD provides precision dispensing systems that apply adhesives, sealants and coatings to a broad range of consumer and industrial products. Our combined expertise in complementary dispensing technologies

allows EFD and Asymtek to provide a solution for virtually any dispensing application – from benchtop assembly operations to high-speed, fully automated manufacturing processes. Innovative products, reliable performance and extraordinary customer support have made EFD and Asymtek the market leaders throughout the world.



COMPONENTS THAT MAKE A DIFFERENCE

EFD dispensers and disposable components work together as complete systems, allowing customers to produce the most accurate, consistent fluid deposits possible.



Industrial-grade ZeroDraft™ syringe barrels and SmoothFlow™ pistons provide a close-tolerance fit for controlled, drip-free fluid application. The double-wiper pistons eliminate costly waste by wiping the syringe barrel walls clean as material is dispensed. Precision molded tips are available in a wide variety of styles, sizes and lengths to match any dispensing application.

OPERATOR-CONTROLLED DISPENSING SYSTEM

The 2400 Series Dispenser applies a wide variety of assembly fluids that range from watery-thin solvents to thick silicones and paste-like epoxies. These innovative systems provide digital readouts of all dispenser settings and offer LED manufacturers the most complete control available today. The compact cabinet requires minimal workspace and features a unique air management system and high-speed solenoid that work together for consistent deposit control.



flux jetting

conformal

epoxy/silicone encapsulation

SEMI-AUTOMATED SYSTEM

EFD's Ultra® TT dispensing robot and pneumatic dispense valves offer a cost-effective way to increase productivity and quality in tabletop assembly processes.



The 752V Series valve provides fast, precise application of low- to medium-viscosity assembly fluids and closes after each shot with a clean, drip-free cutoff.

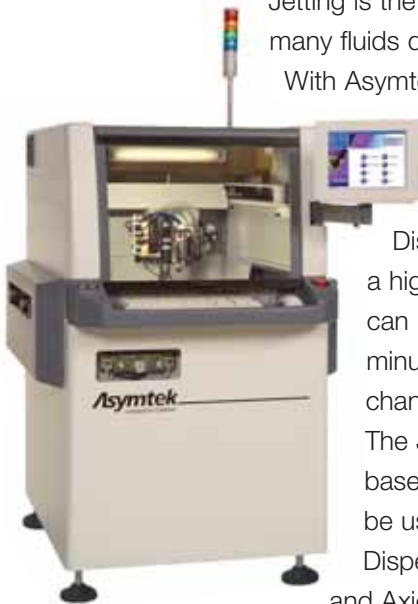
The 741MD valve is an adjustable needle valve designed to apply very precise deposits down to fractions of a microliter. This system is ideal for LED manufacturing processes that require small dispensing tips with orifice sizes as small as .004" (.010mm).

FULLY AUTOMATED SYSTEM

Jetting is the best way to dispense many fluids quickly and accurately. With Asymtek's DispenseJet®

DJ-9000, jetting is faster and simpler than ever. The

DispenseJet DJ-9000 has a high shot generation rate, can be cleaned in a few minutes, and has fast changeover of wetted parts. The Jet and other needle-based technologies can be used on any of our DispenseMate, Spectrum, and Axiom dispense platforms.

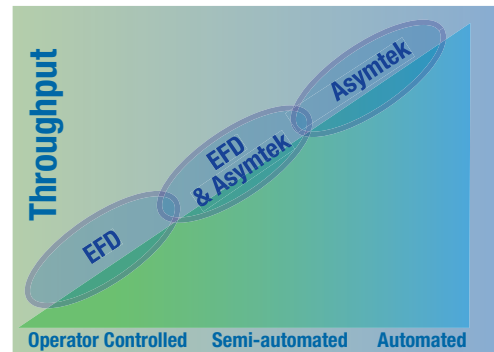


The Asymtek SC-300 Swirl Coat™ applicator applies conformal coating that protects electronics from exposure to moisture, temperature extremes and adverse chemical conditions. Applications include outdoor signage, automotive and architectural lighting. The SC-300 Swirl Coat applicator offers three modes of operation - bead, monofilament and swirl, ideal for conformal coating. The SC-300 and the SC-204/5 Film Coat® applicators work with the Century line of coating platforms.



LIGHTING YOUR WAY

The demand for LED products is rapidly expanding, and Asymtek and EFD are working side-by-side to support LED producers with total solutions for a variety of production levels. Our broad product offerings range from



the operator-controlled, benchtop dispense systems to the batch-loaded, fully automated and conveyORIZED dispense systems. By using these systems and components together, LED manufacturers can gain a wide range of benefits – including higher yields, improved process control, less fluid waste, and greater recognition and higher profits in this growing, competitive market.

www.efd-inc.com/asymtek/led

coating underfill
barrel/piston kits





For EFD sales and service in over 30 countries,
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