

# Premier™ Fixed Lip Single Slot Dies

Ensure superior performance when you partner with the field's leader in precision slot die equipment and specialists with extensive industry experience.

## Benefits of Slot Die Technology

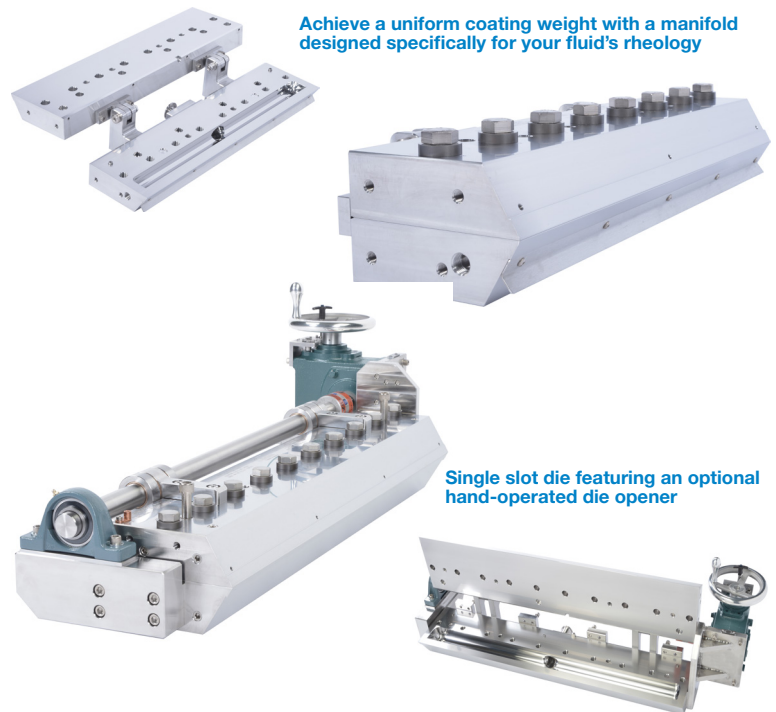
- **Reduce contamination and emission of volatiles** with closed loop system
- **Improve end product yields** with a manifold designed to uniformly distribute the coating fluid, based on the fluid's rheology
- **Increase production rates** with pre-metered slot die and positive displacement pump technology, allowing for precise fluid application with higher solids content
- **Shorten time required for product changeovers** with a slot die designed for a larger process window, allowing for use of a higher variety of fluids at multiple widths and coat weights
- **Easy to use design** requires minimal operator adjustment
- **Incur less downtime and avoid handling damage** with an optional hand-operated die opener, allowing a safe and easy way to open the die for routine maintenance and cleaning while still maintaining die performance during production

Nordson Extrusion Dies Industries' Premier Coating Division offers converters slot die coating systems that deliver a precise, uniform flow to the web at a constant rate.

Premier Fixed Lip Slot Dies are custom designed for a wide range of fluids, including solvent and water-based coating, slurries, paint, hard coating, UV curable, adhesives, and many more.

At our dedicated facility, experienced technicians use state-of-the-art equipment to manufacture slot dies to precise tolerances after precision grinding and hand lapping. The result is a die that is not only flat and straight, but also has an exceptionally uniform slot gap.

No matter what your coating needs are – from laboratory devices to production systems for adhesives, magnetic media, paint, solar, glass coating and more – a custom-designed Premier Fixed Lip Slot Die will increase your production efficiency and provide significant cost savings.



## Features

- **Manufactured from aircraft quality 15-5 PH stainless steel** for highest dimensional stability
- **Adjustable gap and coating width** with precision stainless steel or plastic shims
- **Body lip offset** for optional shear at substrate coating interface
- **Locking hinges** for safe and easy changeovers, reducing potential damage to the die or lip faces
- **Quick-clamp sanitary adaptor fluid inlet**
- **Optional features include** hand-operated die opener, cored holes for liquid temperature control, and die cavity plugs to increase flexibility of die without sacrificing performance
- **Optional die body material includes** titanium, aluminum, or special alloys, based on customer request
- **Designs available to accommodate** stripe and patch (intermittent) coating



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## Range of Capabilities

- **Die Flatness:** Standard flatness is 2.54µm (0.0001"), with capability of manufacturing to 0.5µm (0.00002")
- **Coating Weight Accuracy:** ± 1-2%
- **Coating Thickness:** .1µm (0.000039") to 2,300µm (0.091")
- **Die Coating Widths:** 6.35mm (0.25") to 4,750mm (187")
- **Coating Speeds:** 152mm/minute (6.0in/minute) to 914mpm (3,000fpm)
- **Fluid Viscosity:** 1-175,000cps
- **Maximum Operating Temperature:** 82°C (180°F)

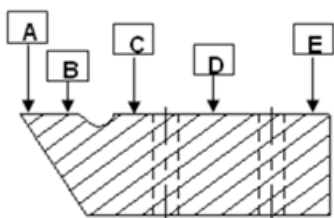
*\*Above specifications subject to fluid rheology, fluid delivery system, and ancillary equipment.*



*Shown in Photo: Premier Fixed Lip Single Slot Die, Die Positioner, and Fluid Delivery System*

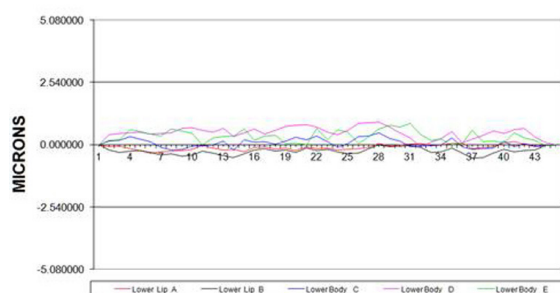
## Exceptional Die Flatness - Critical to Your Success

Ensuring flatness is a critical part of our manufacturing process, leading to a more consistently finished end product. *This results in material and production cost savings for our customers.*



µm	A	B	C	D	E
LOW	-0.334819	-0.554183	-0.219364	-0.069273	-0.037523
HIGH	0.115455	0.000000	0.496456	0.935184	0.871684
DIFF	0.450274	0.554183	0.715820	1.004457	0.909206

FLATNESS INSPECTION REPORT



Results from a Typical Flatness Inspection of a Fixed Lip Slot Die

## Nordson Corporation Polymer Processing Systems

Nordson Polymer Processing Systems provides customers with engineered components to melt, homogenize, filter, meter, and give shape to plastic and fluid coating materials. Nordson Corporation leverages the collective plastics industry experience from a series of strategic acquisitions to offer a uniquely broad portfolio of industry-leading technologies. Nordson delivers a full range of precision melt stream products — from screws and barrels for extrusion and injection molding — to filtration systems, pumps, and valves — to the extrusion dies and pelletizing systems to meet the constantly evolving needs of the polymer industry.

Nordson Extrusion Dies Industries is part of the Nordson Polymer Processing Systems product offering and is a leading international supplier of flat dies, feedblocks, and related equipment for film, sheet, extrusion coating, fluid coating, and pelletizing. The company operates plants in China, Japan, and the USA, including capabilities in all three countries for remanufacturing its own dies and those built by other suppliers.

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