# Premier™ Slide Curtain Coating Dies

Ensure unsurpassed product quality, uniformity, and performance when you partner with the field's leader in slot die design and manufacturing.

# **Slide Curtain Coating Die Technology**

- Increase production rates by uniformly coating one or more layers on a substrate at higher speeds
- Achieve excellent edge bead control with edge guides designed to ensure fluid does not taper in
- Lower material costs with thinner coatings that require less fluids or dyes
- Reduce contamination and emission of volatiles with closed loop system
- Easy to use design requires minimal operator adjustment to control coverage
- Improve end product yields with a manifold designed to uniformly distribute the coating fluid, based on the fluid's rheology



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

Premier<sup>™</sup> slide curtain coating dies are custom designed for a wide range of fluids, including solvent and waterbased coating, dyes, adhesives, and more.

At our dedicated facility, experienced technicians use state-of-the-art equipment to manufacture slide curtain coating dies to precise tolerances after precision grinding and hand lapping.

No matter what your curtain coating needs are – from laboratory devices to production systems for paper, imaging, adhesives, optics, paint, etc. – a custom-designed Premier<sup>TM</sup> slide curtain coating 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
- Single or multiple layer end plate with edge guide adaptor
- Optional cored holes for liquid temperature control
- Optional die body material includes titanium, aluminum, or special alloys, based on customer request



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# **Range of Capabilities**

■ Die Gap Flatness: Standard flatness is 2.54µm (0.0001"), with capability of manufacturing to 0.5µm (0.00002")

■ Coating Weight Accuracy: ± 1% cross web

Coating Thickness: ≥1µm (0.000039")

Maximum Coating Width: 6400mm (251")

■ Fluid Viscosity: ≥1mPas; ≤10,000mPas

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



## **Exceptional Die Gap Flatness - Critical to Your Success**

Ensuring gap 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.

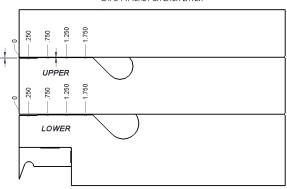
#### Feedgap Tolerance

Feedgap Location	6.35mm (0.25") Land Range	19.05mm (0.750") Preland Range	31.75mm (1.250") Preland Range	44.45mm (1.750") Preland Range
UPPER	1.397µm	1.372µm	1.219µm	1.194µm
	(.000055")	(.000054")	(.000048")	(.000047")
LOWER	1.956µm	2.057µm	1.880µm	1.473µm
	(.000077")	(.000081")	(.000074")	(.000058")

### **Feedgap Opening**

Feedgap Location	6.35mm (0.25") Land Average	19.05mm (0.750") Preland Average	31.75mm (1.250") Preland Average	44.45mm (1.750") Preland Average
UPPER	766.08µm	441.68μm	442.72μm	442.70μm
	(.030161")	(.017389")	(.017430")	(.017429")
LOWER	760.27µm	445.77μm	446.86µm	447.24μm
	(.029932")	(.017550")	(.017593")	(.017608")

\* GAPS TYPICAL FOR EACH LAYER



Results from a Typical Flatness Inspection of a Slide Curtain Coating 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, Germany, Japan, and the USA, including capabilities in all three countries for remanufacturing its own dies and those built by other suppliers.

