



EDI® Die Solutions for Vinyl Siding

Extrusion Die Systems Designed to Optimize Siding Performance

The Challenge

Increasing the Durability and Efficiency of Vinyl Siding

The goal of siding manufacturers is to produce a cladding that provides long lasting weatherability and aesthetics, which often means adding costly materials with enhanced capabilities to the coextrusion process.

When added as a thin cap layer over PVC, the uniformity of the enhanced polymer can be difficult to control, leading to high scrap rates and increased downtime.

The Importance

Product Quality is Key

If the protective cap layer is not extruded in a consistent manner, the siding - and the structure it protects - is at risk of extensive damage due to moisture, sun exposure, and/or temperature.

By ensuring the protective cap layer is uniform, siding manufacturers can deliver a product that offers the long-term durability and efficiency that the construction industry requires.

The Nordson Solution

EDI® Ultraflex™ Sheet Die with a Dual Stage Flexible Lip

Nordson is committed to supplying innovative solutions to help our customers increase their profitability. The dual stage flexible lip die feature enables siding manufacturers to finally have direct control over expensive cap layer materials - taking productivity to a whole new level.



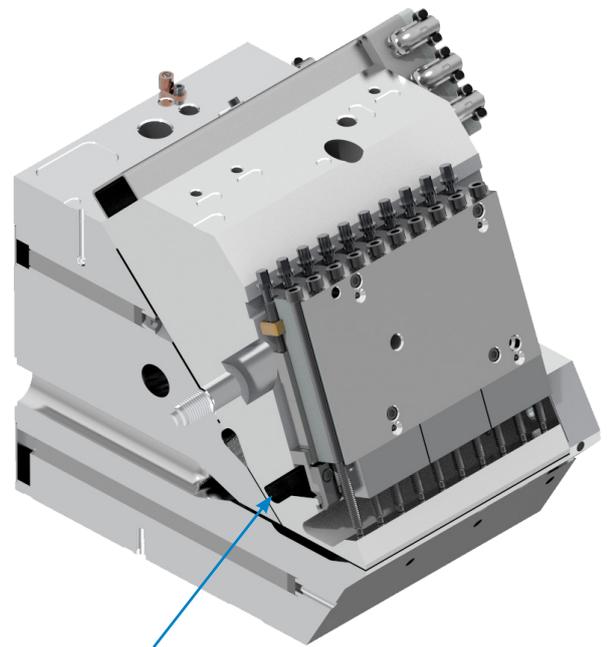
Specifications

Dual Stage Flexible Lip Feature *(Patent Pending)*

- Allows for direct fine-tuning of the cap layer by making small profile adjustments to the channel gap prior to the combination point
- Adjustment of the cap layer is provided with no sacrifice to flow path streamlining
- Tuning the overall gauge is still possible by making adjustments to the die's conventional flexible lip system

Benefits of Nordson Sheet Die Technology

- *Achieve optimal product quality* with customized manifolds specifically tailored to your production requirements
- *Reduce material usage* through a variety of available features, including partial coverage (“naked edge”) options
- *Reduce downtime for routine maintenance* with ancillary equipment designed for added safety and convenience during ‘split & clean’ procedures



Second flexible hinge allows direct fine-tuning of cap layer.

Cost Saving Considerations

		Traditional Siding Die	EDI® Siding Die with Dual Stage Flexible Lip
Cap Layer	Cost	US\$1.50	US\$1.50
	Thickness Tolerance Variation	15.0%	6.0%
	Output Rate (lbs/hr)	136	120
	Cost per Hour	US\$204.00	US\$180.00
Base Layer	Cost	US\$0.41	US\$0.41
	Thickness Tolerance Variation	3.0%	3.0%
	Output Rate (lbs/hr)	3,064	3,080
	Cost per Hour	US\$1,256.24	US\$1,262.80
Total Product Cost	Per Hour	US\$1,460.24	US\$1,442.80
	Per Day (24 Hours)	US\$35,045.76	US\$34,627.20
	Per Week (40 Hours)	US\$58,409.60	US\$57,712.00
	Per Year (266 Days)	US\$9,322,172.16	US\$9,210,835.20
	Total Annual Savings	US\$111,336.96	

Total Annual Savings Due to EDI® Dual Stage Flexible Lip: US\$55,668.48*

*Half of the total annual savings calculated above can be attributed to the modern flow channel design based on current resin and rates. The other half of the annual savings can be attributed to the dual stage flexible lip feature.