

# EDI® Coextrusion Technology

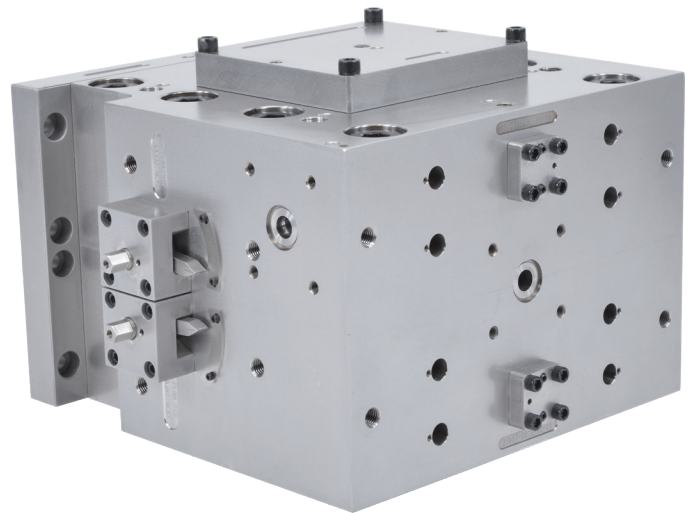
**Ensure unsurpassed product quality and performance when you partner with the industry's leader in flat die manufacturing and technology.**

Nordson Corporation, a leading international supplier of extrusion die and feedblock technology, provides a broad-line of custom-engineered flat extrusion dies and related system components for a variety of applications.

Whether your specific process is better suited for a multi-manifold die or the industry workhorse Ultraflow™ feedblock designs, our highly-skilled team will work with you to determine the best approach for your coextrusion process.

## Why Coextrude?

- No single material has all of the desired properties of a product
- Properties, such as gloss and toughness, are necessary for the end product
- A gas or moisture barrier is required
- Reduce material expenses by using low-cost or regrind materials in middle layers

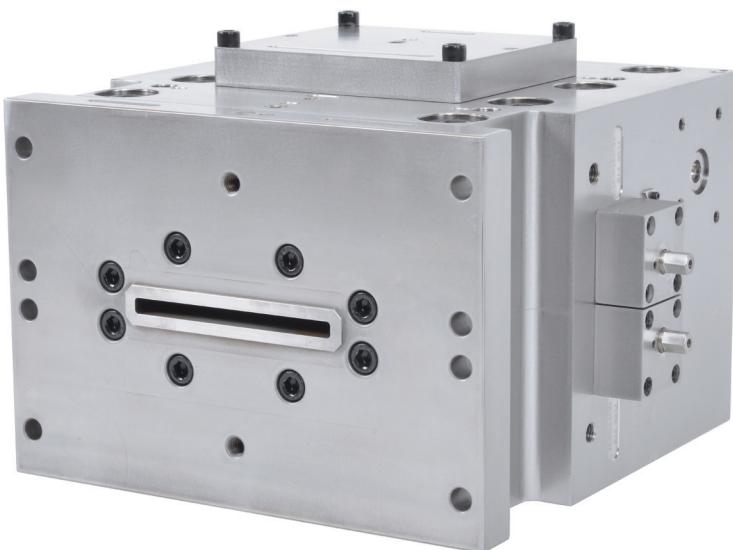


*Ultraflow™ V-T Adjustable Geometry Coextrusion Feedblock*

Nordson is committed to providing customers with innovative solutions to meet the industry's ever-evolving coextrusion needs.

## EDI® Coextrusion Solutions

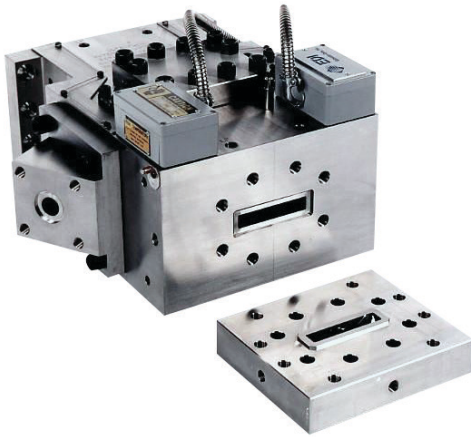
- Multi-Manifold Coextrusion Dies
- Ultraflow™ Adjustable Geometry Coextrusion Feedblocks
- Ultraflow™ Fixed Geometry Coextrusion Feedblocks
- Layer Multiplication Technology
- Ultraflow™ Coextrusion Feedblocks for Specialty Applications



# EDI® Coextrusion Technology

## EDI® Fixed Geometry Feedblock Designs

Nordson's fixed geometry feedblocks are the industry-proven results of over 30 years of coextrusion expertise from our world-class design facilities.



### Ultraflow™ I Design

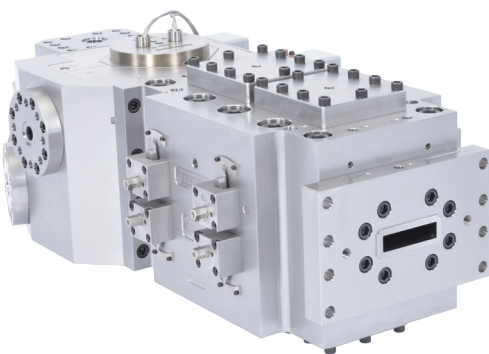
- Controllable linear valves allow for highly precise layer ratio changes
- Split body design minimizes the physical space requirement and allows for easy cleaning
- Entrance locations are customizable with optional selector spool

Maximum Number of Layers	13*
Layer Ratio Adjustability (without downtime)	10%
Layer Multiplication Technology (LMT)	Available

*\*Process dependent. Please consult your Nordson application specialist to discuss your process.*

## EDI® Adjustable Geometry Feedblock Design

Nordson's adjustable geometry feedblocks combine polymers in a parallel path manner, achieving optimal layer ratio stability throughout the structure. This flexible design allows for entrance locations to be customized, based on your line design and layout.



### Ultraflow™ V-T Design

*US Patent 10,442,126*

- Large diameter profiling actuators provide highly effective tuning lands, which can be positioned at the combination point or significantly upstream to refine the layer distribution
- Controllable linear valves allow for highly precise layer ratio changes
- Split body design minimizes the physical space requirement and allows for easy cleaning
- “On-the-fly” layer ratio adjustability increases uptime and precision, while allowing for greater end-product versatility
- Optional selector spool feature allows layer sequence to be pre-arranged upstream of the combining point, all without removing the feedblock from the production line
- Optional Layer Multiplication Technology (LMT) can be integrated into the feedblock on request

Maximum Number of Layers	13*
Layer Ratio Adjustability (without downtime)	45%
Layer Multiplication Technology (LMT)	Available

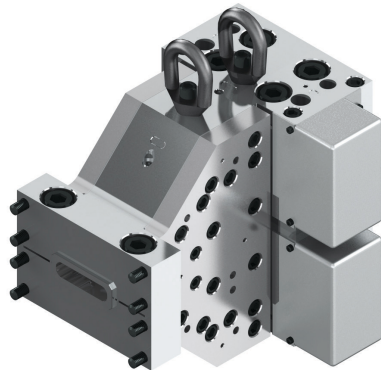
*\*Process dependent. Please consult your Nordson application specialist to discuss your process.*

# EDI® Coextrusion Technology

## EDI® Specialty Feedblock Designs

Nordson designs our standard Ultraflow™ feedblocks to meet the requirements of our customers, including unique designs for specific resin types and applications.

**Ultraflow™ for BOPET**

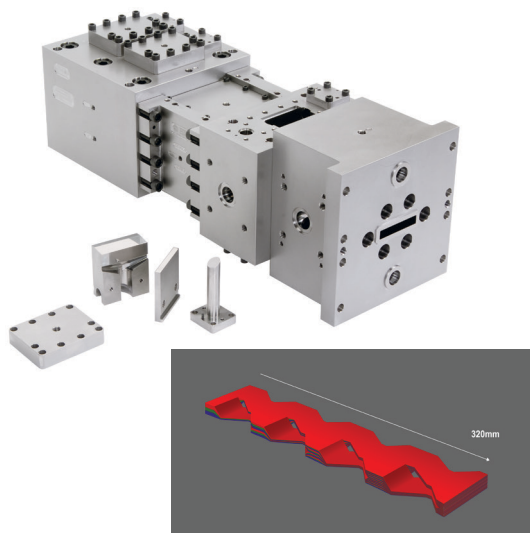


**Ultraflow™ for PVC**



## EDI® Layer Multiplication Technology

Nordson's streamlined and versatile layer multiplication technology (LMT) is a special tool that can be engineered to multiply some or all of the layers within a coextrusion "sandwich" provided by a feedblock.



### LMT Design

- Streamlined design requires smallest space envelope in industry
- Design features inserts that are easily changed, allowing for layer multiplication levels to be altered quickly
- No matter how many microlayers there are in the structure, the overall thickness is no greater than that of a conventional coextrusion, and the structure contains the same amount of raw material
- When used for food packaging, shelf life may be prolonged by reducing the OTR and total oxygen ingress over an extended period
- By utilizing LMT, barrier properties may be better maintained when packages are flexed, since thinner EVOH layers tend to develop fewer pin holes

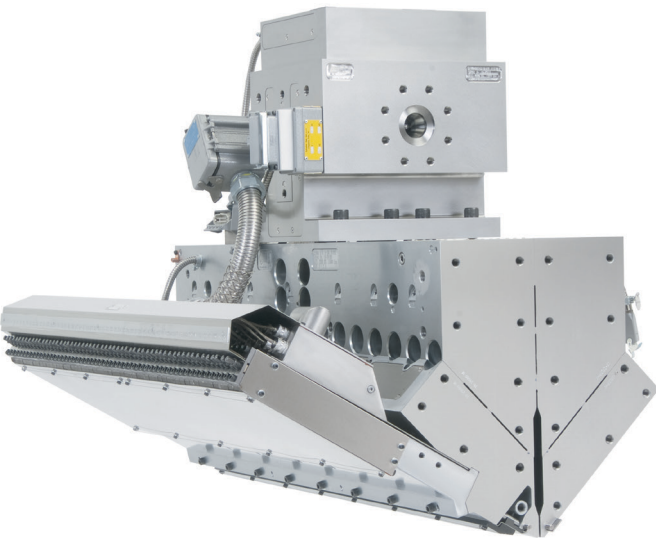
# EDI® Coextrusion Technology

## EDI® Multi-Manifold Coextrusion Dies

Nordson's multi-manifold coextrusion dies utilize the "naked edge" or partial coverage feature, allowing for reduced trim and increased material savings. Coextrusion is accomplished when layers are spread and thinned prior to being combined into a multi-layer structure.

### Multi-Manifold Coextrusion Die Design

- The multi-manifold approach is the most precise form of coextrusion technology available
- Improved product quality is possible with precise individual layer distribution.
- Optimized manifolds are designed to accommodate dissimilar viscosity materials and partial coverage requirements, increasing production efficiency.
- Coextrusion structures with skin layer(s) of less than 10% of total configuration.
- Coextrusion structures with melt temperature differentials up to 50°F (28°C).
- Available options include special lip exit design, complete metric design, special body materials, various platings, and mounting trunnions.



### We're Here to Support Your Existing Equipment Too

#### EDI® Aftermarket Services

Whether you need parts, on-site technical service, or it's time to refurbish your equipment, the EDI® Aftermarket Services team has the skills and know-how to help you get the job done.

A well cared for coextrusion system, no matter the age, is a significant benefit to any business.

**Scan our QR code with your phone for more details about the services offered by our team!**



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Printed in USA  
11/2022

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