



EDI® Die Solutions for Eco-Plastics

Extrusion Die Systems Designed to Process Biopolymers & Recycled Materials



The Challenge

The Demand for Eco-Friendly Solutions is Growing

For years, plastic goods have faced criticism for their single-use consumption rate. The reality is, plastics are essential to our daily lives - from our mobile devices to our method of daily transportation to the packaging that protects our food. And since the demand for these products is not declining, consumers and governments have started to increase the pressure on processors to manufacture plastic products from bio-based or recycled materials.



The Importance

Conserving the Earth... and Our Industry

By exploring processes to produce eco-plastic materials, manufacturers are contributing to the overall reduction in global plastic waste. In addition, these efforts leave a long-lasting and meaningful impression on consumers, assuring the continued production and success of goods necessary to our daily lives.



The Nordson Solution

EDI® Die Systems for Biopolymers & Recycled Materials

Nordson is committed to providing sustainable and innovative solutions to our customers. Our EDI® extrusion die systems are custom-designed using a rheological analysis of each specific polymer that will be used during the production process, including those that are bio-based or recycled.

Our advanced technology helps deliver products designed to reduce waste and leave a smaller carbon footprint for the everyday consumer.



Nordson Technology for Improved Flow Distribution

Nordson custom extrusion dies include advanced features designed to refine the thickness uniformity of a film or sheet product. We help our customers deliver environmentally friendly products to the market by precisely distributing bio-based, biodegradable, compostable, or recycled materials. Less material is consumed when cast film, sheet, and oriented film is produced with very tight thickness tolerances – because the average thickness can be set very close to the minimum acceptable thickness. We also produce flow distribution channels that minimize inventory time and purge very well, allowing for more edge trim reclaim to be re-used in the process.

Autoflex™ VI-RE Automatic Lip Adjustment System

- Minimize gauge variation and increase product yield by making fine adjustments to the film or sheet's thickness profile
- Reduce your operation's carbon footprint by utilizing the convective air cooling design feature
- Shorten downtime for routine maintenance by easily accessing wearable parts with quick disconnect plugs and removable module sets



Biaxially Oriented Film Extrusion Dies

- Increase the versatility of your film structure with equipment designed to accommodate dissimilar viscosity materials
- Enjoy unsurpassed coextrusion uniformity, leading to a consistent thickness across the final film product
- Save material costs by utilizing the “naked edge” or partial coverage feature to reduce trim



Cast Film Extrusion Dies

- Optimize production efficiency with a die custom-tailored to your specific processing parameters, including frequency of rate changes and stability of resins
- Improve cross-directional uniformity and reduce formation of gels in the film
- Shorten the time required to purge materials during product changeovers



Sheet Extrusion Dies

- Achieve optimal product quality with customized manifolds designed specifically for your production requirements
- Decrease material usage with a variety of available product features that provide optimal flow distribution
- Easily changeover products with flexible designs and optional features that enable a larger processing window

