COMPONENTS FOR EXTRUSION

SOLUTIONS THROUGH INNOVATION

INJECTION MOLDING | SHEET | CAST FILM | BLOWN FILM | BLOW MOLDING | PIPE | TUBING | PROFILE |
WIRE & CABLE | RECLAIM COMPOUNDING | RECYCLING
Nordson XALOY invented bimetallic cylinders more than 70 years ago and continues to lead the way in development of improved alloys and production processes.

X-800: Our best extrusion barrel
- Composition: Tungsten carbide particles uniformly dispersed in a corrosion-resistant nickel alloy matrix.
- Outstanding resistance to both abrasive wear and corrosion.
- Essential for extrusion of hard-to-melt materials such as HMW-HDPE or LLDPE and of highly filled abrasive materials such as those containing 25% or more of mineral fillers (calcium carbonate etc.) or glass fibers.
- Resists corrosive attack by aggressive volatiles released by polymers or additives.

X-102: For general purpose
- Composition: Nickel-rich iron-boron alloy.
- Cost-effective choice for extrusion of unfilled or lightly filled polymers having good thermal stability.
- Outlasts generic competitive barrels in comparative testing.

How we got here

Nordson XALOY X-800 and X-102 barrels meet the needs for wear and corrosion resistance for more than 90% of all extrusion requirements.

Machinery components that work better and last longer, can make the difference in today’s ultra-competitive manufacturing environment. For over 80 years, Nordson XALOY products and know-how in plastics have been making a difference for companies around the world. We’ve got proven tools to combat wear, boost output and improve and maintain quality in extrusion operations. We offer advanced process testing and training services. Our technical leadership and personal service is backed by decades of engineering, materials, process and application experience. The company has plants in the United States, Germany and Thailand and a network of sales agents around the globe.

Nordson XALOY is the world’s leading manufacturer of components and melt delivery systems for extrusion machinery. Nordson XALOY has expanded through acquisition, innovation and an unwavering commitment to customer service. Today we serve the plastics industry by offering the highest quality in barrels, high performance screws, preassembled plasticating systems, heat transfer rolls, melt pumps, screen changers, pelletizers, and cleaning ovens.

Barrels

Strong and straight
The structural shell of Nordson XALOY bimetallic barrels consists of a microalloy steel that maintains high strength and straightness after casting of the wear-resistant alloy lining. Unlike some barrel manufacturers, Nordson XALOY can produce long barrels – up to 240 in. (6.1 m) – without resorting to butt welding. The benefit to you is a stronger, straighter barrel with no seams to trap polymers that can degrade and contaminate your process.

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- Resists corrosive attack by aggressive volatiles released by polymers or additives.

X-102: For general purpose
- Composition: Nickel-rich iron-boron alloy.
- Cost-effective choice for extrusion of unfilled or lightly filled polymers having good thermal stability.
- Outlasts generic competitive barrels in comparative testing.
X-800 Bimetallic Twin Barrels

It's All About Service Life
- Last up to 4x as long as traditional Nitralloy barrels.
- More resistance to abrasive fillers.
- More resistance to corrosive volatiles.

Screw compatibility
Screw-barrel compatibility is especially critical in counter-rotating twin-screw extrusion because of the very high screw-to-barrel loading and the potential for adhesive and abrasive wear at the interface.

Nordson XALLOY 630 screw surfacing is the ideal companion to X-800 barrels. It too is a hard, durable tungsten carbide composite specially formulated for maximum compatibility with X-800 barrels.

We work closely with leading extruder manufacturers and processors on testing various screw coatings to ensure compatibility between our barrels and their screws.

Relining or new
Nordson XALLOY can save your needs for long-lasting X-800 bimetallic twin barrel sets by re-facing your worn barrel or by supplying a completely new barrel.

Relining is highly cost-effective because the casing usually does not require replacement. Second-time and subsequent relining jobs cost less than first-time reliners because there is no need to bore out the worn barrel. We simply press out the old unit and replace it with a new X-800 liner.

X800™ Encapsulated Screws

Application Method:
X800™ is a thermal spray coating. To eliminate risk of delaminating, a second process fuses the nickel/tungsten carbide alloy. This allows for 100% metallurgical bonding to the screw base material. The typical bond strength is 280 megapascals. This exceeds non-fused, mechanical bonds of 70 MPa which is common among all global competitors’ carbide coatings.

X800™ is a thermal spray coating applied to the screw. This material complements Nordson XALLOY’s high abrasive resistant XB30 overlay and is well suited for processing highly filled or corrosive resins. It can be applied for the full flight length or only on isolated areas of the screw that are more susceptible to wear.

Benefits
- Tungsten carbide cladding – improved wear and superior corrosion resistance
- Metallurgical bond – no chipping or delamination issues associated with HVOF carbide coatings
- Complete Nordson XALLOY Wear System – for the ultimate in wear protection:
  - X800™ carbide cladding on the screw root surfaces
  - X810 carbide hardfacing on screw flight ODs
  - X800™ patented carbide barrel lining
- Rebuilt Screws – X800™ is repairable and can be applied to your rebuilt screws greater than 50mm diameter

Made right. Our highly skilled production and quality team make sure that every X-800 barrel meets or surpasses OEM specifications for dimensions and straightness.
Extrusion Screws

New Castle brand extrusion screws — only by Nordson XALOY® — enable you to maximize extrusion throughput, product quality and component life.

Designs that perform.

L/D retrofits
Nordson XALOY can modify any extruder to extend or shorten its L/D ratio to cope with changed process requirements. We engineer and deliver complete retrofit packages including a compatible screw and barrel suitable for your process plus heater bands, cover modifications and front barrel support modifications, as required.

Ready to meet your needs
For more information, a recommendation for the screw best suited for your process or a quotation, contact your Nordson XALOY representative today.

For additional contact information visit nordsonxaloy.com.

Fusion™ Screw. New barrier screw delivers higher throughput at lower melt temperatures than earlier barrier designs. It has proven its benefits in processing polyolefins, PET, ABS and PLA in various extrusion and blow molding processes. See page 8. Efficient™ Screw. This barrier screw has proven its value in more than 30 years of field experience. StrataBlend® II Mixer. Low-shear distributive mixer produces a melt of uniform temperature. It’s highly suitable for processing shear-sensitive engineering resins such as polycarbonate or ABS as well as polyolefins and materials containing high levels of colorants, fillers or glass fibers.

Nano™ Mixer. Breaks up and disperses color and filler agglomerates, including nanoclays. Ideal for processing shear-tolerant materials.

OEM replacements
You can count on Nordson XALOY for precise reproduction of geometry, materials and finish of the original components that came with your machine.

Optimizing performance
Ask us to analyze the performance of your current screw design. Chances are good that we can improve on its output, melt quality and/or melt temperature profile with one of our proprietary high-performance designs or with a screw custom-tailored to your materials and process. And we can prove that it works at our Technology Center in New Castle, Pennsylvania.

Built for your process
We build screws to your requirements using a range of base materials and hardsurfacing alloys.

Full-length coatings and other treatments can afford additional protection against corrosion and abrasion. Available treatments include nitriding, chrome plating, and metallurgically bonded encapsulation for protection of root and flank surfaces as well as flight tops.

Specifications

Base Materials
Nordson XALOY screws are typically manufactured from a 4000 series alloy (usually 4140), nitriding steel (Nitralloy 135M), CPM tool steels, or any grade of stainless steel depending on the application. Certain applications require the use of stainless steels or special alloys for better resistance to corrosive wear. However, these screws require a secondary treatment to provide better resistance to wear (see Hardsurfacing Materials Chart).

Hardsurfacing Materials
Hardsurfacing is applied to flights using the plasma transferred arc (PTA) welding method. Our proprietary PTA technology and rigorous quality control systems ensure consistent hardness and minimize cracking and bonding problems. The chart below lists available hardsurfacing materials and summarizes their wear resistance, barrel compatibility and applications.
**Nano™ Mixer.** In extrusion of shear-tolerant polymers, the Nordson XALOY Nano™ Mixer combines very intensive dispersionary mixing of colorants, fillers and additives with excellent temperature control.

The unique, patented geometry of the Nano™ mixer provides exponential mixing action. Its melt channels have multiple inlets and outlets that divide, reorient and recombine the melt stream.

What it can do for you:
- Breaks up color, filler and nanoclay agglomerates into fine particles and thoroughly disperses them throughout the polymer melt.
- Enhances the effect of additives and fillers on product properties.
- Eliminates un-melts in stiff viscosity materials with minimal melt temperature increase and improved temperature homogeneity.

**Stratablend® II Mixer.** When your extrusion application calls for intensive chaotic and distributive mixing, but with low shear and little or no temperature rise, a screw using the Nordson XALOY® Stratablend® II Mixer can help you meet your quality and productivity goals. The unique, patented geometry of Stratablend® II produces highly effective mixing. The cut-through melt channels allow back flow for chaotic mixing effects.

What it can do for you:
- Homogenizes melt temperature.
- Speeds up material/color changeover.
- Improves color uniformity.
- Enhances effects of additives.

Typical applications:
- Extrusion of most thermoplastics, including shear-sensitive polymers.
- Processing materials with color and additive concentrates, fiber reinforcements and/or fillers, including nanoclay.
- Engineering plastics.
- Compounding of natural polymers with colorants, additives, reinforcements, and fillers.
The patented Nordson XALOY Fusion™ screw allows you to increase production and improve product quality in extrusion process applications. Its design is the combination of proven barrier screw technology and a low shear metering section that provides chaotic mixing, reduced melt temperatures and improved throughputs.

**How it works: Using our proven Barrier Design Technology**

1. The separation of melted polymer from unmelted resin protects the melt from additional shear.
2. Next the homogeneity of these two melt differentials re-combines in a short metering section.
3. Then the final melting is completed by means of a second barrier section designed for multi-cycle chaotic mixing.

Diameters available: 1.5” to 10” (3.81cm to 25.4cm)

### Power Efficiency Performance Benefits

- **Typically, 5 to 10 MI LD/LLDPE blends require 7 to 8 Lb/hr/hp to process effectively.**
- **The Fusion™ Screw was able to process slightly more than 10 Lb(4.5Kg)/hr/hp due to the efficient use of available HP.**
- **The Fusion™ Screw also features the added benefit of energy cost savings through more efficient use of available horsepower.**
- **Reduced energy costs**
- **Controllable melt temperatures**
- **Efficient use of available HP.**

### Power Efficiency Comparison

**Resulting Overall Benefits**

- More Lb/hr/hp
- Controllable melt temperatures
- Reduced energy costs

### Note:

- Fusion™, Fusion™ II and Fusion™ II Plus are either registered trademarks or trademarks of Nordson Corporation. 
- Patents are pending.

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**Increase Production**

**Improve Product Quality**

**Lower Melt Temperature**

**Lower Drive Motor Load**

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**Which Materials?**

- The Nordson XALOY Fusion™ screw and Fusion™ II screw have already proven to deliver benefits in processing.
- ABS, PP, HDPE, LLDPE, MDPE, PET, PLA

**Which Processes?**

- The Nordson XALOY Fusion™ screw and Fusion™ II screw are available for the following processes:
  - Blown Film
  - Sheet Extrusion
  - Blow Molding
  - Pipe
  - Profile
  - Pelletizers
  - Extrusion Screws
  - Barrels
  - Screws
  - Melt Pumps
  - Mixer service
  - Pelletizers
  - Jet Cleaners
  - Rollers
  - Screen Changers

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**The Nordson XALOY Fusion™ Screw**

**U.S. patent no. 6,672,753, 7,156,550 and 7,014,353**

**Note:**

- Suggested Barrel Temperature Profile: Z1=350F, Z2=420F, Z3=400F, Z4=380F, Z5=360F
- Using our proven Barrier Design Technology
- The separation of melted polymer from unmelted resin protects the melt from additional shear.
- Next the homogeneity of these two melt differentials re-combines in a short metering section.
- Then the final melting is completed by means of a second barrier section designed for multi-cycle chaotic mixing.

Diameters available: 1.5” to 10” (3.81cm to 25.4cm)

**Throughput Rate (kg/hr) and Melt Temperature (C)**

<table>
<thead>
<tr>
<th>Melt Temp</th>
<th>Output Pressure (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>400</td>
<td>0</td>
</tr>
<tr>
<td>350</td>
<td>50</td>
</tr>
<tr>
<td>300</td>
<td>100</td>
</tr>
<tr>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>150</td>
<td>250</td>
</tr>
<tr>
<td>100</td>
<td>300</td>
</tr>
</tbody>
</table>

**Note:**

- Fusion™ Screw was able to process slightly more than 10 Lb(4.5Kg)/hr/hp due to the efficient use of available HP.
- The Fusion™ Screw also features the added benefit of energy cost savings through more efficient use of available horsepower.
- Reduced energy costs
- Controllable melt temperatures
- Efficient use of available HP.

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**Output and Power Efficiency on 3.5” (88.9mm) x 24:1 L/D**

<table>
<thead>
<tr>
<th>Screw Speed (RPM)</th>
<th>Output</th>
<th>Power Efficiency (Lb Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>125</td>
<td>800</td>
<td>320</td>
</tr>
<tr>
<td>100</td>
<td>600</td>
<td>280</td>
</tr>
<tr>
<td>75</td>
<td>500</td>
<td>240</td>
</tr>
<tr>
<td>50</td>
<td>400</td>
<td>200</td>
</tr>
<tr>
<td>25</td>
<td>300</td>
<td>160</td>
</tr>
</tbody>
</table>

**Note:**

- This profile typically will produce a 410-420˚F(210-215˚C) melt against a 3500 PSI headpressure.
Quality awareness, quick delivery, competitive pricing and hassle-free customer service are our priorities at Nordson XALOY. Our computerized scheduling system ensures accurate delivery quotes at the time of order.

Flight repairs are performed using our multi-step welding process utilizing plasma transferred arc welding with a complete quality control system. Our method ensures consistent hardness, minimizes “cracking” and eliminates bonding problems. Available welds:
- Colmonoy 56
- Nordson XALOY X-830
- Colmonoy 83
- Stellite #1, #12, 46

Root and radius repairs, as required, are made with compatible base metals or hardsurfacings for value added protection against future damage.

Full length coatings offer additional protection to extruders processing fiberglass or talc reinforced resins. Available coatings:
- Weld encapsulation
- Carbide coatings
- “J” weld protection
- Chrome or nickel plating

Nordson XALOY offers flexible customer service programs to many high volume users. We welcome the opportunity to discuss your requirements.

Nordson XALOY also offers additional capabilities for many of your extrusion component and service needs:

New Barrels
We can provide new barrels according to your application needs with corrosion and abrasion resistant centrifugally cast bimetallic liners.

Barrel Rebuilding
Partial re-lining using standard hardened alloys or premium bimetallic liners.

New Screw Design
If you change your application, we can help you design a new screw to optimize your process. By providing computer engineered designs, we can increase your productivity by improving output, melt quality or melt temperature for any resin applications in use today.

L/D Retrofits
Complete extruder performance updates often start with the screw design and associated lengths. Nordson XALOY offers complete engineering design manufacturing services for most resin applications.

Extruder Barrel Borescoping Service
One of the most important maintenance processes in an extrusion facility is the bore measurement and alignment of the extruder barrel. This is typically done by means of borescoping, either optically or with lasers. If an existing barrel is being aligned, then the bore should be measured to determine if there is any wear to the bore and where the wear is located so that this information can be used to during the alignment process.

A properly aligned barrel will help reduce screw and barrel wear possibility decrease un-explainable elevated melt temperature or zone over-ride, or even possibly screw shank to drive quill mis-Engagement. This will improve the overall life expectancy of the extrusion equipment and reduced maintenance requirements. Contact Nordson XALOY for more information.

<table>
<thead>
<tr>
<th>Screw Size in (mm)</th>
<th>New Machine in (mm)</th>
<th>Used Machine (max. allowable) in (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – 1/8&quot; (6.35)</td>
<td>.007 - .010 (.18 - .25)</td>
<td>.021 - .030 (.53 - .76)</td>
</tr>
<tr>
<td>3 – 1/8&quot; (8.89)</td>
<td>.010 - .012 (.25 - .30)</td>
<td>.030 - .036 (.76 - .91)</td>
</tr>
<tr>
<td>4 – 1/8&quot; (11.43)</td>
<td>.010 - .013 (.25 - .33)</td>
<td>.030 - .039 (.76 - .99)</td>
</tr>
<tr>
<td>6&quot; (152.4)</td>
<td>.013 - .016 (.33 - .41)</td>
<td>.039 - .048 (.99 - 1.22)</td>
</tr>
<tr>
<td>8&quot; (203.2)</td>
<td>.016 - .019 (.41 - .48)</td>
<td>.048 - .057 (1.22 - 1.45)</td>
</tr>
<tr>
<td>10&quot; (254)</td>
<td>.018 - .021 (.46 - .53)</td>
<td>.054 - .063 (1.37 - 1.60)</td>
</tr>
<tr>
<td>12&quot; (304.8)</td>
<td>.020 - .025 (.51 - .64)</td>
<td>.060 - .075 (1.52 - 1.90)</td>
</tr>
</tbody>
</table>

Opportunity Cost:
60 lbs (27.21 kgs) /hour x $65.00 /hour x 24 hours = $936.00 per day

Your Return on Investment Payback is 3.89 days
If you are planning on rebuilding your screws, take advantage of Nordson XALOY’s Screw Rebuilding Work Cell that features fast turnarounds (7 – 14 days) on your screws. Streamlined using Lean manufacturing principals we can receive incoming screws for inspection, estimate costs, quote and release to the shop with your approval within 24 hours of receiving the parts.

Extruder Barrel Borescoping
Borescoping
From the worldwide leader in filtration equipment, Nordson XALOY offers the EM and XM manual screen changers. Contamination of the melt stream by metal, wood, paper or internally generated black specks yields products that are unacceptable in appearance and/or performance. Manual screen changers are the least expensive and most suitable option for processes that require infrequent changes. Nordson XALOY manual screen changers minimize costly downtime for screen replacement. With a simple swing of the handle lever during routine shutdown, clean screens are quickly brought on-line. No line disconnection occurs, and full production is re-established. As an option the EMP and XMP models add air assist to the shifting of the slide plate.

**Features:**
- 3 position handle
- 10,000 PSI (690 BAR) maximum head pressure
- 3,000 PSI (207 BAR) maximum differential pressure
- Pressure activated seal technology
- Extruder screw pull through
- Bolt-through extruder connection
- Leak-free processing
- Nordson XALOY provides full time comprehensive support

**Integrate the System**
Put an Nordson XALOY melt pump after the screen changer and further increase the productivity of the extrusion line – all from one company.

**Polymer Rheology Testing**
Nordson XALOY has the ability to provide polymer viscosity and melt index analysis.

**Superior Service**
Nordson XALOY rebuilds, repairs, services and supplies parts for screen changers, melt pumps, screws, barrels, heat transfer rolls, pelletizers and cleaning ovens.

**Options:**
- High temperature seal (540 °F / 282 °C)
- Corrosion resistant flow bores
- Twist lock co-extrusion breaker plates
- Downstream reducer bushing
- XP air assisted
- Adapters
- Add a melt pump for complete system control

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### EM Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Bore &quot;A&quot;</th>
<th>Screen Dia.</th>
<th>Heater</th>
<th>Heater Volt</th>
<th>Unit Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM-10</td>
<td>1.010 (25.65)</td>
<td>1.063 (26.99)</td>
<td>0.6 KW</td>
<td>230 V</td>
<td>25 (11)</td>
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<tr>
<td>EM-15</td>
<td>1.510 (38.35)</td>
<td>1.563 (39.69)</td>
<td>0.9 KW</td>
<td>230 V</td>
<td>40 (18)</td>
</tr>
<tr>
<td>EM-20</td>
<td>2.010 (51.05)</td>
<td>2.063 (52.39)</td>
<td>1.2 KW</td>
<td>230 V</td>
<td>56 (25)</td>
</tr>
<tr>
<td>EM-25</td>
<td>2.510 (63.75)</td>
<td>2.563 (65.09)</td>
<td>1.8 KW</td>
<td>230 V</td>
<td>82 (37)</td>
</tr>
<tr>
<td>EM-35</td>
<td>3.555 (90.30)</td>
<td>3.563 (90.49)</td>
<td>3.0 KW</td>
<td>230 V</td>
<td>173 (78)</td>
</tr>
<tr>
<td>EM-45</td>
<td>4.735 (120.27)</td>
<td>4.813 (122.24)</td>
<td>4.8 KW</td>
<td>230 V</td>
<td>330 (150)</td>
</tr>
<tr>
<td>EM-60*</td>
<td>6.015 (152.78)</td>
<td>6.093 (153.99)</td>
<td>10.8 KW</td>
<td>230 V</td>
<td>750 (340)</td>
</tr>
</tbody>
</table>

*Hydraulic Cylinder

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### XM Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Bore &quot;A&quot;</th>
<th>Screen Dia.</th>
<th>Heater</th>
<th>Heater Volt</th>
<th>Unit Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XM-30</td>
<td>30.25</td>
<td>39.7</td>
<td>0.9</td>
<td>230 V</td>
<td>18</td>
</tr>
<tr>
<td>XM-35</td>
<td>35.25</td>
<td>39.7</td>
<td>0.9</td>
<td>230 V</td>
<td>18</td>
</tr>
<tr>
<td>XM-45</td>
<td>45.25</td>
<td>52.4</td>
<td>1.2</td>
<td>230 V</td>
<td>25</td>
</tr>
<tr>
<td>XM-50</td>
<td>50.25</td>
<td>52.4</td>
<td>1.2</td>
<td>230 V</td>
<td>25</td>
</tr>
<tr>
<td>XM-60</td>
<td>60.25</td>
<td>66.7</td>
<td>1.8</td>
<td>230 V</td>
<td>37</td>
</tr>
<tr>
<td>XM-65</td>
<td>65.25</td>
<td>66.7</td>
<td>1.8</td>
<td>230 V</td>
<td>37</td>
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<td>XM-70</td>
<td>70.25</td>
<td>77.8</td>
<td>2.0</td>
<td>230 V</td>
<td>64</td>
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<td>XM-75</td>
<td>75.25</td>
<td>77.8</td>
<td>2.0</td>
<td>230 V</td>
<td>64</td>
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<tr>
<td>XM-80</td>
<td>80.25</td>
<td>90.5</td>
<td>3.0</td>
<td>230 V</td>
<td>78</td>
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<td>XM-90</td>
<td>90.30</td>
<td>90.5</td>
<td>3.0</td>
<td>230 V</td>
<td>78</td>
</tr>
<tr>
<td>XM-95</td>
<td>95.25</td>
<td>103.2</td>
<td>4.2</td>
<td>230 V</td>
<td>108</td>
</tr>
<tr>
<td>XM-100</td>
<td>100.25</td>
<td>103.2</td>
<td>4.2</td>
<td>230 V</td>
<td>108</td>
</tr>
<tr>
<td>XM-110</td>
<td>110.25</td>
<td>122.2</td>
<td>4.8</td>
<td>230 V</td>
<td>150</td>
</tr>
<tr>
<td>XM-120</td>
<td>120.27</td>
<td>122.2</td>
<td>4.8</td>
<td>230 V</td>
<td>150</td>
</tr>
</tbody>
</table>
From the worldwide leader in filtration equipment, Nordson XALOY offers the EH hydraulic screen changers. Contamination of the melt steam by metal, wood, paper or internally generated black specks yields products that are unacceptable in appearance and/or performance. Nordson XALOY hydraulic screen changers represent the most technologically advanced design of slide plate type screen changers. The EH line is suitable for processing a wide variety of thermoplastics in applications ranging from sophisticated multiple layer thin film extrusion to the heavy demands of recycling.

Integrate the System
Put an Nordson XALOY melt pump after the screen changer and further increase the productivity of the extrusion line – all from one company.

Polymer Rheology Testing
Nordson XALOY has the ability to provide polymer viscosity and melt index analysis.

Superior Service
Nordson XALOY rebuilds, repairs, services and supplies parts for screen changers, melt pumps, screws, barrels, heat transfer rolls, pelletizers and cleaning ovens.

Options:
- Vertical mounted units
- Adapters
- High temperature unit
- Stands
- Corrosion resistant flow bores
- Add a melt pump for complete system control

Compact Hydraulic Unit
eliminates piston wear with vertical accumulator. Includes status indicator lights and easy to read operating instructions.

### Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Bore &quot;I&quot; in. (mm)</th>
<th>Screen Dia.&quot;A&quot; in. (mm)</th>
<th>Heater KW (body)</th>
<th>Heater KW (slide plate)</th>
<th>Heater Volt</th>
<th>Unit Weight lb. (kg) approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EH-25</td>
<td>2.51 (63.75)</td>
<td>2.875 (73)</td>
<td>2.6 KW</td>
<td>0.6 KW</td>
<td>230 V</td>
<td>200 (91)</td>
</tr>
<tr>
<td>EH-35</td>
<td>3.55 (90.17)</td>
<td>3.938 (100)</td>
<td>3.8 KW</td>
<td>1.0 KW</td>
<td>230 V</td>
<td>375 (170)</td>
</tr>
<tr>
<td>EH-45</td>
<td>4.735 (120.27)</td>
<td>5.188 (132)</td>
<td>5.6 KW</td>
<td>1.6 KW</td>
<td>230 V</td>
<td>480 (218)</td>
</tr>
<tr>
<td>EH-60</td>
<td>6.04 (153.42)</td>
<td>6.563 (167)</td>
<td>8.0 KW</td>
<td>1.6 KW</td>
<td>230 V</td>
<td>865 (393)</td>
</tr>
<tr>
<td>EH-80</td>
<td>8 (203)</td>
<td>8.063 (205)</td>
<td>8.0 KW</td>
<td>2.0 KW</td>
<td>230 V</td>
<td>1800 (818)</td>
</tr>
<tr>
<td>EH-100</td>
<td>10 (254)</td>
<td>10.125 (257)</td>
<td>20.0 KW</td>
<td>2.0 KW</td>
<td>230 V</td>
<td>2350 (1068)</td>
</tr>
</tbody>
</table>

Numerical data: 1716
From the worldwide leader in filtration equipment, Nordson XALOY offers the DBC Continuous Screen Changer that provides continuous polymer flow and consistent, repeatable process parameters during screen changes.

As polymer enters the screen changer, the melt stream is divided equally and distributed through two rheologically optimized breaker plates. This method of filtration provides an increased screen area as compared to single breaker plate screen changer designs and maintains a streamlined polymer flow path. Polymer merges back to a single melt stream as it exits the screen changer.

Related Services

On-site Start-up Assistance and Training.
Nordson XALOY offers a comprehensive service menu catered to meet your specific requirements and ensures that your equipment performs to your expectations.

Laboratory Testing of Customer Polymers.
Nordson XALOY employs three complete extrusion lines to emulate your process conditions and provides real-world test results for your review prior to purchasing equipment.

Polymer Rheology Testing.
Nordson XALOY has the ability to provide polymer viscosity, melt index, and moisture analysis.

Equipment Options
- Adapters
- Custom Stands
- Melt Pump Systems
- Static Mixers
- Pelletizers
- Cleaning Ovens
- Turn-key System Integration

Features:
- Seal-less design
- Automated control
- Optimized flow channels
- Fully guarded
- Removable polymer tray
- Integrated support system
- Designed using FEA modeling
- CE compliant

Benefits:
- Increased production
- Reduced downtime & scrap
- Leak-free operation
- Increased filtration area
- Reduced inlet pressures
- Accurate, repeatable screen changes
- Reduced maintenance
- Simple operation
- Safe operation
- Operator friendly

Applications:
- Sheet
- Film
- Pipe/Profile
- Compounding
- Recycling
- Polymerization

Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Extruder Output*</th>
<th>Screen Diameter</th>
<th>Filter Area</th>
<th>sq. in. (sq.cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td>600 (272)</td>
<td>3.00 (76.2)</td>
<td>2 x 7.07</td>
<td>45.61</td>
</tr>
<tr>
<td>379</td>
<td>1050 (476)</td>
<td>3.79 (96.3)</td>
<td>2 x 11.28</td>
<td>72.78</td>
</tr>
<tr>
<td>458</td>
<td>1500 (680)</td>
<td>4.58 (116.3)</td>
<td>2 x 16.47</td>
<td>106.26</td>
</tr>
<tr>
<td>552</td>
<td>2200 (998)</td>
<td>5.52 (140.2)</td>
<td>2 x 23.92</td>
<td>154.33</td>
</tr>
<tr>
<td>583</td>
<td>2420 (1098)</td>
<td>5.83 (148.1)</td>
<td>2 x 26.68</td>
<td>172.14</td>
</tr>
<tr>
<td>694</td>
<td>3530 (1601)</td>
<td>6.94 (176.3)</td>
<td>2 x 37.81</td>
<td>243.95</td>
</tr>
<tr>
<td>907</td>
<td>6000 (2721)</td>
<td>9.07 (230.4)</td>
<td>2 x 64.58</td>
<td>416.67</td>
</tr>
<tr>
<td>1063</td>
<td>13,230 (6000)</td>
<td>10.63 (270.0)</td>
<td>2 x 88.75</td>
<td>572.50</td>
</tr>
</tbody>
</table>

Maximum Pressure: 7500 psi (517 Bar)
Maximum Differential Pressure: 3000 psi (207 Bar)
Maximum Temperature: 600°F (315°C)

*Extruder output will vary based on actual process conditions.

The DBC is also available in a vertical orientation offering a more compact design, requiring less aisle space than the horizontal versions.

An automatic hydraulic control and a hand-held operator pendant make screen changes simple, reliable and repeatable.
High Capacity Screen Changer

Proven design, superior performance.

Nordson XALOY's line of High Capacity Screen Changers is the result of 55 years of experience, innovation and development in filtration systems. These Hydraulic Screen Changers are the standard of the industry representing a design proven in a wide variety of applications over a long period of time.

Features:
- Optimized productivity during screen changes
- Breaker plate design maximizes polymer flow and minimizes pressure drop
- Leak-free operation
- Rugged single piece body minimizes deflection
- Toleranced machined parts
- Easily adapts to both new and existing installations
- Bi-fold guard design allows easy access to breaker plates and ensures safe operation
- Pre-wired to junction box for easy operator interface
- Steam or oil heating available in place of standard electrical heating
- Suitable for explosion proof environments - optional

Nordson XALOY offers advanced screen changer technology and customized models up to 20” diameters (508mm).

Extended Area Screen Changers: Models SPC 1200EA and 1500EA
For high capacity polymer filtration up to 60,000 lbs (27,272.73 kg)/hour and higher, Nordson XALOY manufactures the SPC-1200EA and 1500EA. These models utilize cylindrical screens to achieve a significantly reduced pressure drop, resulting in higher throughputs and longer on-line time between screen changes.

- Extended area provides longer filter life
- Reduced screen change frequency
- More stable process
- Lower power consumption
- Finer filters can be utilized
- Rapid on-line filter changes

Specification Table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Screen Changer Size in. (mm)</th>
<th>Typical Throughput Rates</th>
<th>Screen Diameter in. (mm)</th>
<th>Filter Area sq. in. (sq. cm)</th>
<th>Maximum Clearance Bore in. (mm)</th>
<th>Heat Zones Required</th>
<th>Heater KW (body)</th>
<th>Heater KW (slide plate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200</td>
<td>12 (305)</td>
<td>6,000-10,000 lbs/hr</td>
<td>12 7/8 (327.0)</td>
<td>113 (729)</td>
<td>12 (304.8)</td>
<td>4</td>
<td>14, 14</td>
<td>6.6, 6.6</td>
</tr>
<tr>
<td>1200 EA</td>
<td>12 (305)</td>
<td>25,000-40,000 lbs/hr</td>
<td>11,338-18,141 kg/hr</td>
<td>*</td>
<td>13 (304.8)</td>
<td>4</td>
<td>8, 8</td>
<td>11, 11</td>
</tr>
<tr>
<td>1500</td>
<td>15 (381)</td>
<td>10,000-20,000 lbs/hr</td>
<td>15 15/16 (404.8)</td>
<td>177 (1158)</td>
<td>15 (381.0)</td>
<td>4</td>
<td>14, 14</td>
<td>6.0, 6.0</td>
</tr>
<tr>
<td>1500 EA</td>
<td>15 (381)</td>
<td>40,000-60,000 lbs/hr</td>
<td>18,141-27,211 kg/hr</td>
<td>*</td>
<td>16 (381.0)</td>
<td>4</td>
<td>12, 12</td>
<td>15, 15</td>
</tr>
</tbody>
</table>

*Cylindrical filter tubes replace the conventional flat screen packs allowing for increased filter area
Extrusion Line Synchronization Made Easy. With a Nordson XALOY pump between your extruder and die you can directly dial in gauge control, eliminating extruder surge and screw beat at the die. Extruder screws efficiently melt, mix and convey polymer, but are not as efficient at providing a consistent pressure and volume to the die. A melt pump, while not a mixing or melting device, is extremely efficient at building pressure and metering the polymer output.

The Nordson XALOY Melt Pump is a positive displacement device which provides a linear output over a wide range of operating conditions. A closed-loop drive control varies extruder screw speed to assure an adequate amount of polymer melt to the output side of the pump. Integrating the Systems

Put an Nordson XALOY Screen Changer in front of the Nordson XALOY Melt Pump and further increase the productivity of the extrusion line.

Melt Pump Options

- Adapters
- Controls
- Drive Systems
- Stands
- Internal Fluid Channels (Heat/Cool)
- Manual Screen Changers
- Hydraulic Screen Changes
- Continuous Screen Changes
- Static Mixers
- Divert Valves

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Model</th>
<th>CCREV</th>
<th>CCREV</th>
<th>PCP</th>
<th>PDP</th>
<th>PDP</th>
<th>PDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Pressure: 5,000 psig (345 BAR)</td>
<td>Maximum Differential Pressure: 4,000 psig (276 BAR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Temperature: 566°F (300°C)</td>
<td>566°F (300°C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transducer Ports: 4 locations in body for 155 size and larger pumps</td>
<td>Transducer Ports: 4 locations in body for 155 size and larger pumps</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Nordson XALOY Melt Pump installation also provides you with more production line flexibility, first by shortening start-up times on difficult materials and second, by processing multiple polymers with the same screw. The Nordson XALOY Pump Control closes the loop from pump inlet pressure times on difficult materials and provides you with more production line control. The Nordson XALOY Melt Pump installation also improves screw efficiency and increase output.

Melt Pumps efficiently build pressure; thereby reducing extruder head pressure. By reducing extruder pressure, a screw can operate more efficiently and can convey material.

Accurate Metering = Tighter Product Spec and Material Savings

Melt Pumps operate at a constant speed and precisely meter polymer to die.
Extrusion Line Synchronization Made Easy. With a Nordson XALOY pump between your extruder and die you can directly dial in gauge control, eliminating extruder surge and screw beat at the die. Extruder screws efficiently melt, mix and convey polymer, but are not as efficient at providing a consistent pressure and volume to the die. A melt pump, while not a mixing or melting device, is extremely efficient at building pressure and metering the polymer output.

The Nordson XALOY Melt Pump is a positive displacement device which provides a linear output over a wide range of operating conditions. A closed-loop drive control varies extruder screw speed to assure an adequate amount of polymer to the pump regardless of inlet pressure variations due to extruder surge and screw beat. Precise construction makes Nordson XALOY Melt Pumps extremely accurate volumetric metering devices. Each gear tooth “bucket” carries a precise, repeatable amount of polymer melt to the output side of the pump.

Integrate the Systems
Put an Nordson XALOY Screen Changer in front of the Nordson XALOY Melt Pump and further increase the productivity of the extrusion line.

Melt Pump Options
- Adapters
- Controls
- Drive Systems
- Stands
- Internal Fluid Channels (Heat/Cool)
- Manual Screen Changers
- Hydraulic Screen Changers
- Continuous Screen Changers
- Static Mixers
- Divert Valves

Accurate Metering = Tighter Product Spec and Material Savings
Melt Pumps operate at a constant speed and precisely meter polymer to die.
From the image, we can extract the following information:

### Benefits:
- Improved uniformization of Polymer Properties
- Temperature control
- Improved viscosity flow
- Mix Colors Uniformly
- Higher Quality Product Appearance
- System Integration with Adapter to Shorten Length of the Line

### Static Mixer

The static mixer is installed right after the gear pump to improve the consistency of the melt feed to the die. Static mixers come in six sizes from 1 to 4 inch (25.4 to 101.6 mm) diameters with six or nine element “twists.”

### Specifications

#### Static Mixer Assembly Dimensions

<table>
<thead>
<tr>
<th>MIXER SIZE</th>
<th>FLANGE O.D.</th>
<th>BOLT CIRCLE</th>
<th>BARREL O.D.</th>
<th>SOCKET DIA.</th>
<th>BORE DIA.</th>
<th>OUTLET C/BORE</th>
<th>FLANGE WIDTH</th>
<th>MIXER O.A.L.</th>
<th>HOLE DIA.</th>
<th># BOLT HOLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&quot;</td>
<td>4.50 (114.3)</td>
<td>3.50 (88.9)</td>
<td>2.5 (63.5)</td>
<td>1.626 (41.3)</td>
<td>1.629 (41.38)</td>
<td>1.000 (25.4)</td>
<td>1.000 (25.48)</td>
<td>1.888 (4.79)</td>
<td>1.25 (31.75)</td>
<td>9.75 (247.65)</td>
</tr>
<tr>
<td>1 3/4&quot;</td>
<td>6.00 (152.4)</td>
<td>4.75 (120.65)</td>
<td>3.5 (89.9)</td>
<td>2.251 (57.18)</td>
<td>2.254 (57.25)</td>
<td>1.500 (38.1)</td>
<td>1.500 (38.18)</td>
<td>2.500 (63.5)</td>
<td>1.25 (31.75)</td>
<td>14.25 (361.95)</td>
</tr>
<tr>
<td>2&quot;</td>
<td>7.00 (177.8)</td>
<td>5.75 (146.5)</td>
<td>4.5 (114.3)</td>
<td>3.001 (76.23)</td>
<td>3.005 (76.3)</td>
<td>2.000 (50.8)</td>
<td>2.000 (50.8)</td>
<td>3.75 (9.52)</td>
<td>2.00 (50.8)</td>
<td>19.00 (482.62)</td>
</tr>
<tr>
<td>2 1/4&quot;</td>
<td>9.00 (228.6)</td>
<td>7.25 (184.15)</td>
<td>6.0 (152.4)</td>
<td>4.292 (107.02)</td>
<td>4.298 (107.17)</td>
<td>2.500 (63.5)</td>
<td>2.500 (63.6)</td>
<td>3.75 (9.52)</td>
<td>2.00 (50.8)</td>
<td>23.50 (596.96)</td>
</tr>
<tr>
<td>3&quot;</td>
<td>10.00 (254)</td>
<td>8.50 (215.9)</td>
<td>7.0 (177.8)</td>
<td>4.502 (114.35)</td>
<td>4.506 (114.5)</td>
<td>3.000 (76.2)</td>
<td>3.004 (76.3)</td>
<td>5.0 (12.7)</td>
<td>2.00 (50.8)</td>
<td>28.00 (711.2)</td>
</tr>
<tr>
<td>4&quot;</td>
<td>13.50 (342.9)</td>
<td>11.00 (279.4)</td>
<td>9.0 (228.6)</td>
<td>6.003 (152.48)</td>
<td>6.009 (152.65)</td>
<td>4.000 (101.6)</td>
<td>4.004 (101.7)</td>
<td>5.12 (12.7)</td>
<td>2.75 (69.65)</td>
<td>37.00 (939.8)</td>
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</table>

### Table: Elements

<table>
<thead>
<tr>
<th>Number of Elements (n)</th>
<th>Flow Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>64</td>
</tr>
<tr>
<td>7</td>
<td>128</td>
</tr>
<tr>
<td>8</td>
<td>256</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Rotation (c)</th>
<th>Flow Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
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<tr>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
</tr>
<tr>
<td>6</td>
<td>64</td>
</tr>
<tr>
<td>7</td>
<td>128</td>
</tr>
<tr>
<td>8</td>
<td>256</td>
</tr>
</tbody>
</table>

### Diagram

The diagram shows the flow of material through the static mixer, indicating the placement of elements and the flow division. The dimensions and specifications are detailed in the table above.
**Equatherm® Rolls**. For ultimate performance in double shell spiral heat-transfer rolls, Equatherm® rolls from Nordson XALOY have what it takes. In their unique patented construction, water flows through a stainless steel spiral with a PTFE gasket, forming a sealed flow path between the inner and outer shell. Our engineers optimize spiral size and pitch to the heat-transfer requirements of your application.

**Built to Perform**
- Shrink fit double shell spiral design provides uniform temperature across the roll face: ±0.5°C (±1°F).
- Consistent performance under loads up to 2100 N/m, higher if your process requires.
- High precision: TIR (total indicator runout) of 15 μm standard.
- Our large in-house CNC machining capability, offers many diameter and face length combinations to meet your requirements.

**Built to Last**
- Low-carbon steel tubing, hard surfaced, overlaid with 420 stainless steel to 52 Rc.
- More resistance to worm tracking than carburized and flame-hardened shells.
- Lower reconditioning costs.

**Quality Assurance**
- Complete Design Engineering, Manufacturing, Hard Chrome Plating and Finishing
  - Control of the processes enables Nordson XALOY to ensure your delivery will be met
- Hard Chrome Plating
  - 63-65 Rc hardness
- Vertical Stress Relief
  - 42” (1065mm) dia. and 210” (5330mm) lengths
- Dynamic Balancing
  - In accordance with ISO 1940/1

**Finish Options, RMS Values**

<table>
<thead>
<tr>
<th>Finish Options</th>
<th>RMS Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish</td>
<td>Value</td>
</tr>
<tr>
<td>Super</td>
<td>-1</td>
</tr>
<tr>
<td>Bright Mirror</td>
<td>1-2</td>
</tr>
<tr>
<td>Standard Mirror</td>
<td>2-4</td>
</tr>
<tr>
<td>Polish Finish</td>
<td>6-32</td>
</tr>
<tr>
<td>Satin Finish</td>
<td>Variable</td>
</tr>
<tr>
<td>Coarse Matte</td>
<td>125-150</td>
</tr>
</tbody>
</table>

Specialty finishes: water retention, flash plating over matte, pocket release, 30-50% gloss, tungsten carbide coating.

**Benefits**
- Maximum heat-transfer rate
  - Increased productivity. The heat-transfer efficiency of the Equatherm® design lets you specify your rolls for maximum line speed, minimum roll size or anywhere in between.
  - Energy savings. The efficiency of the spiral design lets you operate at minimum flow rates, reducing costs associated with heating, cooling and pumping process water.
- Improved product quality. Uniform temperature across the roll face, ±0.5°C (±1°F), combats across-the-web variations in gauge, appearance etc.

**Quality Assurance**
- Computerized Heat Transfer and Mechanical Analysis
  - For Most Process Applications including: Cast Film, Extrusion Coating, Laminating, Coating, Metallizing, General Heating, Cooling and Roll Design
- ASME Code Certified to manufacture and repair rolls
  - “U” and “R” Stamp Approved
- Hard Chrome Plating
  - 63-65 Rc hardness
- Acid Flushing and Flow Testing
  - Up to 10 tons - 500 GPM Maximum
- Roll Repair & Refinishing
  - Up to 40 in diameter by 120 overall length
Nordson XALOY’s water ring pelletizer connects directly to the end of the extruder, Nordson XALOY Screen Changer or Melt Pump via a short coupled adapter allowing polymer to flow horizontally from the extruder to the in-line die plate.

The rheologically optimized design minimizes polymer inventory between the extruder and die plate and evenly distributes polymer flow to each die plate hole.

The result is a consistently uniform pellet.

Reclaim, masterbatch, and compounders will benefit by improved pellet quality during both short and extended production runs. The in-line design reduces inlet pressures which can allow for increased production rates. Polymer purges quickly through the in-line die plate for quick color changes, which maximize production time. The retractable cutter head allows quick access to change blades and remove die plates for cleaning or screw removal.

An open trough cooling system allows easy operator response to process changes. A new cylindrical pellet dryer provides improved 360° access to dryer rotor for cleaning and pellet removal. Pellet flow through the dryer is streamlined to eliminate pellet stagnation and to promote efficient pellet drying.

Equipment Options
- Automatic Control System
- Adapters
- Custom Stands
- Melt Pump Systems
- Static Mixers
- Pelletizers 355, 365
- Cleaning Ovens
- Turn-Key System Integration

Pelletizing Technology for:
- Reclaim
- Masterbatch
- Compounding

Benefits:
- Uniform polymer flow to die plate
- Lower inlet pressure = increased rates
- Rapid blade and die plate removal
- Fast color changes
- Easy clean-out
- Simple start-up and operation
- Improved pellet dryness
- Easy dryer access and cleanability
- Insensitive to process variations

Features:
- In-line cutter geometry
- Retractable cutter head design
- Open water trough
- New cylindrical pellet dryer
- Integral dryer blower
- Fully interlocked control system
- Independent pellet cut

360° Access for easy clean out

Specifications

<table>
<thead>
<tr>
<th>Model Description</th>
<th>Nominal Rate LB/HR (KG/HR)</th>
<th>1800 (816)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Operating Pressure PSI (Bar)</td>
<td>3000 (207)</td>
<td></td>
</tr>
<tr>
<td>Max. Operating Temperature °F (°C)</td>
<td>600 (315)</td>
<td></td>
</tr>
<tr>
<td>Cutter Motor HP</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Pump Motor HP</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Dryer Motor HP</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Die Plate Heater KW</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Max. Cutter RPM</td>
<td>3600</td>
<td></td>
</tr>
<tr>
<td>Circulating Water Flow GPM (L/Min)</td>
<td>135 (511)</td>
<td></td>
</tr>
<tr>
<td>Temperature Zones</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Weight LBS (KG)</td>
<td>2200 (998)</td>
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</tr>
</tbody>
</table>
## Specifications

<table>
<thead>
<tr>
<th>Model Description</th>
<th>35s</th>
<th>36s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Rate LB/HR (KG/HR)</td>
<td>1800-3500 (816-1587)</td>
<td>3000-5000 (1361-2268)</td>
</tr>
<tr>
<td>Max Cutter RPM</td>
<td>3600</td>
<td>3600</td>
</tr>
<tr>
<td>Electric Supply</td>
<td>460/3/60</td>
<td>460/3/60</td>
</tr>
<tr>
<td>Cutter Motor HP</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Circulating Pump Motor HP</td>
<td>1.5</td>
<td>5</td>
</tr>
<tr>
<td>Slurry Pump HP</td>
<td>7.5</td>
<td>3</td>
</tr>
<tr>
<td>Dryer Motor HP</td>
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<td>5</td>
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<tr>
<td>Die Body Heaters KW</td>
<td>3.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Die Plate Heaters KW</td>
<td>1.25</td>
<td>2.8</td>
</tr>
<tr>
<td>Circulating Water Flow GPM (L/MIN)</td>
<td>125 (473)</td>
<td>350 (1325)</td>
</tr>
</tbody>
</table>

### Pelletizer Options
- Upstream cutter head adapter
- Cutter head support cart
- Heat exchanger and temperature regulating valve
- Pellet discharge duct
- Dryer sound abatement package
- Dryer wear resistance package

## Nordson XALOY’s Water Ring Pelletizing Systems

Nordson XALOY’s Water Ring Pelletizing Systems offer a modern, cost-effective method of pelletizing a wide range of unfilled and filled thermoplastic polymers. The Water Ring Hot Die Face ensures a consistent, uniform pellet and is insensitive to short term polymer flow interruptions. Pellets are cut and immediately quenched in a unique cooling chamber design that transfers the pellet slurry to the spin dryer. An integral dryer blower is standard for improved drying efficiency. Typical applications include polymer reclaim, compounding, color concentrates and polymerization.

### Benefits
- Uniform polymer flow to die plate
- Insensitive to melt flow variations
- Rapid blade and die plate removal
- Simple, user-friendly operation
- Easy clean-out
- Fast start-ups
- Reduced scrap
- Reduced power consumption

### Features
- Hot die face cutting
- Flexible knife blades require no adjustment
- Open water trough
- Fully guarded and electrically interlocked control system
- Integral dryer blower
- Independent pellet cut
- Fines management systems allow on-the-fly changes of filters

### Simple, trouble-free cutting.
Nordson XALOY’s advanced cutter head design evenly distributes molten polymer to the die. Since pellets are cut in air, there are no strands to drop, nor will die holes freeze off in the event of momentary flow disruption.

### Efficient pellet cooling.
Submersion of the pellet in the water slurry system provides highly efficient heat transfer. Water temperature and residence time can be varied to accommodate specific resin cooling requirements.

### Fines management.
All circulating water is continuously filtered through high-capacity filters fitted to the dewatering and dryer drain lines. Filters can be easily changed or cleaned without tools or line shutdown.

### Testing Facilities
To demonstrate the ease of operating the Water Ring Pelletizer on customer specific resins, Nordson XALOY maintains two process laboratories. Customers are encouraged to visit our lab for a demonstration.

For specifics on how the Nordson XALOY WRP can improve quality and productivity in your plant contact your representative.

### Pelletizing Technology for:
- Reclaim
- Masterbatch
- Compounding

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**WRP-35s/36s Pelletizer**

**Jet Cleaners**
- Extrusion Screws
- Screen Changers
- Melt Pumps
- Mixers
- Rolls
- Pelletizers
- Jet Cleaners
- Service
The Mini Jet is the smallest unit in the Nordson XALOY Jet Cleaner Product Line. It utilizes heat and vacuum to effect vaporization. In most cases, complete thermoplastic removal is accomplished within 90-120 minutes at an operating temperature range between 800°F and 900°F (426.7°C and 482.2°C) and a vacuum of 25 inches (635 mm) of mercury. The unit is a free standing console model and can easily be installed in any area having available facilities of water supply, drain line and electrical power.

Operation

Operation is completely automatic. The operator places the hardware into the chamber, sets the cleaning cycle, and walks away. At the end of the cleaning cycle, the Mini Jet automatically depressurizes the chamber, closes the water solenoid valve, and shuts off the vacuum pump. The operator now simply removes the cleaned part, checks and cleans the traps if necessary, and the unit is ready for another cycle.

Safety

Since cleaning takes place under vacuum, combustion does not occur. This feature provides a high degree of operator safety and the parts are equally protected from excessive or localized high temperatures, ensuring freedom from annealing and stress cracking.
The Model JCP 1724 Jet Cleaner with working dimensions of 15 ½ “ and 23 ¼” depth (393.7 mm and 596.9 mm depth) represents one of the most popular model sizes of the Nordson XALOY Jet Cleaner product line. It is ideally suited for small to intermediate-size cleaning applications. All Nordson XALOY Jet Cleaners utilize heat and vacuum to remove material such as thermoplastic from metal parts. In most cases cleaning cycles are accomplished within 120-240 minutes at an operating temperature range between 800°F and 900°F (426.7°C and 482.2°C) and a vacuum of 25 inches (635 mm) of mercury. The unit can be easily installed in any area having available facilities of water supply, water drain and electrical power.

Operation

Cleaning is totally automatic. The operator loads the parts into the parts tray, moves the carriage assembly to the operating position, sets the cycle time and temperature, starts the heaters and vacuum pump shut down. The cycle then simply opens the chamber door, removes the cleaned parts, checks and cleans the traps if necessary and the unit is ready for another cycle.

Safety

Since cleaning takes place under vacuum, combustion does not occur. This feature provides a high degree of operator safety and the parts are equally protected from excessive or localized high temperatures, ensuring freedom from annealing and stress cracking.

Primary Trap:

Located beneath and attached to the chamber, it collects any melted resin. Trap consists of a cast aluminum housing with swivel bolt clamped cover containing a gasket. Included is removable stainless steel collector pan is included.

Secondary Trap:

Positioned vertically in the pipe run between the chamber and vacuum pump. Condenses and collects any vapors by means of a water spray mist scrubber. Fabricated from welded carbon steel with quick open cover containing a gasket. Included is removable mesh basket.

Vacuum Pump:

Water ring design vacuum pump with integral TEFC motor mounted to frame of unit. Inlet port is in line with the chamber and secondary trap. Outlet port feeds the water-vapor separator.

Water-Vapor Separation:

Located below and connected to the vacuum pump outlet line. It directs water to drain and vapors to atmosphere. Customer provides pipe connection to atmosphere and sources and wires optional exhaust fan.

Electrical Control Console:

Pre-wired NEMA-12 enclosure with the top control portion containing a temperature controller, cycle timer, vacuum gauge, power switch cycle start button and high temperature override monitoring light. All items and components in the lower section are prewired allowing for fully automatic operation. Controls at 115 volts.

Environmental

Clean your tooling by removing material, not burning it away. Cleaning in an oxygen-starved chamber eliminates combustion and minimizes environmental impact. Consult our Environmental Report for additional details.

Benefits:

- Capable of removing most polymeric materials
- Fast cleaning cycle
- Simple operation
- Reliable and maintenance-free operation
- Gentle cleaning extends part life
- Operator safety
- Energy-saving operation
- Labor saving

FEP - OPTIONAL UNIT AVAILABLE

Specifications

<table>
<thead>
<tr>
<th>Standard Units</th>
<th>Cleaning Capacity (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>JC-MINI</td>
<td>9 ½ dia. x 12</td>
</tr>
<tr>
<td>JC-1724</td>
<td>15 ½ dia. x 23 1/2</td>
</tr>
<tr>
<td>JC-1760</td>
<td>15 ½ dia. x 60</td>
</tr>
<tr>
<td>JC-2448</td>
<td>24 dia. x 48</td>
</tr>
<tr>
<td>JC-2484*</td>
<td>24 dia. x 84</td>
</tr>
<tr>
<td>JC-24100*</td>
<td>21 ¼ dia. x 100</td>
</tr>
<tr>
<td>JC-3648</td>
<td>36 dia. x 48</td>
</tr>
<tr>
<td>JC-3672*</td>
<td>36 dia. x 72</td>
</tr>
<tr>
<td>JC-40160*</td>
<td>28 dia. x 160</td>
</tr>
<tr>
<td>JC-5484*</td>
<td>43 dia. x 84</td>
</tr>
</tbody>
</table>

* Depends on weight of part(s) to be cleaned.

Jet Cleaners

Screen Changers

Melt Pumps

Mixers

Rolls

Pelletizers

Service
WE REBUILD, REPAIR, SERVICE AND SUPPLY PARTS FOR ALL OF THE FOLLOWING:

Barrels, Screws, Pumps

Screen Changers

Water Ring Pelletizers

Injection Molding

Process Equipment
- 85 Ton Injection Press
- 400 Ton Injection Press
- Over a dozen molds available for various lab trials in our injection molds machines (IRM)
- Capability of demonstrating the TwinShot® Technology on 2 different size Injection Machines

Injection Molding

With an intense focus on customer care Nordson XALOY has allocated significant funds to organizational improvements that directly benefit the customer. Recent capital machinery equipment additions to our Technology and Training Center in New Castle, PA allow increased research and testing opportunities. The Polymer Laboratory and Testing Services include comprehensive process analysis for Injection Molding and Extrusion as well as a fully equipped Rheology Lab.

Extrusion Analysis Extrusion applications are tested on our fully customized 3.5” x 24:1 L/D extruder, complete with over 20 data points of analysis. Multiple extruder configurations are available.

Accessory Equipment
- Conax CD-400 Desiccant Dryer
- 28” Flex Lip Sheet Die
- 12” x 54” 3 Roll Sheet Stack
- Dual Spindle Winder
- 24” Casting Stand
- Strand Pelletizer
- Single Component Additive Feeder
- Conax 3 Component Auto-Weight Gravimetric Blender
- Water Ring Pelletizer

Working with industry partners, Nordson XALOY offers the latest in Injection Molding equipment to simulate your processes accurately.

Material Testing Equipment
- Kayeness Capillary Rheometer
- Kayeness Melt Indexer
- Omnimark Moisture Analyzer

Nordson XALOY relies on a scientific approach to all of our product developments. Our Technical Lab enables our designer engineers to test and analyze your materials’ viscosity, moisture content and melt density to best determine the correct design requirements the first time.

Rheology Lab

Let Nordson XALOY completely service you