

# Xaloy® Injection Molding Screws

We build screws to your requirements using a wide range of base materials, hardsurfacing alloys and full-length treatments.

Xaloy® injection molding screws can enable you to cut molding cycles and improve part quality with lower melt temperature, faster screw recovery and improved dispersion of color, additives and fillers.

## Conversions

### Up/Down-Sizing

You can count on Xaloy for single source responsibility in adapting an injection press to cope with changed requirements for shot size, residence time or venting. We do it all – design, engineering and manufacturing – and deliver a complete retrofit package including a screw optimized for your materials, a compatible barrel and accessories such as heater bands, end cap, and check valve.



## Designs that perform



**Xaloy® EasyMelt® Screw.** Multi-purpose, single flighted screw design superior to industry standards. Designs can be modified by process for: output/recovery rate, shear, and mixing.

- Robust design processes a wide variety of resins
- Economical
- Good for custom molding applications



**Xaloy® MeltPro™ Barrier Screw.** High performance barrier screw to process crystalline & amorphous resins.

- The Xaloy® MeltPro™ Screw reduces recovery times by 10 to 20%
- A mixing section can be added to improve color dispersion



**Xaloy® ELCee® Screw.** The highest performance, single flighted screw designed for precompounded resins.

- High output provides fast cycles
- Great melt quality due to low shear



**Xaloy® Pulsar® Mixing Screw.** Combination mixing screw provides 3-4 times better mixing.

- Wave style root geometry for excellent distributive & dispersive mixing
- Processes PET, PA, PE, LCP, PP, ABS, PC, PMMA, rigid PVC, glass filled resins



**Xaloy® Quantum™ Barrier Screw.**

Ultra high performance barrier screw design targeted for recovery limited, thin wall processes utilizing polyolefin resins.

- Mass balance design controls shear stress
- Optimum plasticizing rate and recovery times
- Innovative barrier design achieves homogeneous melt quality at high process speeds

## Ready to meet your needs

For more information, a recommendation for the screw best suited for your process or a quotation, contact your Xaloy representative.

For contact information visit [www.xaloy.com](http://www.xaloy.com).

# Xaloy® Injection Molding Screws

**OEM replacements.** You can count on 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.

**Hardsurfacing materials and proprietary coatings.** PTA technology and rigorous quality control systems ensure consistent hardness and minimize cracking and bonding problems. Xaloy's X-8000™ coating technology offers a high tungsten carbide content in a nickel matrix for the best in class abrasive and corrosive wear resistance.



**Xaloy® Pulsar® II Mixing Screw.** Superior low shear distributive mixing screw for amorphous and crystalline resins.

- Excellent distribution of additives.
- Better cell distribution in foam processes



**Xaloy® V-Mixer™ Screw.** Proprietary “pump-through” mixing design for quick color changes.

- Generates localized high & low shear areas with low mixer pressure drop
- Processes a variety of materials
- Lower scrap rates



**Xaloy® Z-Mixer™ Screw.** Intense dispersive mixing screw to process polyolefins & PA, PET, & Ionomer. Best mixing screw providing excellent color & additive mixing with no unmelts.



**Xaloy® Fusion™ Screw.** Trials conducted by Krauss-Maffei showed that the patented Xaloy® Fusion™ screw outperformed a leading competitive high-performance screw and a standard mixing screw with faster plastication and lower melt temperature in molding HDPE. Other resins have shown similar results.

*Xaloy is the industry leader in plasticizing screw, mixing, injection molding component, and materials technologies, holding over 20 patents on innovative plasticizing component design and wear resistant material solutions that have made a difference in the plastics industry.*

**Xaloy LLC**  
375 Victoria Road  
Austintown, OH 44515 USA  
+1.330.726.4000 **Phone**

**Germany**  
+49.7132.999.35.0 **Phone**

**Thailand**  
+66.38.717.084 **Phone**

**China**  
+86.21.5785.091.8 **Phone**

www.xaloy.com | info@xaloy.com  
© 2021 Xaloy  
Printed in USA  
3/2021

**XALOY**  
Solutions through Innovation.™