

Process Overview

Compression Molding

This Process Overview provides an overview of Westlake products that are compression molded

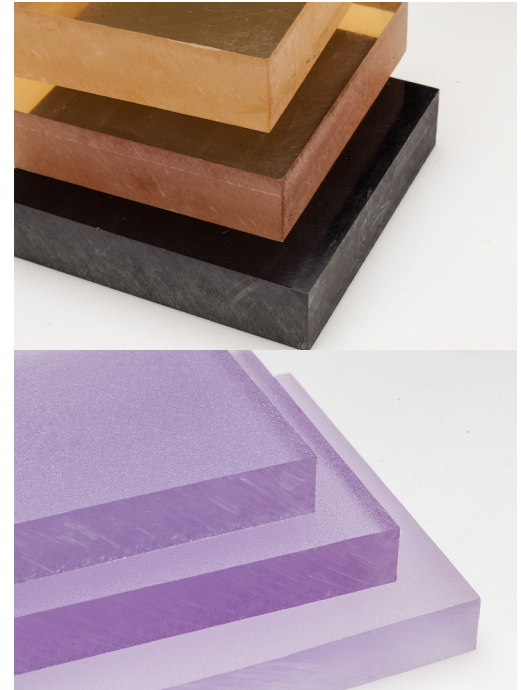


COMPRESSION MOLDING

Westlake compression molded sheets are formed under heat and pressure, and are slowly cooled to produce a very dimensionally stable, virtually stress-free sheet ideal for machining and fabrication. When machining close tolerance parts, a fabricator will experience very little material movement. Our proprietary process provides sheets with inherent stress levels that are extremely low or nonexistent.

Westlake offers a wide range of sheet sizes in addition to the industry standard 24" x 48" to help maximize yields and reduce waste. Westlake can manufacture most materials in 30"x60", 36"x72", 48"x96", 48"x120", 60"x120", and 72"x144" sheet sizes. Westlake compression molding can often benefit your custom sheet needs as well.

Another added benefit of our compression molded sheets over extruded/annealed sheets is the ability to provide sheets with a smooth surface. A variety of other surface finishes can also be applied during the manufacturing process including press polished, haircell and other custom surface textures.



BENEFITS AT A GLANCE

- ✓ Dimensionally stability
- ✓ Machinability
- ✓ Reduced machining operations
- ✓ Holds tolerances
- ✓ Stays flat and resists warping
- ✓ Offered untrimmed
- ✓ Plus tolerances and better yield
- ✓ Smoothest surface finish

PRODUCT DEVELOPMENT

At Westlake Plastics, we take pride in being not only a material supplier, but a strategic partner. If you need a material to meet critical performance requirements or industry specific standards that an off the shelf product can't address we can help by developing a custom modified product. Utilizing our partnerships with custom compounders, and our expertise in extrusion and compression molding Westlake Plastics can help you solve your next material challenge.

OUR EXPERTISE

Our advanced manufacturing technologies allow the conversion of a full range of thermoplastics into semi-finished shapes and film. Highly skilled sales and manufacturing teams readily assist customers in the selection of the optimal product to meet their needs.

An ISO 9001 and ISO 13485 registered company, Westlake Plastics values customer feedback. Our commitment to quality and continuous improvement coupled with our focus on customer satisfaction positions us for success with integrity.

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POLYMER	PRODUCT FAMILY	DESCRIPTION
ABS	ABSYLUX®	Absylux ABS is a low cost engineering plastic ideal for prototyping. It has excellent dimensional stability and lends itself to all forms of fabrication. It can be painted or glazed and in some cases chrome plated.
COC/COP	CYLUX	Cylux is a cyclic olefin copolymer (COC), and a cyclic olefin polymer (COP) that combines excellent optical properties with both chemical resistance and low moisture absorption.
LDPE	ETHYLUX®	Ethylux® LDPE is a semi-rigid, lightweight plastic material, noted for its low temperature flexibility, toughness, and corrosion resistance.
PVDF	FLUOROLUX	Fluorolux Polyvinylidene Fluoride (PVDF) is a semi-crystalline, high purity thermoplastic fluoropolymer that offers excellent corrosion and chemical resistance at both ambient and elevated temperatures.
PVDF	KYNAR®	Kynar® Polyvinylidene Fluoride (PVDF) is a semi-crystalline, high purity thermoplastic fluoropolymer that offers excellent corrosion and chemical resistance at both ambient and elevated temperatures.
PPO/PPE	NORYLUX	Norylux PPO modified Poly Phenylene Oxide is a high-strength, amorphous, engineering plastic with outstanding mechanical, thermal, and electrical properties.
POMC	POMALUX®	Pomalux® POMC Polyoxymethylene is an acetal copolymer. Pomalux® POMC has excellent mechanical, electrical, and wear properties.
PP	PROPYLUX	Propylux PP polypropylene is a semi-crystalline thermoplastic exhibiting excellent chemical resistance, low moisture absorption, moderate heat resistance, and good impact resistance.
PEI	TEMPALUX®	Tempalux PEI polyetherimide is an amorphous transparent thermoplastic. It offers exceptional heat resistance, high strength and stiffness, has broad chemical resistance and is inherently flame retardant.
PESU/PSU/PPSU	THERMALUX®	Thermalux is our family of sulfone materials which include polysulfone (PSU), polyethersulfone (PESU), and polyphenylsulfone (PPSU). All vary in their levels of heat, chemical and flame resistance.
HDPE	ULTRA-ETHYLUX®	Ultra Ethylux® HDPE High Density Polyethylene is relatively low cost, light weight, toughness, resistance to a broad range of chemicals and low moisture absorption.
PC	ZELUX®	Zelux is our family of Polycarbonate (PC) materials. Westlake offers standard machine and window grades along with medical grades, glass reinforced grades and conductive grades.

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