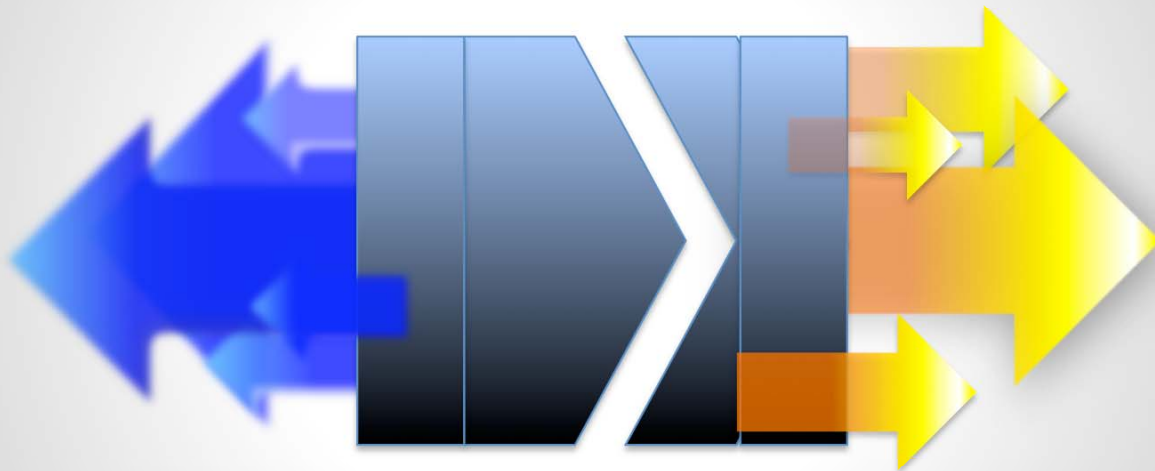


ENERGY = ENERGY



**BUT ITS LOSS RESULTS IN A LOSS IN YOUR
PRODUCTIVITY AND PART QUALITY...**

The *Thermal Management* of your mold is important whether you are heating or cooling, because Hot or Cold, energy loss is just that – *Loss* -

Glastherm® brand **Mold Insulation Sheets** are perfect for:

Plastic Injection Molding

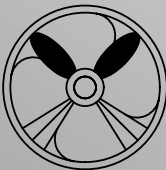
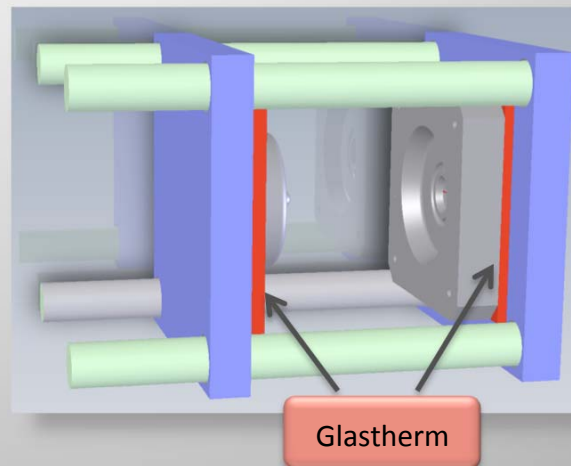
Rubber Molding

Thin Wall Molding

Zinc Die Cast Molding

Positioned between the mold halves and platens, they offer the following benefits:

- Energy Savings (50-75%)
- Increased Part Quality
- Temperature Control
- Better Mold Filling
- Faster Cycle Times
- Hot Compressive Strength
- Low Thermal Conductivity
- Oil And Moisture Resistant
- Asbestos Free Material

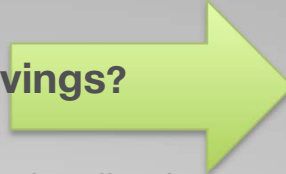


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GROUP**

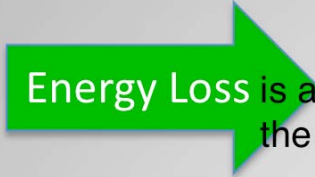
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Where are the Cost Savings?



Whether a mold needs an intentionally localized temperature control gained from Bubblers, Heat Pipes or proximal positioning of cooling lines or a uniform temperature profile, there is a great benefit to insulating your mold. A mold not insulated can result in monetary loss in several ways: energy loss, equipment damage and poor part quality.



Energy Loss is an easy one to see. Without insulation, you are cooling the entire machine and room, and not just your mold.

The use of thermal insulation will result in energy savings between 50 and 75 percent depending on the delta T between the mold and surroundings.

A rubber molder once said to me,

"My plant is always so nice and warm in the winter"



"But my chiller Temperature is just fine"

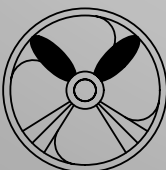
This is often mentioned, as if there is no waste in a system in equilibrium. Only, this simply means you chose a chiller that is up to cooling more than your mold. With insulation, the chiller would be working less and using less energy.



Part quality in both amorphous and semi-crystalline plastics is greater with temperature uniformity. Additionally, thin walled parts are even more susceptible to the changes in wall temperature.



Equipment damage can be anything from the over use of chillers to damage to presses due to the heating of lubricated parts or worse, the heating of the hydraulic system (oil seals rings, and pumps) and guide systems.



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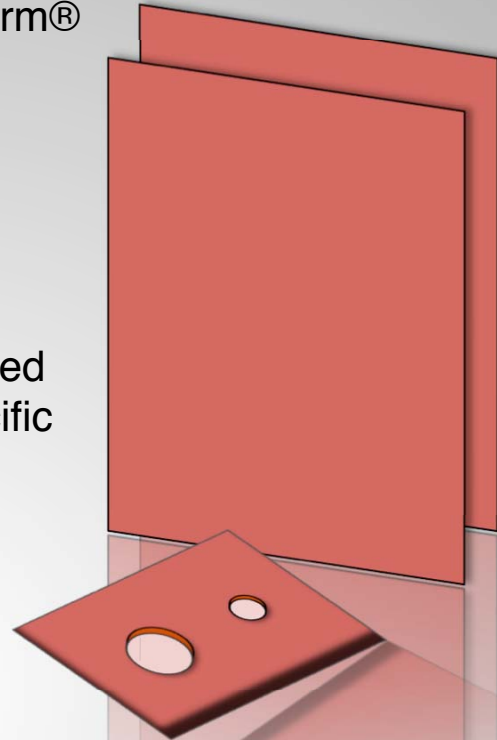
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Glastherm Availability

We offers several grades of Glastherm® Mold Insulation Sheet.

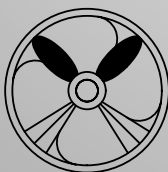
We can supply you with:

- Full sheets
- Parts cut it to size
- Parts with custom machined features to suit your specific needs.



Sheet Sizes

Grade	S	1/4, 3/8, 1/2,	HT220	HT250
Sheet Sizes	36" x 72"	1/4, 3/8, 1/2,	48" x 96 "	45" x 118 "
	49" x 96.5"	1/4, 3/8, 1/2,		
Thicknesses	1/4, 3/8, 1/2,	1/4, 3/8, 1/2,	4 - 50mm	4 - 50mm



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Glastherm Grades

Grade	°F/°C	Notes
S	310/155	A general purpose insulating sheet with an economical combination of thermal and physical properties. Grade S is particularly suited to the rubber molding industry
<i>HT200</i>	412/200	Used primarily in plastics and zinc die cast mold presses.
HT220	428/220	Used primarily in hydraulic, wood and tire presses.
HT250	482/250	Used primarily in hydraulic, wood and tire presses.

Glastherm Properties

Property	Units	Grade S	Grade HT	Grade HT220	Grade HT250
Continuous Use Temperature	°F/°C	310/155	412/200	428/220	482/250
Maximum Service Temperature	°F/°C	>425/218	1">550/285	608/350	752/400
Compressive Strength at 75°F	Psi	45,00	49,000	72,500	87,000
Compressive Strength at 392°F	Psi	11,000	18,000	40,600	65,200
Water Absorption	% by wgt.	0.40	0.20	0.20	0.15
Thermal Conductivity	Btu•In/Hr•Ft ² °F	1.80	1.90	1.73	1.59

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