



Troubleshooting Guide for TRANSFER MOLDING Phenolic & Granular Polyester

PROBLEM	CORRECTIONS								
	Mold Temperature	Transfer Pressure	Transfer Speed	Preheat Temperature	Rate of Preheat	Clamp Pressure	Charge Weight	Cure Time	Refer to Comment Sheet.
Ball & Socket	3D	2I	1D						4A
Bulge Opposite Insert	3I			4I					1B & 2C
Cure Blister	2I	4I	6D	1I	3D			7I	5E
Dull Appearance	1I	3I		2I					4F & 5M
Flash - Excessive	4I	1D		3I		6I	2D		5G
Flow Lines	2D	1I		3D					4A
Hard Spots	3D	2D			1I				
Mold Staining	4I	5D	6D	3I		7D			1L & 2M
Mottled Surface Appearance	3D			2D			1I		
Nonfills or Short Shots	4D	3I		2I			1I		5L
Orange Peel	3I	1I	4I	2I					
Part Shrinkage - Excessive	2I	1I		3I				5I	4L
Part Shrinkage - Insufficient	1D							3D	2L
Sink Marks	2I	3I					1I		4L
Skin Blisters	4D	1D					3I		2E, 5L & 6A
Sticking in Mold	2I						3D	5I	1H & 4F
Trapped Gas	5D	4D		3D		6D			1P 2L & 7N
Warpage When Ejected									1H, 2F & 3J
Warpage After Cooling	1I	3D		2I				5I	4L, 6K & 7A

Legend: Number = Priority I = Increase D = Decrease Other Letters = Comment ID



Comment Sheet for TRANSFER MOLDING Phenolic & Granular Polyester

- A. Relocate the gate to create turbulence in the material as the cavity is being filled. Sometimes increasing the gate size will improve the packing and curing of the parts.
- B. Heat inserts to mold temperature before using.
- C. Use a shorter insert.
- E. Add a breathe cycle or try changing the current breathe cycle.
- F. Check the condition of the mold plating and re-plate if necessary. If the mold is unplated, polishing or plating may be necessary.
- G. Check the parting line for wear or damage and repair as needed.
- H. Check the mold for wear or staining. Polish out any mold stains and remove any undercuts that may have been worn into the mold
- J. Add undercuts to hold the part in the moving half of the mold until it is ready to be ejected.
- K. Use shrink fixtures to hold the parts flat as they cool.
- L. Check the vents and correct as needed. (See Section #23 "Thermoset Transfer Mold Design Tips")
- M. Polish those areas of the mold that tend to trap gas and stain.
- N. Increase gate and runner size.
- P. If mold is vacuum vented, check if system is pulling a minimum of 21" Hg in the mold. If not, resolve problem with vacuum system.

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This information is suggested as a guide to those interested in processing Plenco Thermoset molding materials. The information presented is for your evaluation and may or may not be compatible for all mold designs, runner systems, press configurations, and material rheology. Please feel free to call Plenco with any questions about PLENCO molding materials or processing, a Technical Service Representative will assist you.