

Troubleshooting Guide for TRANSFER MOLDING Phenolic & Granular Polyester

CORRECTIONS	Mold Temperature	Transfer Pressure	Transfer Speed	Preheat Temperature	Rate of Preheat	Clamp Pressure	Charge Weight	Cure Time	Refer to Comment Sheet.
	PROBLEM								
Ball & Socket	4D	3I	2D						1A
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	5I	1D	2D	4I		6I	3D		6G
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	5D	3I	4I	2I			1I		6L
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				4I		5L
Skin Blisters	4D	1D	2D				3I		5E, 6L & 7A
Sticking in Mold	2I	1D					3D	5I	6H & 4F
Trapped Gas	5D	4D	2D	3I		6D			1L
Warpage when Ejected									1H, 2F & 3J
Warpage after Cooling	1I	3D	4D	2I				6I	5L, 7K & 8A

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 not plated, polishing and 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.