

PLASTICS ENGINEERING COMPANY SHEBOYGAN, WISCONSIN 53082-0758 U.S.A 3518 LAKESHORE ROAD POST OFFICE BOX 758 PHONE 920 - 458 - 2121 F A X 920 - 458 - 1923

## Troubleshooting Guide for COMPRESSION MOLDING Phenolic & Granular Polyester

CORRECTIONS	Mold Temperature	Mold Closing Speed	Preheat Temperature	Rate of Preheat	Clamp Pressure	Charge Weight	Cure Time	Refer to Comment Sheet.
PROBLEM								
Bulge Opposite Insert	3I		4I					1A & 2B
Cure Blister w/Preforms	4I	5D	1I	2D			7I	3P & 6C
Cure Blister w/Cold Powder	21	4D					6I	1R, 3E & 5C
Dull Appearance	11	3D	21					4F & 5J
Flash - Excessive	3I	4D	21		6I	1D		5G
Flow Lines	1D	3D	2D					
Hard Spots or Precure	4D	31						1H & 2P
Mold Staining	<b>4</b> I	5D	31					1N & 2J
Mottled Surface Appearance	3D		2D			1I		
Nonfills or Short Shots	4D	31	21			1I		5N
Orange Peel	31	1D	21					
Part Shrinkage - Excessive	21	1I	31				5I	4N
Part Shrinkage - Insufficient	1D						3D	2N
Sink Marks	21	31				1I		4N
Skin Blisters	4D	1D				31		2C & 5N
Sticking in Mold	21					3D	5I	1K & 4F
Trapped Gas-Burn Marks	4D	31	2D					1N
Warpage When Ejected								1K, 2F & 3L
Warpage After Cooling	1I		21				<b>4</b> I	3N & 5M

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



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## Comment Sheet for COMPRESSION MOLDING Phenolic & Granular Polyester

- A. Heat inserts to mold temperature before using.
- B. Use a shorter insert.
- C. Add a breathe cycle or try changing the current breathe cycle.
- E. Use minimum charge weight.
- F. Check the condition of the mold plating and re-plate if necessary. If the mold is unplated, polishing or polishing and plating may be necessary.
- G. Check the parting line for wear or damage and repair as needed.
- H. Speed up the placing of the preforms into the mold.
- J. Polish those areas of the mold that tend to trap gas and stain.
- K. Check the mold for wear or staining. Polish out any mold stains and remove any undercuts that may have been worn into the mold.
- L. Add undercuts to hold the part in the moving half of the mold until it is ready to be ejected.
- M. Use shrink fixtures to hold the parts flat as they cool.
- N. Check the vents and correct as needed. (See Section #13 " Thermoset Compression Mold Design Tips")
- P. Change the placement of the preforms in the cavities.
- R. Warm the material to 66°C (150°F) if possible before molding it.

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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, press configurations, and material rheology. Please feel free to call Plenco with any questions about PLENCO molding materials or processing and a Technical Service Representative will assist you.