

## Troubleshooting Guide for COMPRESSION MOLDING BMC

CORRECTIONS	Mold Temperature	Mold Closing Speed	Rate of Ejection	Clamp Pressure	Charge Weight	Cure Time	Refer to Comment Sheet.
	PROBLEM						
Crazing / Cracking	4I		3D				1A,2B,5C,6E,7F
Contamination							1G,2H,3J
Dieseling		1D					2K,3L
Drag Marks							1M,2A,3N
Dull Appearance	1I	2D					3P,4R
Flash - Excessive	2I	3D		5I	1D		4S
Flow Lines	1D	2D					
Knit Lines	4D	3D					1T,2U
Laking	5I	4D		1I			2V,3W,6S
Nonfills or Short Shots	3D	2I			1I		4X
Pin Cracking	4I		1D			5I	2A,3N,6L,7Y
Pre Cure	3D	2D					1T
Scumming	3I			1I			2W,4U,5T
Part Shrinkage - Excessive	2I	1I				4I	3X
Part Shrinkage - Insufficient	1D					3D	2X
Sink Marks	2I	3I			1I		4X
Sticking in Mold	2I				3D	5I	1Z,4P
Trapped Gas-Burn Marks	3D	2I					1X
Warpage When Ejected							1Z,2P,3AA
Warpage After Cooling	1I					3I	2X,4F

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

## **Comment Sheet for COMPRESSION MOLDING BMC**

- A. Check mold for back draft or undercuts and remove them.
- B. Eliminate any sharp transitions from thick to thin cross sections.
- C. Allow the parts to cool at a controlled uniform rate.
- E. Change the placement of the charge to maximize the material fill pattern.
- F. Use shrink fixtures to hold the parts flat as they cool.
- G. Checked all unmolded material for foreign matter and if possible remove it. If it can't be removed, quarantine the remaining material.
- H. Check all equipment used in molding the material for potential sources of contamination and remove them.
- J. Check for air borne particulates from other processes and eliminate their source.
- K. Increase the mold temperature and if that does not resolve the problem try decreasing it.
- L. Vent the ejector pins.
- M. Check parallelism of ejector system and repair as needed.
- N. Check mold for the total degrees of draft and increase if necessary.
- P. Check the condition of the mold plating and re-plate if necessary. If the mold is un-plated, polishing and/or plating may be necessary.
- R. Polish the mold.
- S. Check the parting line for wear or damage and repair as needed.
- T. Decrease the amount of time needed to position the charge in the mold.

U. Change the location of the charge.

V. Verify the correct charge weight is being used, and adjust as needed.

W. Verify that clamp pressure is maintained on the mold during the entire cycle, and correct as needed.

X. Check the vents and correct as needed. (See Section #13 "Thermoset Compression Mold Design Tips")

Y. Relocate ejector pins or increase the diameter and/or number of pins.

Z. Check mold for wear and correct as needed.

AA. Add undercuts to hold the parts in the movable half of the mold until they are ready to be ejected.