Troubleshooting Guide for TRANSFER MOLDING BMC

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

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

Comment Sheet for TRANSFER 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. Increase the size of the gate and relocate it.

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. If mold is vacuum vented, check system to ensure that it is pulling a minimum of 21" of Hg in the mold. If not resolve problem with vacuum system.

L. Increase the mold temperature and if that does not resolve the problem try decreasing it.

M. Vent the ejector pins.

N. Vacuum vent the tool.

P. Check parallelism of ejector system and repair as needed.

R. Check mold for the amount of draft and increase if necessary.

S. 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.

T. Polish the mold.

U. Check the parting line for wear or damage and repair as needed.

V. Verify the correct charge weight is being used and change 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 #23 "Thermoset Transfer 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. Increase the gate and runner size.

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

CC. 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