



# Technical Bulletin

*Place a copy of this bulletin in the front of each Blueprints Manual. Redline drawings as needed and include a TB reference note. Reference TB implementation on site Action Item Box-chart and/or site tool history management log.*

**Number:** 071  
**Date Issued:** 05/01/08  
**Expiration Date:** None

<b>Subject/Key Words:</b>	GAMA Restart Sequence after a Non-controlled Shutdown; Delete Recovery (.tmp) files			
<b>Classification:</b>	<input type="checkbox"/> Informational	<input checked="" type="checkbox"/> Mandatory	<input checked="" type="checkbox"/> Safety Alert	<input type="checkbox"/> PM Impact
	<input type="checkbox"/> Warranty Impact	<input type="checkbox"/> Purchase Parts	<input type="checkbox"/> No Charge For Parts expires ___/___/___. Reference this TB# when ordering NC parts.	
<b>Parts/Reference Documents:</b>	GAMA Operator's Manual-- Chapter 5 (rev. 5/08) GAMA Software Manual-- Appendix 4 (rev. 5/08) (AKS Upgrades only)			

**Issue/Symptoms:** Unless adequate precautions are taken, restarting the AKS software after a non-controlled shutdown can result in unpredictable software operation and damage to product, especially if the shutdown occurs while the robot is moving. A non-controlled shutdown occurs when the computer suddenly loses power, a Windows operating system error occurs, or the AKS software experiences a thread loss or other fatal error.

**Solution:** Always follow Akrion recommendations when restarting the AKS software from a non-controlled shutdown, including the deleting of temporary files (.tmp). Temp files are used to support the AKS software's automatic recovery feature and can become corrupted during a non-controlled shutdown. Always follow the sequence below when restarting after a non-controlled shutdown.

Non-controlled Shutdown / Restart:

1. Restart the wet station and recover product as normal.
2. Allow all product to recover, and do not introduce any new product. During recovery, monitor tool operation for safe product handling. Make sure two product lots do not try to occupy the same tank or output queue.
3. When all product has been removed from the wet station, exit Automatic mode.
4. Perform the following steps for each tank:
  - Turn off the chemical state.
  - Turn off the temperature state.
  - Turn off the pump.
5. Exit the AKS software.
6. Using Windows Explorer, locate the Akrion / Data directory.
7. Delete all .tmp files in this directory. Delete ONLY .tmp files. These files will be recreated when the software is restarted. It is not necessary to save a copy of these files.
8. Defragment the hard drive.
9. Restart the AKS software. Operation can be resumed as normal.

If you have technical questions or require more information, please contact Akrion Technical Support Department via e-mail at [techsupport@akrion.com](mailto:techsupport@akrion.com). Authorized service personnel can obtain copies of the latest Akrion procedures and controlled documents from the Akrion Document Control department at [doccontrol@akrion.com](mailto:doccontrol@akrion.com). Customers must direct all inquires to their local Akrion field service representative. (Form QA1656F1AC)