

CHANGE-OVER PROCEDURE

JM CORBOND® SPRAY POLYURETHANE FOAM

This procedure must be followed whenever changing from one SPF system to another, including changes between the following:

- JM Corbond® closed-cell SPF products & JM Corbond® open-cell SPF products
- JM Corbond® open-cell SPF & JM Corbond® open-cell Appendix X
- JM Corbond® SPF products & alternate SPF manufacturers products

Following proper change-over procedures in to, or out of, JM Corbond® open-cell Appendix X is especially critical.

Note: Extreme caution should be taken to ensure that cross-contamination of other systems does not occur. This is especially important with respect to the “B” side, whether it is from JM or other manufacturers. Cross-contamination most frequently occurs as a result of 1) transfer pumps that are not properly wiped down prior to switching drums, or 2) circulation lines leading from pressure relief valves to the drum that are not properly flushed prior to utilizing circulation for heating purposes. In addition, the high pressure hose leading up to the spray gun must also be flushed of the previous material prior to use.

1. Transfer Pump

- a. If changing over to JM Corbond open-cell, or JM Corbond open-cell Appendix X, begin mixing the B side drum with a triple blade mixer for 10 minutes prior to beginning the change-over process.
- b. Remove the “B” side transfer pump from the existing material. Place the base of the pump into a clean bucket, or onto a clean pile of rags.
- c. Wipe down the exterior of the pump carefully. Working around the riser tubes and drive shaft can be difficult, but these areas must be wiped clean.
- d. Invert the pump over the bucket or pile of rags to drain the upper chamber of the fluid section. (This is the area where the riser tubes connect to the lower fluid section. As much as a ½ cup of material will drain from this area.)

Water flushing steps e-i should only be followed when switching in to or out of a JM Corbond Appendix X SPF

- e. Place the B side transfer pump into a bucket of clean water (preferably warm).
- f. Open pressure relief valves, or fluid shut off valves on line set depending on set-up, and begin pushing the old material from the line. The old material should be properly disposed.
- g. The moment that water begins coming through the line set, begin cycling the water back into the bucket of water from which you are pulling. Cycle for 2-5 minutes.
- h. Remove the B side transfer pump from the bucket of water, wipe off the outside again, and place the transfer pump into the drum of new material.
- i. While continuing to mix with the agitator, begin pushing the water out of the line set into the bucket of water.

Steps j-k should only be followed when switching between materials other than JM Corbond Appendix X SPF

- j. Place the B side transfer pump into the drum of new material.
- k. While continuing to mix with the agitator, begin pushing the old material out of the line set into a bucket for disposal.

- l. The moment that the B side material begins coming through the line set, stop pushing into the bucket, and begin cycling the B side fluid back into the new drum from which you are working.
- m. The B side preheater may be turned on and cycling may continue per the Processing Parameter Instructions for the specific product.
- n. Finish prepping the jobsite, and prepare to commence spraying.
- o. Reduce the mixing speed of the agitator to the point that the drum is just turning over as opposed to high speed mixing. Constant agitation is required with JM Corbond open-cell Appendix X.

2. Circulation (for open-cell and open-cell Appendix X only)

- a. If equipped for circulation, the circulation line must be purged of the existing material.
 - i. If using T1 type transfer pumps and the pressure relief valves are connected to the ½" inlet on the transfer pump, this connection must be broken from the transfer pump, and the existing material purged into an alternate container.
 - ii. If using T2 type transfer pumps and the proportioner is equipped with a circulation kit, the existing material from the circulation lines must be purged into an alternate container prior to hooking up the circulation line to the JM Corbond open-cell material.
- b. If the proportioner is not equipped for circulation, then adequate measures must be taken to ensure that the material temperature in the drum is within the range specified in the Processing Parameters Instructions.

3. Heating the Drums via Circulation (for open-cell only)

- a. Only after adequately cleaning and purging any existing material from the transfer pumps or circulation lines, and placing the transfer pumps and circulation lines into the appropriate drums of JM Corbond open-cell can the heating process begin.
- b. Set the target temperature for the "A" and "B" component to the temperature specified in the Processing Parameters Instructions for the specific system.
- c. Open the pressure relief valves for both the "A" and "B" component.
- d. The transfer pumps should begin pumping.
 - i. The "A" side will be dumping the warmer material on top of the cooler material.
 - ii. The "B" side will need to be mixed throughout the circulation process.
- e. Because circulation does not affect the high pressure hose or line set, hose heat may be turned on during this process.
 - i. Caution: if planning to purge the existing material from the line set (that leads to the gun) into an alternate container, be aware that if the existing material is a closed-cell product, heating the hose at this juncture will cause frothing to occur of the "B" side when attempting to purge the line set.

4. Purging the line Set or Pressure Hoses leading to the Spray Gun

The existing material that is in the line set may be either purged into an alternate container or sprayed out.

- a. If being sprayed out, target temperatures must be set and reached prior to spraying.
 - i. A closed-cell foam will produce approximately one square foot of foam 1" thick for each foot of hose that is being sprayed out. An open-cell foam will produce approximately one square foot of foam 3 ½" thick for each foot of hose.
 - ii. The inner-mingled material must be sprayed off target until satisfied that all existing material has been purged from the line set before application of JM Corbond SPF can commence.
- b. If being purged into an alternate container, the gun should be removed from the coupling block and the "B" side fluid shut off valve carefully opened over the container until which time the existing material is flushed from the line set.
 - i. Purging will take between two to five gallons. The purged material must be properly disposed.
 - ii. Set target temperatures and turn on heat zones.
 - iii. The gun may be reconnected and material sprayed off target to be evaluated for application suitability prior to spraying any portion of the job.