

## **Tech Tip, What am I forgetting? Equipment Storage**

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How to prepare your spray foam and polyurea equipment for long-term storage.

Ever walk away and wonder, “I know I’m forgetting something?” This article will tell you what to consider at the end of the season before walking away.

If you are leaving your foam or coating equipment sitting idle for more than three or four weeks, it is important to flush the reactive material out of the machine and purge it with a quality storage fluid. Every spring the Technical Assistance group gets many calls on how to clear a solidified ISO in the hose, gun, or proportioner equipment. Replacing the hose line because of improper flushing and storage is an expensive undertaking in both hose replacement cost and labor when you are trying to get up and running the following season.

To properly flush your equipment, you must contact your chemical supplier to select the proper urethane grade solvent that will not react with their formulation. Typically it will be a Glycol Ether based solvent, completely moisture-free. Believe it or not, Graco gets several calls each year related to proper flushing fluid – wondering if they can use some concoction their friend or brother-in-law said will work great for this purpose from MEK to transmission fluid to Mr. Bubble and water. While all these chemicals will not affect the equipment-wetted parts, they will react to isocyanate used in most foam and coating material formulations. What ever you use, you must be sure to properly dispose of chemicals in accordance with local jurisdiction requirements and to follow proper safety precautions while flushing.

When flushing your equipment, you should pull all filters and screens and place your feed pumps into the flush solvent. Next, cycle the proportioner pumps to agitate the material through the system until the solvent runs clear. Be sure to properly mark our waste container to not mix the “A” with “B” material, as they will still react at a diluted state. Wash all screens separately and re-install after flushing. After the system has run clear and you are sure of adequate flushing, chase the flush material out with a storage fluid. Common storage fluid is again completely moisture-free and typically a plasticizer that will not gel or react with any trace chemical left in the system. Graco TSL “Throat Seal Liquid”, DOP (Diocetyl Phthalate) or other commercially available plasticizers are commonly used. The key here is that it’s completely moisture-free.

After filling the pump with storage fluid, it would be a good time to stall the proportioner at 1000 psi (7 MPa) (69 bar) fluid pressure and examine the entire system for any packing leakage or loose fittings that should be addressed. It's also a good time to correct any situations that may have arrived when you were just too busy working.

You may wish to consider general maintenance items such as replacing hydraulic oil and filter if required, and cleaning and replenishing the ISO pump lubrication system. Check to see if the drive belt is in good condition, check for any loose electrical connections, inspect the motor brush as well as the feed pump and supply line strainers. Do a general inspection of the heated line – checking the electrical and fluid temperature sensor connections, and making sure there's no ripped insulation. You should also properly service the spray gun and feed pump, and any auxiliary equipment.

End of season maintenance is crucial before you walk away at the end of the spray season, or before the next job comes along. Remember, a little effort now will save time, money, and frustration later.