

Tips for Preventive Mold Maintenance

By Joe Buttigieg, DME

Like cars, mold systems can't run forever without an occasional tune-up. Not only will regular preventive maintenance make your system run more efficiently and produce better parts; it can also prevent the cost and downtime of expensive repairs down the line.

Without regular maintenance, some components, such as the slides, can be damaged beyond the point of repair and need to be completely replaced.

You should inspect the following components every 700,000 cycles. If you're running harsher material, such as nylon, run through the checklist more frequently. Every 500,000 cycles is recommended or when flash on a part appears.

1. Flash – One of the most important parts of preventative maintenance is checking for flash. Look at the last shot taken and see if the part contains any sections of plastic where there shouldn't be any. If you find flash, you'll need to weld and re-spot the mold. Also examine the slides for signs of wear from flash. If this is the case, you must either weld or cut back the slide and then re-time it.

2. Vents – Molds that have had a long run tend to have accumulated a significant amount of plastic and grime in the vents. Clogged vents prevent gas from correctly leaving the mold area and, if unchecked, can cause short shots in certain areas. Clean them out if you're able. If you can't clean them sufficiently, you may need to re-grind them.

3. Mold Slides – If your mold has slides, take them all apart and check for scoring. Specifically check the bottom of the slide, where the most wear occurs. If you discover scoring, change the wear plates and stone the bottom of the slide. Gibs should also be checked for wear and replaced if needed.

4. Horn Pins/Angle Pins – The top of the slide has a radius that hits the horn pin. Make sure that the radius isn't worn. If it is, clean it up and install a new horn pin if necessary.

5. Leader Pins and Bushings – Check for scoring on the leader pins or bushing. If any of them are worn, replace them all.

6. Lifters – Clean the lifters and make sure they don't have any scoring. Stone back any scoring that you find. If the lifter is scored in an area that is going to be molded, you might need to weld and re-spot those areas.

7. Ejector Pins – Ejector pins should all be removed, cleaned and re-lubed. Check the pins for wear and replace if needed. Be sure to clean out the ejector housing. Often, plastic will accumulate there and diminish performance

8. Water Lines – Water lines have a tendency to become plugged. Drill all of them out with a drill to clean out any rust. Change your baffles at this time as well. Remove them, drill out the cylinders and then install new ones.

9. Locating Ring – Check your locating ring and ensure it's not damaged from the constant abuse of pulling molds in and out. If it's significantly damaged, you may need to replace it.

10) Mold Interlocks – Misalignment will reduce the life of the mold. Check all mold interlocks for wear and replace if needed.

To find a molding specialist in your area, please call DME at 248-398-6000 or email Customer_Service@dme.net. DME is proud to be an essential resource to moldmakers and molders by providing them with mold technologies and advice to meet increasingly demanding lead times and cost challenges. Visit www.dme.net to learn more.



F. R. Male Associates
MANUFACTURERS REPRESENTATIVES
Specializing In Metal Fabrication & Injection Molding

www.frmale.com
1506 Venetian Way • Waxhaw, NC 28173
Phone: (732) 236-2239
Fax: (704) 243-4827
email: frank@frmale.com

FRANK MALE



DCC
Danville Community College

Jerry H. Franklin
Director
Manufacturing and Technical Services

1008 South Main Street, Danville, Va 24541-4004
434.797.8573 434.797.6437 Fax: 434.797.8583
jfranklin@dcc.vccs.edu