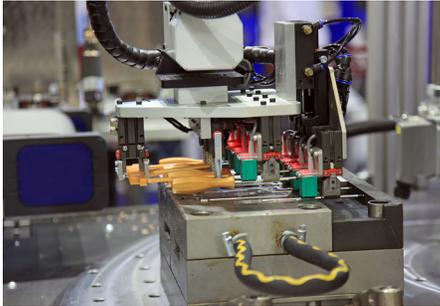


PLASTIC INJECTION MOLDING

SOLUTIONS TO SCALE BUILDUP.



Water cooled plastic molding machine



Raw plastic resin

ScaleBreak Descaling Solution

Cooling is an important process in the production of injection molded plastics. First of all, the cooling time may well represent more than half of the production cycle time. Second, a uniform cooling process is desired to avoid defects in manufactured parts. If plastic materials in the injection molding die are cooled down uniformly and slowly, residual stresses can be avoided, and thereby the risk of warps and cracks in the end product can be minimized.

Cooling water in the injection mold channels will precipitate minerals and form insulating scale deposits. The scale forms an insulation barrier which inhibits proper cooling.

“SCALE BUILDUP IN MOLD COOLING PASSAGES IS A COMMON CAUSE OF OUTAGES AND IMPROPER MOLD PERFORMANCE.”

Water cooled areas are applicable to screw feed extruders, rollers, mixers and other equipment as well.

The making of plastic requires a huge amount of heat and the transfer of that heat from the plastic and the plastic process equipment. When heat is added to the plastic resin (so it can be easily formed and then removed from the formed part), finding the most efficient way to maintain heat transfer maximizes productivity and improves the bottom line. This can be accomplished by preventative measures such as scheduled inhibited acid cleanings for water cooled equipment that is prone to scaling.

Descaling plastic injection mold cooling passages are commonly done via the use of an inhibited acid based descaler product that is biodegradable and safe on injection mold metallurgies as well as other alloys in equipment typically encountered in plastics manufacturing.

Goodway’s line of ScaleBreak products dissolve cooling heat transfer scale build-up while protecting equipment from corrosion and other adverse effects. With properly descaled passages, correct heat transfer is reestablished which minimizes the risks of defects in manufactured parts and optimizes water cooled equipment heat transfer.



After cleaning (left) and before cleaning (right).