POLIFIL® MATERIAL TROUBLESHOOTING GUIDE

DOING THE NEEDFUL SINCE 1973

Blisters

1. Reduce screw speed
2. Dry material
3. Increase back pressure

Brittleness

1. Reduce cylinder temperature
2. Reduce back pressure
3. Reduce screw speed
4. Check for material contamination
5. Dry material

Excessive Flash

1. Reduce cylinder temperature
2. Reduce back pressure
3. Reduce injection pressure
4. Increase clamp pressure
5. Clean mold faces
6. Check mold faces for proper fit

Gas Burns

1. Increase size of vent
2. Reduce injection speed
3. Increase size of gate

Oversized Part

1. Reduce injection speed
2. Reduce injection and holding pressure
3. Reduce cylinder temperature
4. Increase mold temperature
5. Reduce overall cycle time

Poor Part-to-Part Uniformity

1. Check hopper for material bridging
2. Check heater bands, controllers and thermocouples
3. Check hydraulic system for pressure variation

Poor Weld Lines and Poor Surface Finish

1. Increase injection pressure
2. Increase mold temperature
3. Increase cylinder temperature
4. Increase injection speed
5. Clean cavity surface
6. Vent mold
7. Change gate location

Short Shots

1. Increase amount of material
2. Increase injection pressure
3. Raise material temperature
4. Increase injection time
5. Incorporate or enlarge venting
6. Clean vents
7. Increase back pressure
8. Increase size of ...
   a. Sprue
   b. Runners
   c. Gates

Silver Streaking

1. Dry material
2. Increase injection speed
3. Increase cylinder temperature
4. Increase mold temperature
5. Decrease screw speed

Sink Marks

1. Increase injection pressure
2. Increase holding pressure
3. Increase holding time
4. Reduce cylinder temperature
5. Reduce mold temperature
6. Locate gates near heavy cross sections
7. Increase gate size

Undersized Part

1. Increase injection speed
2. Increase injection and holding pressure
3. Increase holding time
4. Increase cylinder temperature
5. Decrease mold temperature
6. Increase size of gate

Voids

1. Use dry material
2. Reduce cylinder temperature
3. Increase injection pressure
4. Increase mold temperature

Warping

1. Check for uneven mold temperature
2. Reduce molded in stress
   a. Reduce injection pressure
   b. Relocate gating
3. Reduce temperature of ejected part
   a. Increase cooling time
   b. Lower mold temperature
4. Redesign ejection mechanism

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