



Mastercraft Companies

Precision Injection Molding & Tooling
Tool Classifications

TYPE 101

1. Cycles: 1 million +.
2. Detailed 3D mold design required.
3. Mold base to be Stainless Steel unless otherwise stated.
4. Molding surface (cavities and cores) must be hardened to a minimum 50 R/C range. All other details, such as slides, heel blocks, gibs, wedge blocks, etc. should also be of hardened tool steels.
5. Ejection system to be guided.
6. Slides must have wear plates.
7. Lifters must be plated.
8. Temperature control provisions to be in cavities and cores. These provisions also apply to slide cores whenever possible.
9. Straight Parting line locks required.
10. Hot manifold System or Hot Sprue as required. (Insulator plates required).
11. High Performance Bushings (Sprue, Leader pins, Guide EJ).

TYPE 102

1. Cycles: Not to exceed 1 million.
2. Detailed 3D mold design required.
3. Mold base to be a minimum hardness of 280 BHN (Stainless or Plated).
4. Ejection system to be guided.
5. Molding surface (cavities and cores) must be hardened to a minimum 48 R/C. All other functional details should be made and heat treated likewise.
6. Temperature control provisions to be in cavities and cores. These provisions also apply to slide cores whenever possible.
7. Straight Parting line locks required.
8. Hot manifold System or Hot Sprue as required. (Insulator plates required).

TYPE 103

1. Cycles: Not to exceed 500,000.
2. Detailed mold design required.
3. Mold base to be a minimum hardness of 165 BHN or Electrolysis Nicked Plated.
4. Cavities and cores must be 280BHN or higher.
5. All other features as indicated.

TYPE 104

1. Cycles: Not to exceed 100,000.
2. Detailed mold design required.
3. Mold base can be of mild steel or aluminum.
4. Cavities can be of aluminum, mild steel or any other agreed upon metals.
5. All other features as indicated.
6. Limited production with non-abrasive materials.

Note: These tool classifications are general guidelines and for reference only. In all cases the requirements identified on the Mold Specification Sheet will prevail in determining tool materials and requirements.