

HOMOPOLYMER ACETAL PROCESSING PARAMETERS (DELTRIN[®])

General Recommendations:

- Reciprocating screw machines
- General purpose screw
- Flow through nozzle
- Reverse taper nozzle
- High hardness tool
- Optimal shot size: 40-60% of barrel capacity
- HomoPolymer Acetal has higher tensile strength, flexural strength, fatigue resistance, and hardness over CoPolymer Acetal

Drying Conditions:

- 2-3 hours at 200°F in an oven or hopper dryer is recommended for optimal surface finish

Injection Speed and Injection Pressure:

- To obtain the best possible surface finish, a moderate to fast injection speed is recommended. With glass and mineral filled materials, fast injection speeds are recommended. If the filling speed is too slow, orange peeling may occur, and gate blemishes may happen if the fill is too fast.

Processing Conditions:

- Melt Temperature 205°C - 215°C
- Target Temperature 210°C
- Mold Temperature 90°C
- Back Pressure 50-100 psi
- Screw Speed 30-60 RPM
- Target Screw Speed 50 RPM
- Hold Pressure 30-75% of the injection pressure
- Cycle Time
 - Varies with part size and mold temperature

Use of Regrind:

- It is not recommended to use more than 20% of regrind material and expect slight decreases in mechanical properties when it is utilized.