Nylon 6 Processing Parameters

**General Recommendations:**
- Reciprocating screw machines
- Nylon screw
- Flow through nozzle
- Reverse taper nozzle
- High hardness tool
- Optimal shot size: 40-60% of barrel capacity

**Drying Conditions:**
- 2-4 hours at 200°F in an oven or hopper dryer is optimal
- Material should be dried to a 0.2% moisture level

**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. To achieve 95% mold fill of the part during the first injection state, a minimum injection pressure should be utilized and hold pressure should be 30-75% of the initial pressure.

**Processing Conditions:**
- Melt Temperature 490°-520°F
- Target Temperature 510°F
- Mold Temperature 160°-200°F
- Target Temperature 180°F
- Cylinder Temperature 480°-525°F
- 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.