polyram
creative thermoplastic compounds

RAMTAL POLYACETAL

Processing recommendation

Temperatures		
rear zone	°C	175-200
center zone	°C	180-205
front zone	°C	190-210
mold	°C	60-110
Pressure		
injection	MPa	70-105
hold	MPa	35-85
back	MPa	0.35-0.7
speed		
fill	mm/sec	25-50
Circumferential speed	m/min	8-15
drying		
time	Hours	2-3
temperature	°C	80c

* Packaging

RAMTAL is standard supplied in 25-kg polyethylene bags. RAMTAL can usually be processed directly without any special treatment, however for best results we recommend pre-drying. Polyacetal that has become moist as a result of exposure to water must be dried for about 2-3 hours at 80°C.

* Injection Molding Parameters

The melt temperature processing range is between 180-230°C. Recommended temperatures are between 190-210°C. Higher temperatures may cause thermal degradation and should be avoided.

* Mould Temperatures

The recommended mould temperatures are 60-90°C. However, the material can be molded at mould temperature of 60-120°C.

* Injection Pressure And Injection Rate

Injection and follow up pressure are necessary to force the melt into the mould cavity and to partially compensate for the volume contraction that takes place when the melt freezes. The required injection pressure is dependent on the melt viscosity, the flow pass/wall thickness ratio and the type of gate. It is normally 800-2000 bar. For manufacturers of precision parts it is generally recommended that the injection pressure and the follow up pressure are equal. The injection rate should be just enough for filling the mould cavity so that no sink mark occurs. For thin wall molding rapid injection speed gives the best results while with increasing wall thickness slower rates are of an advantage.