

PROCESSING GUIDE FOR EXTRUSION OF APEX™ FLEXIBLE PVC COMPOUNDS

EQUIPMENT & CONDITIONS	SUGGESTIONS
Compound Drying	Typically not required. May be helpful for heavily filled and co-extrusion compounds. Typical condition 160°F for 4 hours.
Color Concentrate	PVC-based color concentrates used at 2% or less.
Machine Type	Typical PVC extrusion equipment. Chrome plated screw and bimetallic barrel.
Screw Design	General Purpose or Barrier Type. Maddock mixer (spiral preferred) recommended when using color concentrate.
Compression Ratio	2:1 to 3:1
L/D Ratio	20:1 to 24:1
Screen Packs	20/40/60 Stainless Steel (up to 80 mesh OK)
Screw RPM	30 RPM minimum (choose extruder size to accommodate this)
Screw Cooling	Not Recommended.
Water Bath	Cold Water; 40°F - 60°F
Tooling	Cross-head: Low inventory cross-heads. Die Design: Streamlined, low inventory chrome plated.

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SUGGESTIONS

Machine Temperatures

Hardness Range	Typical Barrel Settings	Typical Die Settings	Melt Temperature Range
Shore A50 - 60	250°F - 310°F	310°F - 320°F	320°F - 335°F
Shore A60 - 70	260°F - 320°F	320°F - 325°F	335°F - 345°F
Shore A70 - 80	270°F - 340°F	325°F - 345°F	345°F - 355°F
Shore A80 - 90	290°F - 360°F	345°F - 370°F	355°F - 375°F
Shore C70 - 80	330°F - 375°F	370°F - 375°F	375°F - 380°F
Shore C80 - 90	345°F - 380°F	375°F - 380°F	380°F - 390°F

**Melt temperature should be measured using a hand-held pyrometer on the material exiting the cross-head.

Purging

If necessary, use HD polyethylene.

Regrind

Recyclable; mix up to 20% regrind with virgin.

Additional Considerations

Care must be taken to avoid excessive temperatures or delays during extrusion; material should not sit for more than 15 minutes under any circumstances.

Never leave in extruder at elevated temperature without purging.

Never process with an actual melt temperature > 400°F.

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