

## PROCESSING GUIDE FOR EXTRUSION OF APEX™ PVC JACKETING COMPOUNDS

EQUIPMENT & CONDITIONS	SUGGESTIONS
<b>Compound Drying</b>	Typically not required. 160°F for 4 hours if desired.
<b>Color Concentrate</b>	PVC-based color concentrates.
<b>Machine Type</b>	Typical PVC extrusion equipment. Chrome plated screw and bimetallic barrel.
<b>Screw Design</b>	A) Metering type with shallow flights and long metering section. Metering Section    50% Transition Section  25% Feed Section        25%
<b>Compression Ratio</b>	2.75:1 target (2.5:1 to 3.0:1 range)
<b>L/D Ratio</b>	24:1 target (20:1 to 30:1 range)
<b>Screen Packs</b>	20/40/60 typical (up to 80 mesh OK)
<b>Screw RPM</b>	30 RPM minimum (choose extruder size to accommodate this)
<b>Screw Cooling</b>	Not Recommended.
<b>Water Bath</b>	Cold Water; 40°F - 60°F
<b>Tooling</b>	<b>Cross-head:</b> Low inventory cross-heads.  <b>Die Design:</b> Matched tip and die angles, fairly tight together for optimum die pressure.  <b>Tubing Die:</b> DDR 2.0 to 5.0:1 range.

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## EQUIPMENT & CONDITIONS

## SUGGESTIONS

### Machine Temperatures

Hardness Range	Typical Barrel Settings	Melt Temperature Range
Below Shore A70	255°F - 310°F	330°F - 340°F
Shore A70 - 65C	270°F - 350°F	345°F - 360°F
Shore C65 - 70	320°F - 365°F	365°F - 375°F
Shore C71 - 80	330°F - 375°F	375°F - 380°F

\*\*Melt temperature should be measured using a 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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