

PROCESSING GUIDE FOR EXTRUSION OF HALGUARD® INSULATION COMPOUNDS

EQUIPMENT & CONDITIONS	SUGGESTIONS						
Compound Drying	Typically not required. 176°F for 4 hours if desired.						
Color Concentrate	PE-based color concentrates.						
Machine Type	Typical PVC or PE extrusion equipment.						
Screw Design	<p>A) General Purpose Metering Type.</p> <table border="0" data-bbox="600 777 974 892"> <tr> <td>Metering Section</td> <td>33%</td> </tr> <tr> <td>Transition Section</td> <td>33%</td> </tr> <tr> <td>Feed Section</td> <td>33%</td> </tr> </table> <p>(Barrier flights and low pressure mixing sections may improve melt quality and production rates)</p>	Metering Section	33%	Transition Section	33%	Feed Section	33%
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Feed Section	33%						
Compression Ratio	1.5:1 to 2.5:1						
L/D Ratio	20:1 to 24:1						
Screen Packs	One 20 or 24 mesh screen typical.						
Screw RPM	As required for proper mixing.						
Screw Cooling	Not Recommended.						
Water Bath	Cold Water; 40°F - 60°F. If shrink back is an issue, hot water is suggested.						
Tooling	<p>Cross-head: Low inventory cross-heads.</p> <p>Die Design: Matched tip and die angles, fairly tight together for optimum die pressure.</p> <p>Pressure Die: Size die 5% over final diameter for optimum speed and physicals.</p> <p>Tube Die: Minimize land length. 2.0 - 3.0:1 DDR with 1.0 - 1.1 DRB.</p>						
Copper Preheat	175°F - 200°F actual copper temperature entering the head for best results.						

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EQUIPMENT & CONDITIONS

SUGGESTIONS

Machine Temperatures

See Product Data Sheet for grade specific recommendations.

**Melt temperature should be measured using a pyrometer on the material exiting the die.

Purging

If necessary, use HD polyethylene or polypropylene.

Regrind

Recyclable; mix up to 20% regrind with virgin.

Additional Considerations

Maddock and blister ring mixing screws are not recommended as their use will result in excessive melt temperature.

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