

THERMOLAST K in Extrusion: Trouble shooter Extrusion

Problem	Possible Causes	Possible Solutions
Rough extrudate	Melt too cold	<ol style="list-style-type: none"> 1. Increase extruder temperature. 2. Increase die temperature.
	Inhomogeneous melt / undispersed particles	<ol style="list-style-type: none"> 1. Use screw with higher compression ratio or screw with mixing zone.
	Poor die design	<ol style="list-style-type: none"> 1. Reduce land length. 2. Check dimensions.
Uneven cross section	Surging	<ol style="list-style-type: none"> 1. Reduce throughput. 2. Use screw with longer feed or metering section. 3. Use more restrictive screen pack – e.g. tighter mesh – to increase back pressure. 4. Reduce die temperature.
Black specks / Undispersed particles	Contamination	<ol style="list-style-type: none"> 1. Purge with high-MFI PP or HDPE. 2. Check that colour concentrate is based on PP or PE - not PVC
Odour or yellowing	Melt too hot	<ol style="list-style-type: none"> 1. Reduce barrel temperature. 2. Reduce die temperature. 3. Reduce screw speed. 4. Use less restrictive screen pack – e.g. larger mesh – to reduce back pressure. 5. Use screw with lower compression ratio.
Voids, porosity, craters	Moisture	<ol style="list-style-type: none"> 1. Dry pellets.
High pressure / low throughput in extruder	Melt too cold	<ol style="list-style-type: none"> 1. Increase extruder temperature. 2. Increase die temperature.
	Obstructed screens	<ol style="list-style-type: none"> 1. Clean or replace screens.