

EXTRUSION TROUBLE SHOOTING GUIDE

Problem	Probable Cause	Solution
Burning		
On Startup		
	Die too hot	Reduce die temperatures
	Barrel zones too hot	Reduce barrel zones
	Startup with high screw speed	Start screw slowly - 5 to 10 rpm until material flows safely out of die
	High back pressure	Die blockage, cold slug in die, die adapter entry too small, machine too big for profile
	Burnt material on screw - previous run, machine down, heats up	When line goes down between runs reduce zone temperatures to 250 ^o F, reset temperatures to 30 minutes before startup
In Die/Adapter		
	Adapter opening too small	Too small or too long
	Poor mating of adapter and die	Streamline to avoid dead spots, machine die/adapter plates to eliminate dead spots.
	Lost chrome - die and/or adapter	Rechrome die and adapter or use stainless steel
	Screw temperature out of control-material sticking to tip	Check temperature control, heat rise and flow of heat transfer medium
	Adapter design does not match screw tip	Reduce melt inventory in front of screw. Try an offset screw tip.

CONTINUED

Burnt Particles

Using regrind containing burnt particles

Change to clean regrind

Material stuck on screw

Reduce screw temperatures
Rechrome screw

Material burned between shutdown and startup

Reduce zone temperature between runs - see above

Burned material falling into melt stream from vent

Clean vent

Hang-up from nicks and scratches on screw

Repair and chrome, file burrs off trailing edge of flights, use brass tools to clean vent

From die/adaptor

Streamline to avoid dead spots, machine die/adaptor plates to eliminate dead spots

Worn barrel or screw

Change screw

Lumps of Char

Barrel zones too high

Reduce barrel zones

Thermocouples not buried

Bury thermocouples

Thermocouples and controllers not connected properly

Color code in insure proper connection

Die zones too hot

Reduce die zones

Screw temperature too hot

Reduce screw temperature

Die stagnation, sticking

Reduce temperature, streamline, rechrome

Regrind degraded

Change regrind

Burned Center

Burning on screw tip

Reduce inventory of melt in front of screw tip; use offset tip; rechrome screw; reduce screw temperature

Pin blisters

Melt too hot

Reduce die temperature; reduce screw speed; reduce zone temperatures

If normal corrective action doesn't alleviate the problem, just call Vi-Chem Corporation's technical service toll free line at 800-477-8501. **V**