

# PVC Extrusion Troubleshooting Guide

PVC extrusion is a continuous processing method that offers high speed and high-volume production with the ability to create products of varying shapes, thickness, hardness, additives, and colors.

Due to the complexity of the extrusion processing method, problems can and will eventually occur. Because most of the extrusion processing steps occur within the machine and are not visible, it is essential to us a systematic approach and keep detail job logs to minimize costly downtime.

## PREVENTATIVE MEASURES

- Operators should fully understand the extrusion process
- Good machinery instrumentation and maintenance records should be kept
- Current and historical processing data should be available
- Material should be stored in a clean and dry area without extreme temperature variation

## THREE (3) MAIN CATEGORIES OF COMMON EXTRUSION PROBLEMS

1. Aesthetic flaws (pits, black specs, pinholes, drag marks, die lines, sink marks, etc.)
2. Size variance (intermittent or contiguous)
3. Dimensional variation

## TROUBLESHOOTING COMMON PROBLEMS

Following are common problems along with their causes and possible remedies. This resource can help your team to diagnose and correct processing issues that will help ensure a quality product. Because of variations in equipment, methods, and conditions, this resource is only a guideline. Please feel free to contact us if you require additional information.

Problem	Probable Cause	Possible Remedy
Lumpy Surface	Too cold	-Increase all temps -Increase screen packs
Surging	Equipment or settings	-Take off puller irregular -Motor speed variations -Inconsistent RPMs -Uneven feed -Bridging in hopper -If Ammeter is varying by 5% or more, increase temp of the feed
Orange peel surface	Overheating	-Raise die temp -Decrease speed
Pimples on surface	Resin gels	-Increase screens -Decrease speed
Excessive shrink	Too much stress	-Cool slower -Decrease speed -Design die with lower draw-down
Bubbles	Moisture	-Dry material for 220F for one hour

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