

Extrusion Blow Molding Trouble Shooting Guide



Instant checklist of likely remedies for the most common problems with Part Defects

**Perform Remedies
in numerical order**

INCREASE

DECREASE

ADJUST UP
OR DOWN

CHECK

| Common Problems | Stock Temp. | Extrusion Pressure Rate | Extrusion Back Pressure | Pre Blow Air Pressure | Regrind Level | Part Weight | Mold Alignment | Die Mandrel | Resin Die Swell | Pre Blow Time | Mold Temp. | Blowing Air Pressure | Wall Thickness | Cycle Time | Air Exhaust Time | Mold Damage |
|-------------------------|-------------|-------------------------|-------------------------|-----------------------|---------------|-------------|----------------|-------------|-----------------|---------------|------------|----------------------|----------------|------------|------------------|-------------|
| Excessive Flash | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | | | | |
| Long Cycle Time | 1 | | | | | | 5 | 6 | | | 2 | 4 | 3 | 7 | | |
| Part Hangs in Mold | 1 | | | | | | | 6 | | | 2 | 3 | | 7 | 4 | 5 |
| Thin Parting Line | | | | | | | 5 | | | 6 | 1 | 2 | | | 3 | 4 |
| Thin Bottom Weld | 1 | 4 | 3 | | 5 | | 7 | | | | 2 | | 8 | | | 6 |
| Thick Bottom Weld | 1 | 2 | 3 | 5 | 6 | 8 | 7 | | | | | 4 | 9 | | | |
| Partial Handle | 6 | | | 2 | | 4 | | 8 | 5 | 7 | | 1 | | | | 3 |
| Orange Peel | 2 | 5 | 4 | 8 | | | | | | 9 | 3 | 6 | | 7 | | 1 |
| Warpage | | 3 | 4 | | | 6 | | 7 | | | 1 | 5 | | 2 | | |
| Excessive Shrinkage | | | | | | 3 | | | | | 1 | 2 | | 4 | | |
| Neck Under Fills | 5 | | | 2 | | | | | 4 | | 1 | | | | | 3 |
| Uneven Wall Thickness | 1 | | | 2 | | | | 3 | | | | | | | | 4 |
| Poor Pinch Off Weld | 1 | 5 | | | | | 4 | | | | | 2 | | | 3 | |
| Poor Part Multiple Head | | | | | | | 4 | 3 | | | 1 | | | | | 2 |
| Blowouts and Bubbles | | | 1 | | | | | 3 | | | | 2 | | | | 4 |

Extrusion Blow Molding Trouble Shooting Guide



Instant checklist of likely remedies for the most common problems with Parison Defects

**Perform Remedies
in numerical order**

INCREASE

DECREASE

ADJUST UP
OR DOWN

CHECK

| Common Problems | Stock Temp. | Extrusion Pressure Rate. | Extrusion Back Pressure | Resin / Cont. | Tooling | Burnt Resin | Die Temp. | Regrind | Resin MI | Part Weight | Extrusion Head | Center Die Mandrel | Resin Die Swell | Head Heater Bands | Acumulator | Parison Program |
|----------------------------|-------------|--------------------------|-------------------------|---------------|---------|-------------|-----------|---------|----------|-------------|----------------|--------------------|-----------------|-------------------|------------|-----------------|
| Scratches / Die Lines | 1 | | 2 | 3 | 4 | 5 | 6 | | | | | | | | | |
| Melt Fracture Alligatoring | 1 | 2 | 3 | 5 | 10 | | 8 | 4 | 6 | 7 | | | | 9 | | |
| Streaks | 1 | 2 | 3 | 6 | 7 | | | 4 | | 8 | | | | 5 | | |
| Rough Parison | 1 | 2 | 3 | | | | | 4 | 6 | | | | | 5 | | |
| Shiny / Clear | 1 | 2 | 3 | 6 | | | | 4 | | 7 | | | | 5 | | |
| Bubbles | 1 | 2 | 3 | 5 | | | | | | | | | | 4 | | 6 |
| Smokey | 1 | 2 | 3 | 6 | | | | 4 | | | | | | 5 | | |
| Wrinkles/Draping | 1 | 2 | 3 | | | | | 4 | 5 | 6 | | | 7 | | | 8 |
| Drawdown Sag/Stretch | 1 | 2 | 3 | | | | | 4 | 5 | 6 | | | 7 | | 8 | |
| Curls | 1 | | | 3 | 5 | | 7 | | | 6 | | 4 | | 2 | | |
| Curves | 1 | | | 3 | 5 | | | | | | 6 | 4 | | 2 | | |
| Intermiten Feed | 1 | 2 | 3 | 6 | | | | 4 | | | | | | 5 | | |
| Length Head to Head | 1 | | | | 3 | | | | | | | 4 | | 2 | | 5 |
| Length Shot to Shot | 1 | 2 | 3 | | | | | 4 | 5 | | | | | 6 | | 7 |

The information and recommendations contained in these guidelines are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made.

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