

General Fault (ASB)

Lowered I.V.

Description

Although Lowered I.V. is one of the most common molding problems, it can also be one of the most difficult to diagnose. This is mainly due to the fact that the symptoms will vary according to the bottle being made and the severity of the Lowered I.V.

However, the following are typical preform / bottle faults that may occur.

Preform

- [Flash On Support Ring](#)
- [Flash On Thread](#)
- [Flash On Top Of Neck](#)
- [White Spots](#)
- [Hazy \(Consistent\)](#)
- [Haziness \(Clouds & Swirls\)](#)
- [Silver Streaks](#)
- [Stress Patterns Bad](#)
- [Crystalline Lumps](#)
- [Crystalline Streaks](#)
- [Specks Of Crystallization](#)
- [String](#)

Container

- [Constriction](#)
- [Uneven Wall Thickness \(Vertical\)](#)
- [Uneven Wall Thickness \(Hoop\)](#)
- [Vertical Bars](#)
- [Crater](#)
- [Gate Off Center](#)
- [Stress Cracking](#)
- [Stretch Rod Makes A Hole](#)
- [Reduced Top Load Strength](#)
- [Reduced Burst Pressure Strength](#)
- [Reduced Impact Resistance](#)
- [Reduced Vacuum Resistance](#)

Preform Body Fault (ASB)



Black Specks

Description

Small black specks of decomposed material appear at random. This fault will be most obvious in the gate area of the preform but could be anywhere.

It is common to see this fault on the first one or two shots after a start-up from cold because decomposed material will have come from the hot runner. **Do not** recycle

these preforms since they will have a lowered I.V. and the contamination will be recirculated.

Possible Causes (Causes are listed vertically in order of likelihood and / or ease of correction)

[Severely Overheated Material](#)

[Bad Quality Raw Material](#)

[Contaminated Regrind](#)

Preform Body Fault (ASB)



Bubbles - Random Position / Random Cavity

Description

Bubbles of gas appear in the body and / or neck of the preform. The frequency varies, and appear in random positions within random cavities.

This type of bubble is normally associated with a problem that is coming from the injection barrel of the molding machine. The bubbles are then being distributed at random to each cavity.

Also refer to your copy of the Training Manual for more information.

Possible Causes (Causes are listed vertically in order of likelihood and / or ease of correction)

[Material Not Dried Correctly](#)

[Too Much Dust In Regrind](#)

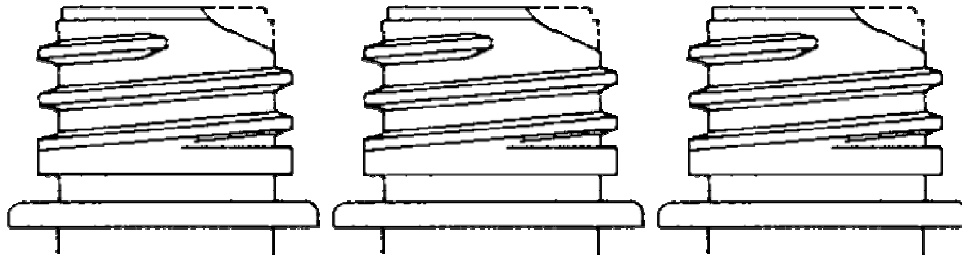
[Insufficient Screw Back Pressure](#)

[Air Being Pushed Into The Barrel](#)

[Material Being Overheated](#)

[Worn Or Incorrect Screw Design](#)

Preform Neck Fault (ASB)



Short Shot (All Cavities)

Description

The top of the preform neck is missing due to underfilling of the cavity. This may appear on [one cavity only](#) or may be on all. When it is a severe case on one cavity only, this may cause flashing on other cavities.

Possible Causes (Causes are listed vertically in order of likelihood and / or ease of correction)

[Shot Size Too Small](#)

[Hot Runner Block Too Cold](#)

[Cushion Too Small](#)

[Blockage In Hot Runner Block](#)

[Filling Speed Too Slow](#)

[Air Venting Blocked](#)

[Holding Pressure Too Low](#)

[I.V. Of Material Too High](#)

[PET Material Too Cold](#)

Container Fault (ASB)



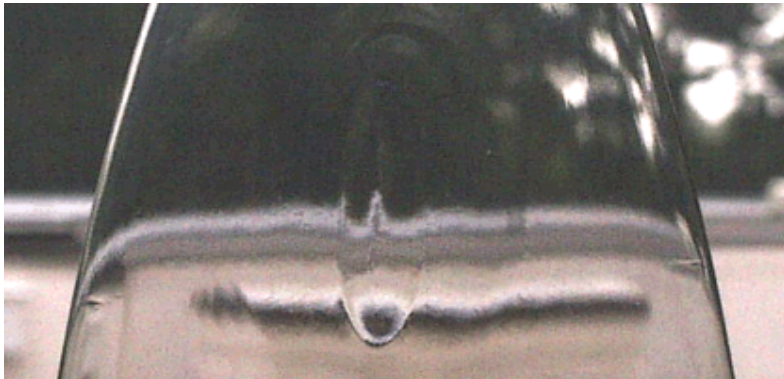
Gate Off Center

Description

The gate of the preform is not in the center of the bottle base. There are many possible causes of this fault.

Possible Causes (Causes are listed vertically in order of likelihood and / or ease of correction)	
Primary Blow Is Too Early	Stretch Rod Speed Too Slow
Secondary Blow Is Too Early	Preform Is Too Hot
Bent Preform	Lowered IV Of PET
Uneven Preform Wall Thickness	Primary Air Flow Too High
Uneven Temperature Around Preform	Broken Or Missing Stretch Rod Tip
Stretch Rod Stopper Is Too Long	

Container Fault (ASB)



Lensing (Fisheye)

Description
<p>This fault is more common in containers that do not have optimized stretch blow ratios such as toiletries, cosmetics and pharmaceuticals.</p> <p>These types of containers tend to be heavier than the optimum since the customer has often requested a container with a strong feel. Since a thick preform will give an uneconomic cycle time, it is preferred that the extra weight is added by increasing the size of the preform. However, this in turn, can lead to problems with Lensing.</p>

Possible Causes (Causes are listed vertically in order of likelihood and / or ease of correction)	
Preform Temperature Too High	Material IV Is Too Low
Preform Is Too Large For Container	Incorrect Polymer Type