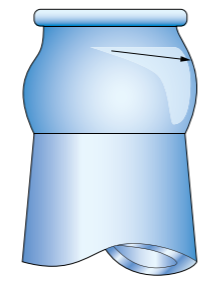


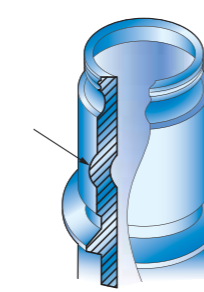
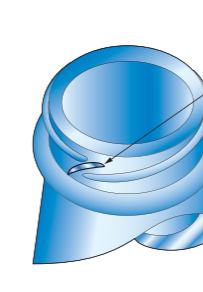
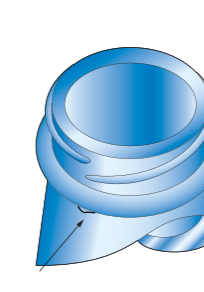
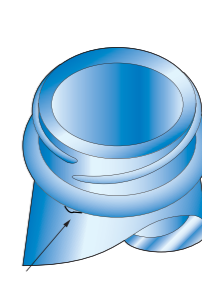
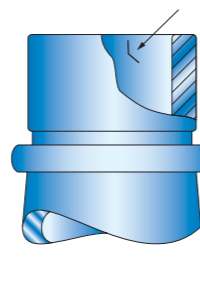
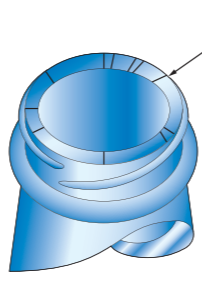
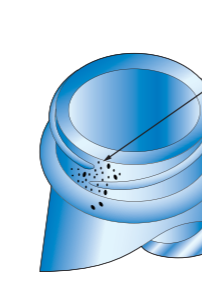
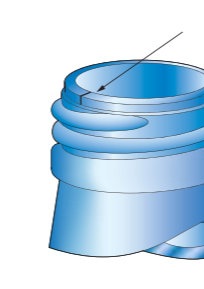
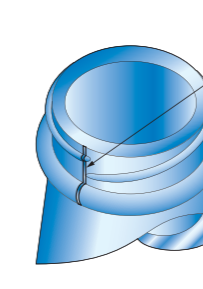
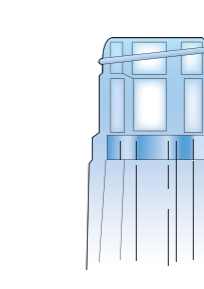
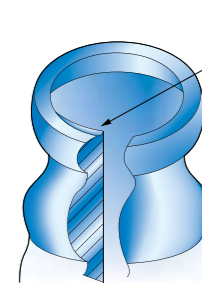

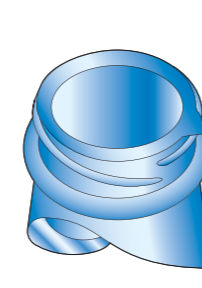

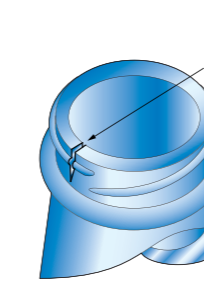
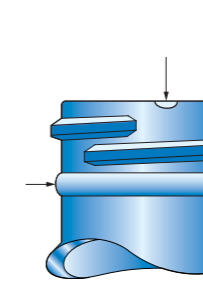
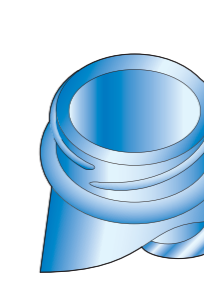



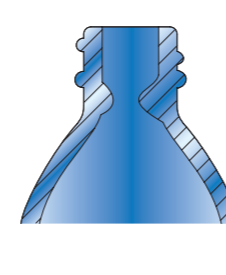
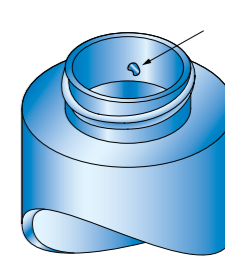
# Guide to Container Defects





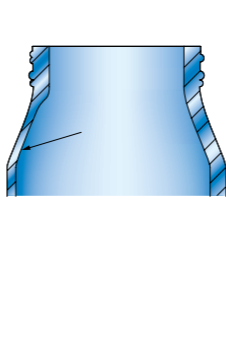
## Finish Defects

 <b>BENT OR CROOKED FINISH</b> A finish which has a bent or crooked appearance.	 <b>BLISTERS</b> Large bubbles in the glass.	 <b>BROKEN FINISH</b> A finish which has cracks or actual pieces of glass broken out of it.	 <b>BULGED FINISH</b> A finish which is bulged out of shape.	 <b>CHECKED FINISH</b> A finish which has a light surface crack in the threads or in the middle.	 <b>CHIPPED FINISH</b> A finish from which a small section is broken on the top or side.	 <b>TEAR OR UNDER RING CHECK</b> Surface cracks which occur on or near the parting line between the neck and the finish.
 <b>CORKAGE CHECK</b> A vertical surface crack located in the inside of the finish.	 <b>CRIZZLED FINISH</b> A finish with many fine surface fractures, mainly across the top.	 <b>DIRTY OR ROUGH FINISH</b> A finish which has a scaly appearance and which may even have black spots on it.	 <b>LINE OVER</b> A groove across the sealing surface that can cause a container to leak after the filling process.	 <b>NECK RING SEAM</b> A protruding seam of glass running vertically up to the finish of the container.	 <b>OFFSET FINISH</b> A finish formed out of alignment, either vertically or horizontally.	 <b>OVERPRESS/WIRE EDGE</b> A finish which has excessive glass projecting upward from the inside edge of the finish.
 <b>SADDLE FINISH</b> A gradual slope or dip in the finish that has a saddle-like finish.	 <b>KNOCKOUT</b> A small glass protrusion caused by a small chip in the mold seam.	 <b>STONES</b> Small pieces of refractory or unmelted batch materials.	 <b>SPLIT FINISH</b> A finish which has a crack across the top surface—extends from the top of the finish down towards the neck.	 <b>UNFILLED FINISH</b> A finish which is incompletely filled, in the top, the bead, or the thread.	 <b>FLANGE</b> A small ring of glass which is pressed out between the glass and neck ring.	 <b>SEEDS</b> Very small bubbles in the glass.

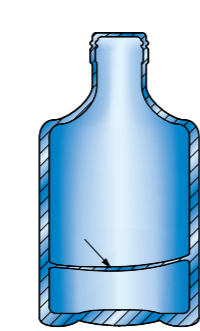


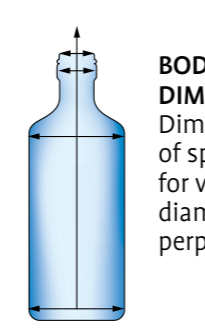
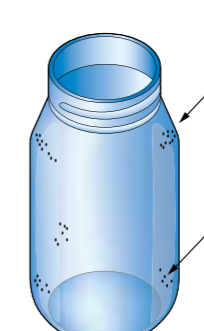
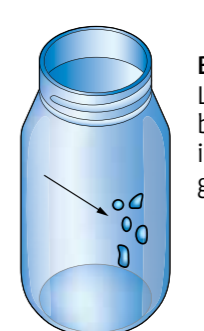
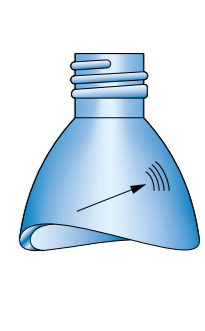

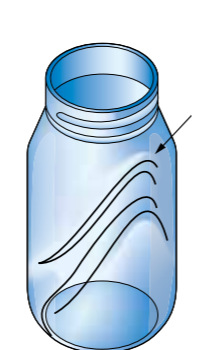
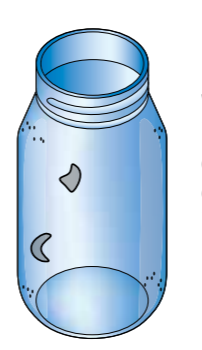

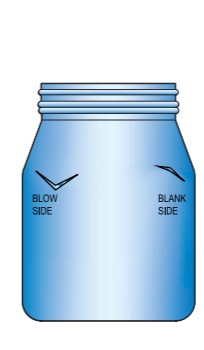
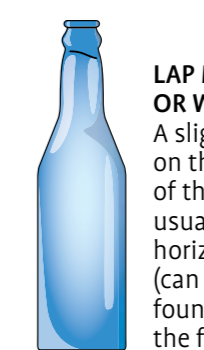
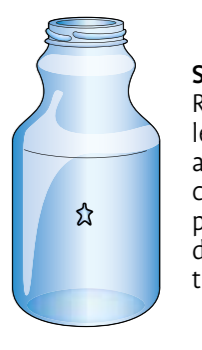

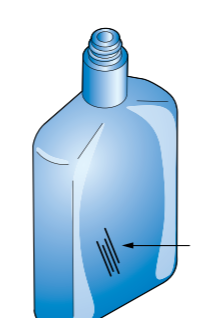
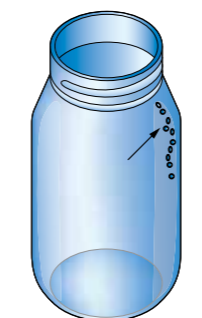
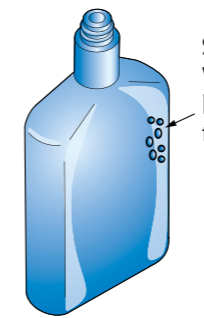
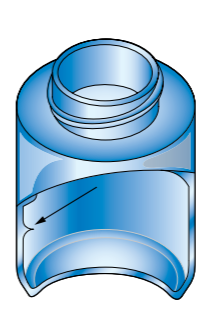
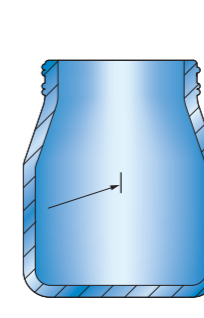

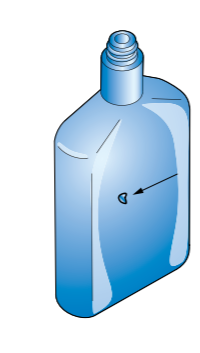
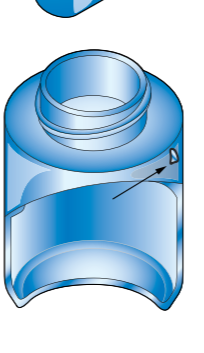
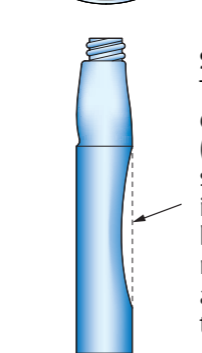
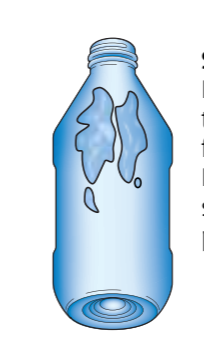

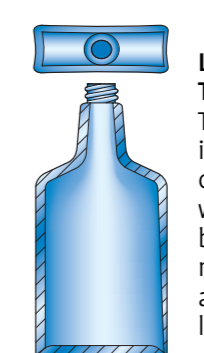
## Neck Defects

 <b>BENT NECK</b> A neck where the finish is tilted to one side.	 <b>CHOKED NECK OR BORE (NARROW NECK)</b> An obstruction in the bore of the neck.	 <b>DANNY NECK OR NECK TEAR</b> A small surface section of glass torn from the neck of the bottle.	 <b>DIRTY NECK</b> A neck which has a dirty or scaly appearance.	 <b>LONG NECK</b> A neck that has been stretched longer than specified.	 <b>PINCHED NECK</b> A neck which has been pushed or pinched.	 <b>STUCK GLASS PARTICLES</b> Small glass particles stuck to the inside of the container. Most common in wide mouth ware.
--	---	--	--	---	---	---

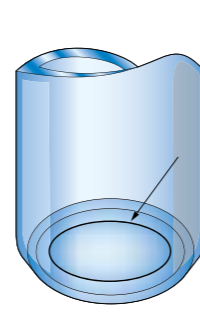

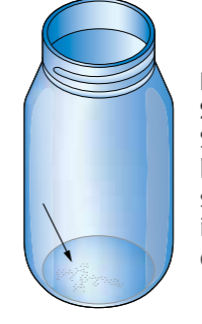
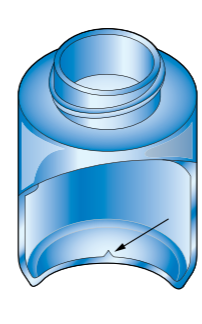

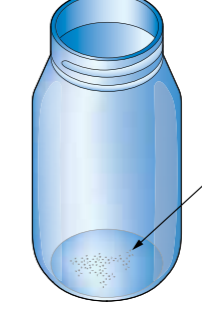
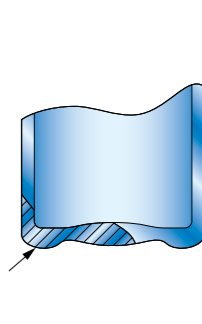
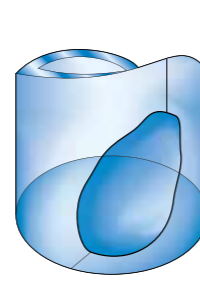

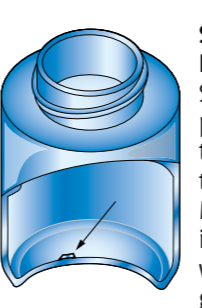

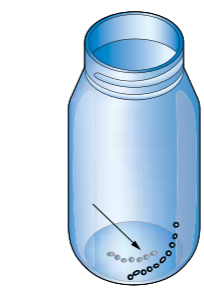


## Shoulder Defects

 <b>SHOULDER CHECK</b> Surface cracks on the shoulder of the containers. They are usually wavy in appearance.	 <b>SUNKEN SHOULDERS</b> A shoulder which is not fully blown up.	 <b>THIN SHOULDERS</b> A shoulder which has a thin section.
---	--	---

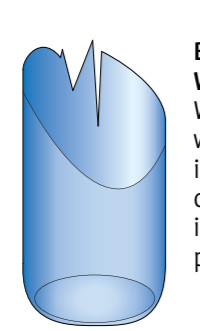
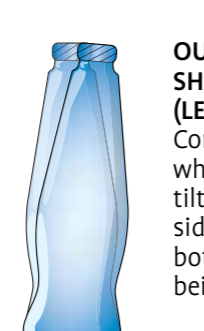
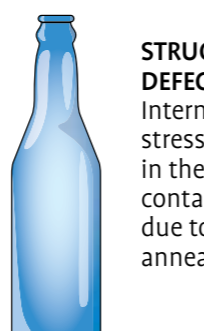





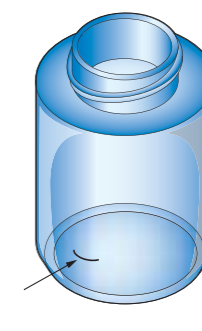
## Sidewall & Body Defects

 <b>BIRD CAGE (BIRD SWING)</b> A string of glass expanding across the inside of the container.	 <b>BODY CHECKS</b> A crack or fracture through the wall thickness in the body of the container.	 <b>BLANK AND MOLD SEAMS</b> Relatively large seams extending from the shoulder to the container base. Blank seams tend to veer off from the mold seam.	 <b>BODY DIMENSIONS</b> Dimensions out of specification for various diameters and perpendicularity.	 <b>BLACK SPOTS</b> Small black specks in the container.	 <b>BLISTERS</b> Large bubbles in the glass.	 <b>BRUSH MARKS</b> Fine vertical lines in the side or neck of a container.
 <b>BULGED SIDES</b> The sides of a container (usually panel shape) which are pushed out.	 <b>COLD MOLDS</b> Dappled or wavy appearance in the body of the container.	 <b>DIRTY WARE</b> Ware which has carbon or dirty deposits in it.	 <b>DRAG MARKS</b> A series of fine vertical laps near the shoulder or neck of the container.	 <b>HOT OR CHECK PANELS</b> Cracks through the container body on the edge or side, deep, V-shaped, going through the wall.	 <b>LAP MARKS OR WRINKLES</b> A slight fold on the surface of the glass—usually horizontal (can also be found on the finish).	 <b>SIDEWALL STRESS</b> Residual stresses left in the glass after annealing caused by foreign particles or dissimilar threads.
 <b>LETTER CHECKS</b> Small cracks or fissures which occur from any lettering or embossing.	 <b>LOADING MARKS</b> Vertical laps on the surface of the container, may be in the body or neck or both.	 <b>OIL MARKS</b> Strings of small bubbles in the container.	 <b>SEEDS</b> Very small bubbles in the glass.	 <b>SPIKES</b> A small projection of glass in the body of the container.	 <b>PRESSURE CHECKS</b> Cracks through the container's wall thickness characterized by thin, vertical cracks appearing at the seam.	 <b>FREAKS</b> A container so badly formed or squeezed that it can be seen at almost any distance.
 <b>STONES</b> Small pieces of refractory or unmelted batch materials.	 <b>STUCK GLASS PARTICLES</b> Small glass particles stuck to the inside of the container. Most common in wide mouth ware.	 <b>SUNKEN SIDES</b> The side of a container (usually panel shape) that is not fully blown up or may have sunk after release from the blow mold.	 <b>SWAB WARE</b> Residue left on the container from the IS Machine swabbing process.	 <b>WASH BOARDS</b> A series of horizontal waves or folds on the side of the container.	 <b>LIGHT OR THIN WARE</b> Thin spots in the container, which are below the minimum acceptable level.	

## Base Defects

 <b>BAFFLE MARKS</b> A rough or damaged baffle seam on the bottom of the container.	 <b>BASE LEANER</b> A bottom which has sagged so that the container is unstable when placed on a flat surface.	 <b>BLACK SPOTS</b> Small black specks in the container.	 <b>BASE SPIKE</b> A small projection of glass in the bottom of the container.	 <b>BLISTERS</b> Large bubbles in the glass.	 <b>DIRTY WARE</b> Ware which has carbon or dirty deposits on it.	 <b>BASE CHECK</b> Small cracks through the base layer that occur on or near the rounded part of the bottom contact surface.
 <b>SWUNG BAFFLE</b> The baffle mark has swung to one side and is not central in the bottom of the container.	 <b>STONES</b> Small pieces of refractory or unmelted batch materials.	 <b>STUCK GLASS PARTICLES</b> Small glass particles stuck to the inside of the container. Most common in wide mouth ware or tramp glass.	 <b>BASE STRESS</b> Residual stresses left in the glass after annealing caused by foreign particles or dissimilar materials.	 <b>OIL MARKS</b> Strings of small bubbles in the container.	 <b>SEEDS</b> Very small bubbles in the glass.	 <b>SWAB WARE</b> Residue left in the container from the IS Machine swabbing process.

## Other Defects

 <b>BROKEN WARE</b> Ware which is cracked or broken into pieces.	 <b>OUT-OF-SHAPE WARE (LEANER)</b> Containers which are tilted to one side due to bottom not being level.	 <b>STRUCTURAL DEFECTS</b> Internal stresses in the container due to poor annealing.	 <b>STUCK WARE</b> A rough piece of glass on the outside of the container.	 <b>UNEVEN OR BAD DISTRIBUTION</b> Uneven wall thickness.	 <b>OVER OR UNDER HEIGHT</b> Height that exceeds or is below specification.	 <b>HORIZONTAL TEAR</b> A rough crack on the glass surface oriented horizontally.	 <b>VERTICAL TEAR</b> A rough crack on the glass surface oriented vertically.	 <b>SHEAR MARKS</b> A C-shaped mark in the glass, attributable to the action of the shears.
--	---	--	--	---	---	---	---	---