

GLOSSARY OF IN-MOLD LABELING TERMS

Activation temperature	Temperature at which a heat seal coating becomes tacky.
Basis weight	The weight of a known area of substrate, usually in pounds/ream or grams/sq. meter.
Blocking	The tendency of two plies of substrate to stick together in a stack or roll, especially under heat and/or pressure.
Blow pin	A hollow device, inserted into the hot parison after mold closing, through which high pressure air expands the parison.
Blow molder	Manufacturer of plastic bottles used for food and household chemicals.
Bond strength	The force required to separate two surfaces which have been laminated or heat sealed together.
Bubbling	Label defect similar in shape to a blister where label is not firmly adhered to container.
C2S	Two (2) side coated substrate.
Caliper	Substrate thickness expressed in mils or points (1 mil = 0.001 inch) or microns (1 mil = 25.4 microns).
Clamping station	Mold cavity on a wheel or shuttle blow molding machine.
Cling	A very mild form of blocking where the plies can be easily separated without visible damage to either surface.
Coextrusion	Simultaneous extrusion of two or more molten polymers to form a multi-layer parison.
COF	<p>(See "Slip.") Coefficient of friction is the ratio of the frictional force to the force acting perpendicular to the direction of motion.</p> <p>Static COF: The ratio of the force needed to <i>start</i> the motion between two surfaces in contact to the the force acting perpendicular to the direction of motion.</p> <p>Kinetic COF: The ratio of the force needed to <i>sustain</i> the motion between two surfaces in contact to the force acting perpendicular to the direction of motion.</p>

Curl	A label that does not lay flat on a plane surface.
Converter	Manufacturer who produces value added products from single web materials by laminating, coating and/or printing operations.
Couponing	The ability to easily remove part of a label for point-of-purchase redemption.
Crazing	Label defect which looks like allegator skin.
Denesting	Removal of bottles from cartons.
Die Cut	Labels cut from printed sheets using a sharp device similar to a "cookie cutter".
Dimensional stability	The ability of a film to resist stretching or shrinking during converting or blow molding.
Double picking	Two or more labels which are stuck together when fed from a magazine stack.
Edge welding	Labels whose edges are stuck together during die cutting.
EVOH	Ethylene vinyl alcohol, a polymer used for gas barrier in laminations.
Extruder	Machine which melts plastic resin pellets and forms the parison tube.
Extrusion	Continuous conversion of resin pellets into a molten sheet, ribbon or tube for further processing.
FIML	Film in-mold labeling.
Flagging	Label defect where edges are lifted from container.
Flame treat	Surface oxidation required for adhesion of heat transfer labels.
Flash	Excess plastic which is squeezed out of the mold and removed after the part is ejected.
Flexo(graphy)	Printing process using polymeric plates with raised images and fluid inks.
Foil stamping	Colored metallic foil transferred to the label surface with heat and pressure.

Friction	The force that resists relative motion between two surfaces in contact.
Gang filling	Batch dispensing of product into a group of containers using multiple filling heads. <i>See in-case filling.</i>
Gel lacquer	A solvent solution of a hot melt heat seal coating applied by heated gravure.
Gravure	Printing method which transfers ink or coating to a substrate from tiny cells etched in a metal cylinder.
HBA	Health and beauty aids
HDPE	High density polyethylene
Heat resistance	Temperature to which a bond or seal can be raised before it fails.
Heat transfer	Decal-like label which is transferred from a release coated carrier web to the container with heat and pressure.
Heat seal coating	Adhesive coating which is non-tacky at room temperature but becomes sticky when heated.
HIC containers	Containers for household and industrial chemicals.
High die cutting	Off-line process for punching out labels from a stack of 500 to 1,000 label sheets in a single stroke.
Hot tack	Strength of a still-molten bond immediately after pressure is released.
IML	In-mold labeling.
In-case filling	Gang filling of bottles without removing them from the carton or case.
Injection IML	Method where die cut label and a forming core is placed in a mold. Hot plastic fills the inner space between the inside of label and the forming core.
Injection stretch blow molding (ISBM)	Blow molding method where a parison preform is made, then reheated, stretched and blown to the bottle shape.
Letterpress	Printing process which transfers ink from raised image areas on metal or polymeric plates.

Mold release	Additive in plastic resin which prevents blow molded container from sticking to the mold.
MSI	Thousand square inches, commonly used measure for label pricing.
MSW	Municipal solid waste.
Narrow web	Press that uses a maximum web width 18 to 24 inches.
Offset lithography	Printing method in which a grease-like ink is transferred or “offset” from the image to a rubber “blanket” cylinder and then to the substrate.
Offware	Rejected blow molded containers.
Overprint lacquer	A clear varnish or coating applied over a printed surface to protect it.
Packaging	How in-mold labels will be packaged for shipment to the blow molders for usage.
Panel bulge	Outward bulge of the labeled side of an in-mold labeled bottle, common to paper labels and some plastic labels.
Parison	Tube of molten plastic extended from extruder which is captured by the closing mold.
PCR	Post consumer resin.
PET	Polyethylene terephthalate (polyester).
Pick and place	Articulated device which picks up a label from the magazine stack and positions it in the open mold.
Puckering	Label defect where the label edge is lifted away from the container.
Regrind	Offware which is granulated and fed back into the extruder.
Release liner	Paper or film carrier for heat transfer or pressure sensitive labels.
Retained solvents	Solvent or water trapped in a coating, adhesive or ink.
Rheology	Deformation and flow properties of polymers.

Rippling	Ridge or wrinkle shaped label defect.
Rotary die cutting	On-press process of punching out individual labels from the surrounding matrix using a tool mounted on a cylinder.
Rotary machine	Blow molding machine which has blowing stations mounted on a vertical or horizontal wheel.
Rotary screen	Printing method where ink is forced through a screen cylinder by a doctor blade inside the cylinder.
Scrap	<i>See "Offware."</i>
Set-off powder	Starch-based powder used at end of sheet fed offset press to prevent face-to-back transfer of wet ink in stacked sheets.
Shuttle machine	Blow molding machine which has blowing stations on either side of a central extruder. Mold shuttles between extruder and blow station.
Slip	<i>(See "COF. ")</i> Term used in the opposite sense of COF. A high slip normally refers to low COF and a low slip refers to high COF.
Thermoform IML	Method where die cut label is placed in a mold, a plastic sheet is indexed over the mold then heated and forced into the mold forming the container.
UV flexo	Same as flexo except it uses 100% reactive inks cured by UV radiation.
Vacuum port	Small openings in mold which hold labels in place during blow molding.
Viscosity	Resistance of a coating or ink to flow under applied force.
Web	Substrate to be printed or coated as it unwinds from a roll.
Wheel machine	Continuous extrusion blow molding machine which has molds positioned around a large wheel.