IMD AND IML: THE SUSTAINABLE, RECYCLABLE CHOICE



In-mold technologies used for the labeling and decoration of plastic products are a sustainable, recyclable alternative to many other types of labels or decoration.

RECYCLABLE:

The substrate used for in-mold labeling (IML) and in-mold decorating (IMD) processes becomes a permanent part of the finished part or product. This simplifies the automated sorting and washing that occurs at the recycling facility by eliminating the need for chemical removal of a paper or film label and adhesive.

Instead, the in-mold label or decorative film is formed from the same or similar resin type as the finished part or product, allowing it to proceed through the recycling process to be reground into pellets that are suitable for use in plastic manufacturing applications. As a result, in-mold processes are not detrimental to the recycling stream.

SUSTAINABLE:

In-mold technologies reduce the overall manufacturing carbon footprint required to decorate plastic parts by allowing processors to mold and decorate the product or part under one roof.

- Additional shipping and handling costs are eliminated because the product or part does not need to be shipped to
 another facility for labeling or decoration, which reduces employee labor, packaging material, transportation costs and
 vehicle emissions.
- Post-mold equipment, such as flame or plasma treaters, labeling machines, paint sprayers, trimmers or drying ovens, are not needed, reducing additional capital investment costs and utility costs (no gas or electric required to operate the extra equipment).
- Chemical processes, such as painting, powder coating, chrome plating and adhesive application, are eliminated.
- The additional floor space and employee labor required to operate freestanding decorating and labeling equipment can be reallocated to other areas of the facility.
- Plastic parts or products decorated with IML/IMD are long-lasting, with superior weatherability, abrasion resistance, chemical resistance and durability.
- Since the in-mold label or decoration is a permanent part of the molded item, brand identity is maintained throughout the life of the product or part and required identification or safety information cannot easily be removed or lost.
- In-mold processes enable lightweighting initiatives for plastics components. Lightweighting lowers environmental impact by increasing fuel efficiencies, reducing carbon emissions and decreasing material waste.



