Innovative provider of integrated plastic tooling solutions for the injection molding industry.

Stack Molds

Stack molds are a series of moulding faces “stacked” together to create multiple faces or levels for moulding. Each level or face is a parting line and produces moulded product.

The benefit of stack molding is to increase the output of a given molding machine and operation.

Special machine considerations are required to run stack molds, however StackTeck’s technical team are well versed in providing guidelines and recommendations to ensure success when adapting a stack mold strategy.

StackTeck provides stack molds in 2, 3 and 4 level configurations based on part designs and volume requirements. Molds can also be converted from 2 to 3 to 4 levels as volumes increase.

Benefits
• Integrated mold ejection functions
• Double, triple or quadruple output
• Higher output/ capital and floor space
• Modular design expandable with volume growth

Applications
• Dairy food containers
• Lids and over caps
• Take out food containers
• Thin wall articles
• Cosmetic containers

4x24 Stack Mold

4x32 Stack Mold
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**Advanced Lightweighting Design Technology**

StackTeck has developed a new patented technology called TRIM™ for light weighting injection molded parts. Thin Recess Injection Molding (TRIM) uses an advanced approach to thin out parts of the wall section well beyond the conventional thin wall packaging approach used for polyolefins with high melt flow indexes.

This 32 oz. TE container had a flow length of 5.74 inches, and with thin recess areas covering half of the part’s side wall and bottom, a thin panel thickness of 0.011 inches was achieved.

**Potential Part Weight Savings of 20-40%**

Conventional thin wall part design normally assumes a maximum L/T ratio of 300 (i.e. ratio of flow length to average wall thickness). Using TRIM, it has been demonstrated using a 32 oz. rectangular container design, that large areas of the part can be thinned out which correspond to an L/T ratio of over 500. Part weight savings that can be achieved using this technology are in the range of 20-40%.

The injection speed and pressure used to fill the part were normal, by thin wall packaging standards, and it is expected that thin wall molders can adopt this technology using existing injection molding machines.