


What is a Stack Mold and how does it work?

Stack Mold

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Definition

- 1) Characteristics, two (or more) mold parting surfaces or mold split lines.
- 2) Does not require more clamp force than a single face mold.
- 3) Projected part surface areas of the cavities cancel out each others force.

Stack Plastic Injection Molds were introduced in the 1960's and A1 Tool was an instrumental pioneer in their development. Traditional molds consist of a core & cavity, however stack molds increase productivity by using a "stack" of multiple core & cavity mold layers. Closing the stack mold simultaneously closes all layers in the stack, enabling molding all parts in all layers at one shot. Using a stack molding concept, productivity can be

increased two, three, or even four times in some cases. In molding, the projected part area produced requires the **same tonnage**, whether producing one level or multi-level stack molds. The tonnage required of the molding press does not increase with more layers.

If you are planning for future expansion or looking to reduce costs, consider adding layers to make a stack plastic injection mold to increase productivity and profitability.

A1's strengths are engineering and manufacturing; complex, multi-shot, multi-action, stack and tandem molds. Bring us your project and we'll help evaluate if a stack mold is right for you.

*570+ stack molds
produced to date*

"Challenge Our Innovation."

Stack Mold Benefits:

- **Increased throughput**
- **Reduced multiple mold costs**
- **Faster cycle times**
- **Lower production costs**

Applications:

- **Virtually limitless**

