

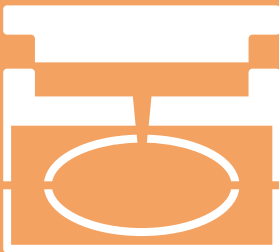
## Compression Molding



Simplest, lowest cost tooling  
- Usually 2 mold plates

- Longest cure/cycle time.
- Rubber material/compound is placed in mold cavity, mold is closed using hydraulic or electric pressure, “compressing” the material to conform into the mold cavity shape.
- Rubber is then cured thru the heating of the rubber from the heated mold.
- The cured rubber part is removed and allowed to cool.
- Excess material, called “flash”, is trimmed from the part using special scissors, trimming dies, tumbling or cryogenic deflashing equipment.

## Transfer Molding

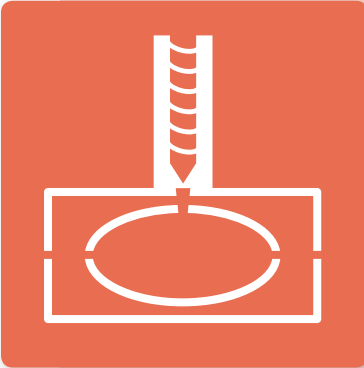


Slightly more complicated tooling  
- At least 3 mold plates

- Shorter cure/cycle time.
- Rubber material/compound is placed in mold “pot” (located above top mold plate).
- Using hydraulic pressure, the tight fitting plunger squeezes rubber material from the pot, through the sprues or gates into the mold cavity.
- Rubber is then cured thru the heating of the rubber from the heated mold.
- After rubber is cured, the mold opens, the plunger is raised up from the pot and the “transfer pad” is removed and thrown away.
- The cured rubber part is removed and allowed to cool.
- Sprues, gates and/or excess material, called “flash”, is trimmed from the part using special scissors, trimming dies, tumbling or cryogenic deflashing equipment.

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## Injection Molding

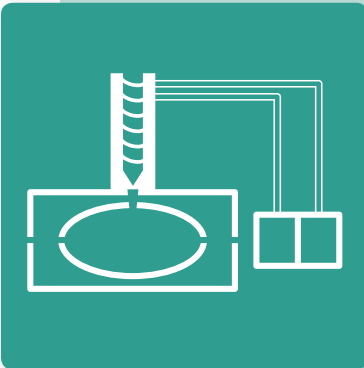


Moderately complicated tooling

- At least 2 mold plates

- Shorter cure/cycle time.
- Rubber material/compound is fed into injection barrel and is warmed by the temperature controlled barrel and/or through the "shearing" action of an auger type screw or plunger.
- The rubber material/compound is then fed into the runner system and into the mold cavity via hydraulic or electric ram pressure.
- Rubber is cured thru the heating of the rubber from injection process and the heated mold.
- The cured rubber part is removed and allowed to cool.
- Excess material, called "flash", is trimmed from the part using special scissors, trimming dies, tumbling or cryogenic deflashing equipment.

## LIM - Liquid Injection Molding



Most complicated tooling

- At least 2 mold plates

- Shortest cure/cycle time.
- Two-part silicone (Component A & Component B) is fed into a mixing head (static mixer) via hydraulic ram pressure.
- From the mixing head, the mixed liquid silicone is fed into injection barrel.
- From the barrel, the mixed liquid silicone is then fed into the runner system and into the mold cavity, via hydraulic or electric ram pressure.
- The liquid silicone is cured thru the heating of the material from the hot mold. The curing time of LSR is typically about 1/3 to 1/6 of the time required for solid/gum rubber.
- The cured rubber part is removed and allowed to cool.
- Excess material, called "flash", is trimmed from the part using special scissors, trimming dies, tumbling or cryogenic deflashing equipment.