# **Experience the Innovation of Gas Assist Injection Molding**

## Why Sajar Plastics?

Simplify your supply chain by consolidating parts and reducing vendors ...

- Multiple injection processes:
- → Gas Assist Injection Molding
- → Straight Injection Molding
- → Structural Foam
- Short to medium production runs.
- Product flexibility and efficiency for multiple component projects:
- $\rightarrow$  17 injection molding machines
- → Wide range of press tonnage capacity
- $\rightarrow$  Parts up to and exceeding 1,000 sq. in.
- → Molds up to 80" width and 70" height
- $\rightarrow$  In house tool repair and fixture building

- Decoration
- → Mist Coat Painting
- $\rightarrow$  Finish Gloss and Texture Painting
- $\rightarrow$  Pad Printing, Hot Stamping
- EMI/RFI Coatings
- Complex Assembly
- → Sonic Welding and Heat Staking
- → Electronics
- → Label Application
- → Custom Packaging
- ISO 9001:2008, (叭), RoHS <sup>《</sup>
- 99.7% Customer Satisfaction Rating
- Just-in-Time Manufacturing/Kanban Programs

For over 60 years Sajar Plastics has been innovating in the production of injection molded parts. 25 years ago Sajar pioneered the development of Gas Assist Injection Molding, both Internal and External. We specialize in providing design and product development assistance, and in the production of large, appearance enhanced, quality-critical plastic parts.

# **Sajar**Plastics

CEM

design .

assistar

## The Gas Assist Process

Gas assist injection molding is a low pressure, conventional injection molding process that requires the injection of pressurized nitrogen gas into a short shot of molten resin.

The gas flows through strategically designed and located gas channels, following the path of least resistance to displace the material in the thick areas of the part by forming hollow sections. This process reduces material usage but does not compromise the appearance and functional performance of the part.

Next, the pressurized gas packs and holds the molten resin against the cavity walls until the part solidifies. Constant gas pressure prevents thick, customer facing part sections from shrinking and warping as the resin cools and solidifies. Once the part solidifies, the gas is vented from the tool.

Most thermoplastics can benefit from the gas assist injection molding process, including Polypropylene (PP), ABS, PC, PC/ABS, HIPS and others.





Sajar Plastics was founded in Middlefield, Ohio in 1949 with three injection molding machines producing straight injection molded parts. The name Sajar is an acronym reflecting the last names of the founding three owners. Sajar grew steadily over the years expanding manufacturing capabilities and facility, a direct result from earning a reputation in the custom molding industry as an innovative molder supplying high quality parts at competitive costs.

In the early 1980's, Sajar was one of the three original companies who developed gas assist molding technology. To date, we have commercialized over 500 gas assist parts for leading OEM's in a wide variety of industries.

With small, medium and large tonnage presses, along with in-house painting and full secondary operations and assembly, we are well-equipped to handle your requirements. We welcome your visit so you can see our gas assist technology and capabilities.



**Sajar** Plastics

The Innovative Leader in Large Part Gas Assist Molding



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