# **Company Introduction - Shenzhen Enjiesen**

Shenzhen Enjiesen Technology Co., Ltd is a company specializing in R&D, Manufacturing and Service in Gas Assisted Injection Molding (GAM) equipment and technology. Our vision is "Quality from Speciality, Innovation for Future, Service is Value", we sincerely create the highest value for clients, by providing high quality product and service.

### Introduction of Gas Assisted Injection Molding (GAM) technology

Gas Assisted Injection Molding (GAM) technology is a revolutionary innovation in the global injection molding industry, it provides higher improved plastic part quality, more molding design freedom, higher production efficiency and reduced manufacturing cost.

The work principal of GAM is to inject high pressure nitrogen into the plastic melter at the preset pressure and time, which can inflate the interior of the plastic part to create a hollow, but keep the plastic parts surface and shape complete and intact. The advantages of GAM technology are:

- ▶ Save plastic raw material, up to 50%;
- ▶ Solve and reduce the visible weld lines on plastic surface;
- Shorten plastic production lead time;
- ▶ Reduce plastic internal stress, then no or less plastic deformation;
- ▶ Reduce mold inside pressure and mold loss to increase mold life time;
- ▶ Reduce mold locking pressure in injection machine by up to 50%;
- ▶ Increase injection machine life time and reduce power consumption;
- ▶ Reduce investment cost of injection machine and mold;
- ▶ Reduce overall production cost.

### System configuration of Gas Assisted Inection Molding (GAM)

One basic Gas Assisted Molding Injection (GAM) system mainly includes 3 sub-systems, like Nitrogen Gas Generator, Nitrogen Gas High Pressure Compressor and Nitrogen Gas Pressure Controller; in which the Nitrogen Gas High Pressure Compressor and Nitrogen Gas Pressure Controller are the core systems. You can choose different type of nitrogen gas source, high pressure system and nitrogen gas controller, depending on different production requirements.

## Complete system reference of Gas Assisted Injection Molding (GAM)



Customer own compressed air system



Nitrogen Gas Generator



Nitrogen Gas High Pressure Compressor



Injection machine by GAM assisted



Nitrogen Gas Pressure Controller



High pressure nitrogen gas storage tank

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#### Basic system reference of Gas Assisted Injection Molding (GAM)



Outsourced Nitrogen gas

Nitrogen gas pressure booster

& Gas pressure controll system

Injection machine by GAM assisted

#### Product reference by Gas Assisted Injection Molding (GAM)













