

Plastic Extrusion, Moulding and Mould Designs

(Plasma Films, Acrylic Fabrication, Design, Gas Injection Moulding, Thin Walled Injection Moulding, Injection Moulding, Blow Molding, Extrusion, Transfer Molding, Reinforcements for Thermosets, Welding Plastics, Carving Plastics)

Introduction

Plastics extrusion is a high-volume manufacturing process in which raw plastic is melted and formed into a continuous profile. Extrusion produces items such as pipe/tubing, weather stripping, fencing, deck railings, window frames, plastic films and sheeting, thermoplastic coatings, and wire insulation.

This process starts by feeding plastic material (pellets, granules, flakes or powders) from a hopper into the barrel of the extruder. The material is gradually melted by the mechanical energy generated by turning screws and by heaters arranged along the barrel. The molten polymer is then forced into a die, which shapes the polymer into a pipe that hardens during cooling.

The moulding process is one of the most important plastic processing operations. It is an important commercial process whereby a resinous polymeric compound is converted into useful finished articles. The origin of this process is dates back about a century to the invention of a plunger type machine. The mould has its own importance, which give the required shapes of the products. The vast growth of injection moulding is reflected dramatically in many types and sizes of equipment available today. Plastic moulding especially thermoplastic items may be produced by compression moulding methods, but since they are soft at the temperature involved, it is necessary to cool down the mould before they may be ejected.

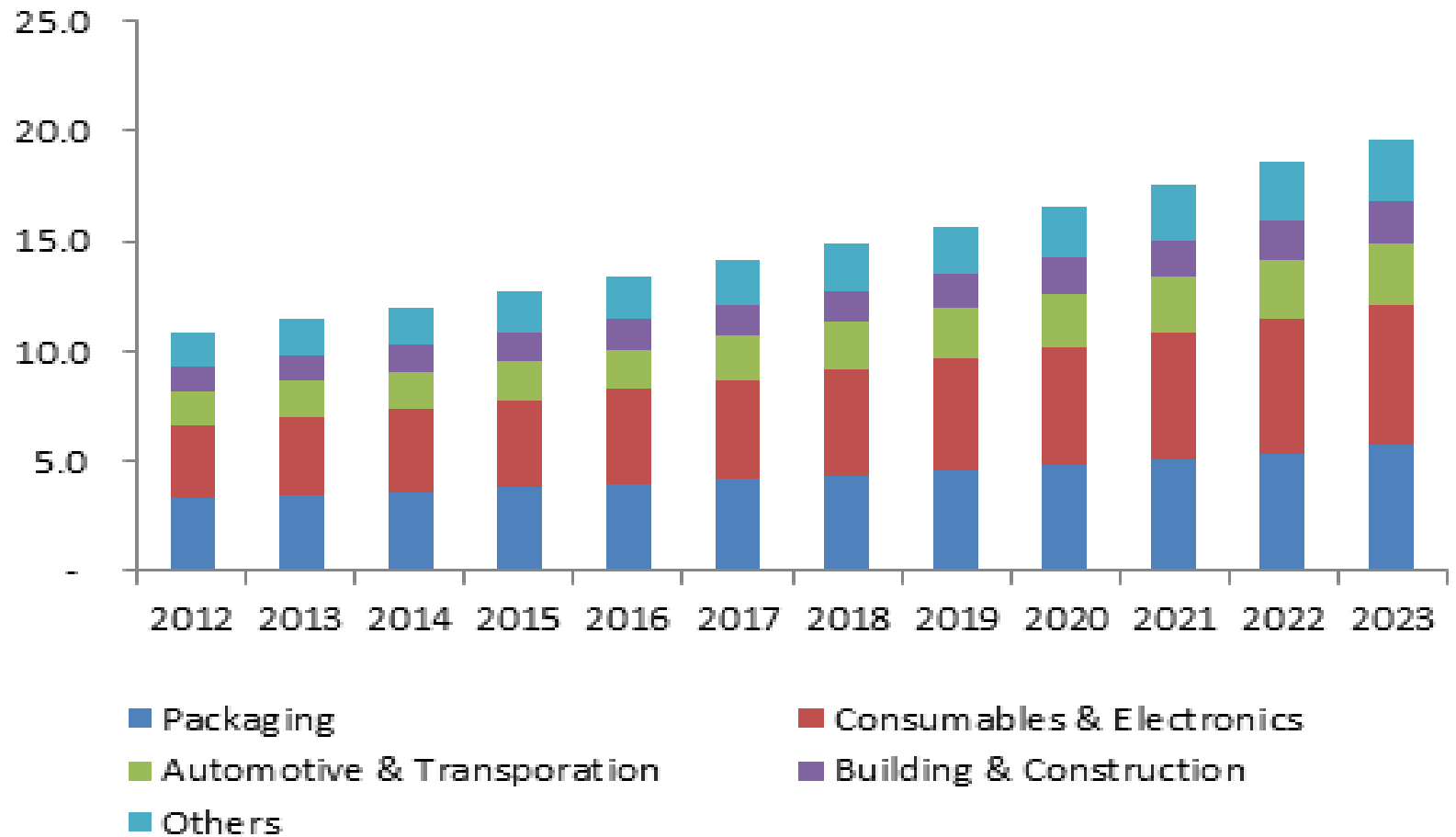
Injection moulding differs from compression moulding is that the plastic material is rendered fluid in a separate chamber or barrel, outside the mould is then forced into the mould cavity by external pressure. Plastic technology is one of the most vigorous manufacturing branches, characterised by new raw materials, changing requirements, and continuous development in processing methods. The injection moulding machines manufacturers plays an important part in the creation of injection moulding technology, process control, to essential mechanical engineering.

Even though design is a specialized phase in engineering field, in tool and mould engineering it is totally divided into two wings as product design and tool and die design.

Market Outlook

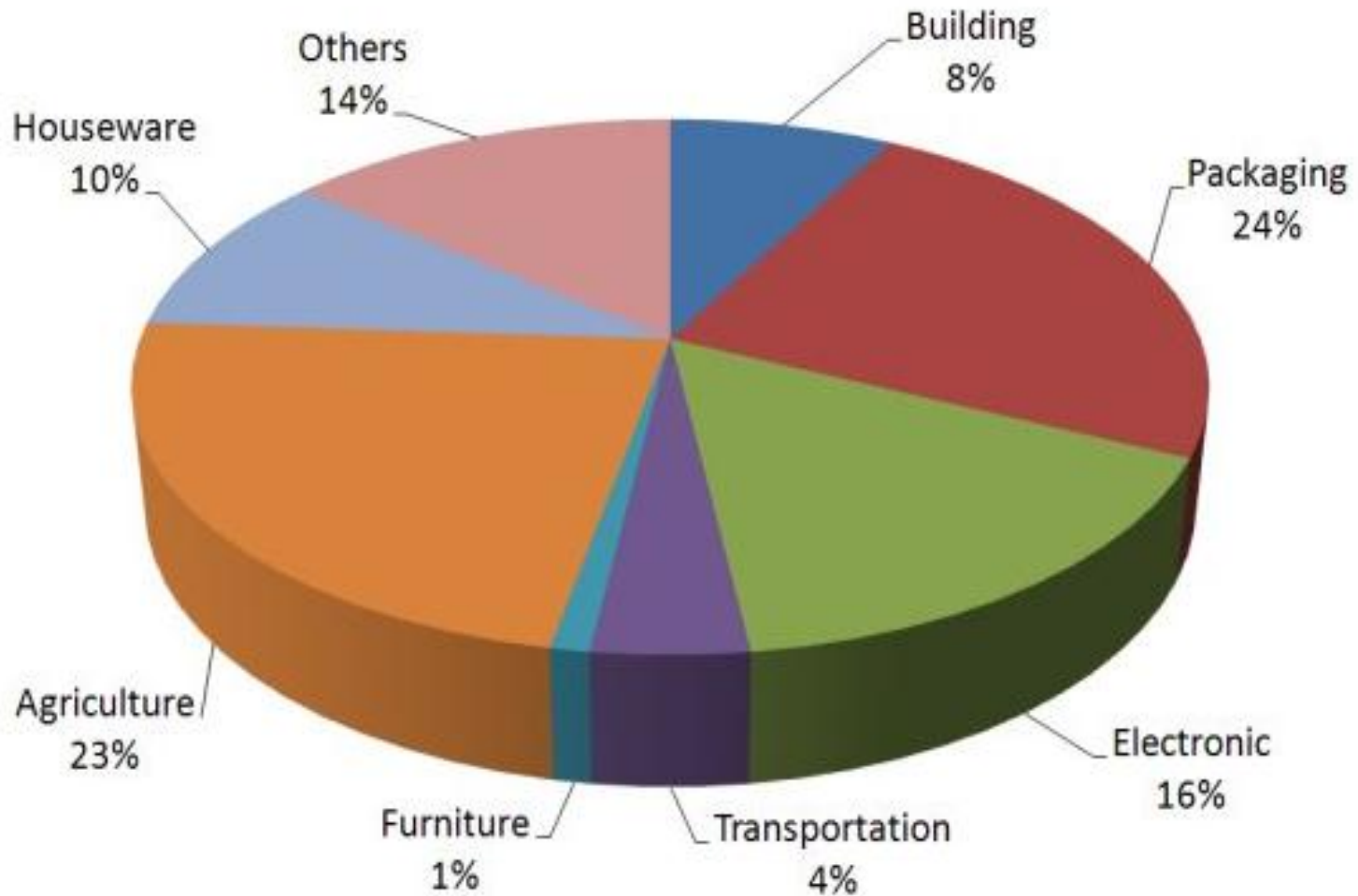
Injection Molded Plastic Market size was calculated at over 100 million tons in 2015 with growth forecast at more than 5% CAGR up to 2023.

Injection Molded Plastics Market

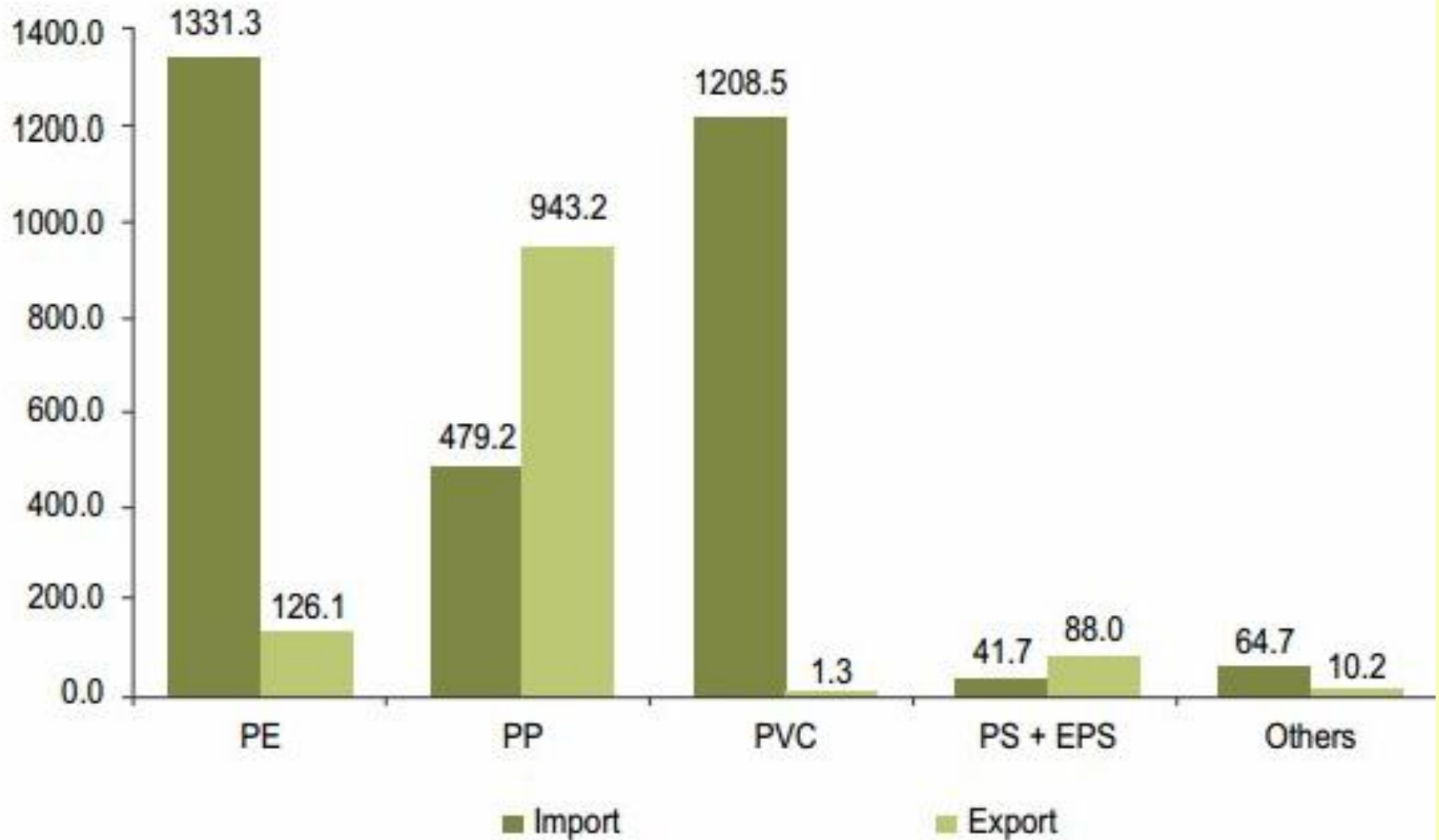


The global market for injection molded plastics is expected to reach \$277.78 billion by 2020.

Plastic Consumption by Application (India)



Import-Export of Plastics (In '000 MT), FY14



The growth rate of the Indian plastics industry is among the highest in the world, with plastics consumption growing at 16% per year (compared to 10% p.a. in China and around 2.5% p.a. in the UK). Considering a growing middle class (currently around 50 million) with low per capita consumption of plastics (currently 9.7kg per head), this high growing rate is likely to continue, as the per capita consumption of plastics will inevitably increase.

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Plastics Extrusion, Plastic Extrusion Machines, Plastic Extrusion Process, Extrusion Moulding Process, Plastic Extrusion Plants, Industrial Plastic Extrusion, Plastic Extrusion Line, Plastic Moulding, Plastic Moulding Business, Products For Plastic Injection Moulding, Plastic Moulding Process, Injection Molding Process, Plastic Injection Molding Machines, Plastic Mould Design, Plastics Injection Mould Design, Injection Moulding Design Guide, Product Design for Plastic Moulding, Design for Injection Moulding, Preparation of Plasma Films, Transport Phenomena in Polymer Films, Acrylic Fabrication, Reinforcements for Thermosets, Miscellaneous Thermoplastic Process, Compression and Transfer Molding, Disciplined Process Strategy for Injection Moulding, Injection Molding, Blow Molding, Extrusion, Newly Developed Injection Moulding Technology, Injection Moulding, Plastic Injection Moulding Environment in India, Tiebarless and 2-Platen Injection Moulding Machines, Thin Walled Injection Moulding, Mold Cooling Best Bet for High Profits, Gas Injectionmoulding Technology, Mould Materials and Processing Methods, Laminate Composition, Reinforcements for Filament Winding, Fiberglass Technology, Making Glass Fibers, Glass Composition, Glass Fabric Construction and Weaves, Plastisol Molding, Injection Molding Machines, Injection Unit, Mold Clamping Unit, Functions of Mold Components, Injection Moulding Technique, Economical Production of Parts, Thermosetting Materials and Elastomers, Tiebarless Machine, Two-Shot Moulding Process, Assisted Injection Moulding Process, Hand Injection Moulds, Single Cavity Two Plate Moulds,

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Our Approach

Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

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- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*



Sectors We Cover Cont...

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*



- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

Sectors We Cover Cont...

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitability Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*



Sectors We Cover Cont...

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*



Sectors We Cover Cont...

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

Sectors We Cover Cont...

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*



Sectors We Cover Cont...

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*



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