

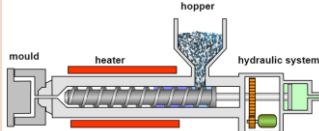
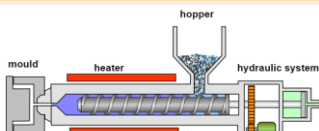
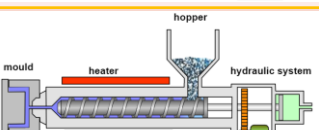
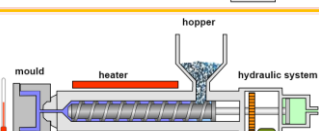
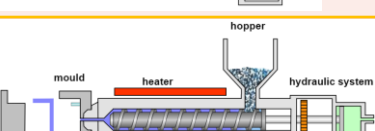
Thermoplastic Polymers

	PET - Polyethylene Terephthalate	PET is strong, lightweight, hygienic and shatterproof. Used for bottles and containers for food and drink, it is the most commonly used polymer in the world.
	HDPE - High Density Polyethylene	HDPE is extremely strong and durable so is used to produce corrosion resistant piping, building materials and packaging for thick, heavy liquids such as shampoo, bleach and other cleaning products.
	PVC - Polyvinyl Chloride	PVC in both rigid and flexible forms has high tensile strength, is durable, long lasting and robust. Flexible PVC is used to make bottles, packaging and medical devices such as blood bags and softer forms are used as flooring, in cabling, clothing, insulation and inflatable products. Rigid PVC most commonly used in construction and plumbing as pipes, doors and windows.
	LDPE - Low Density Polyethylene	LDPE is flexible, strong and can be used in corrosive environments. used to make carrier bags, bin liners, packaging films and other flexible items such as foams, squeeze bottles and toys.
	PP - Polypropylene	PP is colourfast, heat resistant, fatigue resistant and highly resistant to corrosion and chemical leaching. A semi-rigid plastic, it is ideal to use on items such as hinges and flip top caps. PP is commonly used for packaging food and non-food items, as well as reusable food containers, housewares, ropes, carpets, car parts and laboratory equipment.

Thermoplastic Polymers continued

	PS - Polystyrene	Most commonly known in its expanded form, used as protective packaging materials. It is also used in its rigid form to make food packaging such as yoghurt pots and disposable crockery, cd cases, petri dishes and disposable razors.
	O - Other	Identification code number 7 is used to class all other types of plastics that do not fall into any of the other 6 categories. This includes acrylic, nylon, polycarbonate, ABS bioplastics such as Polylactic Acid and multilayer combinations of different plastics.

Injection Moulding

	Plastic granules are fed into the machine through a hopper and into the Archimedes screw which rotates to move the granules past the heated section of the machine.
	The injector piston is drawn back by the hydraulic system.
	The piston is then moved forward, forcing the now molten plastic into the heated two-part mould.
	The mould is then cooled allowing the thermoplastic polymer to harden and set in its moulded shape.
	The mould is then opened and the mould ejected by ejector pins. Any flashing (spread at the edge of the moulding where the two male and female mould parts meet) will then be removed to clean up the finished part.

Use <https://www.focuslearning.co.uk/> to look at other methods. Username: student@parkhouse34225 Password:cumr74a7f