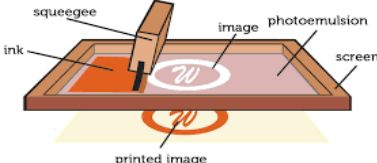
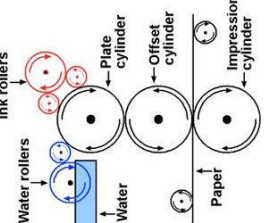
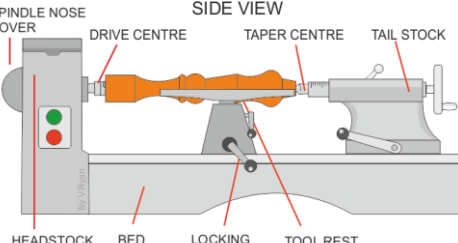
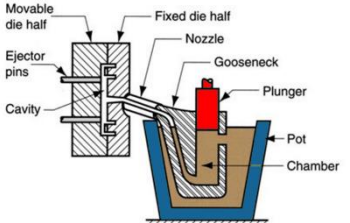
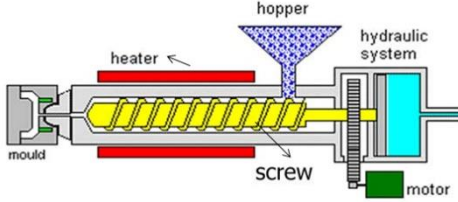
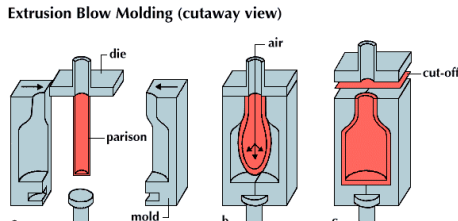


Production Processes

Name of Process	Diagram	Material	Products Made	Key info
<p><b>Screen-printing</b></p>	 <p>The diagram shows a squeegee pushing ink through a screen that has a stencil (image) on it. The ink passes through the screen to create a printed image on a surface below. Labels include: squeegee, ink, image, photoemulsion, screen, and printed image.</p>	<p>Papers and Textiles</p>	<p>Posters, signs and t-shirts</p>	<p>Screen printing places paint on top of a screen. The screen has a stencil embedded in it, so when the paint is passed across it the desired shape is printed underneath. Good process in one-off and batch production as often done by hand</p>
<p><b>Offset Lithography</b></p>	 <p>The diagram illustrates the offset lithography process. It shows ink rollers and water rollers feeding into a plate cylinder. The ink is then transferred to an offset cylinder and finally to an impression cylinder where the paper is printed. Labels include: Ink rollers, Water rollers, Plate cylinder, Offset cylinder, Impression cylinder, and Paper.</p>	<p>Papers and card (thin, flexible plastics)</p>	<p>Posters, newspapers, plastics bags</p>	<p>Rollers containing the colours and water go onto the plate cylinder. The water stops the colours sticking to certain places, creating the shape. The shape is transferred between rollers and onto the material. Can be used at batch and mass production</p>
<p><b>Lathe Turning</b></p>	 <p>The diagram shows a side view of a lathe machine. Labels include: SPINDLE NOSE COVER, DRIVE CENTRE, TAPER CENTRE, TAIL STOCK, HEADSTOCK, BED, LOCKING HANDLE, and TOOL REST.</p>	<p>Wood and metal</p>	<p>Chair legs, baseball bats (cylindrical items)</p>	<p>Material is placed between the tail stock and the headstock and spun at high speed. The material is then cut using specialist tools (either by hand or by automated machinery) to the desired shape. Can be used in one-off and batch production</p>
<p><b>Die Casting</b></p>	 <p>The diagram shows a die casting process. Molten metal is poured into a chamber. A plunger forces the metal through a nozzle into the cavity between a movable die half and a fixed die half. Labels include: Movable die half, Fixed die half, Nozzle, Gooseneck, Plunger, Pot, Chamber, Ejector pins, and Cavity.</p>	<p>Metal</p>	<p>Car parts, engine components, etc</p>	<p>Molten metal is poured into a chamber and a plunger forces the metal through the nozzle into the mould. Unlike sand casting, the mould is reusable. Good process for both one-off and batch production</p>
<p><b>Injection Moulding</b></p>	 <p>The diagram shows an injection moulding machine. Plastic granules are poured into a hopper. A screw inside a barrel moves the granules towards a heater. The melted plastic is then forced into a mould. Labels include: hopper, heater, mould, screw, hydraulic system, and motor.</p>	<p>Plastics</p>	<p>Chairs, toys, etc</p>	<p>Plastic granules are poured into the hopper and onto the screw. The screw moves the material towards the heater where it turns into a liquid. The liquid is then forced into the mould, cooled and released. Great process for mass production as it makes 100s+ of products at once, to a identical standard.</p>
<p><b>Blow Moulding</b></p>	 <p>The diagram shows the extrusion blow moulding process in three stages: (a) extrusion of a parison from a die, (b) the parison being heated and then blown into a mould with air, and (c) the finished bottle being cut-off. Labels include: die, parison, mold, air, and cut-off.</p>	<p>Plastics</p>	<p>Plastic bottles</p>	<p>A Plastic parison is heated and put into the mould. The parison is then filled with air (like blowing up a balloon) and is forced to fit the mould shape. It is then cooled and then released. This is a great process for mass producing bottles.</p>