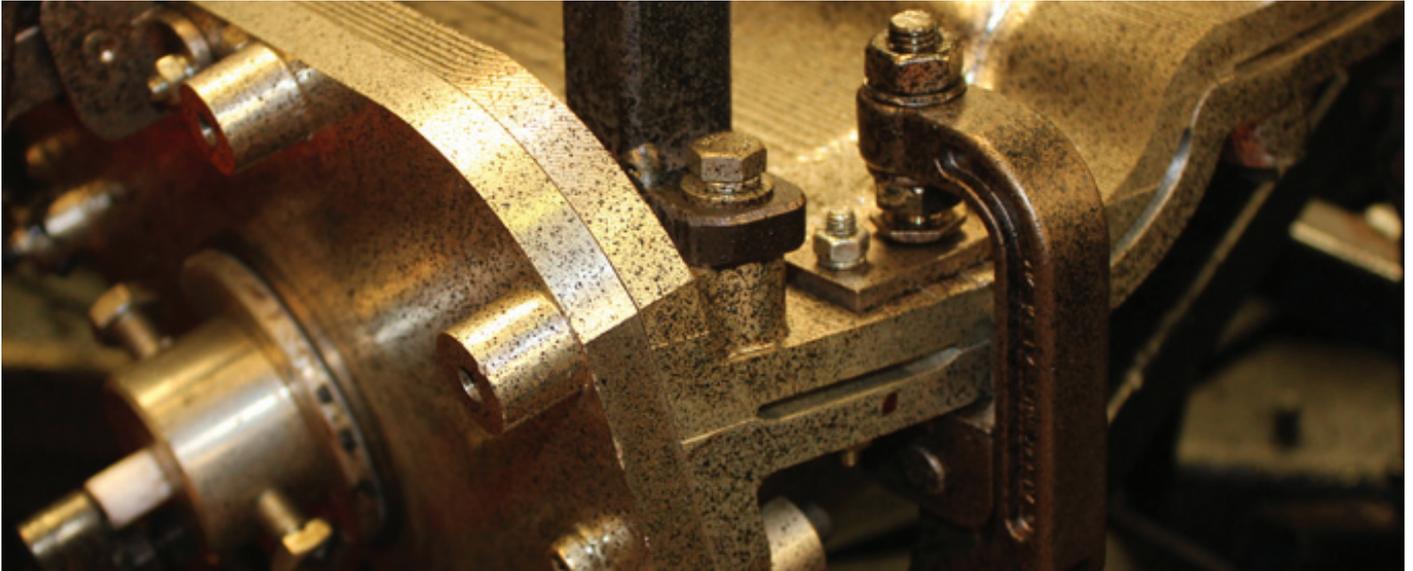


The Rotomould Process



“ The first step in making rotationally moulded plastic components is to create the basic shape from a mould. This procedure is the same whatever the material or shape of the desired component

A step-by-step guide to the rotational moulding process in creating the rotationally moulded component

- 1 A mould is created according to the specifications for the finished article – these are usually produced from CAD data, although tecni-form can also work from paper designs or from a physical model (For design information, please see their Designing for Rotational Moulding section)
- 2 If any metal inserts are to be moulded in, they are fitted to the mould
- 3 A measured amount of the appropriate polymer powder is added to the mould
- 4 The mould is securely closed
- 5 The mould is slowly heated with blown hot air and rotated simultaneously about two axes mutually at right angles. The tumbling action is slow and centrifugal forces are not significant. During this part of the process the polymer is distributed evenly around the interior of the mould, gradually adhering to it
- 6 The mould is cooled using fans
- 7 The component is unloaded from the mould, ready for finishing and assembly
- 8 The mould can then be fitted with any new inserts and recharged with powder ready for the next cycle.

Once this stage of the rotational moulding process is complete, tecni-form go on to Stage Two – Finishing the Plastic Components.

A moulded textured surface enhances appearance, and improves scratch resistance – tecni-form have almost unlimited choice. The look and feel of other materials such as metal and leather can be simulated. If more rigidity or insulation are part of the design, an inner foam layer can be moulded integrally or after moulding injected into hollow sections.

Take a look at the Finishes section to see what can be done.