# Manufacturing End Product

**Plastic External Cover**

**General material expectation would be like that of a children toy- safe, sturdy, lightweight and low cost. However, precise dimensional design is required.**

1.Expected life span – 5 years

2.Expected Production Volume – 10, 000

3. Target Cost

* Material: Volume of the piece \* density of the material \* price by weight
* Machine time: The hourly cost of the injection moulding machine divided by the number of pieces produced per hour.
* Investment: The amount invested into the tool divided by the number of pieces produced (there are as many ways of calculating this figure as there are customers).

4. Expected temperature range – 15-30 (room temperature)

5. Exposure to other chemicals

6. Need for dimensional accuracy – must be precise

## Manufacturing process

Establish design needs -> Get a quote -> Product designers develop 3D model -> Metal Tooling Device is made -> Plastic is moulded using this tool

## Concept Design

## Supplier Options

<https://www.toolcraft.co.uk/toolcraft-plastics-swindon/contact/enquiry-plastic-moulding-antistatic-packaging-vacuum-forming.php>

<http://www.inpressplastics.co.uk/>

<http://www.design4plastics.com/>