



How are these made?

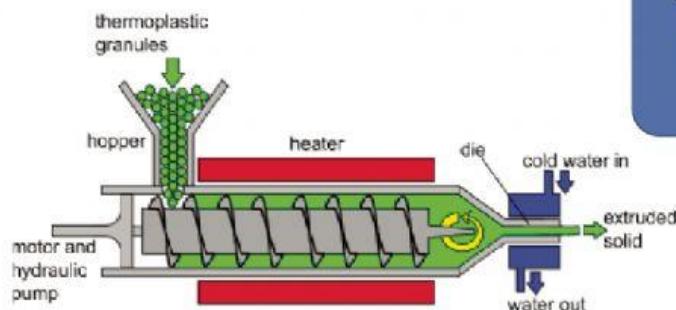


LIVEWORKSHEETS

Extrusion

Clues to Extrusion:

Long regular shape
Can be tube/bar
Shapes are linear



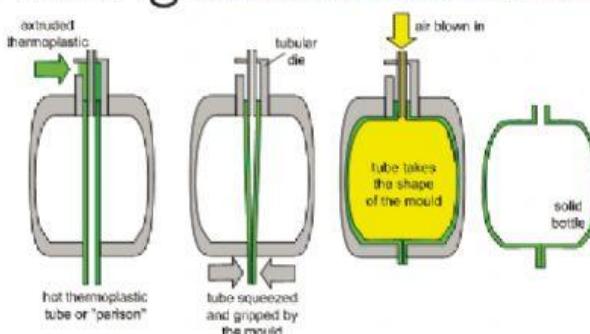
1. A motor turns a thread which feeds granules of plastic through a heater.
2. The granules melt into a liquid which is forced through a die, forming a long 'tube like' shape.
3. The extrusion is then cooled and forms a solid shape.
4. The shape of the die determines the shape of the tube.



How are these made?

Blow Moulding

<http://www.youtube.com/watch?v=oR0gMKN58kY>



Clues to Blow Moulding:

Shut Line
Sprue Mark
Closed neck/hollow shape

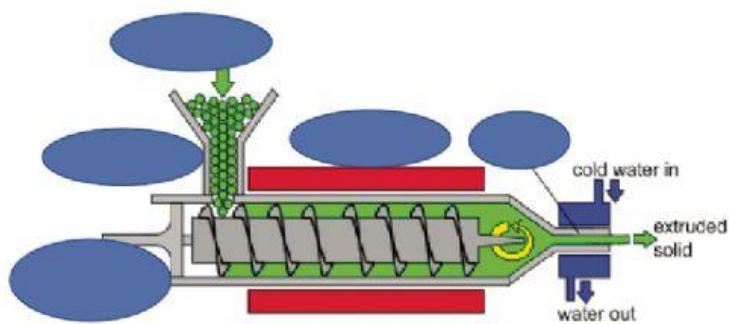
1. Mould is opened into its two halves.
A hollow tube of polymer known as the parison is heated.
2. The parison is lowered into the mould.
3. Mould is clamped shut, leaving only a small hole for the air hose.
4. Air is forced into the mould at high pressure. The plastic is forced to the mould sides and cools.

Activity 2:

- Work in Group
- Set the steps in the correct sequence.
- label the shape and choose the correct properties of the objects made by injection moulding method in the blue box.
- Timing 15mins.

Clues to Extrusion:

Extrusion



Long regular shape
Shut lines
Can be tube/bar
Sprue mark
Shapes are linear
Lots of detailed features
Complex shape

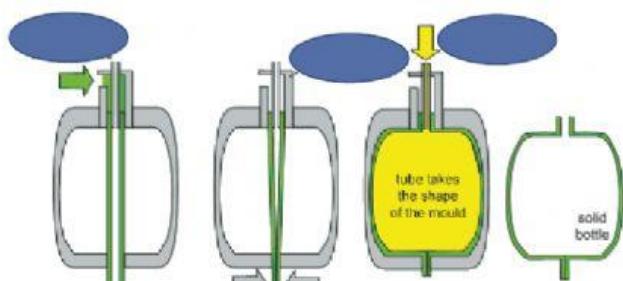
- 1
- 2
- 3
- 4

- The shape of the die determines the shape of the tube.
- The granules melt into a liquid which is forced through a die, forming a long 'tube like' shape.
- A motor turns a thread which feeds granules of plastic through a heater.
- The extrusion is then cooled and forms a solid shape.

Clues to Blow Moulding:

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Shapes are linear
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Blow Moulding



1 Mould is opened into its two halves.

2 Air is forced into the mould at high pressure. The plastic is forced to the mould sides and cools.

3 A hollow tube of polymer known as the parison is heated.

4 Mould is clamped shut, leaving only a small hole for the air hose.

5 The parison is lower into the mould.