

On A4 sheets of paper, produce the following information:

1. What is the purpose of the product? Explain what the artefacts to be manufactured will be and show examples of injection moulded items similar to what you want to manufacture.
2. Sketch a simple design of the artefact – (It is not important that the sketches are perfect or to scale, just 'hairy sketches').
3. History of plastic and plastic products – where and when did plastic start to be used? Etc.
4. What data can you find about your Injection Moulding Devices – e.g. what are the levels of production would Inj Moulding machines be used for?
5. What standards do Inj Moulding machines need to conform to? E.g. ISO, BS, BN, DIN, CE etc.
6. State the relationship of ergonomics and anthropometrics in regard to the design of an effective Inj Moulding tool.
7. What constraints will there be when planning to make your inj mould? e.g. workshop availability and costs.
8. Existing devices – show pictures of existing devices (min 3) and perform a simple 'product analysis' of each.
9. What are the Moral, social, economic, environmental and cultural factors regarding injection moulding plastic?

Useful sites for research into Injection moulding and related materials etc.

You can also use the information from the Plastics programme on the school network.

www.withersdemon.co.uk/plasticsdex.htm

Plastic Injection Moulding FAQ

What is plastic ?What is plastic injection moulding ?

Why do we have different kinds of plastics?Why are plastics used in durable goods?

How are plastics helping the environment ?Quality Controlinternationally recognised
ISO9002 Quality Assurance Standard - precision injection moulders working to the
demanding QS9000 automotive standards,

http://homepages.enterprise.net/caistorg/p_injmol.html

Injection Moulding

[http://www.borealisgroup.com/public/customer/injection](http://www.borealisgroup.com/public/customer/injection_moulding/caps_and_closures/MainPage.jsp)

[moulding/caps_and_closures/MainPage.jsp](http://www.borealisgroup.com/public/customer/injection_moulding/caps_and_closures/MainPage.jsp)

Injection Moulding

http://www.teachingplastics.org/hands_on_plastics/intro_to_plastics/students.html

Plastics

<http://home.howstuffworks.com/question217.htm>

Plastics