

Task 2 – Manufacture and test

You must:

- a) produce a risk assessment for the manufacture of the prototype
- b) manufacture the prototype
- c) test the operation of the prototype.

The prototype can be full size or a scale model (the minimum acceptable size is 1:5 scale).

Conditions of assessment:

- the time allocated for this task is **13 hours**
- you must carry out the task on your own, under **controlled conditions**.

Controlled conditions:

- you must only work on the tasks in the allocated times
- assessment evidence must be handed in at the end of each session for secure storage which cannot be accessed
- you must not share or discuss your work with other candidates
- you are not permitted to bring any materials into the assessment session.

What must be produced for marking:

- risk assessment
- test records for the results of testing the prototype
- prototype.

Additional evidence for this task:

- assessor observations:
 - manufacture of the prototype
 - testing.

To support the comments made within the Practical Observation the assessor must capture the following photographs and videos that must be submitted as supporting evidence for each candidate.

Photographic evidence which shows:

- sequence of photos during the construction of the prototype to include:
 - results of tool selection and usage
 - the fit and relative orientation of the mechanical parts
 - final prototype.

Video evidence which shows:

- functionality of the model.

Resources:

- copies of completed documentation from task 1
- appropriate materials, components and facilities to produce the model
- hand tools
- measurement equipment, including engineers rule, Vernier callipers.

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