

Assessment 2

Object

To produce a CAD Engineering drawing of the M10 Clamp to enable the ease of manufacture and reduce cost.

You must consider the following factors when planning your drawing:

1. The most cost effective Material
2. Any heat treatment or special finish requirements to enhance the life of the product
3. The amount of clearance required for the clamp screw
4. Tolerances dimensional and geometrical to ensure quality

Method

- 1- Study the given isometric sketch and check for errors (*missing dimensions, revisions, currency and validity*) – Any errors must be reported using the approved error notification sheet and submitted to the appropriate person.
- 2- Produce a fully dimensioned standard 3 view Engineering CAD drawing to BS888/ISO128 Standards **full size** from the direction of the arrows shown. (*On the A4 Template you produced for Assessment 1*)
- 3- The component must be drawn in first angle projection. Ensure you mark the appropriate symbol for projection on the drawing sheet.
- 4- Complete the box information :
Description, Title, Date, Scale, Drawn by, projection used and any other relevant information.
- 5- Use appropriate BS888/ISO128 conventions and symbols to annotate your drawing
- 6- Ensure you apply dimensional and geometrical tolerances to your drawing specification

You will be expected to include the following detail in your CAD drawing:

- The use of layers is required
- Appropriate selection of Line types
- All required symbols and conventions
- Geometrical & Dimensional tolerances
- All required box information