T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Engineering, Manufacturing, Processing and Control

Employer-Set Project (8730-034)

Task 1
Autumn 2023

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Task 1 – Research

You have been asked to review the project brief and research potential approaches to 'go/no-go' gauges that JDH engineering could produce to improve the reliability of measurement checks.

You are to conduct research to determine:

- potential approaches that could be used to design a gauge that meets the gauge requirements stipulated in the project brief
- suitable manufacturing processes for the production of the gauge and how this could influence the design
- suitable materials for gauges to be manufactured from, and materials that should be avoided
- suitable material sizes, dimensions, and tolerances for the gauge
- anthropometric and ergonomic considerations for handling the gauge.

Record notes on the findings of your research and initial analysis. Your notes may include:

- material supplier data sheets
- sketches or images showing the range of approaches that could be taken when designing a gauge
- relevant anthropometric data and ergonomic needs of the handle
- extracts from tooling aid supplier catalogues showing gauge components and materials that could be used to manufacture a gauge.

The research notes will typically be 1500 words. You must outline how you planned and approached your research within your notes. You must include a list of your references/sources alongside your research notes.

Timing of assessment

- You will have **three hours** to complete the research and record your findings.

Conditions of assessment

- Your research must be completed working alone under supervised conditions.
- You must not share or discuss your work with other candidates.
- You will have access to the Internet to conduct your research.
- Assessment evidence must be handed in at the end of each session for secure storage which cannot be accessed.

What you must submit on completion of this task

- **Research notes** (typically 1500 words) hard copy or file saved securely (e.g., on memory stick to be handed in) including a list of references/sources. References/sources are not included in the 1500 word count.

Marks available

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Get in touch

City & Guilds Technicals Quality Team

We are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

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E: technicals.quality@cityandguilds.com

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