

**OCR Level 1/Level 2 Cambridge National in Engineering
Manufacture
Qualification J823
Unit R015
Unit Recording Sheet**

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| Please read the instructions printed at the end of this form. A Unit Recording Sheet must be completed for each candidate and unit. | | | | | | | | | | |
| Unit Title | Manufacturing a one-off product | Unit Code | R015 | Session | | Year | 2 | 0 | | |
| Scenario Title | | | | | | | | | | |
| Centre Name | | | | | | Centre Number | | | | |
| Candidate Name | | | | | | Candidate Number | | | | |

| Marking Criteria | | | Teacher Comments | Mark | Page No. |
|--|---|--|------------------|------|----------|
| Task 1 – Topic Areas 1.1, 1.2: Interpret an engineering drawing and prepare a production plan | | | | | |
| MB1: 1 - 5 marks | MB2: 6 - 10 marks | MB3: 11- 14 marks | | | |
| <p>A basic plan that includes information that could be used when making the product, however additional content would be required to facilitate manufacture.</p> <p>A few of the materials needed are identified.</p> <p>Few suitable processes, tools and equipment are identified.</p> <p>Few health and safety issues have been considered.</p> <p>At least one quality control measure has been identified.</p> <p style="text-align: right;">[1 2 3 4 5]</p> | <p>An adequate plan that includes information that could be used when making the product to facilitate manufacture.</p> <p>Some of the materials needed are identified.</p> <p>Some of the processes, tools and equipment are suitable and presented in a workable sequence.</p> <p>Some health and safety issues have been considered.</p> <p>Some quality control measures identified.</p> <p style="text-align: right;">[6 7 8 9 10]</p> | <p>A comprehensive plan that includes all the information required to facilitate manufacture of the product.</p> <p>All materials needed are accurately identified.</p> <p>All processes, tools and equipment are appropriate and presented in a logical sequence.</p> <p>All health and safety issues have been considered.</p> <p>Appropriate quality control measures identified to support the manufacture of an effective outcome.</p> <p style="text-align: right;">[11 12 13 14]</p> | | | |
| | | | /14 | | |

| Marking Criteria | | | Teacher Comments | Mark | Page No. |
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| Task 2 – Topic Area 1.3: Risk assessment | | | | | |
| MB1: 1 - 2 marks | MB2: 3 - 4 marks | MB3: 5- 6 marks | | | |
| At least one potential hazard is identified and the risk of occurrence estimated. At least one control measure has been identified. [1 2] | Some potential hazards are identified and the risk of occurrence for each is estimated. Appropriate control measures identified for some of the hazards. [3 4] | All of the potential hazards of the process are identified and the risk of occurrence for each is estimated. Appropriate control measures identified for all of the hazards. [5 6] | | | |
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| Marking Criteria | | | Teacher Comments | Mark | Page No. |
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| Task 3 – Topic Areas 2.1 and 2.2: Measuring and marking out | | | | | |
| MB1: 1 - 4 marks | MB2: 5 - 8 marks | MB3: 9 - 12 marks | | | |
| Use at least one item of measuring equipment. Safely use a few items of marking out equipment. Dependent upon assistance or help from other sources to measure and mark out accurately. [1 2 3 4] | Select and use some appropriate items of measuring equipment. Select and safely use marking out equipment for some of the features. Accurate measuring and marking out is carried out with some assistance or help from other sources. [5 6 7 8] | All measuring equipment is selected and used appropriately. Select and safely use appropriate marking out equipment for all of the features. Able to accurately measure and mark out independently . [9 10 11 12] | | | |
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| Marking Criteria | | | Teacher Comments | Mark | Page No. |
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| Task 4 – Topic Area 3.1: Manually controlled machining processes | | | | | |
| MB1: 1 - 5 marks | MB2: 6 - 10 marks | MB3: 11- 14 marks | | | |
| <p>Dependent upon reminders of safety requirements in order to work safely.</p> <p>Basic application of understanding and skills to partly achieve the intended result, but it would not be useable without further input/work.</p> <p>Dependent upon assistance or help from other sources to use machinery to successfully manufacture the required part.</p> <p style="text-align: right;">[1 2 3 4 5]</p> | <p>Worked safely with some reminders of safety requirements.</p> <p>Adequate application of understanding and skills to produce the intended result in a way that would be useable for its purpose.</p> <p>Machinery is used to successfully manufacture the required part with some assistance or help from other sources.</p> <p style="text-align: right;">[6 7 8 9 10]</p> | <p>Worked safely at all times without additional instruction.</p> <p>Effectively applies understanding and skills to successfully produce the intended result in a way that would be fit-for-purpose.</p> <p>Able to use machinery to successfully manufacture the required part independently.</p> <p style="text-align: right;">[11 12 13 14]</p> | | | |
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| Task 5 – Topic Areas 3.2 and 3.3: Tools and equipment and joining techniques | | | | | |
| MB1: 1 - 5 marks | MB2: 6 - 10 marks | MB3: 11- 14 marks | | | |
| <p>Dependent upon reminders of safety requirements in order to work safely.</p> <p>Basic application of understanding and skills to partly achieve the intended result, but it would not be useable without further input/work.</p> <p>Dependent upon assistance or help from other sources to use tools and equipment to successfully manufacture the part(s) and assemble the product.</p> <p style="text-align: right;">[1 2 3 4 5]</p> | <p>Worked safely with some reminders of safety requirements.</p> <p>Adequate application of understanding and skills to produce the intended result in a way that would be useable.</p> <p>Tools and equipment are used to successfully manufacture the part(s) and assemble the product with some assistance or help from other sources.</p> <p style="text-align: right;">[6 7 8 9 10]</p> | <p>Worked safely at all times without additional instruction.</p> <p>Effectively applies understanding and skills to successfully produce the intended result in a way that would be fully fit-for-purpose.</p> <p>Able to use tools and equipment independently to successfully manufacture the part(s) and assemble the product.</p> <p style="text-align: right;">[11 12 13 14]</p> | | | |
| | | | | /14 | |
| Total | | | | /60 | |

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| Please tick to confirm this work has been standardised internally | |
|---|--|

Please note: This form may be updated on an annual basis. The current version of this form will be available on the OCR website (www.ocr.org.uk).

A Centre Authentication form (CCS160) **must** be completed for each submission to the moderator. This **must** be held in your centre to be available on request at centre inspection.

Guidance on Completion of this Form

- 1 One form should be used for every candidate.
- 2 Please make sure that all parts of the form are completed.
- 3 Please enter specific page numbers where evidence can be found in the portfolio, and where possible, indicate to which part of the text in the mark band the evidence relates.
- 4 Circle/highlight the mark awarded for each strand of the marking criteria in the appropriate box.
- 5 Enter the circled/highlighted mark in the 'Mark' column.
- 6 Add the marks for the strands together to give a total out of 60. Enter this total in the relevant box.
- 7 For Paper-based submissions, one of these sheets, suitably completed, should be attached to the assessed work of each candidate.
- 8 For Electronic Internal submissions, prior to submitting 'candidate evidence' to OCR (via the Repository/SfA or via a USB), the Centre should add a separate folder containing the Unit Recording Sheets.