# Skills Assessment : Angle bracket

**Event 3 of 3**

## Criteria

### Unit code, name and release number

MEM05005B - Carry out mechanical cutting (1)

### Qualification/Course code, name and release number

MEM30305 - Certificate III in Engineering - Fabrication Trade (4)

## Student details

### Student number

### Student name

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Version: *1.0*

Date created: *3 July 2018*

Date modified: *18/11/2019*

For queries, please contact:

IMRS Skillspoint

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RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your required skills and knowledge as required to be deemed satisfactory in meeting the necessary requirements as stated in UAG for Carry out Mechanical Cutting and covers the elements.   1. Determine job requirements 2. Select/Set up machine tooling 3. Operate cutting machine   Check material for conformance to specifications. |
| **Assessment Event number** | 3 of 3 |
| **Instructions for this assessment** | This is a skill based assessment and will be assessing you on your ability to demonstrate skills required in the unit.  This assessment is in 3 parts   1. Practical task 2. Observation checklist   3. Assessment feedback  The observation checklists are proved for each task to identify the skills you are to demonstrate. Assessment feedback is provided at the end of this document. |
| **Submission instructions** | On completion of this assessment, you are required to upload it or hand it to your assessor for marking.  Ensure you have written your name at the bottom of each page of this assessment.  It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment.  ***On completion***  ***On satisfactory completion of this task, the angle bracket material is to be retained and used for a practical welding task.*** |
| **What do I need to do to achieve a satisfactory result?** | To successfully complete this assessment the student will be available at the arranged time to complete all the assessment criteria as outlined in the assessment instructions.  All parts of the observable task must be performed to a satisfactory level as indicated in the criteria section of the Observation Checklist.  All oral questions must be answered correctly to be deemed satisfactory in this assessment task; however, Assessors may ask questions to clarify understanding. |
| **What do I need to provide?** | Pens, PPE |
| **Due date/time allowed/venue** | Task 1: Angle bracket – 1 Hour |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with Every Students Guide to Assessment. |

## Specific task instructions

The instructions and the criteria in the tasks and activities below will be used by the assessor to determine whether the tasks and activities have been satisfactorily completed. Use these instructions and criteria to ensure you demonstrate the required skills and knowledge.

If this assessment requires you to record information, your assessor will provide you with an appropriate document/template.

## Part 1: Practical

To complete this part of the assessment, the student is required to participate in a practical demonstration of how to complete a task or activity.

This practical will be observed by you, or the student can digitally record them and submit them as evidence.

The student’s responses will be used as part of the overall evidence requirements of the unit.

You should refer to the list of criteria provided in the Observation Checklist to understand what skills the student is required to demonstrate in this section of the assessment. This Checklist outlines the Performance Criteria, Performance Evidence and Assessment Conditions you will be marking the student on.

Once completed the student is required to submit this assessment and the tasks and activities required to be completed to you for marking.

**Contingency Management:**

While undertaking this task a number of unforeseen circumstances may arise. The assessor will have the opportunity to question each learner to gather an understanding of how the student will respond to these events. Below is a table with examples of possible questions and acceptable responses.

The assessor has the opportunity in the observation checklist to record relevant questions and responses in the table ***“Table 3 Additional Questions”***

Table 4 Unforeseen Circumstances

|  |  |  |
| --- | --- | --- |
| Scenario | Assessors question | Acceptable students response |
| Power failure in workshop | What is the correct action in the case of power failure? |  |
| Mechanical cutting machine failure | What do you need to do if the mechanical cutting machine fails and prevents you from carrying out the cutting task? |  |
| Emergency evacuation | What do you do if an emergency evacuation drill happens during the assessment? |  |

**Task 1: Manufacture Angle bracket using mechanical cutting equipment**

Task 1 consists of four (4) steps as described below:

**Step 1:**

Refer to the specification for the angle bracket material requirements. Complete the information in ***Table 1: Material list/cutting list*** attached.

Identify all the machine and tooling required to complete Task 1: Manufacture angle bracket. Complete the information in ***Table 2: Select machine and tooling*** attached.

**Step 2:**

Refer to the drawing and specifications to mark out each item of the angle bracket

* Mark out each item for the angle bracket as per the drawing specifications
* Check marking out is correct to specifications using appropriate measuring equipment
* Witness all marking out
* Stamp you initials in the bottom right corner of the material

**Step 3:**

Set up cutting machine required to produce holes as per specifications

* Set up tooling correctly to produce holes
* Adjust machine and tooling as necessary to produce holes
* Ensure material is secured and positioned correctly
* Punch required holes as per specification

**Step 4:**

Set up cutting machine required to produce angle bracket (Item A, B C)

* Set up tooling correctly to cut material to size and shape
* Adjust machine and tooling as necessary to cut to material correctly
* Ensure material is secured and positioned correctly
* Cut material to shape and size as per specification

**Note:** Ensure all sharp edges are removed before submitting for assessment

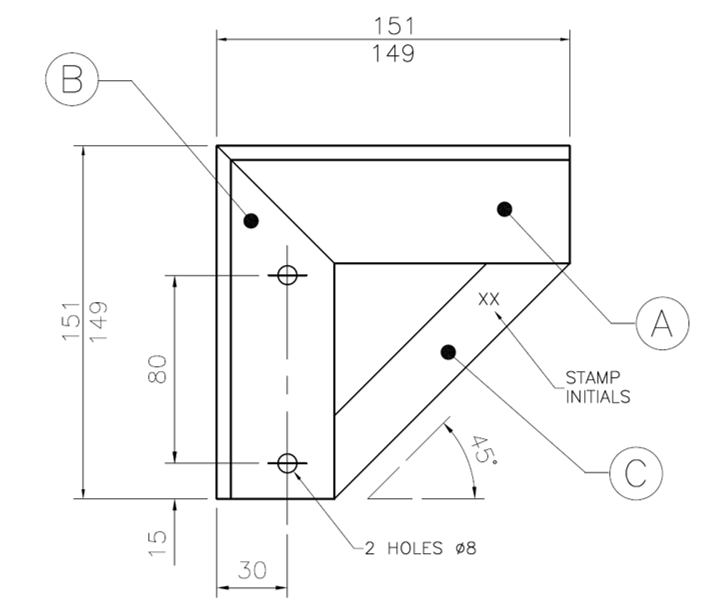
Simulated Environment Conditions

***Note: The assessor may direct the student to use different equipment in different spaces to ensure competency is applied in new and different situations.***

The assessment is to be carried out in the workshop complying with all WHS requirements and compliance with Standard Operating Procedures.

## The assessment should take approximately 1 hour.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Quantity | Title | Material | Finish requirements | Tolerance | Sheet Number |
| 2  1 | Angle bracket | ***Item A & B***  50 x 6mm EA 400mm long  ***Item C***  25 x 6 mm Flat Bar 250mm long | Remove all sharp edges  All cuts to be done using mechanical cutting equipment | + - 1mm Angles + - 10  All dimensions in mm UNO | 1 of 1 |



## Table 1: Material Cutting list

Complete the following table listing material required to produce the angle bracket

|  |  |  |
| --- | --- | --- |
| Quantity | Material | Dimensions |
|  |  |  |
|  |  |  |

## Table 2: Selecting machine and tooling

Complete the following table listing the cutting machine and tooling required to produce the angle bracket

|  |  |  |
| --- | --- | --- |
| Procedure/Task | Cutting machine | Tooling |
| Marking out |  |  |
|  |
|  |
|  |
|  |
| Measuring to specifications |  |  |
| 8 mm punched holes |  |  |
| Cut material to shape |  |  |
| Remove sharp edges |  |  |
| Stamp initials |  |  |

## 

## Part 2: Observation Checklist

The Observation Checklist will be used by your assessor to mark your performance in the manufacture of the angle bracket. Use this Checklist to understand what skills you are required to demonstrate in this section of the assessment. This Checklist outlines the Performance Criteria, Performance Evidence and Assessment Conditions you will be assessed on. All the criteria must be met. Your demonstration will be used as part of the overall evidence requirements of the unit. You may ask questions while the demonstration is taking place or if appropriate directly after the task/activity has been completed.

Table 2 Observation Checklist

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item# | Task requirements | S | U/S | Assessor comments  (describe the students ability in demonstrating the required skills and knowledge) |
|  | Task outcomes and objectives are verbally presented by the assessor. You are to ask your assessor questions to clarify task-related information |  |  |  |
|  | Standard Operating procedures (SOP) for Operating mechanical cutting equipment are followed   * Wear correct PPE * Carry out prestart checks * Follow safe work practices and housekeeping * Carry out shutdown procedure |  |  |  |
|  | Refer to detailed drawing to identify the most appropriate mechanical cutting equipment and source the appropriate tools and equipment required to complete Task 1 |  |  |  |
|  | Mark out material as per specifications using material economically |  |  |  |
|  | Select the appropriate mechanical cutting machine.  Identify condition  Prestart machine check  Determine- safe for use. Tag out if required  Maintained before, during and use |  |  |  |
|  | Set up cutting machine, load material and adjusts accordingly as per  Standard operating procedure (SOP) prior to cutting |  |  |  |
|  | Follow Safe work practice/ codes/standard operating procedures for operating mechanical cutting equipment at all times |  |  |  |
|  | Measure angle bracket to check conformance to specifications |  |  |  |
|  | Shut down mechanical cutting equipment and returned tooling to correct storage on completion of task |  |  |  |
|  | Student shut down mechanical cutting equipment and returned tooling to correct storage on completion of task |  |  |  |

|  |
| --- |
| Additional Questions |
| Assessors may ask additional questions to clarify student understanding. List here any additional questions that were asked during this assessment event.  *Record all additional questions that were asked of the student during the assessment event.* |
| **Student Reponses to Additional Questions** |
| List here the student responses to any additional questions that were asked during this assessment event.  *Record the student responses to any additional questions that were asked during this assessment event.* |

## Part 3: Assessment Feedback

*NOTE: This section* ***must*** *have the assessor signature and student signature to complete the feedback.*

### Assessment outcome: Manufacture angle bracket

Satisfactory

Unsatisfactory

### Assessor Feedback

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

***NOTE: Make sure you have written your name at the bottom of each page of your submission before attaching the cover sheet and submitting to your assessor for marking.***