# Skills Assessment: Slotted Plate

**Event 2 of 3**

## Criteria

### Unit code, name and release number

MEM18002B - Use power tools/hand held operations (1)

\*\*\*This unit sits in the qualifications below – This assessment is not to be amended\*\*

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

MEM30205 – Certificate III in Engineering – Mechanical Trade (3)

MEM30305 – Certificate III in Engineering – Fabrication trade (4)

\*\*\* Amend the qualification box before distributing to the student. The information here should only contain the qualification the student is enrolled in\*\*

## 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: *24/10/2019*

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 skills as would be required to perform hand held power tool operations. |
| **Assessment Event number** | 2 of 3 |
| **Instructions for this assessment** | This is a skill based assessment and will be assessing you on your ability to demonstrate skills required to Manufacture a slotted plate.  This assessment is in 3 parts:   1. Practical 2. Observation Checklist 3. Assessment Feedback |
| **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. |
| **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, measuring equipment, PPE |
| **Due date/time allowed/venue** | *TBC*  60 minutes |
| **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, you will be required to participate in a practical demonstration of how to complete a task or activity.

These practicals will be observed by your assessor, or can be digitally recorded and submitted as evidence.

Your responses will be used as part of the overall evidence requirements of the unit.

You should refer to the list of criteria in the Observation Checklist to understand what you need to demonstrate in this section of the assessment. This Checklist outlines the assessment criteria used to assess your performance.

Once completed you will need to submit this assessment and the tasks and activities you are required to complete to your assessor 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? |  |
| Power tool failure | What do you need to do if a power tool fails during the practical task? |  |
| Emergency evacuation | What do you do if an emergency evacuation drill happens during the assessment? |  |

**Instructions: Slotted plate**

The task consists of ten (10) steps as described below

**Step 1:**

Your assessor will deliver a verbal briefing session, outlining the steps to be completed for the assessment, including showing any documentation to be completed and materials and tools to be used.

At the completion of the verbal briefing session complete the following documentation:

Refer to the specification for the slotted plate (DWG - MEM182B) material requirements. Complete the information in ***Table 1: Material cutting list*** attached.

Identify all the tools and equipment required to complete Task: Manufacture the slotted plate as per Drawing supplied (MEM182B). Complete the information in ***Table 2: Organise tools and equipment*** attached.

Identify the work holding requirements to complete Task: Manufacture the slotted plate as per Drawing supplied (MEM182B). Complete the information in ***Table 3: Clamping equipment and techniques*** attached.

**Step 2:**

Refer to drawing MEM182B for specifications to manufacture and mark out the items for the slotted plate.

* Mark out the slots as the drawing specifications
* Check marking out is correct
* Witness all marking out
* Stamp you initials in the bottom right corner of the material

**Step 3:**

Cutting the material to length (**using powered cutting tool: Eg: Cold Saw**)

* Clamp the work piece securely using the selected equipment and technique
* Cut the material to the desired length

**Step 4:**

Producing 12mm elongated hole (**using portable drill**)

* Clamp the work piece securely using the selected equipment and technique
* Drill 10mm diameter as per marking out
* (12mm slot to be finished using portable die grinder)

**Step 5:**

Producing 12mm elongated slot (**using portable die grinder**)

* Clamp the work piece securely using the selected equipment and technique
* Grind elongated slot to 12mm as per marking out

**Step 6:**

Producing 16mm slot (**using fixed drilling machine**)

* Clamp the work piece securely using the selected equipment and technique
* Drill 16mm diameter as per marking out
* (16mm slot to be finished using portable angle grinder)

**Step 7:**

Producing 16mm slot (**using angle grinder**)

* Clamp the work piece securely using the selected equipment and technique
* Cut and Finish 16mm slot to size using angle grinder as per marking out

**Step 8:**

Producing 20mm x 20mm 45 degree chamfer (**using portable angle grinder**)

* Clamp the work piece securely using the selected equipment and technique
* Cut and Finish 20mm x 20mm 45 degree chamfer using angle grinder as per marking out

**Step 9:**

Producing 20mm radius (**using portable angle grinder and fixed grinding machine**)

* Clamp the work piece securely using the selected equipment and technique
* Remove excess material with portable grinder, prior to producing 20mm radius
* Cut and Finish 20mm radius using fixed position grinding machine as per marking out

**Step 10:**

Producing 10mm radius (**using fixed grinding machine**)

* Cut and Finish 10mm radius using fixed position grinding machine as per marking out

**Step 11:**

* Clean tooling/equipment and after use damage/fault check

**Note:** All sharp edges and burrs are to be removed using a finish hand tools

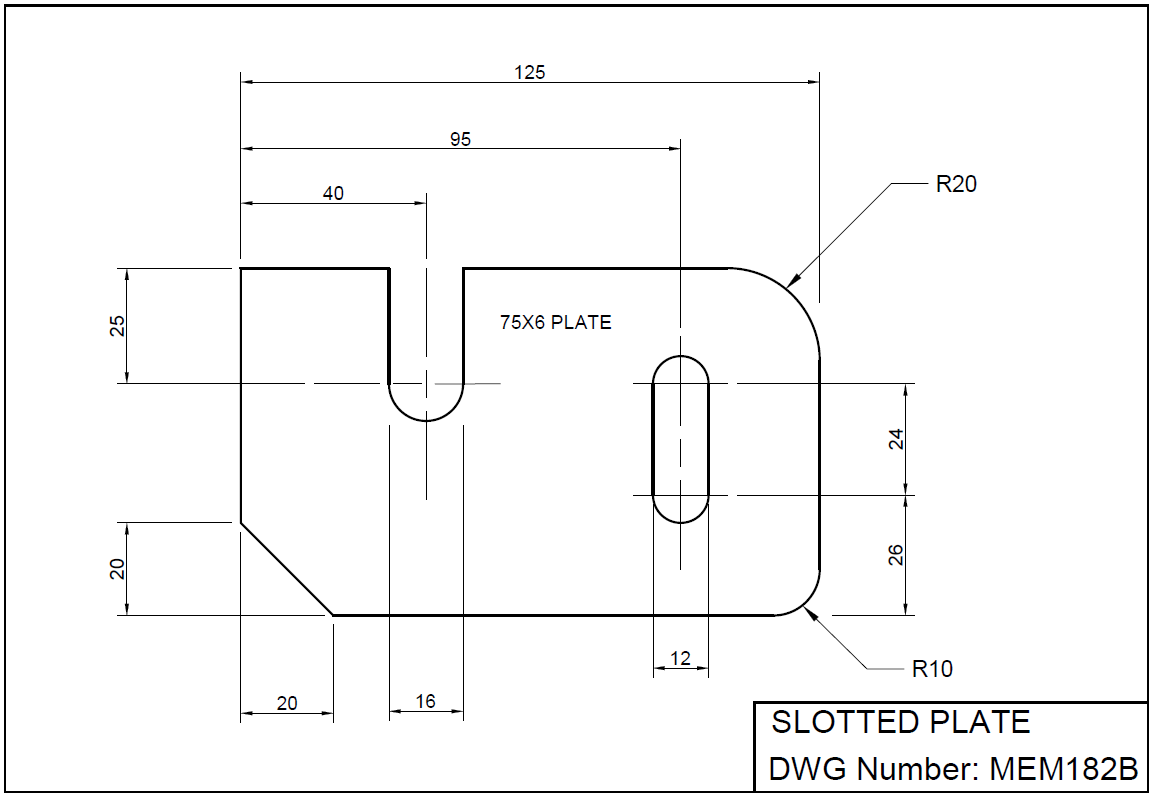
Simulated Environment Conditions

***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 60 minutes

|  |
| --- |
| Slotted plate (Drawing) |



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Quantity | Title | Material | Finish requirements | Tolerance | Sheet Number |
| 1 | Slotted plate | 75mm x 6mm Mild steel plate 140 mm in length | All sharp edges and burrs to be removed | +/- 1mm  All dimensions in mm UNO | 1 of 1 |

**Table 1: Material Cutting list**

Complete the following table listing materials required to produce the slotted plate.

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

**Table 2: Organise tools and equipment**

Complete the following table listing all tools and equipment required to produce the slotted plate drawing supplied

|  |  |
| --- | --- |
| Item # | Tools and Equipment |
|  |  |
|  |  |
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|  |  |

**Table 3: Clamping equipment and techniques**

While undertaking the task of manufacturing the slotted plate, the correct clamping procedures need to be followed.

Complete the following table listing the clamping technique used to secure the work piece for each stage of the process.

|  |  |  |
| --- | --- | --- |
| Item | Process | Clamping technique/securing device |
| 1 | Cutting material to length |  |
| 2 | Producing internal slots |  |
| 3 | Drilling using portable drill |  |
| 5 | Drilling using fixed drilling machine |  |
| 5 | Removing sharp edges or burrs |  |

## Part 2: Observation Checklist

The Observation Checklist will be used by you to mark the students’ performance in any of the previous three event types. Use this 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. All the criteria must be met. The student’s 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 1 Observation Checklist

| Item # | | Task: Manufacture slotted plate | S | U/S | Assessor Comments (Describe the student’s ability in demonstrating the required skills and knowledge) |
| --- | --- | --- | --- | --- | --- |
| 1 | Standard Operating Procedures (SOP) Job procedure sheets, job specification sheets, drawings, reference documents are referred to and used to develop the:   * Slotted plate | |  |  |  |
| 2 | Source the material for Task: Manufacture slotted plate.  Follow verb instruction for location of Material  Complete Table 1: Material cutting list | |  |  |  |
| 3 | Refer to procedure and detailed drawing to identify and select the appropriate tools and equipment required to complete the task.  Complete Table 2: Organise tools and equipment | |  |  |  |
| 4 | Identify the clamping device and techniques used for each process during the manufacture of the bolted lap joint  Complete Table 3: Clamping equipment and techniques | |  |  |  |
| 5 | Student sources the marking out kit and completes marking out as per specifications. | |  |  |  |
| 6 | Select the appropriate power tools.  Identify condition  Prestart tool check. Tag out if required unsafe  Determine- safe for use  Maintained before, during and after use. | |  |  |  |
| 7 | Ensure work is secured and correctly clamped during all processes | |  |  |  |
| 8 | Select the correct power tool for each task.  Used correctly and safely  Maintained before, during and use. | |  |  |  |
| 9 | Follow sequence of operations to produce item to specifications using the correct tool at all times  Used correctly and safely  Maintained before, during and use. | |  |  |  |
| 10 | Clean power tools/equipment  Appropriate action taken if tools damaged/faulty 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.* |

*Table 3: Additional questions*

## Part 2: Assessment Feedback

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

### Assessment 2 of 3 outcome

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.***