# Skills Assessment: Tool Sharpening

**Event 3 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 sharpening of tools by use of power tools. |
| **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 to sharpen a centre punch and Cold chisel  This assessment is in 3 parts:   1. Practical 2. Observation Checklist 3. Assessment Feedback   The observation checklists are provided 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. |
| **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 suitable for working in a manufacturing workshop and meet the SOP requirements. |
| **Due date/time allowed/venue** | *TBC*  30 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 are required to participate in a practical demonstration of how to complete a task or activity.

Your 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 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 marked on.

Once completed you are required to submit this assessment and the tasks and activities required to be completed by the assessor for marking.

**Contingency Management:**

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

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? |  |
| Bench/Pedestal grinder failure | What do you need to do if the bench/pedestal grinder fails and prevents you from carrying out the tool sharpening task? |  |
| Emergency evacuation | What do you do if an emergency evacuation drill happens during the assessment? |  |

**Task: Sharpen chisel and centre punch**

Task consists of three (3) steps as described below:

**Step 1:**

You are required to attend a verbal presentation and demonstration delivered by your assessor on how to safely operate a bench/pedestal grinder to sharpen chisels and centre punches on the bench/pedestal grinder.

**Step 2:**

Refer to the SOP for bench/pedestal grinders, and complete the information for ***Table 1: Safely sharpen chisel and centre punch on bench/pedestal grinder.***

**Step 3:**

***Student will be observed in the following to:***

* Sharpen a cold chisel to a point angle of 60 degrees
* Sharpen a centre punch to a point angle of 90 degrees
* A tool gauge is to be used to measure correct point angles for each tool
* Cutting edges on the chisel and point of the centre punch must be sharp without signs of overheating.

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 30 minutes.

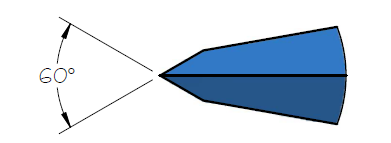
**Table 1: Safely sharpen chisel and centre punch on bench/pedestal grinder**

Complete the following table listing 10 prestart safety requirements that can be found in the Standard Operating Procedure (SOP) for the bench/pedestal grinder to sharpen a chisel and centre punch.

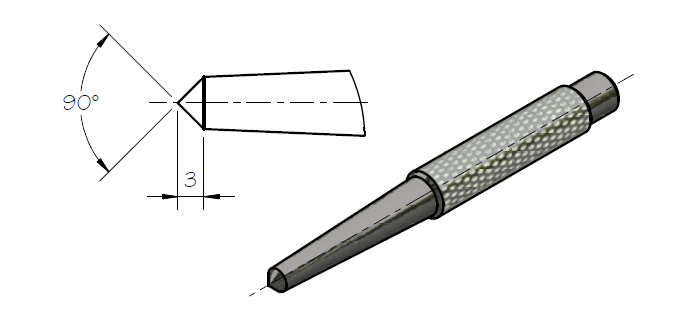
|  |  |
| --- | --- |
| Item # | Safely requirements to sharpen Chisel and centre punch on bench grinder |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |

Tool sharpening specifications

Flat cold chisel



Centre punch



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Quantity | Tool | Cutting Angle | Finish | Tolerance |
| 1 | Flat Cold chisel | 60 degrees | Cutting edge to be square even and uniform | +/- 3 degrees |
| 1 | Centre Punch | 90 degrees | Point angle to be even and centred | +/- 3 degrees |

**Part 2: Observation Checklist**

The Observation Checklist will be used by your assessor to mark your performance in the practical tasks. Use this Checklist to understand what skills you need to demonstrate to prepare materials and equipment before welding. The Checklist provides the assessment criteria used to determine whether you have successfully completed this assessment event. 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. These questions and responses are to be documented in the “***Table 3*** ***Additional Questions”*** table following the observation checklists

| Item # | | Task requirements | S | U/S | Assessor Comments (Describe the student’s ability in demonstrating the required skills and knowledge) |
| --- | --- | --- | --- | --- | --- |
| 1 | Attend demonstration for the use of bench/pedestal grinders and also follow verbal instructions for safe and correct grinding procedures of tools  Complete Table 1 with safety precautions to be followed as stated in the SOP | |  |  |  |
| 2 | Locate and refer to SOP for safe use of bench/pedestal grinders.  Complete the information in Table 1: Safely sharpen chisel and centre pop on bench grinder | |  |  |  |
| 3 | Follow Standard Operating Procedures (SOP) to operate a bench/pedestal grinder to sharpen tools Safely & correctly.   * Wear correct PPE suitable for task * Carry out before use checks for faults/safety and tag out if not in safe working order * Follow safe practices and housekeeping * Carry out after use checks | |  |  |  |
| 4 | Verbal instruction followed to source the flat cold chisel and centre punch for tool sharpening task. | |  |  |  |

| Item # | | Task requirements | S | U/S | Assessor Comments (Describe the student’s ability in demonstrating the required skills and knowledge) |
| --- | --- | --- | --- | --- | --- |
| 5 | Select the appropriate power tools. Identify condition, tag out if not safe for use.  Sharpen flat cold chisel correctly as per specification  Must follow safe procedure as stated in SOP and listed in table 1 | |  |  |  |
| 6 | Select the appropriate power tools. Identify condition, tag out if not safe for use.  Sharpen centre punch correctly as per specification  Must follow safe procedure as stated in SOP and listed in table 1 | |  |  |  |
| 7 | After use Maintenance check as per manufactures recommendations  Tag out if required  Student returned tools and equipment to correct storage on completion of task | |  |  |  |

Table 3 Additional Questions

|  |
| --- |
| 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 2: Assessment Feedback

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

### Assessment outcome Task: Sharpen chisel and centre punch

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.***