



Forename: \_\_\_\_\_ Surname: \_\_\_\_\_

School / College/ Institution \_\_\_\_\_

Course date: / / RDTHSC: \_\_\_\_\_

Colleagues must demonstrate their theoretical and practical knowledge, skills and understanding of the use of power fret saws in school workshops by completing the following assessment tasks  
Please tick in the appropriate column to confirm your knowledge and understanding and that you have completed the practical tasks set

Assessment Task 1 Hazards and Control Measures		Tick
Hazards	Safe system of working (control measures)	
Entrapment/hands or fingers in contact with the saw blade	<ul style="list-style-type: none"> <li>• Long hair and loose clothing should be secured</li> <li>• Dangling jewellery should be removed</li> <li>• Gloves or bandages should not be worn</li> <li>• Blades should be guarded and the hold-down arm and guard must be used at all times.</li> </ul>	<input type="checkbox"/>
Blunt/use of incorrect blades	<ul style="list-style-type: none"> <li>• Blades should be sharp, and should be of the correct pattern for the machine and distortion-free (blunt or distorted blades can break in use)</li> </ul>	<input type="checkbox"/>
Wood dust	<ul style="list-style-type: none"> <li>• A risk assessment should be carried out to evaluate the likely risks to health from inhalation of wood dust, and any action required to prevent or control the risks</li> <li>• Effective LEV to COSHH regulations should be in place if required by risk assessment</li> <li>• Suitable eye protection should be available near to machine</li> <li>• Eye protection stickers should be fitted on or close to the machine</li> <li>• Eye protection must be in use at all times</li> </ul>	<input type="checkbox"/>
Electric shock/inadvertent starting of the machine	<p><b>The machine must have:</b></p> <ul style="list-style-type: none"> <li>• A means of electrical isolation</li> <li>• Fused switch disconnect</li> <li>• Starter with overload protection and no-volt release</li> <li>• Armoured cable to isolator</li> <li>• A conveniently positioned control device that can quickly stop the machine in an emergency</li> <li>• Machine must be electrically isolated before blades are changed</li> <li>• The machine should be included in a planned maintenance programme that should include electrical safety tests</li> </ul>	<input type="checkbox"/>

The fret saw machine becoming detached from the bench	<ul style="list-style-type: none"> <li>The saw should be securely fixed to the bench. Alternatively, if on a floor mounted stand, the stand should be securely fixed</li> </ul>	<input type="checkbox"/>
Position/space around machine	<ul style="list-style-type: none"> <li>The height of the machine should be set for comfortable working as appropriate</li> <li>Sufficient space around the machine available to prevent the operator being pushed by passers by</li> </ul>	<input type="checkbox"/>
Slippery floor surface, loose items around machine	<ul style="list-style-type: none"> <li>Floor surface should not be slippery and should be kept free of loose items</li> <li>See BS4163: 2014 Section 6 Working Area Environment</li> </ul>	<input type="checkbox"/>
Lighting	<ul style="list-style-type: none"> <li>See BS4163: 2014 Section 6 Working Area Environment</li> </ul>	<input type="checkbox"/>

**Teaching Strategies**

- It is essential that risk assessments are completed to cover the use of these machines by learners and colleagues. This will normally involve the adoption and adaptation of model risk assessments, e.g. BS4163: 2014
- It is essential that a regular maintenance programme is put into operation and that a maintenance log is kept. This should involve daily, weekly and termly checks, covering general maintenance and identifying any faults that require repairs
- Local exhaust ventilation (LEV) systems where fitted should be cleaned at least weekly. The COSHH Regulations require that systems should be examined at least every 14 months and a record maintained of the efficiency of the system
- Learners should be aware of the hazards associated with the equipment and the precautions that should be taken during use
- Before using the equipment, learners should be trained and assessed as competent, and a record of their training should be kept
- Learners should be supervised at all times by a trained, competent person
- Fret sawing machine health and safety rules should be available and observed
- Demonstration of fret sawing machines to learners should include:
  - The position of all controls, i.e. workshop emergency stop buttons, isolator switch and start and emergency stop buttons on machine
  - The use of LEV
  - How to check the condition of the blade
  - The use of and correct position of the hold down arm and guard
  - The use of eye protection, and dust masks if required
  - How to hold material being cut, i.e. firmly on the machine table, keeping fingers either side of the blade to prevent contact with the blade
  - Problems associated with using different materials, e.g. cutting acrylic

**Assessment Task 2  
Practical Skills**

Machine operation:

Cut an external shape to a marked line, to demonstrate:

- Correct adjustment of hold-down arm and guard
- Correct positioning of hands whilst cutting

Cut an internal shape to a marked line, to demonstrate:

- Correct procedure for removal and replacement of blade