

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

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

Course date:    /    /

**These Training and Accreditation Guidelines are based on the following essential publications:**

- Health and Safety Training Standards in Design & Technology: D&T Association
- BS 4163:2014 BRITISH STANDARD Health and safety for design and technology in educational and similar establishments – Code of practice
- Model Risk Assessments for D&T in Secondary Schools and Colleges: CLEAPSS

Please tick against each of the standards below to confirm your knowledge, skills and understanding and that you have completed Assessment Tasks 1 and 2. The RDTHSC/Trainer will sign and date this form on completion	Band Saw	Circular Saw	Vertical Panel Saw	Chop/Radial Arm Saws
<p>This includes band saws, circular saws, vertical panel circular saws and chop and radial arm saws. Colleagues must be aware that the circular saw should not be used by students in compulsory education. Colleagues must be able to demonstrate, through practical activities, their capability in using wood sawing machines, and their knowledge and understanding of:</p>				
<p>1. The types of saws commonly used in school workshops with reference to start and stop controls, safety devices, correct positioning of guards and dust collection</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>2. The HSE L114 Safe Use of Woodworking Machinery Approved Code of Practice and Guidance 1998 based on PUWER 1998 and its relevance to school workshops.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>3. The procedures for isolating these machines and the procedures for changing blades</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>4. The correct adjustment of fences and guards</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>5. The different types of saw blades commonly used and their purpose</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>6. The correct feed speeds to maintain safe cutting speeds and be able to detect defective saw blades</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>7. The use of push sticks with particular reference to the safe positioning of the left hand</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>8. The correct procedures for feeding material into the saw and for 'taking off' after cutting is complete; the specific precautions required when sawing long lengths of timber and when cutting large sheet materials</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>9. The routine maintenance as required and the cleaning of sawdust from the machine; they need to keep the area around the saw bench free from clutter to prevent tripping or slipping</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RDTHSC/Trainer signature: \_\_\_\_\_

Date: \_\_\_\_\_

Colleagues must demonstrate their theoretical and practical knowledge, skills and understanding of the use of wood sawing machines in school workshops by completing the following assessment tasks. Please tick in the appropriate column(s) to confirm your knowledge and understanding and that you have completed the practical tasks set

<b>Assessment Task 1</b>	
<b>Knowledge and Understanding</b>	
<b>1. The types of saws commonly used in school workshops with reference to start and stop controls, safety devices, correct positioning of guards and dust collection</b>	
<p><b>Know that:</b></p> <ul style="list-style-type: none"> <li>• Sawing machines fitted with a circular blade or saw band are classified as ‘high risk woodworking machines’</li> <li>• Where young persons (persons under 18) are employed or participating in a work experience scheme, employers are required to assess the risks and implement measures to protect their health and safety. Young persons should not use high-risk woodworking machinery unless they have been assessed as mature and competent and have received sufficient training, and a record of their training has been kept</li> <li>• BS 4163:2014 states that learners in schools and sixth form colleges should not use circular sawing and vertical panel circular sawing machines</li> <li>• Learners should only use band saws when they have been assessed and the assessment has shown that they are competent, and they are under the direct supervision of specifically trained employees.</li> <li>• For other sawing machines, the school should decide which are suitable for use by each group of learners, based upon maturity and competence, the level of supervision, and local authority/employer and national guidelines</li> <li>• Learners should be assessed and a record of their competence kept</li> </ul>	<input type="checkbox"/>
<p><b>Know the electrical installation requirements of wood sawing machines in school workshops:</b></p> <ul style="list-style-type: none"> <li>• Emergency switching systems must be provided in each separate student work area. However, preparation areas for staff use only need not have any emergency switching system and should not be affected by the emergency system of any other area</li> <li>• The machine must be electrically isolated, using a fused switch-disconnector on or adjacent to the machine, controlled by a starter incorporating overload protection and no-volt release</li> <li>• Isolation switches not incorporated in the equipment must be not more than 2m away from the equipment and positioned so that they can be operated safely while the equipment is in use. The switch should be clearly marked with the name of the machine</li> <li>• The machine should be provided with a conveniently positioned and accessible, emergency stop switch (which could be the normal “off” switch) or other suitable control device that can quickly stop the machine in an emergency</li> <li>• Band saws, circular saws, vertical panel saws, chop and radial arm saws must be able to be locked ‘off’, e.g. by use of a key-switch, when not in use and to prevent unauthorised use</li> </ul>	<input type="checkbox"/>
<p><b>Know the hazard of inhaling wood dust, i.e.:</b></p> <ul style="list-style-type: none"> <li>• The COSHH Regulations 2002 (as amended) require employers to prevent, or to adequately control, exposure by inhalation to wood dust. Dust from all types of wood, hardwood, softwood and composite materials such as medium density fibreboard (MDF) has been assigned a workplace exposure limit (WEL) of 5 mg m<sup>3</sup>. This is a time weighted average over an eight hour period. For both hardwood and softwood dusts the COSHH Regulations require employers to ensure that exposure by inhalation is reduced as far as reasonably practicable and in any case to below the WEL.</li> <li>• A risk assessment should be carried out on woodworking machinery to evaluate risks to health and any action required to prevent or control risks. This should involve consideration of the dust concentrations inhaled and the length of time exposed.</li> <li>• This is particularly important where machining operations produce fine dust that remains airborne and is easily inhaled.</li> <li>• Higher dust concentrations are produced from MDF than from hardwoods or softwoods.</li> </ul>	

<ul style="list-style-type: none"> <li>• Wood dust should be controlled by an effective local exhaust ventilation (LEV) system that captures and removes the dust at source before it can spread. The LEV should be properly designed, maintained and used correctly. LEV systems should be thoroughly examined at least every 14 months by a competent person and the results recorded and kept for a minimum of 5 years.</li> <li>• In addition to thorough examinations, a weekly check should be done to verify that the basic operational features are functioning correctly.</li> <li>• The presence of dust or chips on or around a machine is an indication that the LEV system might not be functioning correctly.</li> <li>• Where an effective LEV system is not in place, a dust mask conforming to BS EN 149:2001+A1:2009 class FFP3 should be used. Class FFP3 should be used when emptying or cleaning LEV systems and maintaining machines.</li> <li>• Training should be provided on correct use of respirators. Disposable filtering respirators should be replaced as appropriate in accordance with the manufacturer's instructions.</li> <li>• Respiratory protective equipment (RPE) should be used when engineering measures to reduce exposure by inhalation are not adequate</li> <li>• Appropriate disposable filtering respirators should provide adequate protection in these cases and should be replaced in accordance with the manufacturer's instructions</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the band saw, know:</b></p> <ul style="list-style-type: none"> <li>• The capacity of the machine</li> <li>• The method of powering and general mechanical operation, including tensioning and tracking mechanisms, different types of blade guides, e.g. use of solid insert guides and universal blade guides</li> <li>• Blade/pulley speeds, including the method of adjustment where applicable</li> <li>• Additional features of the machine, e.g. angle cutting, cross cutting, circle cutting</li> <li>• Details of the guarding of the blade, i.e.: guarding provided by the frame of the machine (requiring a tool for removal or the use of interlocks), the function and purpose of the adjustable front guard and under table guard</li> <li>• Band saws should be firmly fixed in place, including bench mounted saws</li> <li>• The main causes of accidents on band saws</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the circular saw, know:</b></p> <ul style="list-style-type: none"> <li>• The capacity of the machine</li> <li>• The method of powering and general mechanical operation</li> <li>• Additional features of the machine, e.g. angle cutting, cross cutting</li> <li>• Details of the guarding of the blade, i.e.: below the saw table by the frame of the machine, the function and purpose of the crown guard and the riving knife</li> <li>• The need for a suitable take-off table when using an assistant to help in drawing-off at the back of the saw</li> <li>• The main causes of accidents on circular saws</li> </ul>	<input type="checkbox"/>
<p><b>In relation to vertical panel saws, know:</b></p> <ul style="list-style-type: none"> <li>• The capacity of the machine</li> <li>• The method of powering and general mechanical operation</li> <li>• Details of the guarding of the blade, i.e. by use of a fixed guard to enclose the non-cutting part of the saw blade and a spring loaded guard that retracts when the machine is in contact with the material</li> <li>• The need for panel saws to be firmly fixed in place, with sufficient space around the saw so that boards can be handled safely</li> <li>• The main causes of accidents on vertical panel saws</li> </ul>	<input type="checkbox"/>

<p><b>In relation to chop and radial arm saws, know:</b></p> <ul style="list-style-type: none"> <li>• The capacity of the machine, N.B. ripping operations should not be carried out on radial arm saws</li> <li>• The method of powering and general mechanical operation</li> <li>• Additional features of the machine, e.g. angle cutting</li> <li>• Details of the guarding of the blade, i.e. by use of a fixed guard to enclose the non-cutting part of the saw blade, use of self-closing guards that rise and open on contact with the work piece and the use of nose guards</li> <li>• Machines should be fitted with a spring assisted return mechanism to return the saw unit to a safe rest position when it is released</li> <li>• The need for chop and radial arm saws to be firmly fixed in place, with particular reference to the safe use of bench mounted saws</li> <li>• The main causes of accidents on chop and radial arm saws</li> </ul>	<input type="checkbox"/>
<p><b>2. The HSE L114 Safe Use of Woodworking Machinery, Approved Code of Practice and Guidance 1998 based on PUWER 1998 and its relevance to school workshops</b></p>	
<p><b>Know the key documents which cover the safe use of wood sawing machines in school workshops, i.e.</b></p> <ul style="list-style-type: none"> <li>• HSE L114 Safe Use of Woodworking Machinery, Approved Code of Practice and Guidance 1998</li> <li>• BS 4163:2014 BRITISH STANDARD Health and safety for design and technology in educational and similar establishments – Code of practice</li> <li>• CLEAPSS Model Risk Assessments for D&amp;T</li> </ul>	<input type="checkbox"/>
<p><b>Know any recent changes in legislation and implications for practice in school workshops, e.g.</b></p> <ul style="list-style-type: none"> <li>• Wood sawing machines should be fitted with a braking device providing a run down time of less than 10 seconds</li> </ul>	<input type="checkbox"/>
<p><b>Know that:</b></p> <ul style="list-style-type: none"> <li>• Appropriate eye protection must be worn when operating wood sawing machines</li> <li>• High levels of noise can cause permanent hearing loss</li> <li>• Ear protection should be used if a noise risk assessment indicates that daily personal exposures exceed the action levels specified in the Control of Noise at Work Regulations 2005</li> <li>• Appropriate signs should be provided in each area to advise staff and learners on the use of personal protective equipment (PPE)</li> <li>• There are general safety measures which must be applied when using woodworking machinery, i.e. long hair should be protected from entanglement, loose clothing should not be worn, jewellery should be removed</li> </ul>	<input type="checkbox"/>
<p><b>Know the type of working environment required, i.e.</b></p> <ul style="list-style-type: none"> <li>• Lighting – at least 500 lx should be provided for normal bench and machine work (taking into consideration the stroboscopic effect of fluorescent lighting units)</li> <li>• Heating and ventilation – work areas should be maintained at a temperature comfortable to work in when appropriate protective clothing is worn. Fan assisted heating should be avoided</li> <li>• Flooring – floors should be provided with a non-slip surface which should be maintained in good condition. Accumulations of waste materials should be removed from floors each day. Floors should be kept free of obstacles and tripping hazards</li> </ul>	<input type="checkbox"/>

<p><b>3. The procedures for isolating these machines and the procedures for changing blades</b></p>	
<p><b>Know that:</b></p> <ul style="list-style-type: none"> <li>• Power operated equipment must be isolated from the power source and locked in the 'off' position when left unattended, when the qualified staff are not in the work area, before clearing out any blockage, before cleaning is undertaken or before blades are changed</li> <li>• Know that power operated equipment should be switched off before guards are adjusted and before chips or waste material is removed</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the band saw, know the procedures for changing the blade, i.e.</b></p> <ul style="list-style-type: none"> <li>• Release of tension, identification of blunt blades, replacement of blade checking direction of teeth, setting the tension and tracking, setting top and bottom blade guides into their correct positions, adjustment of the pulley brush</li> </ul> <p><b>In relation to the circular saw, panel saw and chop/radial arm saws, know the procedures for changing the blade, i.e.</b></p> <ul style="list-style-type: none"> <li>• Use of the correct tools for removal/replacement of the blade, checking condition of the flange plate, identification of blunt blades, replacement of blade checking direction of teeth</li> </ul>	<input type="checkbox"/>
<p><b>4. The correct adjustment of fences and guards</b></p>	
<p><b>In relation to the band saw, know:</b></p> <ul style="list-style-type: none"> <li>• How to adjust the front guard to accommodate different thicknesses of stock, ensuring that the guard is kept as low as possible at all times and that adjustments are not carried out while the blade is in motion</li> <li>• To adjust the front guard to its lowest position before leaving the machine, so as to leave the machine fully guarded</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the circular saw, know:</b></p> <ul style="list-style-type: none"> <li>• The correct position of the fence for ripping, i.e. extending no more than 50mm beyond the tips of the blade in the direction of feed</li> <li>• How to use an auxiliary fence for ripping narrow material, i.e. when the fence touches the crown guard</li> <li>• How to set the fence for cross cutting</li> <li>• Correct positioning of the crown guard, i.e. covering the roots of the teeth at all times</li> <li>• Correct adjustment of the crown guard, i.e. keeping it as close as possible to the work piece for each operation and ensuring that adjustments are not carried out while the blade is in motion</li> <li>• Correct setting of the saw for bevel and compound angle cutting</li> <li>• Correct adjustment of the riving knife, i.e. behind and in line with the blade, correct height and to within 3 and 8mm of the saw teeth</li> <li>• The hazard of the work piece becoming 'jammed' between the fence and the saw blade, both when ripping and cross-cutting, and the likelihood of 'kick-back' on the circular saw</li> <li>• To adjust the crown guard to its lowest position before leaving the machine, so as to leave the machine fully guarded</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the panel saw, know:</b></p> <ul style="list-style-type: none"> <li>• Boards should be located in the correct mounts and horizontal cuts should only be undertaken with the board located against an appropriate stop</li> </ul>	<input type="checkbox"/>

<p><b>5. The different types of saw blades commonly used and their purpose</b></p>	
<p><b>In relation to the band saw, know:</b></p> <ul style="list-style-type: none"> <li>• The types of saw blade in normal use and suitable blades for different materials, thickness of material and radius of cut required</li> <li>• Details required when purchasing blades, i.e. length, width, number of teeth per inch and suitable tooth form</li> <li>• To use blades with the correct number of teeth, i.e. to ensure that at least two to three teeth are in contact with the work piece</li> <li>• The importance of working with sharp blades, to avoid putting unnecessary pressure onto the work piece</li> <li>• The importance of working with correct tension for the width of blade in use and the advantages of releasing the tension overnight</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the circular saw, panel saw and chop/radial arm saws, know:</b></p> <ul style="list-style-type: none"> <li>• The types of saw blade in normal use, choosing blades for different applications</li> <li>• The principle features of saw blades, i.e. tooth characteristics and the use of tungsten tipped teeth</li> <li>• To use blades with the correct number of teeth, i.e. to ensure that at least two to three teeth are in contact with the work piece</li> <li>• The diameters of blades which can be safely used on the saw bench, i.e. on machines with a single working speed, saw blades should be no smaller than 60% of the largest diameter the machine was designed for</li> <li>• Methods for lubricating and cleaning blades</li> <li>• The importance of working with sharp blades, to avoid putting unnecessary pressure onto the work piece</li> </ul>	<input type="checkbox"/>
<p><b>6. The correct feed speeds to maintain safe cutting speeds and be able to detect defective saw blades</b></p>	
<p><b>In relation to the band saw, know:</b></p> <ul style="list-style-type: none"> <li>• Appropriate feed speeds matched to the material being cut, i.e. the importance of cutting at the correct speed, the effects of feeding work too fast and too slow</li> <li>• How to identify defects in saw blades, e.g. blunt, badly joined, uneven set, and cracks</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the circular saw, panel saw and chop/radial arm saws, know:</b></p> <ul style="list-style-type: none"> <li>• The importance of maintaining optimum peripheral blade speed</li> <li>• The likely consequences of running a blade at less than the speed for which it has been tensioned</li> <li>• Appropriate feed speeds matched to the material being cut, i.e. the importance of cutting at the correct speed, the effects of feeding work too fast and too slow</li> <li>• How to identify defects in saw blades, e.g. blunt, damaged/missing teeth, cracks, out of tension</li> </ul>	<input type="checkbox"/>
<p><b>7. The use of push sticks with particular reference to the safe positioning of the left hand</b></p>	
<p><b>In relation to the band saw, know:</b></p> <ul style="list-style-type: none"> <li>• The hazard of hands or fingers coming into contact with saw blades</li> <li>• Correct positioning of hands, i.e. keeping clear of the area immediately around the saw blade by use of a suitably designed push stick</li> </ul>	<input type="checkbox"/>
<p><b>In relation to the circular saw, know:</b></p> <ul style="list-style-type: none"> <li>• The hazard of hands or fingers coming into contact with saw blades</li> <li>• Suitable designs for push sticks and push blocks</li> <li>• Correct procedures for feeding work when ripping, i.e. use of the left hand to hold the face firmly against the fence and the right hand to feed timber into the blade, ensuring that hands are never in line with the saw blade</li> <li>• Correct use of push sticks (or push blocks) for making any cut of less than 300mm and for feeding the last 300mm of longer cuts</li> </ul>	<input type="checkbox"/>

8. The correct procedures for feeding material into the saw and for 'taking off' after cutting is complete; the specific precautions required when sawing long lengths of timber and when cutting large sheet materials (See Assessment Task 2 below)

9. The routine maintenance as required and the cleaning of sawdust from the machine; they need to keep the area around the saw bench free from clutter to prevent tripping or slipping

**Know:**

- Equipment should be maintained in line with the requirements of the 'Provision and Use of Work Equipment Regulations 1998', (i.e. by a person competent to repair and maintain machinery)
- The need to keep maintenance logs
- The need for electrical testing of equipment in line with 'The Electricity at Work Regulations 1989'
- The requirements of routine maintenance as recommended by the manufacturer, e.g. the need to replace drive belts, to undertake regular lubrication of the rise and fall and tilt arbor facilities on circular saws, to detect defective blade guides and thrust wheels and worn fingerplates on bandsaws, to regularly inspect saw blades for damage, e.g. TCT blades for chipped teeth or cracks
- The procedures for sharpening saw blades and that saw blades which have been overheated, should be discarded
- The need for good housekeeping around machines, e.g. floors should be kept clear of obstacles and tripping hazards, there should be sufficient space around machines so that timber can be handled safely, the take-off table should be kept clear of obstructions



Colleagues must demonstrate their theoretical and practical knowledge, skills and understanding of the use of wood sawing machines in school workshops by completing the following assessment tasks. Please tick in the appropriate column(s) to confirm your knowledge and understanding and that you have completed the practical tasks set.

**Assessment Task 2**

**Practical Skills**

Band Saw  
Circular Saw  
Vertical Panel Saw  
Chop/Radial Arm Saws

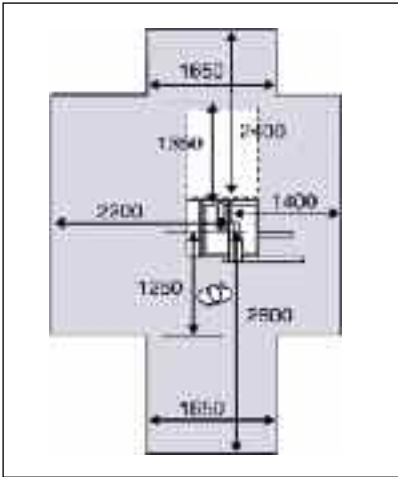
8. Colleagues should know and demonstrate through practical activities how to safely undertake a variety of operations to prepare a variety of materials accurately to size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Machine operation:</b>				
<b>All machines:</b>				
<b>Know how to remove blades and replace with sharpened blades:</b>				
<ul style="list-style-type: none"> <li>• Use of the correct tools</li> <li>• The correct procedure for fitting the blades firmly in place</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Bandsaw:</b>				
<b>Contour cutting, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Correct positioning of the adjustable front guard</li> <li>• Correct procedure for feeding work piece into the saw, cutting at an optimum speed and avoiding trapping or twisting of the blade</li> <li>• Correct positioning of hands and use of a pushstick for feeding close to the blade and to complete the cut</li> </ul>	<input type="checkbox"/>			
<b>Straight cutting, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Use of the fence</li> <li>• Correct procedure for feeding work piece into the saw</li> <li>• Correct positioning of hands and use of a pushstick to complete the cut</li> </ul>	<input type="checkbox"/>			
<b>Stopped cuts, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Correct procedure, making short cuts first and steps to avoid backing out</li> </ul>	<input type="checkbox"/>			
<b>Bevel cutting, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Adjustment of the table up to 45 degrees</li> <li>• Use of the fence as a support to prevent the workpiece falling from the table</li> </ul>	<input type="checkbox"/>			
<b>Cutting round material, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Use of a suitable jig or holder to prevent rotation of the work piece</li> </ul>	<input type="checkbox"/>			
<b>Cutting circles, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Use of a jig for cutting discs</li> </ul>	<input type="checkbox"/>			
<b>Circular Saw:</b>				
<b>Ripping to width using the rip fence, to demonstrate:</b>				
<ul style="list-style-type: none"> <li>• Correct positioning of the fence when ripping</li> <li>• Correct positioning of the crown guard</li> <li>• Correct procedure for feeding work piece into the saw and for 'taking off' after cutting is complete</li> <li>• Correct use of pushsticks, with particular attention to the left hand</li> </ul>	<input type="checkbox"/>			



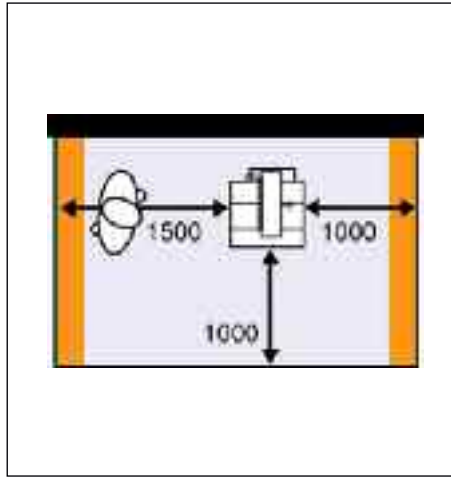
<b>Circular Saw continued:</b>	
<b>Ripping narrow material to width, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Repositioning fence on its' side or use of an additional false fence</li> </ul>	<input type="checkbox"/>
<b>Ripping to width using the tilt arbor facility, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Correct positioning of the crown guard for bevel cutting</li> </ul>	<input type="checkbox"/>
<b>Cross-cutting to length using the cross-cut slide, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Correct positioning of hands when operating the cross-cut slide (or sliding table)</li> </ul>	<input type="checkbox"/>
<b>Cross-cutting to length using the cross-cut slide (or sliding table) and the tilt arbor facility, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Use of the saw to prepare mitres</li> </ul>	<input type="checkbox"/>
<b>Cutting large sheet material, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Use of a second operator to lift sheet on to the saw (if required) and for removing work behind the take-off table</li> </ul>	<input type="checkbox"/>
<b>Vertical Panel Saw:</b>	
<b>Cut man-made board accurately to size, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Selection of appropriate blade</li> <li>• Holding and clamping procedures</li> <li>• Capacity of the machine for making vertical and horizontal cuts, i.e. smallest and largest panels which can be safely cut on the machine, maximum depth of cut</li> <li>• Correct positioning of hands whilst cutting</li> </ul>	<input type="checkbox"/>
<b>Chop and Radial Arm Saws:</b>	
<b><i>NB Ripping operations should not be carried out on radial arm saws</i></b> <b>Cross-cutting to length, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Capacity of the machine, i.e. smallest and largest material which can be safely cut on the machine</li> <li>• Use of the fence and stops</li> <li>• Correct positioning of hands during cutting, particularly the left hand</li> </ul>	<input type="checkbox"/>
<b>Cutting a mitre, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Use of the fence and stops</li> <li>• Correct positioning of hands during cutting, particularly the left hand</li> </ul>	<input type="checkbox"/>
<b>All machines:</b>	
<b>Safety checks, to demonstrate:</b> <ul style="list-style-type: none"> <li>• Correct positioning of guards and electrical isolation when sawing is complete, e.g. adjusting blade guides to the lowest position on bandsaws, lowering the crown guard to its lowest position on the circular saw, locking the machines to off, leaving machines safe for the next operator</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

## Supplementary materials

The space-allocation diagrams indicate the clear working space required on either side of the machines.



Circular Saw



Bandsaw

The following references provide additional notes and guidance to support training sessions:

[www.hse.gov.uk/pubns/woodindx.htm](http://www.hse.gov.uk/pubns/woodindx.htm)

Hyperlink to a series of HSE leaflets, all available as PDF files. Guidance on a range of issues relating to the use of woodworking machinery, the collection of dust and the retrofitting of braking, i.e.

- 'Safe working at woodworking machines' – woodworking sheet 15
  - 'Circular saw benches – safe working practices' – woodworking sheet 16
  - 'Safety in the use of narrow band saws' – woodworking information sheet 31
  - 'Safe use of manually operated cross cut saws' – woodworking information sheet 36
  - 'Wood dust: hazards and precautions' – woodworking information sheet 1
  - 'COSHH and the woodworking industries' – woodworking information sheet 6
  - 'Wood dust – controlling the risk' – woodworking information sheet 23
  - 'Selection of respiratory protective equipment suitable for use with wood dust' - woodworking information sheet 14
  - 'Toxic woods' – woodworking information sheet 30
  - 'Reducing noise at woodworking machines – woodworking information sheet 13
  - 'Safe collection of woodwaste: prevention of fire and explosion' – woodworking information sheet 32
  - 'PUWER 98: retrofitting of braking to woodworking machines' – woodworking information sheet 38
- In addition, the following leaflet is available from HSE at: [www.hse.gov.uk/pubns/indg318.htm](http://www.hse.gov.uk/pubns/indg318.htm) 'Manual handling solutions in woodworking' INDG 318(rev 1)