

INTRODUCTION

This guide provides practical advice about managing exposure to safety and health risks arising from the use of diamond concrete cutting and drilling equipment.

This equipment is used in operations such as:

CORE DRILLING

This process is used for the drilling of circular holes in reinforced concrete, precast concrete, asphalt, brick, cinderblock, and other structural materials. Usually, the holes are made for electrical, plumbing, heating, sewer, and sprinkler installations. Other applications include holes to anchor bolts or lifting rods, to place explosive charges, to install load-carrying devices, or for analysis of the structure or rock.

CONCRETE SLAB CUTTING

This process is used when reasonably level and flat surfaces have to be cut and includes cutting through reinforced concrete, precast concrete, and other structural materials. These surfaces include floors, roofs, bridge decks, and suspended slabs. The surfaces are usually cut to provide expansion joints, to make openings for ducts, elevators, stairwells, machine pads, trenching, and for demolition purposes.

CONCRETE WALL CUTTING

This process is used for the cutting of openings in vertical surfaces and surfaces with slopes so great that flat saws cannot be used. These surfaces are usually cut to provide for doors, windows, vaults, silos, chests, foundations, ducts or large diameter pipes, or to remove part or all of existing walls.

ASPHALT CUTTING

This process is usually done for trenching, to provide expansion joints, to remove damaged pavement sections prior to patching or to clean and prepare random cracks for repair.

SAFETY GROOVING AND TEXTURING

This process is used to make concrete, asphalt, and other surfaces more comfortable and safer to walk on. These surfaces include foot paths, stairs, public platforms and ramps.

MANAGING WORKPLACE SAFETY AND HEALTH

Under the OSH Act, exposure to health and safety risks that arise from workplace hazards must be managed. This includes concrete cutting and drilling operations.

General Cautions for Using Hand-Held Concrete Cutting Saws

- ALWAYS follow the designer's recommendations for the safe use of the saw.
- ONLY use correct blade size, as recommended by the saw manufacturer. Oversized blades are dangerous.
- NEVER use the saw with the guards removed.
- Do NOT hold hand-held concrete cutting saws any higher than shoulder height.
- Do NOT use hand-held concrete cutting saws for inverted cutting.

WORKING SAFELY ON SITE

Preparing a Safe Site

Those people responsible for workplace safety and health must ensure that the work site is safe, based on the results of the workplace health and safety risk management process, as recorded in the Job Hazard Analysis (JHA) or similar site evaluation.

Site preparation for concrete cutting and drilling operations should include consideration of:

- Weather/environmental conditions that can create hazards (e.g. heat, rain)
- Access to and from the work site
- Barricades and warning signs
- Provisions for appropriate personal protective equipment
- Specific health and safety instructions for the site
- Whether the equipment is suitable for the work, is properly maintained and will be used according to manufacturer's recommendations
- Provision for GFCI residual current devices for electrical equipment
- Safe removal of cut pieces and cores
- A method to collect residue to prevent the surface becoming slippery and to prevent residue entering storm water drains. Residue should be disposed of according to environmental protection requirements

Setting Up Safely: Using a Site Checklist

When setting up the site safely for concrete cutting and drilling activities, a safety checklist, such as the one at the end of this section, should be used to make sure that:

- Work areas and/or work platform are suitable and safe
- Locations of all services are marked/disconnected
- Exact location of the cut or drilling is clearly marked
- The blade/equipment is of correct type and in good condition
- Appropriate barricading and warning signs are erected
- The work area is adequately ventilated
- Adequate lighting is provided, where necessary
- Specific site hazards have been identified and safe systems of work are in place
- There is a method of collecting residue from the operation to prevent surfaces becoming slippery
- There is a method for safe removal or support of cut pieces or cores

Using Cutting Equipment Safely

Before cutting with road, floor, wall, and hand held saws, the operator should check that the equipment is safe. The general condition of the equipment should be checked by the operator before commencing each job to ensure that the cutting tool, guards, leads, and hydraulic hoses are in good order.

The operator should ensure that:

- The cutting blade is the right size and right type for the machine
- The blade is in good working condition and is free from cracks and deterioration
- The specified blade speed matches the saw drive speed
- The shaft and flanges are clean and undamaged
- The blade fits securely over the shaft
- The shaft nut is tightened against the outside flange
- The blade guard is fitted and in good working order
- The drive belt is at the correct tension
- For wet cuttings, adequate coolant/water is available
- A trolley is used to support the cutting machine for horizontal work at low level, so that operators do not have to work on their knees
- Other people on the site are not at risk
- Safe removal or support of cut pieces or cores is provided
- The equipment is protected at the power outlet with a Ground Fault Circuit Interrupter
- The area behind the cut is barricaded and warning signs are posted when cutting through floors or walls, to prevent people entering that area
- Safe operating procedures are in place when hand held saws are used in confined areas
- Appropriate personal protective equipment is provided, where required

During cutting, ensure that:

- The blade guard is in the lowered position
- When starting the machine, the operator and other people stand outside the path of the blade
- If the machine stalls, the blade is raised and the outside flange and nut are checked for tightness
- Wall cuts are performed with the operator's back close to vertical and the hands do not move above shoulder height
- Where possible, cut from a standing position with the feet braced and the body balanced. (In some circumstances, it may be necessary to kneel on one knee to enable cuts to be made close to the floor. In such circumstances, protection for the knee will be necessary.)
- When cutting horizontally across a wall, the operator's hand are at waist height
- The length of time the operator spends in a fixed positions is minimized
- The throttle lock is only used when starting the equipment. If the throttle lock is used during normal operation then the ability to cut power will be reduced
- The equipment is stopped when changing grip to move between horizontal and vertical cuts
- When pre-cutting to 6 inches and changing to a second blade, the blade is aligned with the previous cut on resumption of cutting
- The handles provided (rather than the belt guard) are used to support the equipment
- When using electrical equipment, the leads will not be cut during operation
- Any person, who is providing assistance to the operator, is located where they will not be exposed to danger from sudden saw movement, ejection of material, a dropped machine, or falling offcuts
- The saw is only used with blade rotating in the opposite direction to the cut and not used for inverted cutting
- Plenty of water or coolant is used and that the coolant/water is suppressing dust at the point of generation (airborne dust is a health hazard)
- Appropriate personal protective equipment is being worn

In situations where the power pack for a hydraulic and compressed air wall saw is not easily accessible, or the machine is not remotely controlled at the working head, a second operator should be available.

Using Hand-Held Concrete Cutting Saws

Hand-held concrete cutting saws should only be used where the use of larger, self-supporting saws is not practical. When it is necessary to use a hand-held concrete cutting saw, select one which:

- Has handholds for the operator's non-trigger hand
- Is as light weight as is practical for the type of work, to reduce manual handling risks
- Has the best type of guarding around the blade
- Is well balanced and has hand grips that are comfortable to use (poorly balanced machines might require operators to place their hands in dangerous positions near the blades to support the machine)
- Has the least vibration when in use, so as to reduce the risk of damage to the operator's blood circulation
- Can be used both left-handed and right-handed
- For horizontal cutting, can be used left-to-right and right-to-left without having to reposition the blade or guard

The operator must be instructed in, and competent at, operating the saw safely. Where possible, the saw should be used with the operator's hands at waist height when cutting horizontally, and between shoulder to knee height when cutting vertically. When necessary, provide scaffolding or supports to ensure safe use of the saw. Always check to ensure that hand-held concrete cutting saws have not been modified.

General Cautions for Using Hand-Held Concrete Cutting Saws

- ALWAYS follow the designer's recommendations for the safe use of the saw.
- ONLY use correct blade size, as recommended by the saw manufacturer.
- Oversized blades are dangerous.
- NEVER use the saw with the guards removed.
- Do NOT hold hand-held concrete cutting saws any higher than shoulder height.
- Do NOT use hand-held concrete cutting saws for inverted cutting.

Using Concrete Drilling Equipment Safely

Operators drilling concrete should ensure that:

- Close fitting clothing is worn to avoid entanglement.
- The drill is securely fastened to the work surface.
- The area below or behind the operation is barricaded to prevent people entering during drilling.
- Appropriate warning signs are posted.
- The drilling equipment is connected to a GFCI.
- Appropriate personal protective equipment is provided and being used.
- Hydraulic, air or flexible drive units and a drill stand are used for inverted drilling.
- Supply of coolant/water is adequate to suppress dust.

Protecting the Public

If cutting or drilling is carried out on a road, or in a public place, the public must be protected and a safe route around the work area must be provided.

Public safety measures include:

- Complying with local government requirements for road or footpath closure.
- Barricading or screening the work area to protect pedestrians and to prevent vehicle entry.
- Displaying warning signs and caution lighting where necessary lighting the area but ensuring there is no glare or shadows (where flood lighting is used, ensure it is positioned so as not to blind motorists).
- Providing wheelchair access around the area.

MAJOR HAZARDS & SUGGESTED CONTROLS

This section provides general information about the major hazards associated with concrete cutting and drilling operations. Following are some examples and suggested measures for controlling exposure to the risk associated with each hazard.

Airborne Hazards

Airborne hazards affecting the health and safety of concrete cutting and drilling operators can arise in several different ways:

- From dusts created from the cutting or drilling of the concrete itself.
- From exhaust gases generated by machines powered by internal combustion engines.
- From work conducted in confined spaces.
- From hazardous substances (chemicals or additives) used in the process.

Inhaling Dusts Created by Concrete Cutting & Drilling

Concrete cutting and drilling can generate large quantities of dust, which can include respirable silica dust. Exposure to silica dust can result in silicosis, a stiffening and scarring of the lungs. It results in shortness of breath, coughing, and chest pain. The effects are irreversible and lead to degeneration in the person's health, invariably resulting in death. The coarser rock and cement dust particulates can cause upper respiratory irritation and symptoms, such as bronchitis, if extensively exposed over long periods of time.

Dry methods of concrete cutting and drilling produce the highest levels of respirable dust.

Control Measures

Wherever possible, concrete cutting and drilling equipment should be fitted with collection devices to eliminate generated dust at the source.

Where dust extraction is not practical, wet methods should be used to minimize dust generation. Ensure that enough water/coolant is supplied to the operation to adequately suppress the dust. It might also be necessary to use respiratory protection for wet operations. An appropriate “N” series or “P” series particulate respirator will provide adequate protection for respirable quartz concentrations.

Where it is necessary to carry out the task dry, (e.g. due to the proximity of electrical fittings or machinery) ensure that particulate respirators with adequate protection are used.

Other people in the vicinity should also be protected from any dusts created by the cutting or drilling operation. Remove slurry before it dries, otherwise the dried dust can be re-dispersed to expose unprotected workers and others on the site.

If possible, workers should change into disposable or washable work clothes at the job site, shower (where available) and change into clean clothing after leaving the site to prevent contamination of cars, homes and other areas. Workers should not eat, drink, smoke, or apply cosmetics (including sunscreen) in areas where there is dust containing crystalline silica.

Exhaust Gases from Machinery

Exhaust gases from equipment powered by internal combustion engines, including carbon monoxide, oxides of nitrogen and aldehydes, are all toxic. Carbon monoxide is a chemical asphyxiant, which can cause rapid loss of coordination, unconsciousness, and death. Any engine operated in, or near, a poorly ventilated area can quickly produce dangerous levels of contaminants.

Control Measures

Because of the extreme risks from hazardous exhaust gases, equipment with an internal combustion engine should NOT be used in an enclosed or poorly ventilated space. Instead, use hydraulic, electric, or pneumatic machines in poorly ventilated spaces. Attempts to use general dilution ventilation to remove exhaust gases are rarely successful because of the large amounts of contaminants produced and physical difficulties in producing and directing the flow of adequate fresh air supplies.

No attempt should be made to use conventional filtering type respirators to deal with general exhaust gases. There is NO filter to protect a wearer against carbon monoxide for regular respiratory protective equipment.

Working in Confined Spaces

Any work activity undertaken in a confined space can be hazardous. Hazards include:

- Inadequate air quality caused by lack of oxygen (e.g. displacement by carbon dioxide).
- Presence of toxic constituents of the atmosphere (e.g. hydrogen sulphide, carbon monoxide).
- Presence of explosive air contaminants (e.g. methane).

Further (as noted above), for concrete cutting or drilling, the operation of an internal combustion engine equipped machine may produce additional extremely toxic gases in the confined space.

Control Measures

For concrete cutting and drilling, where entry into or on a confined space is needed, the atmosphere should first be tested to check for adequate oxygen, absence of both toxic contaminants and explosive gases or vapors. Where the atmosphere is not suitable for entry, it must be ventilated until it is shown by test to be suitable for safe entry.

Use of machinery in a confined space should be restricted to hydraulic, pneumatic, or electric machines. All machines capable of causing sparks, (particularly electric machines), can provide a source of ignition in an explosive atmosphere.

Hazardous Substances used in the Process

In some instances, chemicals or other hazardous substances may be added as aids in the cutting or drilling operations. The nature of the hazard and the risks will depend on the hazardous substance used.

Control Measures

Relevant safety and health information can be obtained from the MSDS for a hazardous substance.

Noise

Noise from concrete cutting and drilling is a serious issue. An operator's hearing may be damaged by very loud noise over a relatively short period or by exposure to a lower level of loud noise over a longer period. In a normal working day, noise from concrete cutting or drilling equipment will lead to exposure to excessive noise for the operator and other nearby workers. The hearing ability of the operators and workers will therefore be at risk if no control measures are implemented.

Control Measures

There are currently no cutting and drilling equipment available which are quiet enough as not to create excessive noise with normal daily use. Modifications in the form of engineering noise control measures at the source also offer limited noise reduction.

Operators, nearby workers, and bystanders therefore must, on the whole, protect their hearing through the wearing of personal hearing protectors. Employers providing hearing protectors must also provide training and instruction in the proper use and maintenance of such personal hearing protectors (and any other protective equipment) the employer requires the worker to wear.

Manual Tasks Including Manual Handling

Awkward or static working postures and forceful exertions repeated or maintained for long periods increase the risk of injury by increasing loads on the back, other joints, and soft tissues of the body.

Holding hand held equipment (such as hand held concrete cutting saws) over extended periods increases the loads on the body and the risk of injury.

Control Measures

Possible solutions include:

- Suspending or supporting equipment in a frame to reduce the forces and the awkward and static working postures needed to position it.
- Reducing the range of movement of the equipment to minimize the effort or forces needed to guide and control it.
- Training workers in safe methods of work and in principles for handling the equipment.

Vibration of the Whole Body and/or Hand Arm

Vibration transmitted from concrete cutting and drilling machinery and equipment can affect the body as a whole or segments of the body such as the hands and arms of the operator. The harmful effects from whole body vibration are predominantly of a musculoskeletal nature, especially in the lower spine region. Other effects include fatigue, headaches, gastrointestinal problems, and a reduction in job efficiency.

Hand-arm vibration may cause disturbances in the peripheral nerve and vascular systems of the hands resulting in Raynaud's Syndrome (known as vibration white finger) resulting in loss of senses of touch and heat, numbness and loss of grip strength. Other effects can include damage to tendons, bones, and joints in the hands, wrists, arms, elbows, and shoulders, and also carpal tunnel syndrome.

Control Measures

Choose equipment:

- That vibrates less or does not have to be held or supported.
- That is well-balanced, as light as possible, and able to be held with either hand and different sized hands.
- With vibration absorbing handles or with an even surface on the handles to distribute gripping force.

Covering of metal handles of existing equipment with a soft, resilient rubber can also be very effective in reducing vibration exposure.

Train workers in the use of the equipment with a minimum grip force while still able to perform the work safely.

The use of gloves has minimal effect on vibration exposure. The beneficial effects of the use of gloves are that they can improve grip on the equipment and can keep hands warm and thus increase blood flow to the fingers.

Working Safely with Equipment

Absence of guards or ineffective guard operation and the incorrect fitting of blades on concrete cutting and drilling equipment can result in injury.

Accumulation of slurry may cause the work surface to become slippery.

Control Measures

The correct guards should be properly fitted and checked for proper operation. Install only recommended blades, ensuring the rpm rating is suited for the operation. Never install oversized blades.

Collect and remove slurry from the work area so the operator has a sure footing.

Working at Heights

Working at height with any concrete cutting or drilling equipment is dangerous. Heavy equipment cannot be used safely on an unstable platform and portable equipment should not be used from a ladder.

Control Measures

Do not use ladders when operating concrete cutting and drilling equipment. All work at heights should be done from safe working platforms, such as scaffolding and elevated working platforms.

Electrical Safety

There is a risk of electrocution if extension leads, plugs, and electric powered tools are used in the presence of water. Electrocution can also be caused by inverting hand held equipment when wet cutting.

Control Measures

Equipment operators must make sure:

- Double adaptors and piggyback plugs are not used.
- Electrical equipment is inspected, tested, and tagged by a competent person at regular, prescribed intervals.
- Electrical equipment is immediately withdrawn from use if it is not safe to use.
- Electrical equipment is connected to a GFCI.
- Portable GFCI devices are tested at regular, prescribed intervals.
- GFCI devices are withdrawn from use if they are not working properly.

In addition, suspend cords and extension leads on stands and use waterproof connectors where water may be present. Do not use electrical equipment for inverted cutting.

Damage to Structures

Operators risk injury and the safety of others on site by cutting through stressed components in buildings and any other components that could affect the integrity of the structure.

Control Measures

If components, such as stressing tendons, must be cut, the person responsible for workplace safety must assess the risk. Advice and supervision from a structural engineer should be sought for all cuts to structural components. The relevant person responsible for workplace safety (usually the prime contractor) should locate and mark the location of all components that will affect the strength of a structure if cut, as part of initial planning for safety.

Damage to Services

Operators risk injury and the safety of others on the site by cutting through gas, electricity, or water services.

Control Measures

The relevant person responsible for workplace safety on site (usually the prime contractor) should locate and mark the location of all services during initial planning for safety. If services are to be cut through, they must be disconnected and tagged. Disconnection should be confirmed and tagged by the relevant service personnel before the work begins. At conclusion of the work, the service personnel should remove their tags.

Loss of Vacuum

Operators using a vacuum assembly to anchor a core drill stand to the surface may risk injury if the vacuum pump fills with slurry. This can cause loss of vacuum, which can result in the drill stand breaking free and rotating around the drill.

Control Measures

Use bolt down stands where practical. Ensure that the surface to be cut is sound and monitor the equipment to ensure that vacuum pressure is being maintained.

Working Alone

When working alone it may be difficult to set up equipment on site.

Control Measures

A second person should be available to assist in the setting up and relocating equipment on site.

MAINTAINING CONCRETE CUTTING & DRILLING EQUIPMENT

Maintenance can prevent equipment from deviating from the design intention in a way which is a risk to safety and health.

Equipment should be maintained according to the manufacturer's specifications for maintenance or, in the absence of such specifications, in accordance with other proven and tested procedures. Regular inspection and routine maintenance undertaken by a competent person will help to ensure safe and efficient operation of equipment.

A suggested schedule is:

- The general condition of the equipment should be checked daily by the operator before use.
- The equipment should be inspected and maintained by a qualified person at least every month or after 50 hours of operation.

Defects and Repairs

Defects to concrete cutting and drilling equipment should be reported immediately to the person responsible for equipment maintenance. Because of their day-to-day experience, operators should be regularly consulted about the performance of equipment. Their suggestions for improvements should also be encouraged.

- A qualified person should carry out repairs.
- Ensure that equipment with defects that could endanger people is not used.

Keeping Records

Complete records of any inspections, services, or repairs carried out should be kept for all concrete cutting and drilling equipment. These records should include any faults identified in normal use. Records should be up to date and retained for the life of the equipment.

PERSONAL PROTECTIVE EQUIPMENT

If the use of personal protective equipment has been identified as one of the control measures to minimize exposure to a risk, the person responsible for workplace safety and health must make sure such equipment is provided and that workers are properly trained and instructed in the correct use of the equipment, BEFORE starting any concrete cutting or drilling work.

All workers have an obligation to use personal protective equipment if the equipment is provided by the worker's employer and the worker is properly instructed in its use.

The following personal protective equipment (PPE) should be provided, where required:

- Safety Helmets/Hard Hats
- Hearing Protection
- Eye Protection
- Safety clothing such as safety boots, waterproof clothing, aprons, gloves, and reflective safety vest.
- Respirators
- Gloves to improve grip and reduce force.

In addition, operators working outside for long periods should be protected from harsh sunlight and/or reflected light by applying a sunscreen with a SPF rating of at least 15+. They should also wear hats, eye protection, long sleeve shirts and long trousers.

When selecting items of personal protective equipment, preference should be given to those which comply with relevant standards.

Operators should not wear loose clothing, and long hair should be covered or tied back. All clothing needs to be comfortable and suitable for the work and the weather conditions.

Storage and Maintenance of PPE

Store personal protective equipment in a clean and fully operational condition. Storage arrangements should ensure that the equipment is safe from interference and damage, and that it is easily accessible when needed. Items of personal protective equipment should also be inspected regularly, as specified by the manufacturer or supplier, to determine that they are in a serviceable condition, both during storage and in use.

Maintain personal protective equipment in a condition that ensures its continued effective operation. Repair or discard damaged or defective personal protective equipment.

TRAINING & INSTRUCTING OPERATORS

All operators of concrete cutting and drilling equipment must know how to work safely and should be able to demonstrate a certain level of competency before using this equipment.

Employers must ensure their workers are trained in safe concrete cutting and drilling work practices and procedures, and are supervised by experienced people before carrying out this unsupervised work.

Training should include information and instruction on:

- Workplace safety and health.
- Hazards and risks associated with work activities.
- Safe work practices and procedures, the safe handling (including lifting and moving) and safe operation of equipment and the control measures in place.
- The safe use of equipment, the safe use of hazardous substances, electrical safety, safety in confined spaces and other training required under hazard-specific regulations.
- The correct use, fit, care and storage of personal protective equipment, tools and equipment and why the equipment is needed emergency and first aid procedures.
- Sun protection to prevent skin cancer.
- Fire protection.
- Information on dust, fumes and air quality.
- Recognition of poorly ventilated areas and confined spaces.

The operator should be monitored, as required to ensure safe work practices and procedures are being followed.

Concrete Cutting & Drilling Site Safety Checklist

Date:		
Company Name:	Site Location:	
Operator's Name:	Type Of Job:	
Check The SITE For SAFETY — On Arrival At The Site, Mark The Correct Answer Where Relevant To The Job. If The Answer Is NO The Situation Is Unsafe. Alert The Office.		
	YES NO	COMMENT
Site Evacuation		
Checked With Client	<input type="checkbox"/> <input type="checkbox"/>	
Located First Aid/Accessible	<input type="checkbox"/> <input type="checkbox"/>	
Scaffolding		
Erected As Required	<input type="checkbox"/> <input type="checkbox"/>	
Services Located/Marked		
Electricity	<input type="checkbox"/> <input type="checkbox"/>	
Gas	<input type="checkbox"/> <input type="checkbox"/>	
Other	<input type="checkbox"/> <input type="checkbox"/>	
Ventilation		
Adequate	<input type="checkbox"/> <input type="checkbox"/>	
Lighting		
Lighting In Place	<input type="checkbox"/> <input type="checkbox"/>	
Control/Public Safety		
Barricades In Position	<input type="checkbox"/> <input type="checkbox"/>	
Warning Signs Displayed	<input type="checkbox"/> <input type="checkbox"/>	
Traffic Control In Place	<input type="checkbox"/> <input type="checkbox"/>	
Safety Equipment		
Safety Equipment Is Functional, Clean And Safe	<input type="checkbox"/> <input type="checkbox"/>	

Concrete Cutting & Drilling Equipment Safety Checklist

Date:		
Company Name:	Site Location:	
Operator's Name:	Type Of Job:	
Check The EQUIPMENT For SAFETY — On Setting Up, Mark The Correct Answer Where Relevant To The Job And Equipment. If The Answer Is NO The Situation Is Unsafe. Alert Your Supervisor.		
	YES NO	COMMENT
Floor Saw		
Shaft Nut Secure	<input type="checkbox"/> <input type="checkbox"/>	
Belt Tensioned And Undamaged	<input type="checkbox"/> <input type="checkbox"/>	
Adequate Water And Waterways Clear	<input type="checkbox"/> <input type="checkbox"/>	
Flaps In Place	<input type="checkbox"/> <input type="checkbox"/>	
Guards In Place	<input type="checkbox"/> <input type="checkbox"/>	
Hand Held Saw		
Belts Tensioned And Undamaged	<input type="checkbox"/> <input type="checkbox"/>	
Flange Locking Nut Secure	<input type="checkbox"/> <input type="checkbox"/>	
Water Supply Adequate	<input type="checkbox"/> <input type="checkbox"/>	
Guards In Place	<input type="checkbox"/> <input type="checkbox"/>	
Wall Saw		
Tracks Securely Fastened	<input type="checkbox"/> <input type="checkbox"/>	
Blade Secured	<input type="checkbox"/> <input type="checkbox"/>	
Job Wedged/Securely Supported	<input type="checkbox"/> <input type="checkbox"/>	
Wire Saw		
Pulleys Secure	<input type="checkbox"/> <input type="checkbox"/>	
Hydraulic Pressure Correct	<input type="checkbox"/> <input type="checkbox"/>	
Drills		
Electric Switch, Plug And Lead Safe	<input type="checkbox"/> <input type="checkbox"/>	
Water Collar Operable	<input type="checkbox"/> <input type="checkbox"/>	
Carriage Clamp And Shims Operable	<input type="checkbox"/> <input type="checkbox"/>	
Blade And Bits		
No Undercutting Evident	<input type="checkbox"/> <input type="checkbox"/>	
Blades Free Of Cracks & Deterioration	<input type="checkbox"/> <input type="checkbox"/>	
Blade Is Right Size And Type For The Machine	<input type="checkbox"/> <input type="checkbox"/>	
All Segments Secure	<input type="checkbox"/> <input type="checkbox"/>	
Electrical Leads		
Plugs In Good Condition	<input type="checkbox"/> <input type="checkbox"/>	
Outer Casing Intact Correctly Tagged	<input type="checkbox"/> <input type="checkbox"/>	
Gfcs Fitted	<input type="checkbox"/> <input type="checkbox"/>	