	Activities	Procedures	Hazards/Risks	Controls
1	Select steel to be drilled and position it	Ensure that the steel that is to be drilled is positioned so that it cannot move or cause a trip hazard	Materials move, fall or roll or cause a trip hazard or protrude to cause injury if passing by	• Ensure that the steel to be drilled is level • Ensure that the steel is not placed in such a manner that may allow it to fall or tip after the operator has let go of it
2	Check electrical safety	Ensure that the drill cord and any extension lead are tagged with a current test tag and not damaged. Ensure that you are connected to power supply that has RCD protection. Ensure that the working area is not wet.	Possible electric shock, electrocution, burns, fire.	• Ensure RCD protection and cord/leads are in proper condition and area is not wet. • Ensure the machine is properly grounded. Extension cords that are too long or thin or wound can lead to voltage drop and loss of magnetic power. • In the event of a fault, do not proceed until Supervisor instructs you to however Supervisor must document fault in Works Diary. Repair to be arranged and alternate safe-to-use equipment to be provided.
3	Check safety of work area	Clear area of trip or slip hazards	Trips or slips while working	Ensure area is clear of trip or slip hazards and any flammable chemicals or leads.
4	Attach magnetic drill to work surface	Fix drill to surface	Magnetic drill fails to make good contact due to surfaces being dirty or material to be drilled being too small. Work material moves or there is loss of	• Clean surfaces and support work or drill so that it is stable and secure. • Do not hold work material

			magnetism	with hands if material can move during drilling. • Ensure the gloves in use are the right size and in good condition and not loose Unless used with steel back-up plates work pieces must be >9mm thick or else reduced magnetic power may cause drill to move so use machine with its safety strap
5	Install correct drill bit	Choose and install correct and good condition drill bit to drill and secure	Drill bit becomes loose or is damaged and does not drill easily or parts break off and cause injury. Adjustment tool left on machine spins causing injury	Ensure that drill bit is in good condition, secure it in chuck so that it cannot become loose, and is not crooked, and wear eye protection. Ensure all adjustment tools are removed from machine. Eye protection with side shields should be worn.
6	Operate drill to make hole(s)	Use drill to make hole(s)	Steel filings spin off and injure operator's eyes or hands. Hand injury if in contact with spinning drill bit. Drill bit can snap and fly out. Excessive noise causing hearing loss Loose clothing, hair, jewellery catches in machine. Loss of balance causing injury Machine heats up causing burns, fire	Use drill speed that is as slow as possible and new or undamaged drill bit. Ensure drill bit is not blunt. Wear eye protection. Wear leather gloves and keep hands clear of moving parts and chips or hot parts at all times. Wear hearing protection. Do not wear loose clothing and secure long hair or jewellery. Maintain a balanced posture. Keep use to less than an uninterrupted period of 30 minutes to avoid heat and possible fire
7	Remove magnetic drill from work surface and remove	Detach magnetic drill	Drill bit can still be hot and sharp	Wear leather gloves and wait until drill bit has cooled before handling

	drill bit			
8	Remove work	Remove work that has been drilled or have it removed by crane	Manual handling injuries if moving by hand. Work is still hot and can cause burns or holes or has chards that can cause hand injuries	Assess the weight and where it has to go and only handle it alone if safe to do so. Wait until it has cooled. Use someone to assist you and use mechanical equipment where necessary such as trolleys or the crane
9	Pack magnetic drill away and clean up work area	Collect drill and any extension leads used and store away. Clean up any left-over materials such as filings or chards	Sharp pieces of steel causing hand injuries	Wear leather gloves and do not handle scrap with bare hands

- Personal Protective Equipment that must be used: leather gloves, eye protection, steel capped footwear, and if necessary - long sleeve shirt and long pants

This SOP has been developed in consultation with me and I agree to follow it and carry out tasks in a safe manner, reporting any problems to my immediate Supervisor.

	Name	Signature	Date
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