

ROOM:

MACHINE OPERATION: CENTRE LATHE



HAZARDS:

- Long hair, loose clothing etc., can become entangled in moving parts
- Work pieces, chuck keys, broken cutting tools, swarf, etc., can be violently ejected
- Lathes can present a hazard of electric shock
- Closing movements between parts under power can be a trapping hazard
- Sharp edges on tools, work pieces and swarf can cause cuts
- Contact with cutting fluids, oil and grease can irritate
- Swarf can jam or be ejected if allowed to build up
- Inadvertent starting of the machine
- Lack of space around the machine can lead to operator being pushed by passers by
- Slippery floors surfaces or loose items around the machine can cause slips and trips resulting in contact with moving parts
- Manual handling of heavy equipment (e.g. chucks, faceplates work pieces) can present a hazard.

CONTROL MEASURES – SPECIFIC:

- The machine should be provided with a power isolator either on or adjacent to the machine and be controlled by a starter incorporating overload protection and no-volt release. The machine must be fitted with a knee or foot stop.
- The pulley drive and gear must be guarded totally. Tool-operated locking devices must be provided to all access covers. The spindle mandrel should be guarded and the machine should be fitted with a suitable chuck guard. If feed shafts and lead screws are not sufficiently protected by the overhang of the bedways and/or saddle and swarf trays, a telescopic helical guard should be provided. Stock bar should not project beyond the headstock. If unavoidable, the projecting portion should be guarded.
- A spring-loaded chuck key is preferable. Swarf must not be removed by hand; a long handled swarf remover must be used. Precautions should be taken to prevent long lengths of swarf developing.
- Floor surfaces should be free of loose items, swarf and should not be slippery.
- Manual handling tasks associated with changing heavy chucks and faceplates etc., can be beyond the physical abilities of some persons. An assessment should be made and appropriate procedures developed.
- Work must be mounted properly and securely to reduce excessive vibration. Rotational clearances should be checked by hand. The cutting tool should be carefully checked for security before starting machine.
- Swarf should not be allowed to accumulate and should not be removed whilst machine is running. A suitable implement should be used to remove swarf and NOT by hand.
- Metal working fluids should be mixed and changed in accordance with supplier's instructions. Contact with skin should be kept to a minimum. Barrier cream is recommended for staff and hands should be thoroughly washed after use.
- Files and abrasive tape should not be used on this machine.

Risk Assessment checked by:

Date:

CONTROL MEASURES – GENERAL:

- The machine must be provided with a power isolator either on or adjacent to the machine and be controlled by a starter incorporating overload protection and no-volt release. The machine must be supplied with a securely fitted emergency foot stop.
- The pulley drive and gear must be totally guarded. A tool-operated locking device must be provided to all access covers. The drill, chuck and spindle must be guarded by a self-adjusting guard which must be positively locked when in the operating position.
- Eye protection conforming to BS2092-1 must be used at all times. Loose clothing must be secured; long hair tied back and substantial footwear worn to minimise risk of injury if the material or chuck falls.
- Sufficient space should exist around the machine to prevent accidental contact with passers by.

Risk Assessment checked by:

Date: