

# MILLING MACHINE - STANDARD OPERATING PROCEDURE

# **DO NOT** use this machine without completing appropriate induction / training.



Approved safety glasses must be worn at all times with this equipment.



Appropriate protective footwear with substantial uppers must be worn in work areas.



Gloves must not be worn when using this equipment.



Hearing protection must be worn at all times when using this equipoment.



Close fitting protective clothing or a suitable workshop apron is advisable.



Contain or restrain long and loose hair, and remove exposed rings or jewellery.

#### PRE-OPERATIONAL SAFETY CHECKS

- 1. Locate and ensure you are familiar with all machine operations including the E- Stop.
- 2. Ensure all moving parts are functional and clear from obstruction or interference.
- 3. Check the workspace and surrounding area is clean and ensure there are no slip/trip hazards present.
- 4. Only one person may operate this machine at any one time.

## **POTENTIAL HAZARDS**

- Rotating parts Entanglement
- Ejected material and particles
- Eye injuries
- Hot metal Burns
- Noise
- Sharp edges and burs

## **OPERATIONAL SAFETY PROCEDURES**

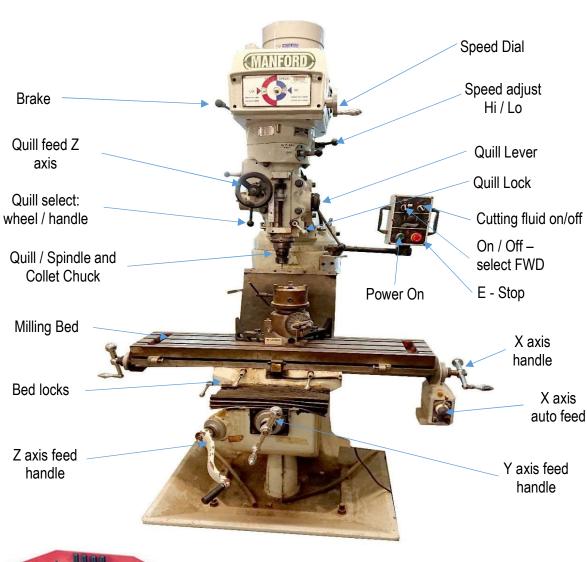
- Lower milling bed using Z axis handle to allow clearance to collet chuck and placement of workpiece on the bed.
- 2. Ensure the appropriate cutting tool is secured firmly with the correct collet in the chuck.
- 3. Ensure the workpiece is secured firmly to the milling bed using the clamp-set and/or a milling vice.
- 4. Ensure there is plenty of clearance between cutting tool and workpiece using X,Y or Z axis.

- 5. Turn Power On
- Select "FWD" to run machine and ensure the spindle is running in the clockwise direction for cutting.
- Select the correct spindle speed using speed dial
- 8. Adjust cutting depth using Z axis and quill adjustment. Take light cuts initially.
- 9. Use X and Y axis to machine workpiece.
- 10. Do not take measurements of the workpiece while the machine is running.
- 11. Do not allow material build up around the cutting tool and workpiece.
- 12. Do not store tools or accessories on top of the machine or on the milling bed.
- 13. Always keep fingers and hands well clear of the cutting tool and other moving parts.
- 14. Do NOT bend down near the machine while it is running.
- 15. Never leave the machine running unattended.

#### **POST OPERATION**

- 1. Switch off the machine when work is completed.
- 2. Lower the milling bed clear of the spindle and chuck
- 3. Clean up all debris using a brush and dispose of appropriately.
- 4. Put away all accessories and tooling including clamp set pieces, collets and cutting tools.
- Wipe down the milling bed with a clean rag and a small amount of 'slide oil' from the blue oil tin
- 6. Dispose of any waste material in the appropriate bins provided.







Clamp Set



Collet chuck set