

Session 1 - machine workshop

Time : 13:30

Date : 01/10/19

Technician : David

First session will be a introduction session to introduce ourselves to the workshop staff

- Aims :
- Learn who the technicians are
 - Understand basic Health and Safety
 - Know how to safely operate the machines

Health and Safety

- Firstly the basic PE (protective equipment)
 - Boots
 - overalls → provided every session
 - goggles → provided every session
- Before any work can be carried, barrier cream must be applied to your hands to protect the skin pores in the hands, for example oil staining the skin

- Remember to sign register for attendance

- Machine walk through
 - Lathe
 - Milling
 - Pillar drill

• Lathe

- Before using, check oil level
- *NOTE ANY DAMAGE ON THE EQUIPMENT*
- Far end of the lathe there is a nose taper where you can put drill bits or active centre
- A Chuck is a tool that is tighten or loosen your work piece in the lathe

• Milling

- It has got 3 axis
 - X - up and down
 - Z - left and right
 - Y - forward and back
- The axis are shown on the DRO
- It has a vice
 - make sure the vice is flat
 - gage - 2 layers on the bottom to make sure it is liner
 - adjust the Y-axis to make it level
 - tighten the vice
- All machines won't turn on unless safety visor is over the machine
- make sure everything is tight
- make sure cutting tool is in line with the material

• Pillar drill

- make sure everything is tightly secure
- Before using, make sure the guard is over the machine
- Tighten the work piece with a G-clamp
- For safety, must feed the lever back up after cutting/drilling, if not it will bounce back up
- Red button is for emergency stop.