

~ FABRICATION ~



METALWORK

OPERATING INSTRUCTIONS



METALWORK

INTRODUCING

the

DROP SAW



Continuous Horizontal Band Metal-Cutting Drop Saw
Access Level 3 (see Metal Workshop induction Guide on Access Levels)
Cutting down lengths of different types of metals only

PPE Basic

- Suitable work coat (provided)
- Safety glasses or Faceshield, rated to BS/EN166 (provided)
- Leather gloves **ONLY** while handling metal stock and loading into machine
- Stout footwear
- **NO GLOVES** to be worn **DURING** machine operation
- Keep rings, ties and dangling jewellery tucked away or removed
- Keep hair tied back

What to do before use

- Check machine isolator is in the OFF position
- Ensure **SOMEONE** knows you are using the machine
- **IF STUDENT** , report any faults to any member of workshop academic/technical staff
- **IF STAFF**, log the fault via the Fault Reporting Log Book – then email technical team to report if machine requires maintenance or servicing and whether it will be out of operation and for how long
- **A BRIEF RUNNING CHECK** of the fitted blade, i.e. under power – watching & listening for reportable faults – is advised before use
- Fixed **GUARDS** fitted and in good condition?
- **AREA AROUND** the band saw is clean and tidy and free from obstructions?
- **ADEQUATE** overhead/natural/machine lighting?
- Know the **LOCATION** of the **START** and **STOP** controls, as well as the **EMERGENCY STOPS** – including those on the machine

- **Ensure SAFE AND CORRECT manual handling of large or heavy metal stock and additional support is available for long lengths. ASK for a second person to assist with the stock carrying and loading, should it be required**
- **LIFT the blade and LOCK it off to stop the saw falling down inadvertently during loading or unloading**
- **ENSURE the stock is clamped securely in the machine vice BEFORE using the machine**
- **ENSURE that the blade supports are correctly adjusted BEFORE using the machine and that they are LOCKED into position**

How to Use This Band Cutting Drop Saw

- **Switch the machine ON at the wall ISOLATOR**
- **After running through the above checklist, press the START button to switch ON the motor and run the band UP TO SPEED for a few seconds**
- **ADJUST the cutting speed of the blade, depending on the material; slower for Steels, slightly faster for Copper and Brass and faster still for Aluminium**
- **ENSURE that the cutting fluid is correctly positioned, is flowing cleanly and is being retained within the fluid bath by the machine. If it is not, STOP the machine immediately and check with a member of technical staff**
- **ADJUST the band FALL RATE, according to the TYPE of metal you are cutting. Technical staff can help you with this. If in doubt, STOP the machine**
- **There should be very little VIBRATION or NOISE from the machine, other than via a running motor. EXCESSIVE vibration or noise indicates a problem. STOP the machine immediately and check with a member of technical staff**
- **At a pre-set depth, the machine will AUTO-STOP the cutting process and switch off the motor. This depth stop is usually pre-set by technical staff and should not be touched at all**
- **Once the stock has been cut through and the machine stopped, LIFT the blade CLEAR of the work and LOCK into position, if the stock is to be fed through again or removed if the job is complete**
- **Although you don't need to ISOLATE the machine after EVERY cut in a series, you SHOULD ISOLATE the machine if ADJUSTMENTS must be made to the settings, the holding vice or blade changes - or when you have finished your stock cutting**

- **REMOVE** metal swarf from the machine using gloves and a sweeping brush and pan. **WEAR GOGGLES** or **EYE PROTECTION** to protect against swarf being ejected into the eye or cutting fluid being splashed
- **Put the metal waste into a suitable waste bin – NOT general waste. Metal swarf should be stored in a lidded, metallic bin, capable of resisting fire**
- **OILY RAGS** should **NOT** be stored in this bin as it **MAY** cause spontaneous fire due to sparking in a flammable environment

I verify that I have read and understood the information detailed within this document

Date

Name

Signature