

# Mechanical Workshop Induction



April 2024



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# Purpose, Scope and Responsibility

**Purpose :** This workshop induction is intended to any person working or using the equipment in the mechanical workshop

**Scope :** It is intended for Contractors, new Employees and Apprentices

## Responsibility

**Maintenance manager:** Has overall responsibility for ensuring people who work in the mechanical workshop are familiar with hazards and precautions to take.

**Mechanical section engineers:** Are responsible for ensuring Contractor, Employees and Apprentices have been inducted.

It is the responsibility of each person using the associated equipment in the workshop, to ensure that they safely do so. When not skilled at using a machine, they must recommend the services of a suitable, competent employee.



# Mechanical Workshop

## Emergency Exits



All emergency exits are marked inside the workshop.  
Keep emergency exits clear.

# Mechanical Workshop

## Fire Extinguisher Location



Gas Store



Workshop



In each work section inside the workshop, there are marked fire extinguishers.

# Mechanical Workshop

## Nearest First Aid Kit Location



First Aid Station and defibrillator They are located in the hallway in front of the area supervisors' offices outside the workshop.



This kit is located in the stores.

All staff are first aid trained



# Mechanical Workshop

**Fire Blanket : Use on the initial stages of a fire. If fire is out of control use the fire alarm**



The fire blankets are located : One by the Drop Saw and One by the Horizontal Press

# Mechanical Workshop

**Chemical First Aid, Wash Down Area (Solvent):** Use when your skin or eyes have contact with chemicals, dust or others.



Sink inside the workshop, mechanical dining room side.



Sterile saline solution, formulated to be safe for use on the eyes.

# Mechanical Workshop

## Gas Bottle Storage Area



Gas Bottle Storage located outside the workshop, make sure bottles are chained upright and that you read the SDS.

# Mechanical Workshop

**Spill Response Procedure: Use whenever there is an oil/chemical spill**



Mineral sponge stored outside the workshop, next to the stores entrance.



There is a Spill Kit located at the northern end of the workshop. A roll of oil soak pad is located in the No 1 tool store.

# Mechanical Workshop

## Metal Waste (Scrap)



All metal waste must be deposited in the green container located outside the workshop.

# Mechanical Workshop

## Evacuation Point



In case of evacuation, all contractor personnel must evacuate to an assigned safe area, located in the parking lot outside the GB main gatehouse.

# Mechanical Workshop

## Emergency Procedures

If an accident happens

Advise your Golden Bay host/job coordinator/Team leader Immediately.

The Golden Bay Host/Job Coordinator/ Team leader is responsible for calling emergency services.

If a spill happens

Use the spill kit or portable spill pads available on location.

A roll of Oil Soak pad is located in the Number 1 tool store.

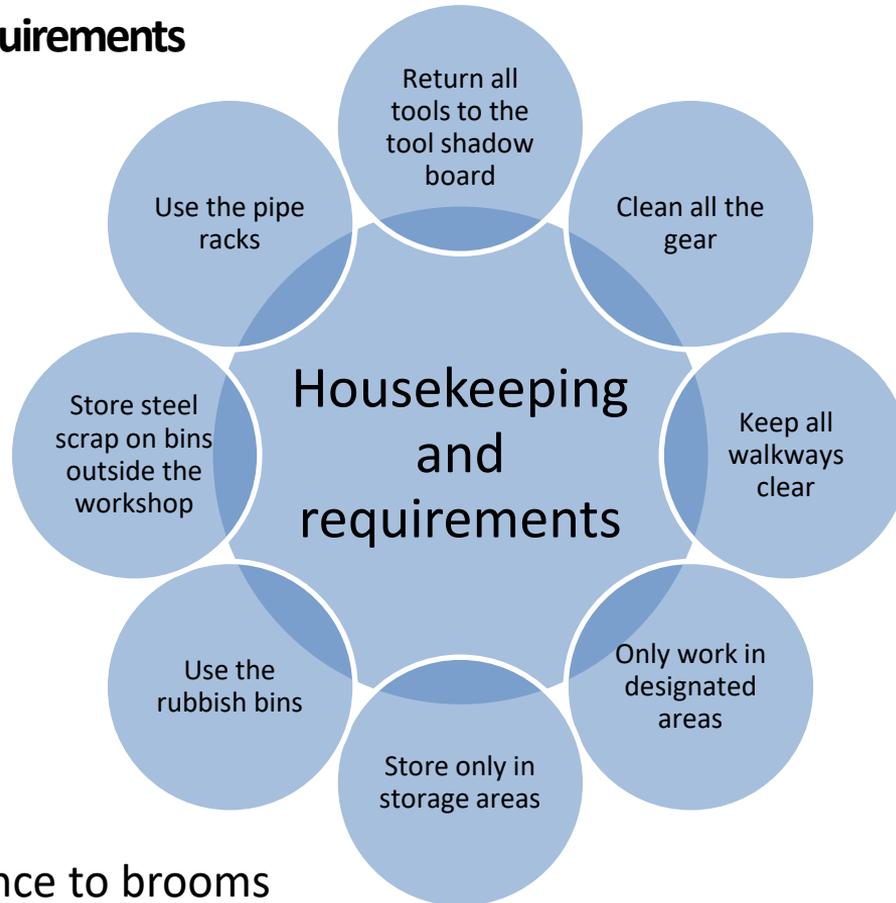
If the fire alarm sounds

Go to the evacuation point, located on the carpark outside of the gate.

If you are trained, and there is a fire, use the fire blankets located by the drop saw and by the horizontal press. If required use a fire extinguisher

# Mechanical Workshop

## Housekeeping and Requirements



Use vacuums in preference to brooms

# Mechanical Workshop

## Use of Chemicals

### When using Chemicals

- Read SDS before using chemicals (Located in the stores and the intranet)
- Read and check labels before use.
- Wear face/eye protection
- Wear gloves
- Only use chemicals if you are competent
- In case of emergency use the wash down areas
- Do not leave chemicals and paints lying around the workshop.
- Always return chemicals to the cupboard.

### When using Gas Bottles

- Read the SDS before use.
- Gas bottles are kept on a location outside of the stores at the back of the workshop.
- Keep stores bottles chained upright.

**Never mix chemicals**



# Mechanical Workshop

## Tools and Equipment: Hand Held Grinders

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Hand held grinder</li></ul>	<ul style="list-style-type: none"><li>▪ Cuts</li><li>▪ Debris</li><li>▪ Electrocutation</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Secure properly cutting discs.</li><li>▪ Change discs with the machine disconnected.</li><li>▪ Use only appropriate cutting discs for the task at hand.</li><li>▪ Check electrical connections.</li><li>▪ Only hold the grinder by the handles.</li><li>▪ Hold the grinder with both hands.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't pull the electrical cord to disconnect the equipment.</li><li>▪ Do not carry the cable over surfaces with oil, high temperature or cutting surfaces.</li><li>▪ Never hold the grinder by the body or the protective surface.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in grinder operation.</li><li>▪ Use of face shield and gloves are required.</li><li>• Use of a dust mask.</li><li>▪ Hearing protection is required.</li><li>▪ All grinders must have a dead man switch installed.</li></ul>	<ul style="list-style-type: none"><li>▪ 9" grinders, only to be used with management approval.</li></ul>



Hand held grinder

# Mechanical Workshop

## Tools and Equipment: Pedestal Grinders

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Pedestal grinders</li></ul>	<ul style="list-style-type: none"><li>▪ Cuts</li><li>▪ Debris</li><li>▪ Electrocutation</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Secure properly cutting discs.</li><li>▪ Change discs with the machine disconnected.</li><li>▪ Use only appropriate cutting discs for the task at hand.</li><li>▪ Check electrical connections.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't use for Aluminium or other soft metals.</li><li>• Don't grind if the tool post is further than 3mm from the wheel.</li><li>• Do not grind on the side of the wheel.</li><li>• Do not use with loose clothing</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in grinder operation.</li><li>▪ Use of face shield and gloves.</li><li>▪ Hearing protection is required.</li></ul>	



Pedestal Grinders

# Mechanical Workshop

## Tools and Equipment: Drill Presses and Radial Arm Drill

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Drill Presses and radial arm drill.</li></ul>	<ul style="list-style-type: none"><li>▪ Cuts</li><li>▪ Debris</li><li>▪ Electrocutation</li><li>▪ Loose clothes, gloves or hair, caught on the rotating drill bit.</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Keep the guarding in place.</li><li>▪ Tighten securely the drill bit.</li><li>▪ Check electrical connections.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't use loose clothes, loose hair.</li><li>▪ Remove all jewels, including watches.</li><li>▪ Don't touch the drill bit.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in drill press and radial arm drill operation.</li><li>▪ Use of face shield, safety glasses is required.</li><li>▪ Hearing protection is required.</li><li>▪ The drill press should have a guarding system in place.</li></ul>	<ul style="list-style-type: none"><li>▪ Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li></ul>



Drill Presses

# Mechanical Workshop

## Tools and Equipment: Overhear Chain Blocks

### Equipment

- Overhead chain blocks
- Certified 2 tons.
- Manual lift, but moves sideways electronically.

### Risks and Hazards

- Load falls.
- Hit by the load.
- Trapped by the chain.
- Cuts to the hand.
- Muscle strain.
- Equipment failure .

### Do

- Use only. if trained
- Select correctly the chain block for the weight to be lifted.
- Inspect the conditions of the equipment.
- Check the certification of the equipment.
- Use only for vertical lifting.

### Don't

- Don't operate if not trained.
- Don't exceed the rated load.
- Don't trespass the exclusion zone.
- Don't leave suspender load unattended.
- Don't modify the chain block or its accessories.
- Don't use as grounding for welding.

### Minimum Requirements

- Trained in chain block operation.
- Eye protection, safety boots, high visibility clothing.

### Permission and Authority



Overhead Chain Blocks

# Mechanical Workshop

## Tools and Equipment: Manual Chain Blocks

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>Manual chain blocks.</li></ul>	<ul style="list-style-type: none"><li>Load falls.</li><li>Hit by the load.</li><li>Trapped by the chain.</li><li>Cuts to the hand.</li><li>Muscle strain.</li><li>Equipment failure.</li></ul>	<ul style="list-style-type: none"><li>Use only if trained.</li><li>Select correctly the chain block for the weight to be lifted.</li><li>Inspect the conditions of the equipment.</li><li>Check the certification of the equipment.</li><li>Use only for vertical lifting.</li></ul>	<ul style="list-style-type: none"><li>Don't operate if not trained.</li><li>Don't exceed the rated load.</li><li>Don't trespass the exclusion zone.</li><li>Don't leave suspended load unattended.</li><li>Don't modify the chain block or its accessories.</li><li>Don't use as grounding for welding.</li></ul>	<ul style="list-style-type: none"><li>Trained in chain block operation.</li><li>Eye protection, safety boots, high visibility clothing.</li></ul>	



Manual Chain Blocks

# Mechanical Workshop

## Tools and Equipment: Lifting Equipment (Strops, Jacks and Lifting Trolleys)

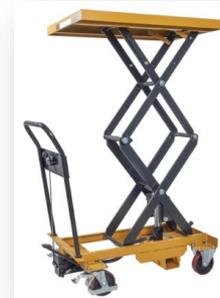
Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Strops.</li><li>▪ Jacks.</li><li>▪ Lifting trolleys.</li></ul>	<ul style="list-style-type: none"><li>▪ Load falls.</li><li>▪ Hit by the load.</li><li>▪ Collapse by trying to go beyond the capacity of the equipment.</li><li>▪ Muscle strain.</li><li>▪ Equipment failure.</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Select correctly the equipment for the weight to be lifted.</li><li>▪ Inspect and tag on a regular basis.</li><li>▪ Check the certification of the equipment.</li><li>▪ Create an exclusion zone below the load lifted.</li><li>▪ Always set up the jack on a even, firm foundation.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't operate if not trained.</li><li>▪ Don't exceed the rated load.</li><li>▪ Don't trespass the exclusion zone.</li><li>▪ Don't leave suspended load unattended.</li><li>▪ Don't use untagged or uninspected equipment.</li><li>▪ Discard damaged strops.</li></ul>	<ul style="list-style-type: none"><li>▪ Strops should be inspected and tagged.</li><li>▪ Trained in jacks and lifting trolley use operation.</li><li>▪ Eye protection, safety boots, high visibility clothing.</li></ul>	



Lifting Strop



Lifting Jack



Lifting Trolleys

# Mechanical Workshop

## Tools and Equipment: Air Compressors

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Air compressors</li></ul>	<ul style="list-style-type: none"><li>▪ Noises</li><li>▪ Electrical risks</li><li>▪ High pressure</li><li>▪ Muscle strain.</li><li>• Air embolism</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Ensure the equipment has pressure limits and relief valves.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't operate if not trained.</li><li>▪ Don't use compressed air to clean yourself.</li><li>▪ Don't remove the guarding on mobile parts.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in air compressor operation.</li><li>▪ Eye protection, noise protection.</li></ul>	



Air Compressors

# Mechanical Workshop

## Tools and Equipment: Lathes

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Lathes.</li></ul>	<ul style="list-style-type: none"><li>▪ Particle projection.</li><li>▪ Contact, impact or entanglement from moving parts.</li><li>▪ Hit by falling objects.</li><li>▪ Cuts to the hand.</li><li>▪ Muscle strain.</li><li>▪ Burns.</li><li>▪ Noise.</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Keep loose clothing/ hair/ Jewelry away from the machine.</li><li>▪ Ensure that the safety devices are in place and use guards to avoid being hit.</li><li>▪ Use the appropriate chuck for the workpiece.</li><li>▪ Keep the headstock free of loose items.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't operate if not trained.</li><li>▪ Don't use loose clothes, jewelry, long hair.</li><li>▪ Don't remove the guarding.</li><li>▪ Forget to wear noise protection.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in Lathe operation.</li><li>▪ Eye protection, safety boots, noise protection.</li></ul>	<ul style="list-style-type: none"><li>▪ Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li><li>• Permission will only be granted after competency has been proven to the GBC authority.</li></ul>



Lathes

# Mechanical Workshop

## Tools and Equipment: Mills

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Mills.</li></ul>	<ul style="list-style-type: none"><li>▪ Particle projection.</li><li>▪ Contact, impact or entanglement from moving parts.</li><li>▪ Hit by flying debris.</li><li>▪ Sharp cuts.</li><li>▪ Eye injuries.</li><li>▪ Muscle strain.</li><li>▪ Burns.</li><li>▪ Noise.</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Keep loose clothing/hair/jewelry away from the machine.</li><li>▪ Ensure that the safety devices are in place and use guards to avoid being hit.</li><li>▪ Use the appropriate chuck for the workpiece.</li><li>▪ Keep the headstock free of loose items.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't operate if not trained.</li><li>▪ Don't use loose clothes, jewelry, long hair.</li><li>▪ Don't remove the guarding.</li><li>▪ Don't leave the machine running unattended.</li><li>▪ Don't make adjustments while the machine is running.</li><li>▪ Do not use an excessively heavy cut or feed as it can cause the cutter to break.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in Mill operation.</li><li>▪ Long and loose hair must be contained.</li><li>▪ Eye protection, safety boots, noise protection.</li></ul>	<ul style="list-style-type: none"><li>▪ Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li><li>• Permission will only be granted after competency has been proven to the GBC authority.</li></ul>



Mills

# Mechanical Workshop

## Tools and Equipment: Former, Rollers, Pipe Benders, Punch/Cropper, Pipe Threader

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>Forming tools, rollers, pipe benders and punch/cropper, pipe threader.</li></ul>	<ul style="list-style-type: none"><li>Contact, impact or entanglement from moving parts.</li><li>Trapping between rollers/parts.</li><li>Hit by falling objects.</li><li>Cuts to the hand.</li><li>High pressure fluids.</li><li>Burns.</li><li>Noise.</li></ul>	<ul style="list-style-type: none"><li>Use only if trained.</li><li>Keep loose clothing/ hair/ Jewelry away from the machine.</li><li>Ensure that the safety devices are in place and use guards to avoid being hit.</li><li>Only wear gloves if they are fingerless.</li></ul>	<ul style="list-style-type: none"><li>Don't operate if not trained.</li><li>Don't use loose clothes, jewelry, long hair.</li><li>Don't remove the guarding.</li><li>Don't punch hardened or wear alloy steels, serious harm may occur.</li></ul>	<ul style="list-style-type: none"><li>Trained in former, roller, pipe bender and punch/cropper, pipe threader operation.</li><li>Eye protection, safety boots, noise protection.</li><li>The machines should have emergency stop systems.</li></ul>	<ul style="list-style-type: none"><li>Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li></ul>



Cropper



Former

# Mechanical Workshop

## Tools and Equipment: Electric Power Hacksaw, Bandsaw, Dropsaw

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ <b>Including Saw tools</b> : electric power hacksaw, bandsaw and dropsaw.</li></ul>	<ul style="list-style-type: none"><li>▪ Excessive force, muscle strain.</li><li>▪ Contact with blades that can cause cuts and amputation.</li><li>▪ Exposure to dust.</li><li>▪ Hit by flying particles.</li><li>▪ Contact with cutting oil.</li><li>▪ Noise.</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Adjust the blade guide and guard as close as possible to the material being cut, to prevent fingers from reaching the blade.</li><li>▪ Keep fingers off the line of cut at all times.</li><li>▪ Only cut one piece of material at a time.</li><li>▪ Ensure that the safety devices are in place and use guards.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't operate if not trained.</li><li>▪ Don't force a wide blade on a curve or small radius.</li><li>▪ Avoid stacking pieces of material, to ensure the piece moves smoothly along the blade.</li><li>▪ Don't remove the guarding.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in sawing machine operation.</li><li>▪ Eye protection, safety boots, noise protection.</li></ul>	<ul style="list-style-type: none"><li>▪ Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li></ul>



Electric Power Bandsaw

# Mechanical Workshop

## Tools and Equipment: Horizontal Press

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>Horizontal Press.</li></ul>	<ul style="list-style-type: none"><li>Deep cuts or amputation.</li><li>Crush injuries.</li><li>Bruising.</li><li>Fractures.</li></ul>	<ul style="list-style-type: none"><li>Use only if trained.</li><li>Ensure workpieces are level</li></ul>	<ul style="list-style-type: none"><li>Don't operate if not trained.</li><li>Operate without hearing protection.</li></ul>	<ul style="list-style-type: none"><li>Trained in horizontal press operation.</li><li>Eye protection, safety boots, noise protection.</li></ul>	<ul style="list-style-type: none"><li>Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li></ul>



Horizontal Press

# Mechanical Workshop

## Tools and Equipment: Arc, Tic, Mig Welders. Plasma Cutter

Equipment	Risks and Hazards	Do	Don't	Minimum Requirements	Permission and Authority
<ul style="list-style-type: none"><li>▪ Arc, Tic, Mig Welders.</li><li>▪ Plasma cutter.</li></ul>	<ul style="list-style-type: none"><li>▪ Exposure to welding fumes.</li><li>▪ Arc eye.</li><li>▪ Burns.</li><li>▪ Electric shock.</li><li>▪ Heat stress.</li></ul>	<ul style="list-style-type: none"><li>▪ Use only if trained.</li><li>▪ Use exhaust ventilation when possible.</li><li>▪ Use a respirator when welding.</li><li>▪ Use correct PPE ( Welding cap, welding helmet, leather suit, gloves and welder spats).</li><li>▪ Set limits on working time and exposure to fumes.</li><li>▪ Use welding techniques that produce less fumes.</li></ul>	<ul style="list-style-type: none"><li>▪ Don't operate if not trained.</li><li>▪ Don't weld near fuels or ignitions sources.</li><li>▪ Don't weld on with equipment that has not been checked or tagged.</li><li>▪ Don't work with leads that have not been tagged and checked.</li><li>▪ Avoid direct contact with live parts of the welding equipment such as the electrode and the workpiece.</li></ul>	<ul style="list-style-type: none"><li>▪ Trained in welding operation.</li><li>▪ Welding PPE: Welding cap, welding helmet, leather suit, or leather apron, gloves and welder spats).</li></ul>	<ul style="list-style-type: none"><li>▪ Your Golden Bay Supervisor or Team Leader will sign you off to use this tool.</li></ul>



Mig



Plasma Cutter

# Mechanical Workshop

## Declaration

- I understand the risks and hazards of the area.
- I understand the emergency response procedure and equipment response location.
- I will not use equipment and tools that I have not been trained and found competent to use.
- I will at all times, adhere to the rules explained in this induction document.

Remember, safety is the responsibility of all of us. By working together, we can keep this workplace safe for everyone. Thank you for your attention and commitment to safety!

**When in Doubt, Shout!!**

Thanks!

Link to complete Online Test [HERE](#)

