



# **IGO GROUP SAFETY STANDARD 2 - PERSONAL PROTECTIVE EQUIPMENT & CLOTHING**

**INDEPENDENCE GROUP NL**





## DOCUMENT APPROVAL FOR USE

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## CONTENTS

1	PURPOSE .....	4
2	APPLICATION .....	4
3	ROLES AND RESPONSIBILITIES .....	4
4	SELECTION OF PERSONAL PROTECTIVE EQUIPMENT .....	5
5	SOURCING PPE .....	5
6	TRAINING .....	5
7	OPERATIONAL AREA .....	5
8	BASIC PPE REQUIREMENTS .....	6
9	HIGH VISIBILITY CLOTHING .....	8
10	SAFETY FOOTWEAR .....	9
11	EYE PROTECTION .....	10
12	HEARING PROTECTION .....	12
13	HAND PROTECTION .....	13
14	RELATED IGO DOCUMENTS .....	14
15	REALTED THIRD PARTY DOCUMENTS .....	14
16	APPENDIX A – IGO PPE ORDERING AND PURCHASING PROTOCOL .....	16
17	APPENDIX B - GLOVE CHART .....	17

## 1. PURPOSE

The purpose of this Standard is to define the minimum Personal Protective Equipment (PPE) requirements for IGO and provides general guidance on PPE selection for selected applications.

This document has been developed to provide detailed instruction in respect of the relevant elements of *IGO's Common Management System Standard 11, Operating & Maintenance Procedures*

## 2. APPLICATION

This Standard applies to everyone working for IGO including contractors, and those visiting IGO Operational Areas.

This Standard covers the issue and use of personal protective equipment intended for:

- whole body protection
- head, eye and face protection
- hearing protection
- respiratory protection
- hand and foot protection

Additional PPE maybe required depending on the task being undertaken, or the area in which the task is to be carried out. These requirements are specified in Safe Work Procedures (SWP), Material Safety Data Sheets and by the use of signage at the area indicating the type of PPE required (Blue and white –Mandatory).

## 3. ROLES AND RESPONSIBILITIES

### 3.1 Everyone on an IGO site or exploration work area

All personnel have a Duty of Care to wear, use and maintain the Personal Protective Equipment (PPE) issued for their use in the workplace. Employees shall ensure that all Personal Protective Equipment in their care is:

- kept in a good condition and replaced as required (any defects shall be reported to the Job Supervisor)
- cleaned as required.

### 3.2 Registered Manager

The Registered Manager is responsible for ensuring:

- site or project compliance with this Standard
- an Operational Area is defined (section 7)
- that the personal protective equipment required for the safe undertaking of all work on the site is available and in serviceable condition
- that visitors to the site are wearing at least the minimum Personal Protective Equipment required

### 3.3 Department/Area Manager

The Department Manager or equivalent is responsible for:

- Championing the application of this standard in the workplace
- Ensuring all personnel are trained in the use of the PPE they are required to use
- Assessing the need or otherwise for additional PPE as may be required beyond that defined in this Standard in consultation with the site HSEC Manager (or equivalent) or Corporate Safety. Specifically they must champion a process to ensure that intended items of Personal Protective Equipment are assessed for suitability by identifying hazards to be mitigated by the PPE and establishing the characteristics and standards of the proposed Personal Protective Equipment.

### 3.4 Job Supervisor

The Job Supervisor is responsible for ensuring, in so far as is practicable, that all personnel on the job have the correct PPE as per the Safe Work Procedure (SWP) or Job Safety & Environmental Analysis (JSEA), and use the PPE as intended.

## 4. SELECTION OF PERSONAL PROTECTIVE EQUIPMENT

The minimum set of PPE as described in Section 8 must be worn at all times.

Additional PPE may be required as defined in the job specific Safe Work Procedure or Job Safety Analysis.

## 5. SOURCING PPE

With regard to IGO employees, PPE must be sourced in accord with the IGO PPE Ordering and Purchasing Protocol as described in Appendix A.

Contractors are responsible for the provision of all safety equipment for their people. Unless otherwise agreed in contract, Contractors must also provide the procedures and training required to maintain and effect the use of PPE in accordance with this Standard.

IGO will ensure all visitors to our operational areas are provided with, and instructed in the use of PPE.

## 6. TRAINING

All personnel who are to be required to wear PPE shall be trained and assessed to determine competence in the selection, use, fit and maintenance of the PPE prior to its use.

All training and assessment will be conducted in the context of the intended use of the PPE. Wherever possible, this will occur in the workplace.

An auditable record of training shall be maintained on the site training database (InTuition) by the applicable site trainers or assessors.

## 7. OPERATIONAL AREA

For the purpose of defining the area in which Basic PPE is to be worn, the site or project Registered Manager is responsible for defining the 'Operational Area'. The 'Operational Area' is to be defined and mapped. As general guidance, an Operational Area is to include any location within 500m of any mining or beneficiating activity, 100m of any drilling or core handling activity, any area within workshops

and warehouses.

**Note:** Administration areas may be excluded from the Operational Area subject to a clear site-specific standard for such areas.

For surface operations, safety helmets and safety glasses need not be worn inside offices, crib rooms, and amenities buildings. Similarly, safety helmets need not be worn inside enclosed cabs of vehicles and mobile plant where protection is provided by the structure of the cab.

Personnel in workshops may also be excluded from wearing helmets subject to the relevant Safe Work Procedure.

**Note:** Safety glasses must be worn at all times in operational areas including when in vehicles and buildings

## 8. BASIC PPE REQUIREMENTS

The following Australian Standards compliant PPE must be worn in Operational Areas:

- Helmet
- High visibility orange long-sleeved shirt with reflective tape on the front back and sleeves
- Navy blue cotton drill trousers or blue jeans with reflective tape.
- Shirt and trousers may be substituted with high-visibility overalls with reflective tape on the front, back, sleeves and knees.
- Safety glasses (medium impact)
- Protective toe capped boots or protective toe capped rubber boots
- The following Australian Standards compliant PPE must be carried at all times by individuals in Operational Areas for use when required:
  - Hearing Protection
  - Gloves

Respiratory protection devices must be carried and or worn as specified in site specific Operational Area rules, or as specified in a SWP or JSEA.

The following Australian Standards compliant PPE must be carried at all times by individuals when underground:

- Cap Lamp (with fully charged battery)
- Utility belt
- Self-Rescuer
- Timepiece

## 8.1 Helmets

### *Safety Helmet Specifications*

All helmets must comply with Australian Standards. The compliance label is found attached to the inside rear of the helmet.

The relevant standards are:

- AS/NZS 1800:1998 Occupational protective helmets – Selection, care and use AS/NZS 1801:1997 - Occupational protective helmets
- AS/NZS 1801:1997/Amdt 1:1999 - Occupational protective helmets
- Helmets must always be white in colour, the exceptions being:
  - Red for use by fire wardens
  - Green for Emergency Services personnel

All underground helmets must have reflective strips.

Helmets intended for underground shall have a plastic cap lamp bracket and a cable clip.

**Note:** Helmets with metal cap lamp clips are not to be used.

### **Underground style helmet (standard)**



### **Underground style helmet (Full brim)**



### *Safety Helmet Use*

Safety helmets have a service life of two (2) years from the date of issue. The date is written by the wearer when the helmet is first issued. The date of issue should be written on the label inside the rear of the helmet.

The helmet should normally be replaced:

- at the end of its service life, or,
- when subjected to severe impact, or,
- whenever it is suspected that the helmet has been damaged.



**Note:** Date of issue is not to be confused with the helmet’s date of production which is stamped on the underside of the visor of the helmet.



Helmets are to be adjusted to fit snugly on the wearer’s head as per the manufacturer’s instructions. All helmets to be worn with the visor facing forward and harness size adjuster to the rear. Chin straps are to be worn where there is a risk of the helmet coming loose from the wearer, for example, in high winds or when looking down into tanks, etc. Gloves, cigarettes, earplugs, or any other items should not be stored between the suspension and shell; the space is needed when the shell-suspension absorbs the energy of an impact.

**Note:** In accord with Section 2.7, AS 1800 Occupational Protective Helmets— ‘Selection, care and use’; the wearing of caps, bandanas and the like under helmets is prohibited unless the item a) has designed for this purposes, and b) the use of the item has been approved by the Safety Department.

**Note:** Long hair should be tied up in Operational Areas so as minimise the potential for entanglement and descalping.

*Care of the Helmet*

The helmet must be inspected by the wearer before each use for damage to the shell and integrity of the harness.

It is recommended that the helmet and liner should be cleaned with a mild soap and warm water to help avoid skin irritation from contamination. Solvent or hydrocarbon type cleaners (for example, thinners, diesel, and kerosene) shall not be used on the helmet. These can seriously weaken the helmet materials in a way that may not be visible to the user.

Unless approved by the manufacturer, no adhesive decals, paint or permanent inks are to be applied to the helmet, as these products may contain solvents that could weaken the helmet. The only exceptions are for Dymo name labels and where helmets come supplied with reflective stripes, etc which have been fitted by the manufacturer, or are approved by the manufacturer.

**9. HIGH VISIBILITY CLOTHING**



All personnel who are required to work in Operational Areas, must wear high visibility clothing compliant with AS/NZS 4501.2:1999 Occupational protective clothing and AS/NZS 4602:1999 High visibility clothing and AS/NZS 4501.2:2006 Occupational protective clothing.

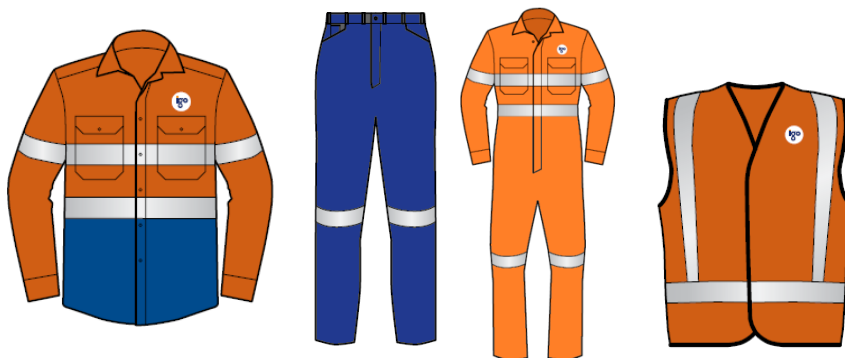
All shirts and overalls must be intact. Any faded, ripped, torn, contaminated or heavily stained clothing is to be replaced subject to Supervisor approval..

**9.1 Standard for IGO employee high visibility clothing in Operational Areas**

All shirts are of an orange and blue (or other colour combination as approved bt the site Registered Manager) long-sleeve cotton drill design with 50mm wide reflective stripes located on the chest back and arms. Trousers shall be of a long, navy blue cotton drill cut or denim with a reflective hoop on each leg.

**Figure 1- Compliant shirt, trousers and overalls for IGO employees in Operational Areas**





Overalls shall be orange, long-sleeved, standard or light-weight cotton drill design with 50mm wide reflective stripes located on the chest, back, arms and knees.

**Note:** Within Operational Areas sleeves must be rolled down and buttoned at the wrist.

**Note:** Clothing which is torn or otherwise damaged to the extent that it does not provide the protection for which it is intended must be replaced as soon as is practical.

### 9.2 Names on Shirts and Overalls

The first name of wearer must be embroidered on shirts and overalls. No nicknames are to be used. With regard to IGO employees, PPE must be sourced in accord with the IGO PPE Ordering and Purchasing Protocol as described in Appendix A.

### 9.3 Standard for IGO Emergency Services

Emergency Service Staff are required to wear different coloured overalls to enable easy identification whilst onsite. The choice of product is subject to approval by the Registered Manager.

### 9.4 Jackets and coats

Jackets and coats may be worn as conditions dictate. Selection of appropriate jackets/coats depends upon the task and the material of the garment. All jackets and coats for IGO personnel must be orange and navy in colour with 50mm wide reflective stripes.

## 10. SAFETY FOOTWEAR

All footwear shall meet the Australian Standard and with protective toe caps or rubber boots with protective toe caps (AS/NZS 2210.3: 2000 Occupational protective footwear - Requirements and test methods.)

Boots should be inspected on a regular basis to ensure they are in good condition.

All boots are to be replaced when the protective toe cap covering is exposed or before the soles are worn smooth.

Personnel requiring other styles and fittings of boot may purchase these privately only after site approval is granted, and they must comply with the specified Standard. Reimbursement to a maximum of \$100.00 per pair may be effected upon submission and approval of an expenses claim form.



**Note:** For people working in administrative areas outside of the Operational Area, fully enclosed, flat

shoes are acceptable.

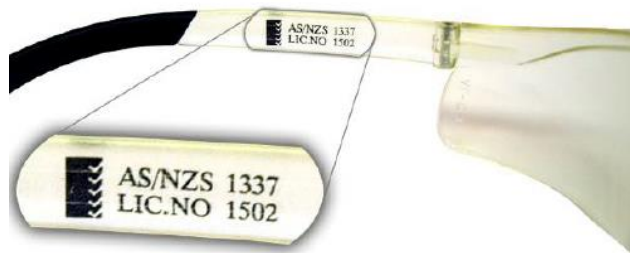
## 11. EYE PROTECTION

### 11.1 Safety glasses

All safety glasses shall conform to Australian Standards. The IGO minimum standard impact rating is Medium as defined in AS/NZS 1337:1992. Medium impact glasses may be identified by the letter I stamped on the lens.

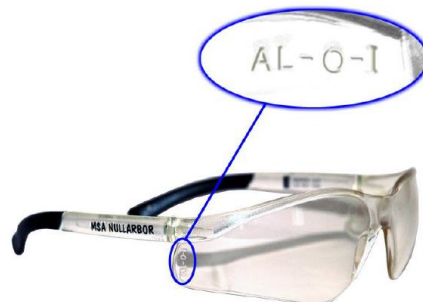
Safety glasses are designed to provide different degrees of protection depending on the design and type.

All safety glasses must provide protection from front and side entry. The tasks being undertaken will dictate the impact rating of the safety glasses.



The relevant standards are:

- AS/NZS 1337:1992 Eye Protection for Industrial Applications AS/NZS 1337:1994/Amdt 1: Eye protectors for industrial application AS/NZS 1337:1997/Amdt 2: Eye protectors for industrial application
- AS/NZS 1336:1997 Recommended practices for occupational eye protection
- AS/NZS 1336:1997/Amdt 1:1997 Recommended practices for occupational eye protection
- Compliant safety glasses showing location of rating stamp.
- 'AL' refers to the manufacturer (All Logic)
- 'O' means suitable for outdoor use
- 'I' means Medium Impact



**Note:** Tinted lenses shall not be worn indoors or underground, or in areas of poor visibility or at night.

Side shields must remain in place on assembled safety glasses. Removal renders the safety glasses non-compliant.

### 11.2 Goggles and Monogoggles

Goggles are worn when extra protection is required against the risk of eye injury.

### 11.3 Vented monogoggles

Vented monogoggles are used as protection against dust (as in the image at right) and in combination with safety glasses when grinding, or as a substitute for overglasses when eye protection is required for spectacle wearers.

Monogoggles shall be worn:

- during grinding, chipping, striking or like operations
- while scraping paint, rust, scale or during similar operations
- when blowing down parts and equipment with compressed air



### 11.4 Chemical splash goggles

Chemical splash goggles conforming to AS/NZS 1337 shall be used to provide full protection to the eyes and surrounding skin area against chemical splashes. They shall be worn:

- when handling dry cement or powdered substances not chemically hazardous
- when painting with spray can or gun
- when handling hazardous chemicals (including lime)

Chemical splash goggles are designed to fit over prescription glasses and shall therefore be worn by wearers of such glasses during any of the operations listed above.



### 11.5 Face Shields

Face shields are used in combination with safety glasses to protect the face from sparks and flying debris during:

- grinding
- machining
- buffing and sanding

Face shields may also be used in combination with monogoggles when handling hazardous chemicals. All face shields shall be medium impact rated and comply with AS/NZS 1337.



### 11.6 Prescription safety glasses

People with prescription glasses shall protect their eyes with prescription safety glasses or by wearing overglasses or monogoggles.

IGO personnel will be reimbursed for prescription safety eyewear on supply on a receipt where such an arrangement is preapproved by their line manager.

### 11.7 Contact Lenses

Personnel wearing contact lenses require the same level of eye protection as those without contact lenses. However, the following potential hazards associated with contact lenses should be noted:

- In the event of a foreign body or chemical splash into the eye it may be difficult to remove the lens in order to flush the eye at an eye wash station. Therefore medical assistance should be obtained.
- Inflammation of the cornea caused by welding arc-eye (welding 'flash') may result in the contact lens sticking to the cornea. Contact lenses should be removed at the first sign of eye irritation, however if there is any indication of adhesion to the cornea, medical assistance should be obtained.

### 11.8 Double eye protection

Double eye protection shall be worn when performing the following tasks:

**Grinding:**

Full face visor and safety glasses

or,

Monogoggles and safety glasses



**Welding:**

Safety glasses and welding helmet



**Handling Chemicals:**

Goggles and full face shield



## 12. HEARING PROTECTION



Hearing loss is cumulative and once lost, can never be regained. In order to prevent damage to hearing by exposure to excessive or prolonged noise, noise levels have to be reduced to as low as reasonably practicable. Where this is not practicable suitable hearing protection must be worn.

Hearing protection must be worn by personnel when noise levels exceed 85 dB (A) for an eight-hour working day, or 82 dB (A) for a twelve-hour shift.

For each 3 dB (A) increase in noise level, the exposure time shall be halved (e.g. 4 hours at 88 dB (A), two hours at 91 dB (A) etc.).

Double hearing protection (ear plugs and muffs) must be worn where noise exposure exceeds 100 dB (A) for any duration in excess of 10 minutes.

## 12.1 Types of Hearing Protection

Essentially there are two basic types of hearing protection: disposable ear plugs and earmuffs.

## 12.2 Disposable Ear Plugs

Only Class 5 disposable earplugs that comply with AS/NZS 1269.3:2005 shall be used. Disposable earplugs are designed to be thrown away after use in order to minimise the chance of ear infection.

Disposable earplugs must be worn in accord with the manufacturer's instructions.

## 12.3 Ear Muffs

Earmuffs consist of rigid cups that fit over the outer ear and are held in place by a neck spring or headband. Muffs are available that can be attached to a safety helmet and can be swung out of the way when not required.

All earmuffs shall, as a minimum requirement, conform to AS/NZS 1270:20029.

Ear Muffs must be worn in accord with the manufacturer's instructions.



## 13. HAND PROTECTION

All personnel engaged in tasks or activities where there is the potential for hand injury shall select and correctly wear gloves or hand protective equipment or products (such as barrier creams) that are compliant with Australian Standards.

The relevant standards are:

- AS/NZ 2161.1:2000 Occupational Protective Gloves – Selection, use and maintenance
- AS/NZ 2161.2:2005 Occupational Protective Gloves – General requirements
- AS/NZ 2161.3:2005 Occupational Protective Gloves – Protection against mechanical risks
- AS/NZ 2161.4:1999 Occupational Protective Gloves – Protection against thermal risks (heat and fire)
- AS/NZ 2161.5:1998 Occupational Protective Gloves – Protection against cold

Gloves shall be worn when handling material that has the potential to burn, cut, tear or otherwise cause injury to the skin. Gloves shall also be worn when walking over rough terrain where a fall could occur. To minimise the risk of entanglement, close fitting Kevlar gloves are to be worn when operating rotating equipment such as pedestal drills and lathes.

Gloves may be carried using glove clips when not in use.

See **Appendix B** to determine the most suitable glove for a given application.

**NOTE:** Given the number of degloving injuries that occur in the industry, it is IGO rule that no rings or loose fitting jewelry shall be worn by those persons work with rotating plant or tools.

## 14. RESPIRATORY PROTECTION

Based on the application of the hierarchy of control, respiratory protection PPE shall be used as a last

line of defence. In circumstances where potential exposure to a respiratory hazard cannot be eliminated, no person should be exposed to potentially harmful atmospheres without suitable protection. The selection, use and maintenance of respiratory protective equipment at IGO must conform to AS/NZS 1715:2009.

One of the most commonly encountered respiratory hazards in the work place is dust. P2 dust masks shall be IGO's minimum standard. P1 dust masks shall not be used on IGO sites.

## 15. RELATED IGO DOCUMENTS

IGO Prescription Safety Glasses Ordering Procedure

## 16. RELATED THIRD PARTY DOCUMENTS

Mines Safety and Inspection Regulations (1995) (Part 4 – General Safety Requirements) AS/NZS 4801:2004 Occupational Health and Safety Management Systems

AS/NZS 1800:1998 Occupational protective helmets – Selection, care and use AS/NZS 1801:1997 Occupational protective helmets

AS/NZS 1801:1997/Amdt 1:1999 Occupational protective helmets

AS/NZS 4501.2:2006 Occupational protective clothing

AS/NZS 1906.4:1997 Reflective materials and devices for road traffic control purposes – High visibility materials for safety garments.

AS/NZS 4602:1999 High visibility clothing

AS/NZS 2210.3:2000 Occupational protective footwear - Requirements and test methods

AS/NZS 1336:1997 Recommended practices for occupational eye protection

AS/NZS 1336:1997/Amdt 1:1997 Recommended practices for occupational eye protection AS/NZS 1337:1992 Eye protectors for industrial application

AS/NZS 1337:1994/Amdt 1: Eye protectors for industrial application AS/NZS 1337:1997/Amdt 2: Eye protectors for industrial application

AS/NZS 1337.6:2007 Personal Eye Protection - Prescription eye protectors against low and medium impact

AS/NZS 1269.3:2005 Occupational Noise Management Pt 3- Hearing Protector Program. AS/NZS 1270:2002 Acoustics – Hearing Protectors

Code of Practice – Managing Noise at Workplaces, 2002, Worksafe Western Australia

AS/NZS 4399: 1996 Sun protective clothing – Evaluation and Classification

AS/NZS 2604: 1998 Sunscreen products - Evaluation and Classification

AS/NZ 2161.1:2000 Occupational Protective Gloves – Selection, use and maintenance AS/NZ 2161.2:2005 Occupational Protective Gloves – General requirements

AS/NZ 2161.3:2005 Occupational Protective Gloves – Protection against mechanical risks

AS/NZ 2161.4:1999 Occupational Protective Gloves – Protection against thermal risks (heat and fire)

AS/NZ 2161.5:1998 Occupational Protective Gloves – Protection against cold

AS/NZS 1716:2003 - Respiratory protective devices

AS/NZS 1716:2003/Amdt 1:2005 - Respiratory protective devices

## 17. APPENDIX A – IGO PPE ORDERING AND PURCHASING PROTOCOL

Employees of IGO working in Operational Areas are entitled to be issued with high visibility clothing from the approved range as follows:

### Initial issue

- 4 Shirts; and
- 4 Trousers; and
- 1 pair Safety Boots

### Subsequent Issues

The issue of replacement clothing will be based on fair wear and tear. Boots will be replaced on exchange.

All items are from the approved range, as per the **Company Clothing Order Form**.

### Non-standard issue

Personnel requiring other styles and fittings of boot (compliant with site and Australian Standards), may purchase these privately. Reimbursement to a maximum of \$100.00 per pair will be effected upon submission of an expenses claim form.

### How to Order ????

Refer to your Site Procurement Procedure or the Exploration Procurement Procedure.



## 18. APPENDIX B - GLOVE CHART

√√√ = Most Preferred    √√ = Preferred    √ = Minimum

Type of Hand Protection GENERAL WORK GROUP	Barrier Cream	Surgical rubber glove	Chemical Specific Glove	Welding Glove (Gauntlet length)	Cut Resistant Gloves	Riggers Glove (Leather)	Standard Duty (Leather/ Cotton)	Mechanics Gloves	Light Duty Gloves	Anti Vibration Glove	Fine Detailed Work Glove
Abrasive blasting				√ √ √							
Biological Hazards (Bodily fluids and excretion)		√									
Cable handling work (trailing cables)				√	√ √	√ √ √	√ √ √	√ √ √	√ √	√ √	
Cold work (Cold objects)				√ √ √		√		√			
Electric portable hand tools (non-vibration)				√ √		√ √ √	√ √	√ √ √	√	√	
Explosive handling			√ √ √			√ √	√	√ √			
Formwork				√		√ √ √	√ √	√ √ √		√	
General maintenance activities (servicing, idler changing, pumps etc)				√	√	√ √ √	√ √	√ √ √	√ √ √	√ √ √	
General operations activities (e.g. manual handling etc)			√	√	√	√ √ √	√ √ √	√ √ √	√ √ √	√	
Gouging				√ √ √							
Handling abrasive and sharp objects (coal/rocks)				√ √	√ √	√ √ √	√ √ √	√ √ √	√	√ √	
Handling sharp edged objects e.g. knives, cut steel, sheet metal				√	√ √ √	√		√		√	
Handling timber and general woodworking					√	√ √ √	√ √ √	√ √ √	√	√	
Hazardous Substances (refer to MSDS)	√		√ √ √								
High impact tools			√	√ √	√	√ √	√ √	√ √	√	√ √ √	
High pressure air				√ √ √		√ √	√ √	√ √	√	√ √	
High pressure hydraulics/fluids				√ √ √		√		√		√	
Hot work (Hot objects)				√ √ √		√		√			
Oxy Cutting				√ √ √							
Rigging (general)				√		√ √ √		√ √ √		√	
Scaffolding					√	√ √ √		√ √ √	√ √		
Welding				√ √ √							