Charters Towers
DALRYMPLE TRADE TRAINING CENTRE
DTTC

# STUDENT HANDBOOK 2018

# 2018 DELIVERY

| ROOM | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
|---|---|---|---|---|---|
| Kitchen | | | | Hospitality 08.30 - 3.00 | |
| | | | | ALL SCHOOLS | |
| Restaurant | | | | Hospitality 08.30 - 3.00 | |
| | | | | ALL SCHOOLS | |
| GLA 1 | | | | AGRICULTURE 08.30 - 3.00 QATC | |
| | | | | ALL SCHOOLS | |
| GLA 2 | | | | ENGINEERING 08.30 - 3.00 RTO: AXIAL | |
| | | | | ALL SCHOOLS | |
| GLA 3 | | | | AUTOMOTIVE 08.30 - 3.00 RTO TAFE | |
| | | | | ALL SCHOOLS | |
| CONSTRUCTION WORKSHOP/AUTOMOTIVE WORKSHOP | | | | AUTOMOTIVE 08.30 - 3.00 RTO TAFE | |
| | | | | ALL SCHOOLS | |
| ENGINEERING WORKSHOP | | | | ENGINEERING 08.30 - 3.00 RTO: AXIAL | |
| | | | | ALL SCHOOLS | |

*The Dalrymple Trade Training Centre Board and Staff welcome all students and families to the Dalrymple Trade Training Centre.*

*We provide a positive learning and training environment and support our students as they progress through the Centre to the pathway of their choice. Our focus is on skills development and attitudes that see our young people valued by our local employers and see them well equipped for their future pathways.*

*We encourage parents and caregivers to take an active interest in the progress of students and enjoy working closely with our schools and families to give our students a supportive environment in which to develop skills and attitudes for work.*

*We wish all our students an enjoyable learning and training experience as they progress through their courses at the Dalrymple Trade Training Centre.*

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*Centre Manager*
*Dalrymple Trade Training Centre*
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*CHARTERS TOWERS QLD 4820*
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Charters Towers
DTTC DALRYMPLE TRADE TRAINING CENTRE

# DTTC DAILY OPERATING PROCEDURES

Our focus is to train students in work attitudes and attributes that contribute to a centre that is utilised by multiple training pathways and Facilitators. It is imperative that students are trained in responsible use and maintenance of tools and workspace.

**LENGTH OF DAY:**
**8.30am – 3.00pm (VETiS programs)**
It is expected that students adhere to the length of day requirements.

**DAILY BREAKS: (VETiS programs)**
Break – 10.00am – 10.15am
Lunch Break – 13.00pm – 13.30pm
These break times are to be adhered to. They enable students to have sufficient break periods and resemble the minimum break requirements under WH & S.

**STUDENT ABSENCE:**
- Due to time constraints on delivery of courses – student attendance each day is vital to ensure students remain up to date.
- If unwell or late parents/caregivers are asked to call their relevant school.
- Rolls are taken each day and schools notified daily of student absences/late arrivals.

**UNIFORM AND EQUIPMENT FOR DAILY USE:**
- Students are to wear correct PPE Personal Protective Equipment each day they are on site.
- Steel capped boots are a requirement for all practical courses in workshops where identified by the training provider (Automotive, Engineering) and MUST be worn each day – there will be no access to workshops and practical work (including experiments) if not worn. Students must be sent home if not worn.
- PPE must be undamaged – no rips in shirts/pants
- PPE must meet EQ requirements as set out in the WH & S section of this booklet and further detailed in the ITD Guidelines.
- No nylon/flammable clothing is to be worn in the Engineering class.

**LUNCH AND HYDRATION:**
- Students will be required to bring meals with them to the centre – **IF PARENTS/CAREGIVERS ARE BRINGING LUNCH IN FOR A STUDENT THEY MUST BRING IT TO THE FRONT DESK TO BE HANDED TO THE STUDENT**
- Each student is required to bring a water bottle clearly labelled each day.

# BANNED ITEMS:

**MOBILE PHONE/IPODS:**

- Students are not permitted the use of mobile phones or iPod at the centre in accordance with Education Queensland policy. Items will be collected by the facilitator until the end of the session/day if this occurs, in some instances where this occurs regularly these will be sent back to the respective school's Deputy Principal.

**STUDENTS LEAVING SITE:**

- **Students are NOT to leave site during the day – under no circumstances are students allowed to go into town during breaks**
- If a student is required to leave early a phone call or note must be received to the student's school prior to the time. Schools will then contact the facilitator to confirm.
- Unauthorised leaving will be reported to the appropriate School.

## COMPUTER USE:

- There is 1 bank of laptops for student access for approved courses – trolleys need to be returned with all laptops plugged in after each sessions use.
- When logging on the user agrees to use the computing and networking facilities solely for study or course purposes. These purposes reflect the standards of the Dalrymple Trade Training Centre and Education Queensland.
- Each user agrees to complete an IT Agreement for computer access.

## BREAKAGES AND FAULTY EQUIPMENT:

Staff and students are asked to report all breakages and faulty equipment to Manager to ensure replacement and repair occurs in a timely manner. If WH&S risk a Do Not Use tag will be issued immediately

## SMOKING:

As an Education Queensland site there is to be no smoking on the Dalrymple Trade Training Centre site or in the Dalrymple Trade Training Centre uniform. The exclusion zone for all Education QLD sites is 5 metres from the surrounding boundary. NO secondary school student is to bring a cigarette lighter, matches or cigarettes to the DTTC.

## STUDENT TRANSPORT:

- **Car parking** - Student car parking is available at the Dalrymple Trade Training Centre.
- **Bikes** – students are required to dismount on arrival and store bikes in the bike rack provided. Students are to provide chain and lock to ensure secure storage. The Dalrymple Trade Training Centre is not responsible for theft of bikes.
- **Skateboards and Scooters** – are NOT to be used on the Dalrymple Trade Training Centre. Students are to dismount on arrival and store with personal belongings. The Dalrymple Trade Training Centre is not responsible for theft of skateboards or scooters.

## CARE OF PROPERTY:

- It is the responsibility of each student to ensure all personal property is kept in own bag and each student is responsible for their own property.
- Lost property should be handed to Facilitator or Dalrymple Trade Training Centre staff.
- Any property belonging to the Dalrymple Trade Training Centre **MUST** at all times be treated with respect and due care. Deliberate damage including graffiti to property **CAN** result in cancellation of enrolment; costs to have deliberate damage including graffiti repaired will be passed on to the student or their legal guardian/parent.

## REPORTING:

Mid –term Feedback Reports are completed by RTO staff to provide feedback to schools on student progress. Copies of reports are sent to your respective school.

## WORKSHOP:

- Workshop will remain locked unless Facilitator is on site to supervise.
- **No student access to workshop/classrooms in breaks.**
- **At end of day all work spaces to be swept and left clean and tidy. All metal/ wood shavings are to be cleaned from machinery and placed in bins.**
- All rubbish is to be placed in the appropriate skip or bin.
- There is to be no Food or Drink (other than water) in workshops

## TOOL STORE and SHUTTER STORE:

- **No student access at any time**
- At end of day all tools to be *cleaned thoroughly, counted and returned in full working order to correct placement on tool boards or shutter store*
- All equipment is to be left in a manner suitable for the next class to use
- Any breakages, faults must be reported to Manager

## KITCHEN:

- Workshop will remain locked unless Facilitator is on site to supervise.
- **No student access to kitchen in breaks.**
- **At end of day all work spaces to be swept and left clean and tidy.**
- **All equipment used must be cleaned and placed in its appropriate location.**
- **Ovens and stove tops MUST be cleaned**
- **All spills MUST be cleaned up**
- All rubbish is to be placed in the appropriate skip or bin.

## CLASSROOMS:

- No student access at any time unless supervised by a Facilitator
- Doors to remain locked during breaks – no student access during breaks
- At end of day all desks and tables left tidy, paper picked up and chairs put up on tables
- Graffiti on tables and workspaces will not be tolerated any student found performing graffiti will be returned to their appropriate school immediately.
- There is to be no Food or Drink (other than water) in classrooms if laptops are in use there is to be no drinks

## ALL POWER, FANS & LIGHTS MUST BE SWITCHED OFF WHEN LEAVING ROOMS AT END OF SESSIONS

## STUDENT OUTDOOR SPACE:

Students are responsible for ensuring all rubbish is placed in either general waste bins.
Facilitators to monitor at end of last break all chairs to be stacked and no rubbish on ground.

## WASTE MANAGEMENT:

The Dalrymple Trade Training Centre aims to operate as sustainably as possible. Staff and students are asked to ensure all waste is placed in general waste bins provided.

# DALRYMPLE TRADE TRAINING CENTRE CODE OF CONDUCT:

Students and Staff at the Dalrymple Trade Training Centre have the responsibility to adhere to a code of conduct that exhibits a high standard of personal conduct conducive to operating as an industry site.

The Dalrymple Trade Training Centre has no tolerance of poor behaviour, attitude or wilful non-compliance with Workplace Health and Safety requirements. It is our focus that students attending exhibit quality skills and attitudes that will see them become positive members of the Dalrymple Trade Training Centre environment as well as demonstrating qualities of Employability Skills.

## Student Responsibilities at the DALRYMPLE TRADE TRAINING CENTRE:

**Be on time** – students have the responsibility of ensuring they are on time at the start of day, returning from breaks.
**Be prepared** – students have the responsibility to ensure they have all equipment required for their training day.
**Smoking** – not allowed on site or in DTTC uniform.
**Uniform** – students have the responsibility to correctly wear the uniform worn each day. If students choose to wear alternative footwear to and from the DTTC they must be prepared and ready to start each session on time.
**Language** – the Dalrymple Trade Training Centre does not tolerate foul or abusive language – students will be removed from class if this occurs. Students have the responsibility to speak to all staff, fellow students and Dalrymple Trade Training Centre visitors in a polite and courteous manner.
**Theft/Vandalism of Equipment** – the Dalrymple Trade Training Centre does not tolerate theft or vandalism – student enrolment may be cancelled immediately if this occurs.
**Verbal/Physical Harassment/Abuse** – the Dalrymple Trade Training Centre does not tolerate abuse or harassment in any form – student enrolment may be cancelled immediately if this occurs.

## Management of Breaches of Code of Conduct:

The student management in class is the responsibility of the classroom Facilitator. If issues are continuing Manager will contact your base school to attend and remove student.

**Step 1:** Warning Issued by Facilitator – individual discussion with student regarding appropriate code of conduct. Facilitator to keep note **(re: WH&S/Code of Conduct Incident Report)**

**Step 2:** Ongoing breaches (after 2 warnings) – Facilitator referral to Manager – Manager will contact base school. Facilitator & Manager to keep note and file **(re: WH&S/Code of Conduct Incident Report)**

**Step 3:** Continuing (additional warning required) – Facilitator referral to Manager – School , parent, Facilitator, student meeting to discuss progressing at the Dalrymple Trade Training Centre and Contract for Continuing at the Dalrymple Trade Training Centre – Issue of Written Warning pending cancellation of enrolment. Facilitator & Manager to keep note and file **(re: WH&S/Code of Conduct Incident Report)**

**Step 4:** Continuing (additional warning required) – Facilitator referral to Manager – School contacted immediately (verbal and written) for removal of student from site pending - Recommendation for Cancellation of Enrolment. Manager takes Recommendation for Cancellation of Enrolment to Dalrymple Trade Training Centre Board -Student suspended from site until Board meets.
Board will make decision on a) Cancellation of Enrolment or b) Conditions of Enrolment.
On Cancellation of enrolment parent and student will be notified immediately.

**NB:**
Serious breaches of code of conduct resulting in WH&S breach or potential to harm (physical/verbal) self or others will result in immediate student removal from site with parent/caregiver and school notified immediately. Process of Management of Breach of Code of Conduct goes immediately to Step 3 or 4 depending on severity of breach.

Breaches to code of conduct will be dealt with by base schools under their Responsible Behaviour Plan (e.g. Smoking) and may result in suspension from school as well as the program.

## EVACUATION PROCEDURE:

In case of fire evacuation follow evacuation routes displayed in each room within the Dalrymple Trade Training Centre. Students are required to follow Facilitator directions and to evacuate in their class group.

The Dalrymple Trade Training Centre evacuation point is the area next to the bus parking bay, in the event of fire/ chemical or gas release or other imminent danger all staff and facilitators are to evacuate their classes to the Friemann oval, accessed by immediately turning right when walking out the Dalrymple Trade Training Centre entrance gate and walking across to the oval. Entrance gates must not be blocked so that emergency vehicles can gain access to the site. Students are to congregate in class groups for roll marking.

## EMERGENCY PROCEDURES

**In case of FIRE or any EMERGENCY Contact 000:**

**Advise Manager on 0499282131**

**Manager will notify the appropriate schools**

**EVACUATION:**

**Sound: Continuous beeping**

- **ALL STUDENTS ARE TO EVACUATE TO Emergency Assembly / MUSTER POINT following their Facilitator and the evacuation route on the maps in each room.**

**FACILITATORS:**

- **If SAFE close all windows and doors**
- **If SAFE close down machinery**
- **If SAFE turn off gas**
- **NO SMOKING OR NAKED FLAMES**
- **Take your class roll with you**
- **You need to use your common sense when evacuating in a safe manner. Leave via the closest SAFE EXIT**
- **EVACUATE TO Emergency Assembly / MUSTER POINT**
- **Mark class roll and report information to Manager who will liaise with schools**
- **REMAIN in training groups**
- **Return to your building ONLY when the all clear is given**

**LOCK DOWN:**

**Sound: CONTINUOUS SIREN**

- **Lock all doors and windows**
- **Remain in lock down until advised otherwise**

**NB: A lock down occurs when there is an immediate threat to those on site. All care must be taken to ensure safety to staff and students.**

# WORKPLACE HEALTH & SAFETY

The Centre operates under the Work Health and Safety Act (QLD) 2011. The PCBU for the site is the Centre Manager. The centre utilises all operating principles under the Vocational (Industrial Technology + Design) Guidelines as issued by Education Queensland. A copy of this guideline is supplied to all facilitators, and a copy is available from the Centre Manager. It is the responsibility of the Facilitator/Staff member to ensure that students are provided a safe learning environment.

## PPE REQUIREMENTS – MINIMUM STANDARDS –

**Selection of Personal Protective Equipment**

- Students will be given instruction on the appropriate selection of each item of PPE. This includes an explanation of its function, why it is to be used, its proper use, and information on how to get a "good fit" so as to make it as comfortable as possible.

Whatever type of PPE is selected, the items ***must*** conform to the relevant Australian Standards.

**Foot Protection**

**Relevant Standard**

- Australian Standards: AS/NZS 2210.5: 2009 – Occupational Protective Footwear – Guide to selection and use.

Managing PPE is further complicated when trying to consider local school uniform policies and the desire by students to follow fashion trends.

Footwear is a most important safety issue. Toes and feet can be injured during the course of many activities in VOCATIONAL workshops. There is often a risk of:

- Crushing, fractures and bruising from heavy falling objects, or kicking objects;
- Penetration wounds and cuts from sharp hand tools falling from work benches, etc.;
- Exposure to hot liquids and solids or hot sparks when welding;
- Burns from chemical spills.

- Slipping, tripping or serious falls when footwear is poorly or improperly fitted.

The wearing of “safe” footwear is mandatory and hence, substantial footwear appropriate to that practical activity must be worn. Footwear such as thongs, open weave type shoes, or shoes with openings at toes or heels, platforms or high-heel shoes shall not be worn in areas which present hazardous situations and any risk of personal injury.

Senior students engaged in Engineering, Metal Fabrication and Welding or other Vocational Education courses where specific workplace risks are high to extreme, will definitely be required to wear far more substantial footwear protection, i.e. safety boots. Steel reinforced (steel-toe) safety boots protect feet from common machinery hazards such as falling or rolling objects, cuts and punctures. The entire toe box and insole are steel-reinforced, and steel, aluminium or plastic materials protect the instep. Some safety boots also insulate against temperature extremes and may be equipped with special rubber soles to guard against slips, chemicals and electrical hazards such as welding.

**Frequently Asked Questions regarding appropriate footwear for Vocational Courses;**
**Question 1**. Can a parent insist that their child be allowed to wear soft, non-substantial, noncompliant shoes in a Vocational workshop and write a note to the school accepting responsibility if something should happen to the child?

**Answer:** No. The PPE requirements in Vocational workspaces must be non-negotiable. A parent signing a disclaimer provides no protection for the teacher or the Department. The student and parent possibly will need to re-evaluate participating in this subject.

**Question 2.** What if the parent then provides a medical certificate indicating that this student has a medical condition and cannot wear any kind of sturdy, protective, PPE compliant footwear? Does this medical certificate override legislation and allow beach sandals or casual canvas footwear to be worn in Vocational workspaces until the medical condition improves?
**Answer:** No. A medical certificate does not override WHS legislation. If a student presented with a medical certificate that says the student cannot wear appropriate protective shoes, then the Centre management would have to undertake a risk assessment to come up with strategies to control the potential or evident risk posed. In this instance maybe the Centre is left with no alternative but to unfortunately exclude the student from further participation in this course of study.

Managing safety in an VOCATIONAL practical workspace is an ongoing process. Proactive risk management will establish the rules and safety standards to be maintained – such as the wearing of correct PPE. It is important that students and their parents understand these rules and standards, and that the minimum standards are maintained at all times.

Every facilitating space and activity undertaken by students can present different risks.

**Eye, Face and Hair Protection**
**Relevant Standard**

- Australian Standards: AS/NZS 1336/7: 1997/2007 – Eye Protection for Industrial Applications – (Recommendations for occupational eye protection.)

Before purchasing approved protective equipment for the eyes and face, the following should be considered:

• The nature of the risk to the eyes or face - i.e. impact from flying objects, chemical splash, irritant or corrosive vapour, heat, welder's flash, UV protection or general irritation to eyes such as dust;
• The work conditions (indoors or outdoors, are side shields required?);
• Personal preference of the wearer (wrap around, tinted or clear);
• Condition of operator's eyesight (need to be worn over glasses);
• Plastic generally has a higher resistance to breakage from sharp objects and hot materials;
• Glass has a higher abrasion and scratch resistance.
Goggles provide a more reliable seal to keep products out of the sensitive eye area. They are useful for protection against chemical splash, dust or vapour. Face shields are appropriate when the entire face need protection: for example, during activities where the worker may be welding or exposed to other burn types, or chemicals that are a skin irritant.

**Emergency Face and Eye Wash Station:**
Eye and face wash stations are an important part of workplace safety anywhere that hazardous materials are used or stored. They provide on-the-spot decontamination and allow staff and students to flush away hazardous substances that can cause injury.
Many VOCATIONAL departments are currently equipped with an eye wash station. These are usually a wall mounted stainless steel or ABS bowl style with push paddle tap and twin aerated diffusers. Eyewashes can be critical in the seconds after an accident. They are usually not used often, so it is important to regularly check that they are functioning properly so they are ready for those rare emergencies.

**Protection for Long Hair:**
Loose hair poses a significant entanglement hazard around machinery. Any person with longer, uncontrolled, loose hair ***must not*** work or pass in close proximity to the moving parts of any machinery unless their hair is securely confined close to the head. This could be, for example, with a hair band, rubber band, a hair net or a close-fitting cap (worn backwards). Ponytails ***must*** also be tied up and contained so that they cannot fall forward, sideways or backwards into the moving, rotating parts of any machinery.

***Note:*** *Hair nets specifically are* ***not*** *mandatory in Qld VOCATIONAL practical activities. What* ***is*** *mandatory is that when hazards and risks are identified, controls must be put in place to manage that hazard to reduce the risk of injury.*

***Hearing Protection***
***Relevant Standard***

- *Australian Standards:* ***AS/NZS 1269.3: 2005*** *– Occupational Noise Management – 3*

Noise level is measured in decibel units (dB). For example, the hum of a refrigerator motor operates at about 40 dB, normal conversation can be approximately 60 dB, and heavy city traffic or industrial workshop noise can be 85 dB and above. Industrial Technology and Design departments in schools deserve special attention because of the excess noise levels that facilitators and students can often be exposed to in many practical workshop curriculum activities. VOCATIONAL departments need to clearly identify those activities or plant and equipment that might generate excessive noise levels, and then implement affirmative measures to help remove the exposure hazards and prevent the harmful effects.

Hearing can be damaged by short bursts of very loud noise, or even exposure to moderately loud noise levels over an extended period of time. Hearing damage can be temporary or, in serious cases, permanent. Symptoms of hearing damage can include:
• Loss of hearing;
• Tinnitus, (or, ringing in your head or ears);
• Difficulty understanding normal conversations, especially with background noise;

**Hearing protection should be worn:**

- In all practical VOCATIONAL activities when noisy power tools and hand tools are in use;
- When facilitators and facilitators' aides are undertaking noisy preparation activities;
- In any other circumstance where excess noise levels are a problem.

**Earplugs:** Ear plugs may be disposable or reusable and are easy to carry from job to job. They also have the advantage over earmuffs (much cooler) for work in hot, humid environments. They must be easily accessible and preferably stored within the practical workspace where they are to be normally used.

It is recommended that earplugs should NOT be worn if:
• The wearer has a pre-existing ear infection or;
• The earplugs are not being worn (fitted) properly.

**Earmuffs:** When purchasing earmuffs ensure they have the Australian Standard approval marking and be rated at Class 2 - for noise exposures up to 95 dB. Earmuffs should be a snug but comfortable fit on the worker's head. They can be virtually useless if not fitted properly. Full earmuffs will provide the safe, more reliable alternative. It is also considered to be more advantageous to wear earmuffs instead of earplugs, if:
• Noise exposure levels are high, or continuous over an extended period;
• Noise is of an impulsive nature such as sudden loud explosive sounds;
• There is a need to remove and replace the hearing protection frequently;
• Users are likely to acquire dirty hands during their practical workshop activities;

• Users have a pre-existing ear infection.

**Maintenance:**
• Disposable earplugs **must** be thrown away after each use;
• Reusable earplugs **must** be cleaned in detergent and water and allowed to dry completely before the next use;
• If earplugs lose their softness, shrink or become distorted, they need to be replaced;
• Ear muffs should to be inspected regularly for damage and require regular care and cleaning;
• The cushions of the earmuff should be soft and supple not hard and cracked, to provide a firm but comfortable seal around the ear;
• The cushions can be replaced when they become hardened and brittle (often due to perspiration) or torn and damaged, without the expense of buying new earmuffs;
• The cushions and head band should be regularly wiped clean but need to be dry before the next use;
• Earmuffs should be stored where they can be kept dry, clean and out of the sun as the band can become distorted when exposed to heat and humidity.

**Hand Protection**
**Relevant Standard**

- Australian Standards: **AS/NZS 2161.1: 2000** – Occupational Protection Gloves – 1

**When we are purchasing approved protective gloves**: we look for gloves most suitable for the various practical activities in VOCATIONAL course by considering the following:
• The nature of the risk to the hands and arms based on the activity: e.g. exposure to extreme heat, mild heat, chemical burns, sharp objects causing cuts or scratches, pinching and various fluids;
• Gloves that might be suitable for one application may not be suitable for another;
• The extent of hand and arm protection required (the glove length);
• The level of manual dexterity required;
• Are the gloves made of suitable material to give the required protection? (e.g. PVC, latex, nitrile, rubber and leather). Refer to the current Safety Data Sheet (SDS) for specific types of gloves as some may dissolve upon contact with some solvents and cause harm to the wearer;
• Leather **welding** gloves should preferably be made of split Grey Chrome-tanned cowhide with extended cuff to give a full 46cm glove. They should have a cotton lining and Kevlar stitching for strength, comfort and durability. They **must** be sound, dry, and used on both hands while welding or changing electrodes;
• Are the gloves of a suitable style and fit;
• Are they disposable (single use), or reusable.

Gloves should be closely inspected to detect potential weaknesses or defects as a result of manufacture or wear. Common signs of failure include:
• Wear between the fingers;
• Seam failures;
• Cracking or bubbling of the material such as waterproofing agents. Cleaning should be undertaken as part of a regular program of maintenance. Refer to the manufacturer's instructions for any special cleaning procedures and/or frequency. Record the date of any issues, maintenance required and visual checks in a PPE Register;
Any gloves with obvious faults should be replaced.
**Note:** Thermal protective gloves, when required, **must** be worn on BOTH hands to prevent accidental handling of hot materials.

**Respiratory Protection**
**Relevant Standard**

- Australian Standards: **AS/NZS 1715: 2009** – Selection, Use and Maintenance of Respiratory Protection Devices
- Australian Standards: **AS/NZS 1716: 2012** – Respiratory Protection Devices

A respirator enables inhaled air to be drawn through a filter that will remove the harmful substance. It purifies the air the person breathes. The type of filter required will depend on the composition of the contaminant.

There are three main types of air-purifying filters:
• **Particulate canisters**: these filter out only thermally and/or mechanically generated particles (dust, mist, smoke, fume);
• **Gas filters**: these filter out certain gases and vapours, and;
• **Combination filters**: these are used when particulate and gas hazards exist.

**Before purchasing approved respiratory protection,** look for devices most suitable for practical activities in VOCATIONAL, by considering the following:
• Refer to the current manufacture's Safety Data Sheet (SDS) in order to select the correct respirator with the appropriate filter for the job;
• Disposable respirators, or dust face masks, have the advantage of requiring no maintenance. However, if they do need to be stored before use, they should be in a sealed container so they are not absorbing micro fine dust, vapours or fumes etc. from the work environment;
• Individuals that have facial hair will need to check with the manufacturer to ensure the respirator or dust face mask product will give the user adequate facial seal against leakage;
• When working in a hot environment, respirators and dust face masks are available with an

air valve to increase worker comfort.

**Maintenance:**
• With the exception of disposable dust face masks, respiratory protective equipment requires regular inspection and maintenance;
• All filter respirators should be inspected at least once per month, even without regular use. They should also be cleaned after each student's use, and filter replaced if necessary. Each student should use a clean filter;
• Record date of issue, maintenance and all visual checks in a PPE Register;
• Face-pieces should be washed in warm water and detergent, rinsed and air dried;
• Filter respirators with activated charcoal filters will continue to absorb contaminants in the air even when not being worn - after use ensure they are stored in a sealed container;
• Disposable respirators cannot be cleaned and should be replaced at least daily, and also when breathing becomes noticeably more difficult indicating that the filter is becoming clogged;
• All go or vapour filters need to be discarded 6 months after opening regardless of being used or not;

**Welding Protection**
**Relevant Standards**

- Australian Standards: **AS/NZS 1336/7: 1997/2007** – Eye Protection for Industrial Applications – (Recommendations for occupational eye protection.)
- Australian Standards: **AS/NZS 1338.1: 1994** – Filters for Eye Protectors (Welding)
- Australian Standards: **AS/NZS 6529 & 3765: 2006** – Protective Clothing
- Australian Standards: **AS/NZS 1716: 2012** – Respiratory Protection Devices
- Australian Standards: **AS/NZS 1269.3: 2005** – Occupational Noise Management - 3
- Australian Standards: **AS/NZS 2210.5: 2009** – Occupational Protective Footwear – Guide
- to Selection and Safe Use.
- Australian Standards: **AS/NZS 2161.1: 2000** – Occupational Protection Gloves – 1
- Australian Standards: **AS 1674.2: 2007** – Safety in Electrical Welding and Allied Processes

The welding industry is rated number one among all industries for the highest number of eye injuries. It's no surprise welding can cause damage to your eyes if you do not use the proper personal protective equipment. Burns caused by sparks, heat, molten metal and ultraviolet rays or cuts caused by flying spatter, and flash burns, commonly known as welder's arc flash or arc eye, all point to the importance of wearing the right PPE when welding.

But what about the rest of the body? Hearing, eyes, skin, neck, back, head, feet and the respiratory system are all at risk when performing both oxy and arc welding operations.

**Hearing**: Welding can generate noise at levels which cause hearing loss;
**Eyes:** Unprotected eyes are exposed to hot metal, sparks, splatter and dangerous radiated light. Ultraviolet (UV) radiation causes inflammation of the cornea and can burn the retinas of the eyes. Infrared (IR) wavelengths cause severe discomfort and redness;
**Skin:** When welding, unprotected skin is exposed to hot metal, sparks and splatter, and when arc welding, to ultraviolet (UV) radiation. UV light can cause serve sunburn or cancer to unprotected skin. Electrocution could occur from poorly earthed or insulated structures;
**Head:** Sparks can also burn hair, causing painful damage to the scalp and skin;
**Neck and Back:** These areas also need protecting from possible exposure to hot metals, UV radiation, sparks and splatter. Note that standing for long periods of time bent over a

welding bench can also cause stress to the neck and back;
**Feet:** Burns caused by sparks, dripping molten metal and even cuts, crushing and fractures from heavy falling objects, kicking solid structures. Electrocution could occur through contact with poorly earthed or insulated damp concrete floors;
**Respiratory System:** When performing welding operations in a poorly ventilated area, facilitators and students are at risk of inhaling fumes, gas and dust present in the air as a result of the welding process.