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| G:\6100_Performance_HR\6555 - Organisational Safety and Wellbeing\2. HSW - Systems and Strategy Team\Rebadging OSW Documents (Kristyn)\ITD logos\Updated 2018\Welding_word_banner_SOP.jpg**TIG WELDER** |
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| **DO NOT** use this equipment unless a teacher has instructed you in its safe use and operation and has given permission |

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| Approved safety glasses must be worn at all times in addition to a welding helmet. | Hair Protection circleLong and loose hair must be contained or restrained. |
| Foot Protection circleAppropriate protective footwear with substantial uppers must be worn. | ApronClose fitting protective clothing or overalls, leather apron and spats must be worn. |
| Protective welding helmet with correct grade UV lensWelding Mask circle must be worn | Hand Protection circleOil free leather gloves must be worn when using this equipment. |
| Prohibition circleRings and jewellery must not be worn. | Pacemaker caution sign02 |
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### **PRE-OPERATIONAL SAFETY CHECKS**

1. **Check workspace, walkways and work leads to ensure that no slip/trip hazards are present.**
2. **Check work area is clean and free of grease, oil and flammable material.**
3. **Ensure the equipment and work area is dry to avoid electric shocks.**
4. **Check gloves, welding gun and work leads are in good condition.**
5. **Ensure the fume extractor unit is on before welding commences.**
6. **Close the UV curtain or erect safety screens to ensure the protection of others.**

**DO NOT** use faulty equipment – report this immediately to your teacher.

OPERATIONAL SAFETY CHECKS

1. **Ensure machine is correctly set up for current, voltage, wire feed and gas flow.**
2. **Ensure work return cables make firm contact to provide a good electrical connection.**
3. **Strike the arc before placing the tip of the filler wire in the weld zone.**
4. **Ensure power is off when changing tungsten electrodes.**
5. **Never leave the welder running unattended.**
6. **Avoid welding flashes. Erect UV safety curtains as required.**

HOUSEKEEPING

1. **Switch off the machine and fume extraction.**
2. **Close gas cylinder valve.**
3. **Hang up the welding gun and welding cables.**
4. **Leave the work area in a safe, clean and tidy state.**

#### POTENTIAL HAZARDS

* **Electric shock ◼ Radiation burns to eyes or body ◼ Flying sparks ◼ Fire**
* **Fumes ◼ Body burns due to hot or molten materials ◼ Cuts and lacerations**

