



# Workshop Self Inspection Checklist (WELDING) WORK02

<b>Welding Areas and Operations</b>	<b>Assessor</b>
<b>Location</b>	<b>Date</b>

This core checklist is provided by the Health and Safety Department as a template, which provides a basic framework for the conduct of a school self-inspection of the type of environment indicated. It will normally require to be amended and/or expanded to address fully the specific requirements of the area to be inspected, and therefore should not be regarded as exhaustive.

Further background information to the subject areas covered can be found in the central University Health and Safety Policy and, in particular, in **Part 4 (Mechanical Equipment)**. Reference to the Policy should assist in any required amendment / expansion of this template in order to tailor it to individual requirements, as will reference to key HSE guidance in the area in question, which can be obtained from Health and Safety Department (51-4255; [Health.Safety@ed.ac.uk](mailto:Health.Safety@ed.ac.uk)) .

<b>ADMINISTRATIVE PROCEDURES</b>			
Insert name of person responsible for welding area:			
What was the date of last formal inspection of the welding area?			
<b>ADMINISTRATIVE PROCEDURES</b>	YES	NO	N/R
Have all items that attracted a negative response in the former inspection been suitably addressed?			
Have School rules for safe welding practices been formulated?			
Has the attention of all certificated and trainee welders been drawn to these Rules and have they signed to state that they have read and understood them?			
Is there a system in place to ensure that only fully trained and certificated welders use the equipment unsupervised?			
Is the welding equipment used to train persons in welding techniques?			
If yes to above: is full and adequate instruction and training in the safe operation of the equipment given before use?			

Is there a system in place to ensure that the level of supervision applied is commensurate with the skill and experience levels of individual users of welding equipment?			
Are written records kept to document the training of users of welding equipment and are these up-to-date?			
Are all users fully acquainted with the operation of any Permit-to-Work systems associated with welding activities?			
Are procedures for the reporting of accidents, incidents and occupational ill health known and well established?			

<b>GENERAL HEALTH AND SAFETY PRECAUTIONS</b>	YES	NO	N/R
Has a risk assessment (as required by the Management of Health and Safety at Work Regulations) been undertaken and is its findings recorded?			
Are the fabric and condition of the accommodation housing your welding facilities suitable for the work to be undertaken?			
Are Fire Escape routes from the welding area and through the workshop to building exit clear of obstruction and suitably sign posted?			
Is the Fire Alarm easily audible above machinery and welding noise?			
If not, have visual warning systems been installed?			
Have suitable items of fire fighting equipment been provided?			
Are notices displayed indicating action to be taken in the event of a fire? (Fire Action Notices)			
Are welding equipment users acquainted with the Fire Routine Procedure for the area or building?			
Have Fire Stewards been appointed covering the workshop area?			

Are notices displayed detailing the nearest available qualified First Aiders, and the location of the First Aid Box(es)?			
Are First Aid Boxes checked regularly to ensure that they are kept well stocked, with contents in good condition?			
Is there a suitable eye wash station installed? (Where running water is available this should be of the type plumbed to the water supply).			
Are users of the welding area able to readily contact University Security in cases of emergency, should this be required?			
Are suitable Warning, Mandatory and Prohibition signs displayed within and around the welding area as required? (e.g. Warning: flammable/compressed gases; Mandatory: eye protection must be worn; Prohibition: No entry, etc.)			
Do these signs comply with the Health and Safety (Signs and Signals) Regulations, 1996 i.e. are they of the pictogram style and coloured; Hazard: black on yellow; Mandatory: white on blue; Prohibition: black on white with red edging?			

<b>CLEANLINESS AND HOUSEKEEPING</b>	YES	NO	N/R
Are all items of welding equipment suitably placed and secured to avoid obstruction or trip hazard?			
Is the welding area free from combustible materials that may ignite as a result of hot spatter or spark?			
If combustibles cannot be removed from the welding area e.g. wooden furniture is there available a fire-resistant blanket to cover these combustibles?			
Are adequate washing facilities and materials available near to the welding area?			

<b>LIGHTING</b>	YES	NO	N/R
Is the general level of illumination within the welding area adequate for the work to be carried out?			
Is suitable supplementary local lighting available, where required?			

<b>NOISE</b>	YES	NO	N/R
Do welding operations produce an excessive or uncomfortable noise level? (Guide: is it necessary to raise one's voice substantially to be heard by someone 2 metres away?)			
If yes to above has a formal noise risk assessment survey been undertaken?			
If dictated as necessary by the noise risk assessment, have suitable hearing defenders, or earplugs, as appropriate been supplied?			
Is the wearing of hearing protection adequately monitored?			

<b>HAZARDOUS/DANGEROUS SUBSTANCES</b>	YES	NO	N/R
Has suitable risk assessments (as required by the COSHH Regulations), for working with the hazardous substances involved in welding processes, been undertaken, documented and records kept?			
Are staff aware of the conclusions and requirements for safe working, with these substances, that result from the COSHH assessments and have they signed to state that they have read and understood the safe system of work?			
Is suitable Local Exhaust Ventilation (LEV) available and used to remove hazardous fume at source and prevent fume from entering the breathing zone of the welder?			
If provided, is this LEV examined and tested by a competent person at least every 14 months?			
Are records of this examination and test kept for a period of 5 years?			
If it is not practical to provide LEV, or if some fume remains to reach the breathing zone, has suitable Respiratory Protective Equipment (RPE)(filtering mask) and filters (P3) been supplied?			
Have users of RPE been individually face-fit tested for fit of the specific respirator used by a competent person and do they have a pass certificate?			
Is any supplied respirator compatible in use with other items of PPE, especially face shields?			
Have suitable risk assessments, (as required by the			

Dangerous Substances & Explosive Atmosphere Regulations (DSEAR)) been undertaken, documented and records kept?			
Where necessary have appropriate control measures been put in place to mitigate any risk identified in the DSEAR risk assessment?			
Have staff signed to state that they have read and understood the requirements of the above control measures?			
Does the welding area have good general ventilation and space, such that it would not be classed as a confined space?			
If no to above, has the risk assessment (undertaken in accordance with MHSAW) adequately addressed the risks associated with confined spaces, gases given off (e.g. asphyxiants) and increased concentration of fume content (e.g. chromium)?			
Are people in the vicinity (other than the welder) shielded from ultraviolet radiation by suitably positioned, non-reflective screens or curtains?			

<b>WELDING EQUIPMENT (ARC WELDING)</b>	YES	NO	N/R
Are all items of portable electrical equipment involved in the welding process subject to a suitable regime of appliance testing, maintenance and record keeping? (see University Health and Safety Policy, Part Three: Electrical Equipment)			
Are items of hard-wired equipment likewise subject to regular maintenance checks by Estates & Buildings Department, and is suitable remedial action applied, where required?			
Does all welding equipment conform to the appropriate BS or EN standard?			
Is all arc welding equipment installed, so far as is practicable, in accordance with the appropriate standards?			
Are electrode holders insulated so that no bare or exposed metal can be inadvertently touched?			
Are welding and return leads insulated and thick enough to carry the current safely?			

Are all connectors insulated to avoid inadvertent access and are they adequately rated for the current carried?			
Are all external connections checked for cleanliness and tightness before each reconnection?			
Are the welding leads, connection devices and electrode holder or torch checked daily, or before each use, for damage or wear?			
Is there in place a system of rules that prohibits the wearing of jewellery (especially rings and metal watch straps) whilst operating arc welding equipment/			

<b>WELDING EQUIPMENT (GAS WELDING)</b>	YES	NO	N/R
Are all high-pressure gas cylinders in use rented from a recognised gas supplier e.g. BOC?			
If no to above, (i.e. your School/Unit owns the cylinder(s)) is responsibility and duty regarding the requirements of the Pressure Systems regulations known and complied with?			
Are flashback arresters fitted to both oxygen and fuel gas regulators?			
Are non-return valves (hose check valves) fitted to both the oxygen and fuel gas lines?			
Is the blowpipe fitted with spring loaded non-return valves to prevent backflow into hoses?			
Are pressure regulators used compatible with the gas content of the cylinders they are fitted to?			
Are all pressure regulators subject to regular visual examination and renewed, or factory refurbished, at an interval not exceeding 5 years?			
Are all hoses used compatible with the particular gas used and coloured accordingly? *			
In the case of key operated cylinder valves; are keys always left attached to the cylinder(s), when in use, in case of the need for emergency shut down?			
Are all gas cylinders secured in the upright position, at a point greater than half their height from the ground, both during use and when in storage?			
Are leak tests carried out after each assembly of			

equipment?			
Is only detection fluid compatible with the materials in use used and never soapy water, or washing up liquid?			
Is there in place a well known and agreed system of action to deal with a cylinder leak, or other emergency situation, including warning other building occupants, and has the varying properties of the gases in use been taken into consideration?			

<b>PERSONAL PROTECTIVE EQUIPMENT</b>	YES	NO	N/R
Is a suitable welding face shield, equipped with an eye protection filter supplied and readily available?			
Is there available a sufficient number of appropriate face shields for any person(s) observing welding operations?			
Are heat resistant gloves supplied and are they readily available?			
Is a fire resistant overall or apron supplied and readily available?			
If necessary is fire resistant spats and/or footwear supplied and readily available?			
Is the wearing of PPE adequately monitored?			

<b>PRESSURE SYSTEMS</b>	YES	NO	N/R
Is the Safe Working Pressure (SWP) clearly marked on each item of pressure equipment?			
Are all items of the pressure system maintained and inspected in accordance with the Pressure Systems Regulations 2000? **			

<b>FURTHER QUESTIONS SPECIFIC TO THIS AREA</b>	YES	NO	N/R

Once the inspection is completed, those items that have attracted a “No” response will normally require remedial attention. Deficiencies identified in this way should be notified to the appropriate person within your School/Unit (Line manager, safety adviser, etc.) and appropriate action requested.

Copies of the inspection form and requests for remedial action should be retained on file.

## Notes

\* Oxygen – blue, Acetylene – red, Propane – orange, Inert gas - black

\*\* ‘On Stream – The productive maintenance plan’ (SFT/008048) BOC publication

Safety of pressure systems (ACOP) Pressure Systems Regulations 2000, 0-7176  
1767-X

BS/EN standards I Arc welding DD CLC/TS 62081: 2002 Arc welding equipment:

Installation and use Compressed gas welding BS EN 60974 (1-12) BS EN 287-1, BS EN 1418, BS EN ISO 4063, BS EN ISO 5817, BS EN ISO 15607, PD CR ISO 15608, BS EN ISO 15609-2 and BS EN ISO 15614-1.