



**CERTIFICATION SCHEME FOR WELDER TRAINING ORGANISATIONS**

## **DOCUMENT No. CSWTO-2-02**

# **Requirements for the Certification of Welder Training Organisations**

## **Self-audit requirements and records**

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## **INTRODUCTION**

The criteria in this document address the specific requirements given in Document No. CSWTO-1-02 in a way that facilitates self-audit. The results of the audit should indicate the ability of a training organisation to meet the CSWTO scheme requirements. It is not intended to replace the formal assessment by the scheme's assessors.

### **1 DOCUMENTATION**

- THE CONTROL MANUAL

### **2 THE TRAINING ESTABLISHMENT**

- PREMISES AND FACILITIES
- WELDING AND RELATED EQUIPMENT
- PERSONNEL (see also Document CSWIP-WInst-1-91)
- QUALITY MANAGEMENT
- QUALIFICATION TESTING
- STORAGE AND HANDLING OF MATERIALS AND CONSUMABLES
- TRAINING PROGRAMMES
- SAFETY

1 **THE CONTROL MANUAL**

**THE CRITERIA LISTED IN THIS SECTION REFER TO APPENDIX 3 OF DOC No. CSWTO-1-02.**

Item	Acceptable – not acceptable	Comments
Quality policy statement		
General description of the facilities, location, organisation and management of the Training Organisation; legal status		
Names, qualifications and experience of staff; recruitment policy, staff structure, access to source of welding technology		
Job functions and job specifications; staff-student ratio		
Sub-contractors; control procedures		
Safety policy; implementation; safety officer; first aid facilities; emergency procedures		
Administration; procedures, trainee records, confidentiality; facilities, systems		
Procedure for management of site operations		
Internal audit procedure		
Complaints procedure		

Item	Acceptable – not acceptable	Comments
Workshop facilities; nature of construction; cleaning, maintenance, safety, Illumination, ventilation, temperature control; access control.		
Welding booths or welding areas; construction, size, access, maintenance, fume extraction, facilities, safety		
Lecture room facilities; nature of construction, area, capacity, noise level and control, cleaning, maintenance, safety, illumination, visual aids, ventilation, temperature control, seating, tables.		
Environment; fume monitoring and recording		
Electrical installation; power supplies, maintenance		
Welding and related equipment; purchase, replacement, checking, calibration, maintenance, safety		

Item	Acceptable – not acceptable	Comments
Consumables and parent materials; purchase, stock levels, control, recording, identification, storage, shelf life		
Preparation of material; cleaning, cutting, machining		
Welding procedures for training; preparation, validation, approval, control change procedure		
Heavy grinding area; location, ventilation and dust extraction, cleaning, maintenance and safety		
Power tools; purchase, maintenance, issue, safety; consumables, control		
Handling and lifting equipment; purchase, maintenance, safety		
Hand tools; purchase, maintenance, issue, safety		

Item	Acceptable – not acceptable	Comments
Approval testing; location, workpiece preparation, identification, issue, control, welding procedures, issue of consumables, instruction to candidates, supervision, witnessing, documentation; welding equipment, calibration, maintenance, certification		
Inspection and testing; equipment, calibration, maintenance, witnessing, assessment of results, sub-contract procedures, issue of certificates		
Training programmes; preparation, validation, change control, interfacing with customer needs		
Visual aids; preparation, sourcing, validation, change control		
Lecture notes; preparation, validation, change control		

When training is carried out at clients' sites, the matters below must be appropriately covered in the Control Manual.

Item	Acceptable – not acceptable	Comments
<b>TRAINING ON CLIENTS' SITES</b>		
Definition, by qualified Instructors, of initial and final craft standards		
Condition of plant and systems (safe and well maintained)		
Protective clothing		
All courses (involving hands-on training) – safety briefing by the Instructor and/or competent member of the site staff		
Initial training environment must be independent of production		
Each trainee is allocated his own welding equipment with adequate screening, hand tools and workbench facilities		
Provision for the supply of materials – for practical exercise, pieces cut and prepared satisfactorily		
Instructor student ratio – to reflect the problems imposed by the environment – good Instructor/trainee supervision must be maintained		

Item	Acceptable – not acceptable	Comments
<b>TRAINING ON CLIENTS' SITES</b>		
Lecture room facilities, reasonably quiet environment and contain adequate means for the use of visual aids		
Time for conducting the training course, must be adequate		
Conducting welder approval tests, Instructor must strictly enforce the directive stated within the specification in question		

2 THE TRAINING ESTABLISHMENT

THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 4 OF DOC. No. CSWTO-1-02

Item	Acceptable – not acceptable	Comments
<b>PREMISES AND FACILITIES</b>		
Designated area separate from manufacturing facility		
Individual welding booths/areas		
Lecture room and offices		
Close access to washing/toilet facilities		
Cloakroom and lockers		
Messing arrangements (rest room with food heating facilities and supply of hot and cold drinks)		
Training area construction (constructed in accordance with good building practice, using fire resistant/retardant materials, maintained in good condition. Hard, dry, level floor, easily cleaned. 2.5 m headroom)		

Item	Acceptable – not acceptable	Comments
<b>PREMISES AND FACILITIES</b>		
Noisy equipment located outside main training area (air compressors etc)		
Minimum working temperature (13 <sup>o</sup> C) and overall level of illumination (at least 300 lux generally and 500 lux for inspection work)		
General ventilation in workshop area and local fume extraction in welding booths/areas (good)		
Identification of air lines, gas lines and power conduits (BS 1710: 1984 colours)		
Storage of gases (relevant Acts and Regulations)		
Layout of training establishment (unobstructed access to all machinery and working areas – all exit doors clearly marked)		
Attendance recording system (in place)		
Heavy grinding and gouging area (suitably screened and ventilated)		
First aid facilities (designated)		
Good housekeeping (clean, tidy condition – gangways clear of obstructions)		

Item	Acceptable – not acceptable	Comments
<b>PREMISES AND FACILITIES</b>		
Provision of individual booths as appropriate (minimum floor area appropriate to process and specimens and designated entry - steel work bench or work support (correctly earthed) - storage for consumables and tools – mains isolation switch and auxiliary 110V supply)		
Clear access from entrance to workbench (to facilitate work piece handling)		
Local fume extraction (installation of correct type for the work to be done)		
Provision of lecture rooms (quiet – suitable size to provide each trainee with at least 1.5m <sup>2</sup> floor area - tables and chairs - chalk or white board (or flip chart) - visual aids and wall space for display of wall charts		
Administrative and record functions (adequate and secure facilities)		
Workplace simulated conditions		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 6 OF  
DOC No CSWTO-1-02**

Item	Acceptable – not acceptable	Comments
<b>WELDING AND RELATED EQUIPMENT</b>		
Welding plant and equipment (fit for purpose, complying with British/European Standards - its power shall be commensurate with welding procedure requirements)		
Maintenance of welding plant and equipment (all shall be maintained, all calibrated controls and instruments checked, in accordance with Control Manual - deviations shall be recorded and prominently displayed on the equipment)		
Wire brushes and hammers as appropriate		
Cutting equipment (equipped with or controlled access to cutting equipment and machine tools for work or test piece preparation)		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 7 OF  
DOC No CSWTO-1-02**

Item	Acceptable – not acceptable	Comments
<b>STORAGE AND HANDLING OF MATERIALS AND CONSUMABLES</b>		
Stock control system and material recording (required for materials, must be documented in the Control Manual)		
Workpiece material (clean and stored in dry, well ventilated area - in appropriate racking, with easy for handling - clearly identified to avoid the selection of incorrect material)		
Consumables (clearly identified and stored in accordance with manufacturers' recommendations, which will keep them in good condition - baking facilities for covered electrodes and fluxes must be available)		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 8 OF  
DOC No CSWTO-1-02**

Item	Acceptable – not acceptable	Comments
<b>PERSONNEL</b>		
Training Organisation and each approved establishment managed by a competent person (qualifications and experience commensurate with the activities). He/she shall have routine access to an engineer of at least IncMWeldI level		
Instructors employed in the training establishment shall be qualified as prescribed by the Certification Scheme for Welding and Inspection Personnel, Document CSWIP-WInst-1-91)		
Team of Instructors (must collectively possess current approval certificates covering the range of training for which approval is being sought)		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 9 OF DOC No. CSWTO-1-02**

Item	Acceptable – not acceptable	Comments
<b>QUALITY MANAGEMENT</b>		
The operation of the Training Organisation shall be controlled by a Control Manual.		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 10 OF DOC No CSWTO-1-02**

Item	Acceptable – not acceptable	Comments
<b>QUALIFICATION TESTING</b>		
The conduct of witnessing of approval tests shall be in accordance with the requirements of the standard, client, or nominated third party authority		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 11 OF  
DOC No CSWTO-1-02**

<b>Item</b>	<b>Acceptable – not acceptable</b>	<b>Comments</b>
<b>TRAINING PROGRAMMES</b>		
Submission of detailed programmes (to demonstrate that all training programmes are established in a systematic and competent manner)		
Training leading to specific recognised approval test (structured programme of practical work must be in place for each case, supported by appropriate lecture notes, qualified welding procedures and visual aids)		
NVQs or SVQs (structured training is also required for programmes designed to prepare individuals for these awards)		

**THE CRITERIA LISTED IN THIS SECTION REFER TO SECTION 12 OF DOC No CSWTO-1-02**

Item	Acceptable – not acceptable	Comments
<b>SAFEY</b>		
TWI publication “Health and Safety in Welding” (the training area, all equipment and facilities therein, and working practices shall conform to the recommendations given)		
Safe working practice (all trainees must receive instruction before starting work in the workshop area – appropriate safety clothing and equipment shall be worn and in good repair)		
COSHH (the training establishment shall meet the requirements of this legislation)		