



CERTIFICATION SCHEME FOR PERSONNEL

DOCUMENT No. CSWIP-WEX-23-13

Requirements for the Certification of Welding Examiners to conduct the Approval of Welder Qualifications and Welding Procedure Qualifications (WPQ's) in accordance with the Relevant Standard

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Issued under the authority of the Governing Board for Certification
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CSWIP is administered by TWI Certification Ltd

FOREWORD

The Certification Scheme for Personnel (CSWIP) is a comprehensive scheme which provides for the examination and certification of individuals seeking to demonstrate their knowledge and/or competence in their field of operation. The scope of CSWIP includes all levels of Welding Inspectors, Welding Supervisors, Welding Instructors, Welding Quality Control Co-ordinators, Heat Treatment Operatives, Cathodic Inspection Personnel, Plant Inspectors, Plastics Welders, NDT and Underwater Inspection personnel.

CSWIP is managed by the Certification Management Board, which acts as the Governing Board for Certification, in keeping with the requirements of the industries served by the scheme. The Certification Management Board, in turn, appoints specialist Management Committees to oversee specific parts of the scheme. All CSWIP Boards and Committees comprise member representatives of relevant industrial and other interests.

TWI Certification Ltd understands the importance of impartiality in carrying out its certification activities, managing conflict of interest and ensuring the objectivity of all its certification activities, in accordance with BS EN ISO/IEC 17024.

ACCESS TO CERTIFICATION

Access to certification schemes is not improperly restricted. The sole criteria for certification are given in the document (and any subsequent amendments) and no other criteria will be applied. Certification is not conditional on the candidate applying for other services or membership from TWI Certification Ltd, its parent, or any other groups or associations.

1. Objectives

The safety and cost-effectiveness of welding is critically dependent on the skill of individual welders. In order to ensure welders are working at the required level of competence, a scheme for certifying the welding examiners is essential. As well as bringing benefits to the trainee, certification also provides a nationally recognised status for the welding examiner and the organisation employing him/her.

2. Scope

The scheme identifies personnel who have relevant experience in welding, a high level of welding skill and who have attained a minimum level of knowledge. This document provides the procedures for certification of welding examiners.

3. Skill and Knowledge Requirements

Examiners are required have at least two years of proven industry experience in one or more of the following processes:

- MIG/MAG
- MMA
- TIG
- FCAW
- SAW
- Other processes as required.

Examiners are required to have knowledge about the welding processes to be used, the welding imperfections that may be encountered, the applicable NDT techniques when these are used and the mechanical and other destructive testing employed.

4. The Examination

4.1. GENERAL WRITTEN EXAMINATION

Candidates will be required to take:

- 20 multiple-choice question paper
- Time allowed 30 minutes
- Pass mark 70%

4.2. SPECIFIC WRITTEN EXAMINATION

- 10 multiple choice questions for each welding process to be covered by the certification
- Time allowed 15 minutes per process
- Pass mark 70%

4.3. PRACTICAL PART 1

Candidates are required to demonstrate their competence as shown in Section 6.

4.4. PRACTICAL PART 2

If a candidate does not have a current visual inspection certificate (CSWIP 3.0 minimum) in accordance with BS EN 17637, they are required to undertake a practical examination on a welded sample and comment verbally on the appearance of the specimen and acceptance/rejection to ISO 5817.

4.5. BORDERLINE CANDIDATES

Candidates who achieve a pass mark of between 60-69% will be given an oral interview to assess their knowledge. If successful they will be awarded a pass.

5. Required Experience

Candidates applying to be a Welding Examiner must have a practical welding background as listed in Section 3 and must have a minimum of five years relevant welding experience or hold a valid CSWIP Welding Inspector, CSWIP Senior Welding Inspector, CSWIP Welding Supervisor or CSWIP Welding Instructor certificate. Additional experience or a recognised course of training covering all of the skills and knowledge required for the full range of welding examiner duties as listed in Section 6 is required for all applicants.

6. Welding Examiner Duties

The conduct and witnessing of all qualification tests by an Examiner shall be in accordance with the requirements of the relevant standard, client or nominated third party authority. The examiner shall ensure that current issues of relevant standards, client specifications and third party authority regulations are used in the conduct of welder qualification tests.

Prior to commencement of testing, if the facility is not CSWTO or ISO 3834 the following must be addressed and recorded by the examiner, as being satisfactory:

- All welding equipment associated with the qualification test shall be in good condition including the earth connection and shall be calibrated.
- The control of the consumables shall be verified to ensure they comply with the manufacturers recommendations.
- General health and safety shall be observed including adequate extraction/ventilation.

It is the responsibility of the examiner to:

- a) Ensure the material grade, material dimensions, joint preparation, welding position and any other criteria required by the test are in accordance with the requirements before the test commences.
- b) Verify the name and any other means of identification of the person and record these details.
- c) Establish that the person carrying out the test understands the test requirements and is familiar with what he/she has to do
- d) Ensure that the weld is made by the nominated person.
- e) Record all necessary data relating to the test and prepare and issue a candidate test data sheet, detailing all relevant information required by the standard, specification or regulation.
- f) Ensure that the weld is made by the nominated person.
- g) Post Weld Visual Inspection: Visual inspection and dimensional check of completed weldment against specification requirements and drawings.
- h) Ensure that the completed test piece is adequately identified and the positions where test coupons are to be extracted are properly marked and, where appropriate, identified.
- i) Arrange for or undertake all required inspections and tests.
- j) Assess the results of inspections and tests and establish if the candidate has satisfied all requirements.
- k) Where the candidate fails to satisfy requirements, arrange a re-test if this required, following the procedure as detailed above.
- l) Generate all necessary data to enable the issue of certificates.

7. Application for Examination

Candidates will be required to submit an application form and a CV. All the information requested must be on these forms. No applications can be considered confirmed until receipt of correctly completed documents. Application forms ask for specific details of experience and training and must be signed to the effect that these details are correct.

Candidates proved to have cheated, or found to have attempted to remove or found to have removed examination material in a CSWIP examination will not be accepted as a candidate for any CSWIP examination for a minimum period of five years from the date of the examination where cheating, attempt to remove or removal of examination material, was established to have taken place.

8. Certification

8.1. RESULTS NOTICES

All candidates will be sent a results notice. This notice will also be sent to the organisation paying the examination fee, if not paid by the candidate.

8.2. SUCCESSFUL CANDIDATES

Two copies of a certificate of proficiency will be issued to the organisation or person that pays the examination fees. Duplicate certificates to replace those lost or destroyed will be issued only after extensive enquiries.

8.3. UNSUCCESSFUL CANDIDATES

Candidates who fail to obtain a certificate may attempt one retest of those parts of the examination in which success was not achieved. The retest must be completed within one year of the initial test, otherwise candidates will have to repeat the complete examination. Candidates who fail the retest revert to initial status.

8.4. PERIOD OF VALIDITY

The certificate is valid for five years from the date of completion of the initial test and may be renewed for a further five years on application, provided evidence is produced in accordance with Clause 8.5.1. Certificates are only valid provided:

- a) they are within date.
- b) they are on standard cream CSWIP paper bearing the CSWIP logo in black on gold signed by an officer of CSWIP and embossed with the CSWIP stamp.
- c) they have been signed by the individual to whom the certificate is awarded.
- d) they are accompanied by a valid official CSWIP identity card.

Photocopies are unauthorised by CSWIP and should only be used for internal administrative purposes.

8.5. RENEWAL

8.5.1. Five year renewal

In order for the certificate to be renewed after five years, the holder has to demonstrate that he/she has maintained his/her competence by:

- i) providing evidence of continuous work activity in welding examination
- ii) providing evidence that the holder has kept up to date in welding technology including 30 hours of classroom based/practical learning per year.

Renewal must take place not later than 21 days after the date of expiry of the certificate. It is the certificate holder's responsibility to ensure that renewal takes place at the appropriate time. Only under extreme circumstances will certificates be renewed up to a maximum of six calendar months from the date of expiry shown on the certificate and late renewal will be subject to a special fee.

8.5.2. Ten year recertification

Certificates are renewed beyond ten years from the initial examination (or from a previous ten year renewal) by the holder successfully completing a renewal examination prior to the expiry of the certificate in addition to the renewal procedure given in Clause 8.5.1.

The 10 year examination will consist of the following:

- 20 Multiple choice General question paper
- The initial practical examination.

One retest, within six months of the 10 year renewal examination, will be allowed. Candidates who fail the retest will be required to undertake formal training before attempting the initial examination.

8.6. COMPLAINTS AND APPEALS

An aggrieved party in a dispute which considers itself to have reasonable grounds for questioning the competency of a CSWIP qualified person may petition the Governing Board for non-renewal of the certificate. Such a petition must be accompanied by all relevant facts, and if in the opinion of the Board an adequate case has been presented, a full investigation of the circumstances under dispute will be initiated. If the petition is substantiated to the satisfaction of the Board, the certificate will not be renewed without further test.

Appeals against failure to certify or against non-renewal of the certificate may be made by the candidate or the employer upon application in writing to the Governing Board.

9. Records

TWI Certification Ltd maintains records of successful and unsuccessful candidates. These records are accessible to the Governing Board or its nominees at all reasonable times.

ADDRESSES

For further general information about the approval schemes covered in this document contact:

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