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CERTIFICATION SCHEME

Requirements for the Certification of Persons for Permanent Joining

AUTHORISED BY:

Name: S R Southall Date: 15/09/2023

Title: Inspection & Certification Manager

Revision	Date	Description of Revision	Issued By
NEW	18/10/2021	New document	SRS
REV 1	26/07/2022	Update to recertification requirements	SRS
REV 2	26/10/2022	Update to scope of certification section and logo / symbol update. Change to I & C Manager	SRS
REV 3	30/03/2023	Update to prerequisites	SRS
REV 4	15/09/2023	Minor wording changes	SRS

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Certification Scheme

Introduction

CS01 is a certification scheme managed by Southdown Welding Inspection, which acts as a Certification Body, based on the requirements of BS EN ISO / IEC 17024. Southdown Welding Inspection is accredited by the sole national accreditation body; UKAS.

Southdown Welding Inspection understands the importance of impartiality when undertaking certification of personnel, ensuring objectivity in all certification activities in accordance with ISO 17024; any conflicts of interest are identified and addressed. Southdown Welding Inspection's impartiality statement is available via the website.

Application and associated fees

Southdown Welding Inspection shall issue an application form (F01) to the candidate / sponsor which must completed in full and returned to Southdown Welding Inspection. Should it be identified that any information supplied on the application form is false, any testing conducted shall be declared null and void. Qualification certificates shall also be invalidated if there are any outstanding fees.

Southdown Welding Inspection reserve the right to retain any fees where the candidate / sponsor cancels within 7 days of the agreed assessment date. An application fee of £50 + VAT is payable by the candidate / sponsor at the time of application. Fees for the certification process, including testing charges, will be agreed prior to any examination taking place.

Scope of certification

The scope of certification of this certification scheme is based on International or National standards, which provide a set of technical rules for the systematic qualification test of the welder and enables such qualifications to be uniformly accepted independently of the type of product, location, examiner or examining body.

For some industry requirements such as the Pressure Equipment (Safety) Regulations, Southdown Welding Inspection can act as a Recognised Third-Party Organisation (RTPO) for the qualification of welders; Southdown Welding Inspection is approved as an RTPO by BEIS. Please note, Southdown Welding Inspection is not authorised to assess, or establish conformity with, the complete regulations.

Certification is offered in accordance with the following standards (latest Issue):

- BS EN ISO 287-1;
- BS EN ISO 9606-1;
- BS EN ISO 9606-2;
- BS EN ISO 9606-3;
- BS EN ISO 9606-4;

- BS EN ISO 13585;
- BS EN ISO 17660-1;
- BS EN ISO 17660-2;
- BS 4872-1;
- BS 4872-2;

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BS EN ISO 9606-5;

AWS D1.1;

BS EN ISO 14732;

ASME IX.

Should the candidate request a standard not included on this list. Southdown Welding Inspection shall conduct a technical review of the standard to determine if it can be complied with. The review shall be recorded on form F17. The review should confirm the technical competence of the Inspectors and the competence of the laboratory chosen to conduct the testing.

It is the responsibility of the candidate / employer / manufacture to select the qualification standard. The choice of standard is reviewed during our contract review process; qualification can only be carried out in accordance with recognised standards, and it should be noted that the criteria covering testing and certification vary between standards.

The candidate / employer / manufacture is also responsible for ensuring that the recognition and acceptance of certificates is appropriate to their requirements. Whilst Southdown Welding Inspection makes every effort to ensure that its qualification certificates carry appropriate accreditation and that testing and certification activities are carried out in accordance with best practice, it cannot guarantee acceptance by all contracting parties.

Job and task description

The candidate shall prepare and weld a test piece suitable for the range of qualification required. The qualification test shall be carried out on plate, pipe, or other suitable product form, as prescribed by the qualification standard.

The essential variables for qualification of welders are as follows:

- Welding process(es);
- Product type (plate or pipe);
- Type of weld (butt or fillet);
- Filler material group;
- Filler material type;
- Dimension (material thickness and outside pipe diameter);
- Welding position;
- Weld detail(s).

Southdown Welding Inspection is responsible for ensuring that the requirements of the qualification standard selected are fulfilled. As the standards used for certification are prescriptive, no additional criteria are required.

Southdown Welding Inspection shall witness the welding of the test piece and, following subsequent testing by an approved third part, verify the testing.

^{*}Note: other standards may be used, this is not an exhaustive list.

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Test pieces are marked with the identification of the examiner and the welder, and where necessary for subsequent testing, the welding positions for all test pieces shall be marked on the test piece and, for fixed pipe welds, the 12 o'clock welding position shall be marked.

The examiner or examining body may stop the test if the welding conditions are not correct or if it appears that the welder does not have the skill to fulfil the requirements, e.g. where there is excessive and / or systematic repairs.

Required competence

There are no official prerequisites regarding welder competence; the welder must be deemed suitably trained, capable of welding the test piece, and capable of reading and understanding the WPS or pWPS.

There may be a requirement to have job knowledge tested. If so, this will be in accordance with the qualification standard selected for certification.

Abilities

Not applicable.

Prerequisites

The qualification test of welders shall follow a pWPS or WPS prepared in accordance with a suitable standard, for example, ISO 15609-1 or ISO 15609-2. Where required, the throat thickness of the fillet weld test piece shall be defined in the pWPS or WPS used for the test.

The applicant shall provide all materials, equipment, and consumables, unless coming to SWI's premises to be examined where they will only be required to bring PPE.

The applicant shall also provide photographic identification in the form of a driving licence or passport prior to being examined.

Code of conduct

The candidate agrees to not release or discuss confidential examination materials or participate in any fraudulent practices that may compromise the integrity of this process.

The candidate is required to comply with all relevant health & safety requirements. The candidate must supply and use appropriate PPE.

Criteria for initial certification

Test pieces are evaluated according to the acceptance criteria specified in the qualification standard for relevant types of imperfections.

Prior to any testing, the following are checked:

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- All slag and spatters are removed;
- No grinding on the root and the face side of the weld;
- Stop and restart in the root run and in the capping run are identified;
- Profile and dimensions.

The acceptance requirements are prescribed by the qualification standard. Any subsequent testing is conducted in accordance with the requirements given in the qualification standard. For example, ISO 9606-1 refers to ISO 5817 for imperfections.

Continuing with ISO 9606-1 as an example, a welder is qualified if the imperfections are within ISO 5817, quality level B, except for the following imperfection types for which level C shall apply:

- Excess weld metal (502);
- Excessive convexity (503);
- Excessive throat thickness (5214);
- Excessive penetration (504);
- Undercut (501).

If imperfections in the welder's test piece exceed the permitted maximum specified in the qualification standard, the welder fails the test.

Assessment methods for initial certification and recertification

After welding, the test piece shall be tested in accordance with the requirements of the qualification standard. If the weld is accepted by visual testing, the remaining tests are conducted.

Examples of testing include the following:

- Visual testing;
- Radiographic testing;
- Bend test;
- Fracture test.

Testing is conducted by a third party in accordance with the qualification standard and a test report is produced.

If any test fails to comply with the requirements of the qualification standard, the welder may be given the opportunity to repeat the qualification test if permitted by the qualification standard.

Recertification requirements are also stipulated in the qualification standard. The requirements and interval vary, and the qualification standard should be used to identify the applicable information. Using ISO 9606 as an example, revalidation shall be carried out by an examiner / examining body, and three methods to achieve this are given, with intervals of 3 years or 2 years.

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The qualification standard may also stipulate confirmation of validity requirements, with a given interval. In the case of ISO 9606, this is every 6 months.

Surveillance methods and criteria

Surveillance methods and criteria are prescribed by the qualification standard. Certificates are issued on letter headed paper and are uniquely identified.

Certificates are issued to the sponsoring organisation, usually the employer / manufacturer, or where requested, to the individual qualified during the test.

The welder's qualification begins from the date of welding of the test piece(s), provided that the required testing has been carried out and the test results obtained were acceptable.

Some qualifications standards, e.g. ISO 9606-1, include provisions for validity of certification to be extended based on provided criteria.

Criteria for suspending and withdrawing certification

When there is a specific reason to question a welder's ability to perform welds that meet the product standard quality requirements, the qualifications that support the welding they are doing shall be revoked. All other qualifications that are not questioned remain valid.

Criteria for changing the scope or level of certification

Not applicable; a request to change the scope of certification would result in reassessment and the issue of new certification should the test be completed satisfactorily.

Complaints and appeals

Where a candidate or their sponsor is not satisfied with a decision made by Southdown Welding Inspection, they may submit a complaint or appeal. Should a complaint or appeal be received by Southdown Welding Inspection, procedure CP11 shall be followed. A copy of CP11 is available via the Southdown Welding Inspection website.

Candidates have the right of appeal. Appeals against failure to meet qualification requirements or against non-renewal of the certificate may be made by the candidate or the sponsor in writing to Southdown Welding Inspection. This must be within one month of the date of examination.

An appeal / complaint must be accompanied by all relevant information / evidence. If Southdown Welding Inspection agree that an adequate case has been made, an investigation shall be launched.

Additional notes

Duplicate certificates may be issued to the sponsoring organisation or candidate to replace any which are lost or destroyed. This can only be done via written request which gives the reasons why further copies are required. A fee will be charged should additional copies be required.

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Photocopies are unauthorised by Southdown Welding Inspection and should only be used for internal administrative use.

Southdown Welding Inspection maintain records of tests / examinations. Records are retained in accordance with certification procedure CP02.

Appendix 1

Misuse of certificates and logos

It is the policy of Southdown Welding Inspection to control how certificates, brand names, marks, and logos are used, and to take action should it be identified they are misused.

Southdown Welding Inspection recognises that it has a duty to all certificate holders to ensure the integrity of their professional status and to eliminate, as far as possible, the fraudulent use or misrepresentation of technical competency.

Use of the Southdown Welding Inspection name by any organisation which might result in users of the schemes being misled or might result in the schemes being brought into disrepute will be acted upon. Any misuse of certificates, brand names, marks, or logos which appears to be an infringement of the law will result in the matter being reported to the employer and, where appropriate, to the applicable law enforcement agency.

The use of the UKAS symbol is governed by BEIS and regulated by UKAS. The symbol is applied to certification to demonstrate the accreditation of the Southdown Welding Inspection and does not infer any approval, by UKAS, of the candidate.