





The Indian Institute of Welding was formed in 1966 at Kolkata and presently there are 13 Branches throughout India. The IIW-India is recognised as the leading Professional Institute related to welding and cutting. The Indian Institute of Welding is a Member society of the International Institute of Welding.

The ANB Division of IIW-India has been accredited by IIW as its only 'Authorised Nominated Body' (ANB) in India to operate its international schemes on Education/ Training, Qualification, Certifications and award International Diplomas to welding personnel at various responsibility and job levels including **International Welder (IW)** for different processes, materials and at three skill levels. The diploma at any level of 'International Welder' also includes an additional renewable certification for practical skill tests as per ISO 9606-1 or the appropriate national standard of the country or any other equivalent standard.

The Standard 'ISO: 3834-Fusion Welding of metallic material for Welding' is applicable in any manufacturing unit using welding and allied processes in a workshop as a quality assurance system. The quality system certification as per ISO 3834-2 & 3 clause no 7.2 welders and welding operators are required to be qualified by an appropriate test as in Table No 1 under ISO 3834-5.

The first requirement for conducting any Welder Qualification test is the presence of authorised and qualified Welding Procedure for all types of welded joints. The preferred standard for the WPS is ISO 15609 (ISO 3834-5, Table No 4) and qualified as per ISO 15614 (ISO 3834-5, Table No 5) is required must follow the standard ISO 9606 as mentioned (ISO 3834-5, Table No 1) unless otherwise specifically justified for following a different standard which must not be less stringent.

IIW-India is also very proud to inform you that we are the first organization in India to get accreditation as a conformity assessment body(CAB) under ISO/IEC 17024:2012 by NABET and we have been given the accreditation number PCB001. Henceforth, all Welders Certificates issued by IIW-India would bear the NABET Accreditation Symbol along with IIW-India Logo. This is now a regular approved scheme for **Welders' Approval Testing and Certification** to meet industry demand for Certified Welders (CW). This is done by Certification of welders already engaged in welding job in order to improve their own skill and also meet the Quality System of their employer organisation including requirement under ISO 3834 by complying with customers' specification & standard/code.

1. What is Certification & Accreditation

- **Certification** refers to the confirmation of certain characteristics of an object, person, or organization. One of the most common types of certification is professional certification, where a person is certified as being able to competently complete a job or task, usually by passing of an examination/test.
- Certification does not refer to the state of legally being able to practice or work in a profession. That is licensure. Usually, licensure is administered by a governmental entity for public protection purposes and certification by a professional association.
- However, they are similar in that they both require the demonstration of a certain level of knowledge or ability. Qualification is historical fact but Certification with validity period reflects the current state of knowledge and skill.

The main objectives of obtaining the accreditation are:

- To attain international recognition of the competency and skills of the personnel being certified by the Conformity Assessment Body (CAB) i.e. IIW-India, under its own certification program or any National or International welders qualification standards.
- To enhance the employability prospects of the certified candidates in India and abroad.
- To ensure that the fabrication & construction industries are able to obtain personnel with relevant skill sets

2.0 Approval of Welding Procedure and Welder Approval Test Certification

The requirements for approvals are determined by the relevant application standard or as a condition of contract. Application standards and codes of practice ensure that a structure or component will have an acceptable level of quality and be fit for the intended purpose.

An **Application Standard or Code of Practice** will include requirements or guidelines on material, design of joint, welding process, welding procedure, welder qualification and inspection or may invoke other standards, for

example for welding procedure and welder approval tests. The manufacturer will normally be required to approve the welding procedure and welder qualification. The difference between a welding procedure approval and a welder qualification test is as follows:

- The welding procedure specification (WPS) approval test is carried out by a competent welder based on a provisional WPS (pWPS) and the quality of the weld is assessed using visual, non-destructive and mechanical testing techniques according to applicable standard / code. The intention is to demonstrate that the proposed welding procedure will produce a welded joint which will satisfy the specified requirements of weld quality and mechanical properties. This called 'Welding Procedure Qualification Record' (WPQR)
- ✓ The Welder Approval Test examines a welder's skill and ability in producing a satisfactory test weld conforming to specified welding code / standard. The test must be performed with a qualified welding procedure (WPS).
- ✓ Training following IIW-India NWTCS Scheme is conducted at Approved Training Institutions (ATI) and skill certified by IIW-India assessors following NABET approved QSM & Operating Procedure (OP). IIW-India ANB appointed Authorised Examiners as per IIW-India ANB QSM & OP conduct Certified Welders (CW) scheme for 'Welder's Certification' for test and Interview of Candidates as provided in the concerned Standard.
 - * ISO 9606-1-2013
 - * ISO 9606-2-2014
 - * EN-287-1-2011
 - * IS: 7310-Part-I-1974 (Reaffirmed in 2006)
 - * ASME-Sec-IX-2015
 - * AWS-D 1.1-2015
 - * AWS:D 1.3-Structural Welding Code-Sheet Steel: 2008
 - * AWS: D 1.5-Bridge, Welding Code-2010
 - * AWS: D 1.6: Structural Welding Code—Stainless Steel-2007 or any equivalent standard.

4.0 Procedure for Certification

An Organisation seeking to sponsor their welders for Certification Examination/Test must write to IIW-India ANB

- Provide details of their requirements i.e. the number of welders to be certified, Process, Joint type, position and material along with the applicable standard and inform whether the proper qualified WPS is available.
- Intimate the preferred location of conducting the approval Test and whether all Infrastructure facility of Space, Machine/Equipment, Accessories, Test Coupons, Material and Consumables shall be made available. The welding & other facilities offered shall be subject to approval by ANB-India to check conformance to prescribed standards and equipment duly calibrated.
- It is important that NDT and DT tests are carried out in a NABL accredited laboratory or in an in-house laboratory with its approved QSM and internal checks and subject to certain conditions like presence of qualified personnel as per ISO 9712/equivalent verifiable by IIW-India ANB representative/Authorised Examiner.
- ANB India may also assist in preparation of pWPS and WPQR for Qualification Examination on agreed terms.
- It will be essential for the organisation to forward fully completed individual welder's application in the prescribed Form attached with authenticated photograph along with technically and commercially clear Order.
- IIW-India ANB recommends basic knowledge test of welders on Safety and Welding Standard/Codes at the time of Approval Test.

Approval Test by ANB authorised Examiner will commence after all the above issues are resolved and the mutually agreed Approval Test schedule is finalised and also commercial terms are formally settled.

5.0 Certification & Other Charges

The charges will be intimated on application, based on the number of Welders to be certified, WPS & the process, material, joint type and position, applicable code/standard and location of the test centre and estimated number of days to be spent by the Authorised Examiner.

Registered Office

The Indian Institute of Welding

A member society of International Institute of Welding Mayur Apartment, 3A Dr. U N Brahmachari Street Kolkata 700017

Phone: +91 33 2281 3208, E-Mail: iiw@iiwindia.com Website http://www.iiwindia.com



The Indian Institute of Welding -ANB

IIW-India House, Plot No:38 Geetanjali Park 200 Kalikapur Main Road, P.O. Mukundapur. KOLKATA 700 099, INDIA Tel: +91 33 4006 1837, E Mail: anb@iiwindia.com,