



# NEWS Letter

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## Editorial

In 1990 ECCW (European Council for Cooperation in Welding) established a committee for the "Authorisation of Welding Organisations and Qualification", aimed at establishing the rules for qualification, authorisation and monitoring of National Institutes dealing with education, training and examination of welding personnel, the so called network of ANBs (Authorised National Bodies). The main role of each ANB is to manage and to assure a comparable quality level of the EWF training and qualification scheme at the national level.

Officially the scheme started on 1st January 1991, with the publication of the first guideline dealing with European Welding Engineer diploma. Now 20 guidelines have been published, covering all educational levels in welding technology, in welding inspection and also in related areas, such as Adhesive Bonding and Plasma Spraying. The scheme leads to mutually recognised qualifications in twenty European countries.

Meanwhile ECCW was restructured originating on the 1st January 1992 the European Federation for Welding, Joining and Cutting, which is legally established as a non-profit cooperative organisation against the Belgian law.

The CEN TC 121 appreciated the EWF qualification scheme and included the reference to the profile of knowledge gained in EWF courses into the CEN standard EN 719.

Furthermore EWF and IIW (International Institute of Welding) reached an agreement for the extension of the scheme to the countries outside Europe. That means the candidates who successfully pass the final examination and therefore receive an EWF diploma for the three main EWF guidelines (European Welding Engineer, European Welding Technologist and European Welding Specialist) are entitled to receive also an equivalent IIW diploma.

As a further fall-out of such agreement it is expected that ten to fifteen more countries worldwide are going to join the scheme in the near future.

As a matter of fact, now the membership of EWF comprehends 26 countries, from Finland to Spain and from Iceland to Russia, while the member countries of IIW are 41. The EWF diplomas state that, at the time of examination, the diploma holder has attained a certain level of knowledge; the diplomas are qualifications and are valid for life. Until the end of 1998 the total of diplomas awarded throughout Europe has been more than 33.000. Recently EWF has also established a Certification Scheme for Welding Personnel, covering for now four guidelines:

European Welding Engineer, Technologist, Specialist and Practitioner.

The candidates who successfully undergo this program, in compliance with ISO 45013, are given a certificate, referring to EN 719 standard, valid for a three year period. Very recently EWF approved also a new type of "Courses", called "Special Courses" very specific to their fields, which give to the participants, after the successful completion of an examination, the right to receive not a diploma, but an official statement of participation and successful completion of the final examination. For now the approved courses are in the field of Laser Welding, Robot Welding and Concrete Reinforcing Bars.

Recently another scheme was created, the "EWF Certification scheme for Manufacturers in accordance with EN 729", for which there is the second EWF network, the network of ANBCCs (Authorised National Bodies for company Certification).

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# EUROPEAN EDUCATION IN WELDING TECHNOLOGY

## Welding Inspection

The education and qualification of European Welding Inspection Personnel to be employed in the job function of Inspector, and the minimum requirements to do so have been devised by Members of the Committee for Education and Training of the European Welding Federation, in a Guideline. It is designed to provide the core education in welding and inspection technology required by those responsible for performing inspection tasks at various levels. It is possible that additional training and/or experience may be required beyond the core education to meet the requirements of specific applications or job functions.

The guideline, in which the minimum requirements for education and training were devised, was agreed upon by all national welding societies within the EWF, in terms of themes, keywords and time devoted to them. All will be revised periodically by the Committee to take into account any changes which may affect the 'state of the art'. Students that successfully complete this course of education are expected to be capable of applying welding inspection technology as described in the guideline. The education is set out in four levels of personnel, as seen in **Table 2**. The previous designations used for these qualifications are shown in **Table 1**.

There are two routes to Qualification provided also by the Guideline. The first one is for those fulfilling the access conditions at a relevant level. Candidates may decide, through self-assessment on the basis of prior learning and/or experience, to proceed directly to the intermediate examination or to first take the Welding Technology Module. A pass in the

intermediate examination is required before entering the Welding Inspection Module. The second route is for those already holding an existing EWF qualification and who may proceed directly to the Welding Inspection Module.

For EWS (European Welding Specialist) only, the Guideline recognises the current situation in several countries by providing a third route. This route enables the entry of inspectors that do not meet the full access conditions specified but have at least 5 years of authenticated experience in general engineering inspection. Such inspectors may decide whether to proceed directly to the first intermediate examination following Module a or whether to first complete the 80 hours of engineering education. A fourth route is also provided for the experienced EWI-P to progress to EWI-S. The candidate may decide whether or not to take specific modules or parts thereof on the basis of self-assessment. His/her knowledge will be checked by intermediate examination and failure will require the candidate to take another training module. In either route, if the candidate fails an intermediate examination having exercised an option to proceed directly to that examination, he/she must take the omitted training module before re-sitting the exam. See **Figure 1**.

The guidelines referred to above define important concepts such as **Education**, **Qualification**, **Experience**, and **Certification**.

Education is defined as a process of instruction in relevant theory and practices, which takes the form of courses to an approved syllabus and periods of practical work under qualified supervision (but shall not include the use of specimens used in the practical

Table 1

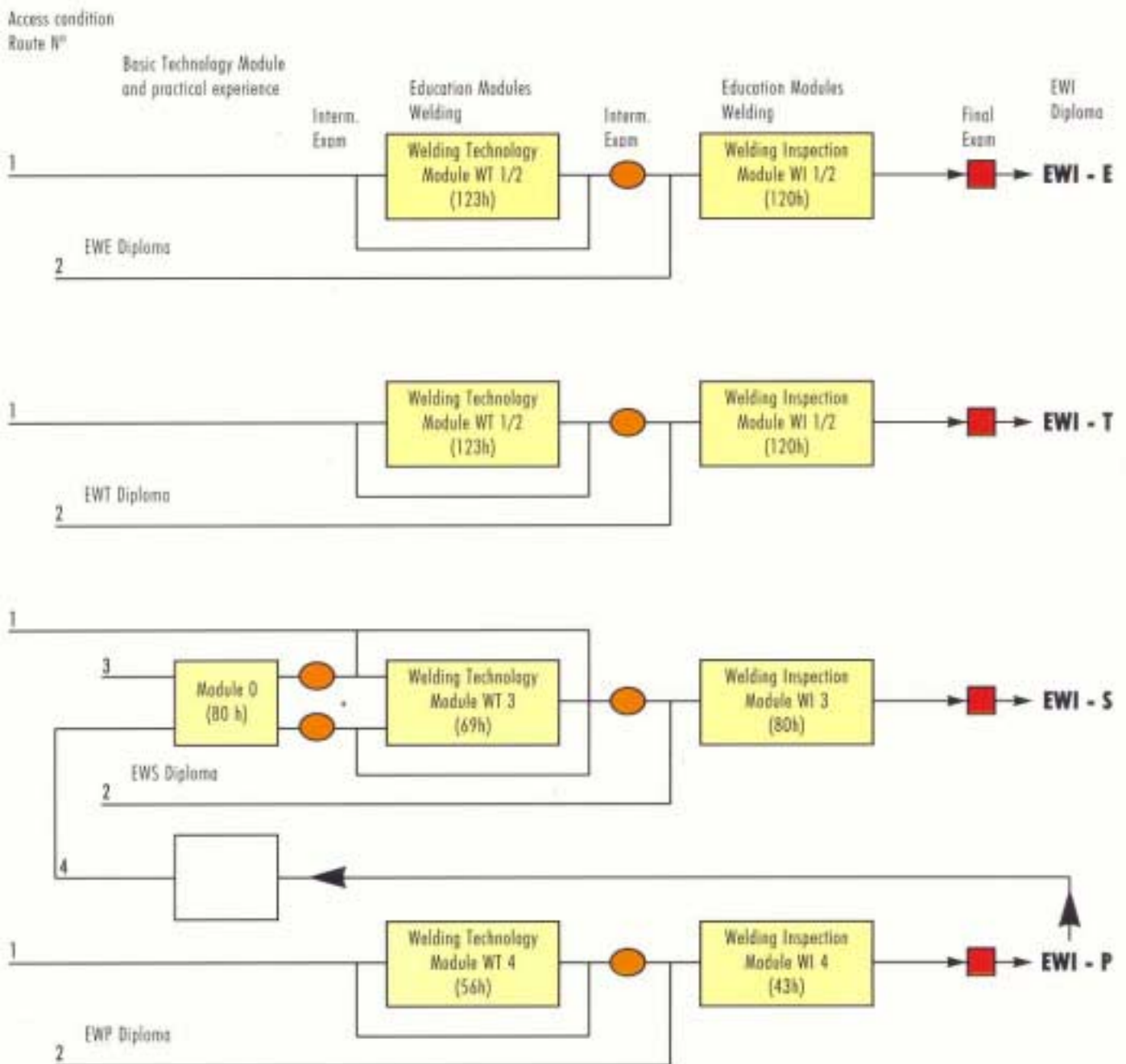
### Previous Titles

Table 2

### New Titles

EWI-1	European Welding Inspector - Level 1	=	European Welding Inspector Engineer	EWI-E
EWI-2	European Welding Inspector - Level 2	=	European Welding Inspector Technologist	EWI-T
EWI-3	European Welding Inspector - Level 3	=	European Welding Inspector Specialist	EWI-S
EWI-4	European Welding Inspector - Level 4	=	European Welding Inspector Practitioner	EWI-P

**Figure 1**



examination). The Authorised National Body shall approve all educational courses leading to the award of qualification covered by this Guideline.

Qualification is a demonstration conducted by the Authorised National Body, involving an examination of the knowledge and skill related to specified criteria. Success in this examination leads to the issue, of an appropriate diploma, by the ANB.

Experience is defined as the period during which the candidate performed welding inspection as his main activity under qualified supervision including personal

application of inspection to materials, parts or structures but not including tests performed during training courses.

Certification, on the other hand, is the procedure leading to a written testimony of an individual's competence demonstrated by examination and assessment of experience and subsequent surveillance to confirm that the competence has been retained. This does not form part of the Guideline and is normally the subject of an independent certification scheme.

# ETCETERA

## New EWI Guidelines and Revisions

## 1998 Results

The revision of the following Guidelines was approved by the General Assembly on June 1999:

DOC. EOTC/AG - 15/97/001/416

During 1998 the EWF ANBs awarded a total of 6.680 diplomas within Europe and 352 diplomas outside Europe.

Since the EWF Qualification scheme started to operate in 1993, a total of 33.970 EWF diplomas were awarded throughout the world.

## EWF LATEST NEWS

### EWF @ the World Wide Web

The EWF Internet page is under preparation and will be available soon!

There you will find, among other things, general information about EWF, its members and ANBs (with links to the members and ANBs' own pages when possible). There will also be a lot of information about Guidelines and EWF qualifications and certification schemes as well as about the ongoing projects.

Several publications as technical papers and all the Newsletters and brochures published by EWF will be available for download. There will also be updated information about conferences, seminars and other relevant events related to welding. If you have any suggestions for other contents to our Web page, please let us know by Email to [ewf@isq.pt](mailto:ewf@isq.pt).

### The WELD-ON Project

EWF is currently leading a European Survey and Analysis project called 'Weld-On'. Basically, the main objective is to develop a questionnaire for EWE, EWT and EWS former students to find out what can be done to improve these EWF courses and what else can be offered for the updating or improvement of their technical knowledge. At this moment, the questionnaire is available on the Internet at the following address:

<http://www.saf.pt/weld-on>

The partner ANBs will soon ask their former trainees who attended these courses to fill in the questionnaire via their own Web pages.

The results of the project will also be published on the Internet.

### EWF Sets Up a Central Register for Certified Companies

The EWF General Assembly has decided that the very recent EWF Manufacturers Certification Scheme (based on EN729) will be complemented by the setting up of a Central Register of all EWF certified Companies. The register will be constantly updated and available for consultation via an annual publication and via the Internet. It is expected that this register be launched for the public by the end of 1999.

The national implementation of this scheme is made through an ANBCC (Authorised National Body for Company Certification) and there are now 3 ANBCCs authorised in the following countries: Italy, Slovakia and United Kingdom.

For further information about the EWF Manufacturers Certification Scheme, please contact Mr. Henk Bodt - the Chairman of EWF Committee 4, or the EWF Secretariat, at the following addresses:

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