



NEWS Letter

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Editorial

The power of the EWF EN 729 scheme!

Special processes in manufacturing are those processes for which the quality cannot be verified by final inspection, and which require special monitoring and documented procedures before and during production, if quality is to be guaranteed.

The EN ISO 9000 series of standards in combination with the EN 729 series assure that welding and its related processes are adequately controlled so that a customer, or any other body, may have confidence that the "special process" of welding is carried out properly and that the welded product will comply to the contract and/or Code.

Soon after the issue of the EN 729 standard, it turned out that there was a need for better control over the use and interpretation of the standard. Verifying and certifying that an organization is competent and does in fact has control of its special process of welding requires special assessors who have qualified experience and are trained in the special process itself.

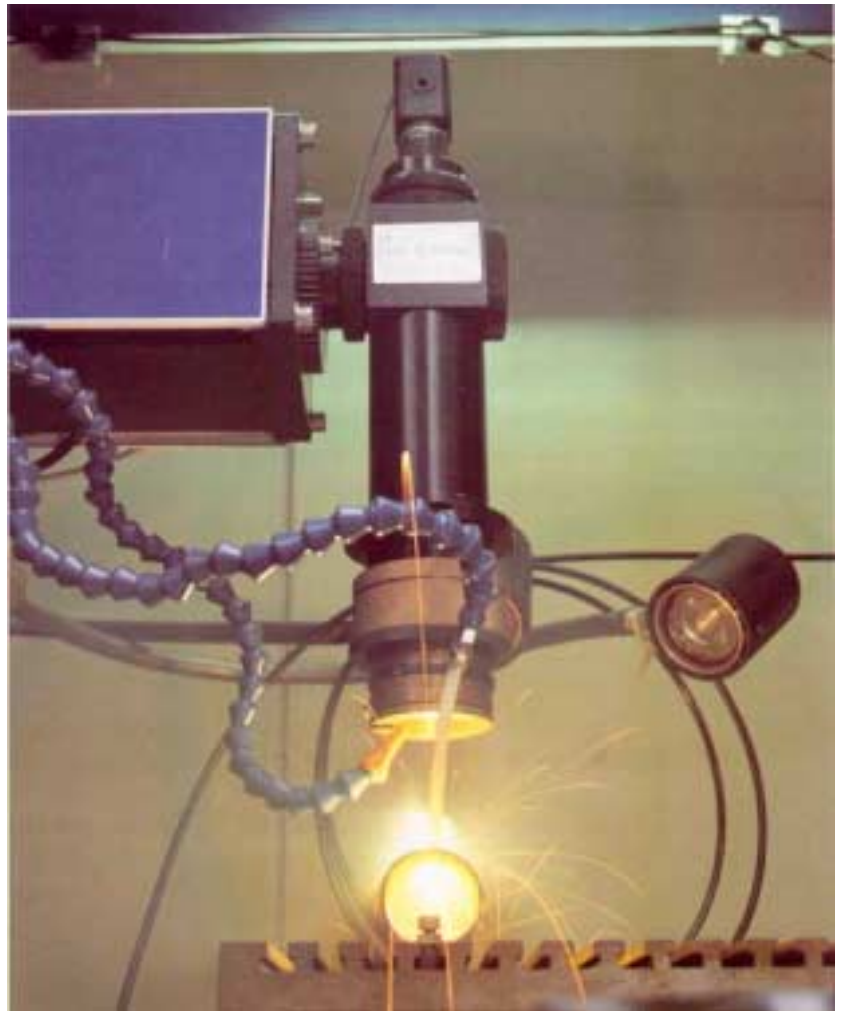
The European Federation for Welding, Joining and Cutting (EWF), by virtue of its unique international expertise has developed a specialized certification system to guarantee companies compliance with EN 729.

In particular the EWF EN 729 scheme takes care about those items EN 729 itself doesn't. In particular, the EWF EN 729 scheme requires EWF-qualified assessors, has procedures for other than EN-standards and is capable of handling the requirements for sub-contracting in an easier way than EN 729 itself. The EWF certificate schedule will list deviations and specific requirements, if any. As a result of co-operation between EWF and "European Accreditation" (EA), the EWF EN 729 scheme fulfils all requirements recently set by the latter for EN 729 certification according to EN 45011 and EN 45012.

Henk Bodt
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EWF SPECIAL COURSES

**EWF MANUFACTURERS'
CERTIFICATION SCHEME**

EUROJOIN 4

EFW SPECIAL COURSES

The EWF "Special Courses" are designed to provide, a basic core education and training in a specific field related to welding processes, in a short, very focused program. At this time, EWF has developed and approved three Special Courses in the fields of Laser Welding (at Engineer, Technologist and Specialist levels), Robot Welding (at the Specialist level) and Welding of Reinforcing Bars (at the Specialist level).

The minimum requirements for the education and training for these courses, in terms of themes, keywords and times devoted to them, are defined in the Guidelines agreed upon by all national welding societies within the EWF membership (27 European countries). The Guidelines are periodically reviewed by EWF to take account of any changes that may affect the "state of the art". The courses are run by the EWF Authorized National Bodies, currently established in 21 European countries.

Anyone who successfully completes the course and examination is awarded an EWF 'Record of Achievement', stating that the person has completed the course and successfully passed the examination (if one exists).

To order anyone of these Guidelines, please contact the EWF Secretariat.



Special Course for Laser Welding
Document No. 494-01

Special Course for Robot Welding
Document No. 530-01

Special Course for Welding
Reinforcing Bars
Document No. 544-01

A short description of the 'Special Courses' contents in terms of main topics and number of hours assigned to them is given below.

Special Courses in Laser Welding (Engineer, Technologist and Specialist levels)

CONTENT	Number of hours of education		
	Engineer	Technologist	Specialist
Theoretical Education			
1. Laser Welding Process & Equipment	13	9	3
2. Materials & Their Behaviour During Welding	14	9	4
3. Construction And Design	4	2	1
4. Fabrication, Application Engineering	14	10	8
Practical Education			
5. Fundamental Practical Skills	15	15	15
6. Preparation Of Reports	12	12	6
Examination	3	3	3
Total	75	60	60

Special Course in Robot Welding (at the Specialist level)

CONTENT	Number of hours of education
1. Introduction	8
2. Mechanization In General	6
3. Design For Robot Welding	16
4. Layout In Workshop	4
5. Robot System	10
6. Programming Including Practical Exercises	16
7. Welding Demonstrations & Practical Exercises	18
8. Welding Processes	4
9. Quality Assurance	14
10. Health And Safety	8
11. Maintenance	6
12. Economy	10
Examination	4
Total	75

Special Course for Welding Reinforcing Bars (at the Specialist level)

CONTENT	Number of hours of education
Theoretical Education	
1. Introduction	2
2. Welding Processes And Equipment	2
3. Materials & Their Behavior During Welding	4
4. Construction And Design	4
5. Fabrication, Application Engineering	4
Practical Demonstrations	4
Total	20

EFW MANUFACTURERS' CERTIFICATION SCHEME

EFW has established a scheme for the Certification of Companies according to EN 729 requirements. The European Standard EN729:1995 deals with quality requirements for companies involved in fabrication by welding. The standard is in four parts: Guidelines for Selection and Use (Part 1), Comprehensive Quality Requirements (Part 2), Standard Quality Requirements (Part 3) and Elementary Quality Requirements (Part 4). It is for the fabricating company to decide whether to follow Part 2, 3 or 4, and this will depend on the specified welding quality requirements. If it is required to satisfy the quality system requirements of ISO 9001 or ISO 9002, Part 2 of EN 729 must be used. In any other situation, Part 2, 3 or 4 may be used and the selection would normally depend on how critical the welding operations were to the quality and fitness of the product.

For the implementation of the scheme, one organization in each country is appointed by EWF, after assessment against the Rules. These organizations are known as the "EFW ANBCCs - Authorized National Bodies for Company Certification" and are responsible for ensuring that the standards of assessment and certification are maintained. In this, the objective is that the EWF Certified Companies will have demonstrated that they have achieved an identified minimum level of capability for a specified

scope of activity, irrespective of the country in which they have been certified.

The role of the ANBCC is to act for EWF in respect of company certification, including the conduct of company assessments (either directly or through Participating Assessment Bodies), the qualification of ANBCC Assessors and the certification of companies and the recording of relevant information. At present there are 5 authorized ANBCCs: in Croatia (Welding Structures Department - University of Zagreb), Italy (Istituto Italiano della Saldatura), Poland (Instytut Spawalnictwa), Slovakia (VUZ) and the United Kingdom (TWI Certification Ltd.).

A database with the relevant information of all companies certified by EWF ANBCCs is kept continuously updated and is available for consultation on the EWF Web page at <http://www.institutovirtual.ptlewf>. You will also find in that site more information and the contact detail for each EWF member, ANB and ANBCC. You can also contact the EWF Secretariat directly by Email (ewf@isq.pt).

The EWF scheme offers advantages to Manufacturers compared with other schemes for EN729 certification. Certificates carry the well recognized EWF logo and the company's details are publicized on the central register described above.

EUROJOIN 4

As published in the last Newsletter, the next EUROJOIN Conference will take place in Dubrovnik, Croatia, on 24 and 25 May 2001. The main topic of the Conference is welding and the allied processes with the following specific topics:

- . Development of welding and allied processes
- . Development of base and filler materials
- . Problems of weldability of base and filler materials
- . Current state of the art of, and developments in, equipment
- . Current state of the art of, and developments in, power sources for the high-density processes (laser, electron beam, plasma, etc.)
- . Automatic devices, robots and their compatibility with the power sources
- . Auxiliary equipment (clamps, centralizers, etc.)
- . Equipment for cutting, brazing and spraying
- . Criteria governing the selection of welding equipment
- . NDT equipment
- . Health, safety and environment in welding and allied processes
- . Role of standardization in development



Authors who wish to present their contributions are kindly asked to submit the title of the paper, abstract containing 200 to 400 words, names of co-authors and personal data including E-mail, phone and fax numbers before May 31, 2000 to HDTZ at the address below. For application and further information please contact:

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ETCETERA

EWF LATEST NEWS

The Weld-On Project

As previously announced, the Questionnaire for the Evaluation of EWF's training courses has been launched via the Internet and is still available at the following Internet address:

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

The Partners have also distributed the questionnaire by mail to the former EWF trainees and the results are being collected for analysis. The final analysis will be available on the Internet in the EWF site by March 2000. The final conclusions will also be published there.

New Members, ANBs and ANBCCs

Until the end of 1999, two more ANBs have been approved: one in Hungary (MhtE - Magyar Hegesztéstechnikai Egyesülés) and one in the Czech Republic (Czech Welding Society ANB). There is now a total of 21 EWF ANBs in Europe.

There have also been two approvals of new ANBCCs: one in Croatia and one in Poland, totaling now 5 EWF ANBCC's approved in Europe.

The Personnel Certification Scheme is now being offered by 5 countries: Belgium, Czech Republic, Italy, Slovenia and the United Kingdom.

EWI On-Line

The EWF Site on the Internet is now available at the following address: <http://www.institutovirtual.pt/Jewf>. You can find there the following main topics:

- . **GENERAL INFORMATION** about the Federation (organization structure, terms of reference of the Technical Committees and main activities, secretariat staff, list of Members and contact addresses);
- . **TRAINING AND QUALIFICATION SCHEME** (currently approved Guidelines with direct access to the first part and the opportunity to access the full version on-line through the payment of 10 Euros per Guideline, and List of Authorized National Bodies - ANBs - with contact addresses);
- . **CERTIFICATION OF PERSONNEL SCHEME** (also with access to the Guidelines in the same conditions described above and list of ANBs currently operating this scheme);
- . **CERTIFICATION OF COMPANIES SCHEME** (including the Guidelines, list of ANBCCs - Authorized National Bodies for Company Certification, and the access to the EWF Central Register Database of EWF Certified Companies);
- . **ONGOING PROJECTS;**
- . **COOPERATION ACTIVITIES;**
- . **NEWSLETTERS;**
- . **POSTERS and BROCHURES;**
- . Relevant **PAPERS;**
- . Forthcoming **EVENTS;**

You can also reach the EWF Secretariat by mail, telephone, fax or Email:

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