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www.ewf.be
www.iiw-iis.org

EFW-IAB/IIW SECRETARIAT
Av. Prof. Cavaco Silva, 33
TagusPark - Apartado 012
P-2741-901 Porto Salvo
PORTUGAL
Tel: (+351) 214211351
Fax: (+351) 214228122
Email: ewf-iab@isq.pt

Editorial

WHY EWF CERTIFICATION IS DIFFERENT

At the end of his only visit to Sardinia in 1537, the Roman Emperor Charles V before leaving, fed up with the great mess, is said to have addressed the jubilant people with the famous expression 'Todos Caballeros' (that is 'All Knights' in Shakespeare's words), giving rise to a system of generalised acknowledgements that has been upheld in the subsequent centuries and has reached its climax in recent years.

Especially in the field of certification!

In this field, in fact, it has not always been the 'knighted' personnel and the 'knighted' companies who have deserved the certification they have obtained.

There are various reasons for this, mostly depending on the low level of competence certification bodies have sometimes been able to demonstrate for the technology relating to the area for which certification was sought.

For a long time, a proportion of those in the area of certification have thought that a defined level of quality in producing products or services could have been reached, both in practice and beyond philosophical and/or semantic objection, through implementing 'a manual and several documented procedures'. The consideration of specific technical knowledge of those concerned of the fabrication process applied appears to have been of secondary interest.

The final result of this approach has been the birth of 'virtual quality', where there is no close correlation between certified quality and the actual quality of the products or services performed.

This is not a criticism of the quality system standards as such. They are normally good or very good.

The problems arise in their application.

Looking at 'substantial quality' is quite easy: it must be recognised that the highest priority should be the specific technical competence in the fabrication process of both the certification body and the company being certified. In this regard, the European Product Directives constitute a very clear and firm reference, insisting wherever necessary on documented evidence of such specific technical competencies for both personnel and companies.

In the field of welded products, the way ahead has already been laid down by the European Welding Federation (EFW), which has organised the community of European Welding Institutes and Societies whose competence in this technology cannot, I feel, be questioned.

In this respect EWF has produced two certification schemes referring respectively to EN719/ISO 14731 (Welding co-ordination - tasks and responsibilities) and EN729/ISO 3834 (Quality requirements for welding). These are two of the most important qualification standards for personnel and companies, quoted in the European harmonised standards supporting the European Welded Product Directives.

With regard to 'substantial quality', EWF has drawn up its own approach where welded products are treated differently according to welding process. For example, fabrication of a bridge made from high strength C/Mn steel has very different specific competences to fabricating a nickel alloy heat exchanger. Such specific competences must be held by both the fabrication and the inspection/assessment organisations involved.

This concept is embedded in the EWF certification schemes, where certificates are always issued in conjunction with a relevant connected Schedule in which specific areas of competence for personnel and companies are outlined and registered.

And not only that!

Specific product approaches, such as railway components, pressure equipment and steel structures, will be introduced into the general certification scheme for manufacturers. This will lead and facilitate both the implementation and assessment of fabrication process management.

All this, I think, makes the difference!

Dr. Mauro Scasso

Chairman working group "Quality, Environment, Health and Safety in welding fabrication"



EWF Companies Certification System

Welding is a special process because the final result "the Weldment" may not be capable of being fully verified by only testing. The quality of the weldment shall be "incorporated" into the product, not by inspection. This means that normally to achieve a proper and sound weldment it is required to have a continuous control and it is needed to follow specific procedures during the production process.

Whenever a manufacturer refers to compliance with a certain EN ISO 3834 quality level, that should be sufficient to demonstrate the manufacturer capabilities to control welding activities for the type of product/work that is being produced by the company.

The preparation of a production unit to fulfil the requirements stated in the relevant standards can be time consuming and complicated. In this context EWF has prepared a set of guidelines aimed at supporting companies in the implementation of the requirements indicated in EN 729/EN ISO 3834 and EN ISO 14001.

EWF Companies Certification System not only provides a way to companies to be Certified in compliance with EN ISO 3834 but also leads to the introduction of the companies Data on the EWF database of Certified Companies. This database is only open to companies that were certified under the EWF Certification System, the database can be

seen in www.ewf.be under "Certified Companies" and it is possible to make a search either by country or by process (using the process standard identification code) or by base material (using the EN 288 base materials identification code).

Due to the developments and needs from the manufacturers regarding the compliance with other Systems, EWF Companies Certification Scheme has at the present the possibility to Certify Companies according with the EWF Environment Management Scheme (EMS). The EMS was developed with the aim to Certify Manufactures of Welding Products in compliance with EN ISO 14001. The introduction of a Safety Management Scheme (SMS) is under preparation, and will probably be ready for implementation in 2006.

The EWF Companies Certification Scheme is the unique Scheme that can answer to a full integrated manufactures system. At the same time the Technical Committee of EWF is developing specific supplements that will be applied according to specific products, such as, railways vehicles and components, pressure equipment, welded structures and so on, all of this supplements are namely to be applied for fulfilling the EN ISO 3834 requirements and specific EN product standards.

The EWF view of the future is a holistic model - EWF Integrated Manufacturer Scheme encompassing quality, environment and health & safety as presented on table 1.

Certification Schemes	Main Rules/Requirements	Specific Rules/Requirements
Quality	Scheme for Compliance with EN ISO 3834	Guidance for compliance with specific EN Products Standards, i.e. Railways, Piping, Structures
Environment	Scheme for Compliance with EN ISO 14001	Not Applicable
Health & Safety	Scheme for Compliance with Health & Safety	Not Applicable

Table 1 - EWF System for Certification of Companies

Conclusion:

- Clear, high profile, independent verification of compliance by the world's leading authority on welding.
- Facilitates compliance with European Standards and Directives.
- Confirmation of welding and fabricating capability and staff competence.
- Improved client confidence leading to a reduction in external audits.
- Entry of the company's details on well-published national and European registers.
- Quality and Environmental management and fabrication capability assessments carried out by specialist assessors.
- Increased national and international business potential.
- Certification packages to suit individual company requirements.
- EN ISO 3834 certification can be achieved alone or alongside EN ISO 9000:2000 certification.
- EN ISO 14001 certification can be achieved after or at the same time with the EN ISO 3834 certification.

The EWF Authorised National Bodies for the Companies Certification - ANBCCs are:

Austria, Croatia, Czech Republic, Germany, Hungary, Italy, Netherlands, Poland, Romania, Slovakia, Slovenia, Spain, Uk

MEET THE INTERNATIONAL AUTHORISED NATIONAL BODY

**SOUTHERN AFRICAN INSTITUTE OF WELDING**

In *March 1948*, the Southern African Institute of Welding (SAIW), a body dedicated to the advancement of welding technology was established in Johannesburg. That same year, it became a founder member of the International Institute of Welding (IIW).

The Institute became involved in training activities in the late 1970s and since that time has developed comprehensive programmes for career development of welding and NDT personnel. It also provides industry with technology consulting and support services.



SAIW - Headquarters Johannesburg

In *January 2003*, SAIW was awarded IIW Authorised National Body (ANB) status for South Africa. Subsequently, SAIW has established an independent non-profit company, SAIW Certification, or SCERT, to take full responsibility for the ANB. The South African National Accreditation System has recently accredited SCERT in accordance with ISO 17024 for personnel certification activities. There are also plans to establish a welding and fabrication company certification scheme during 2006/7.



chief executive John McLeish

Under the guidance of ANB chief executive *John McLeish*, SCERT is responsible for administering all activities related to the qualification and certification of welding engineers, technologists, specialists, practitioners and inspectors through the IIW.

Since receiving its ANB status almost three years ago, almost 100 individuals have attained IIW qualifications through SCERT.

Jim Guild, SAIW executive director says "The *raison d'être* of SAIW is the transfer of knowledge and expertise, which is in high demand in South Africa where there is a shortage of personnel with these skills. The status of SCERT as an ANB is fundamental to developing a human resources base that can meet this demand at standards which match those of the international community."

For additional information please visit: www.saiw.co.za

**THE SPANISH ASSOCIATION OF WELDING AND JOINING TECHNOLOGIES - CESOL**

CESOL, Spanish Association of Welding and Joining Technologies, is a non-profit and independent Association which serves welding and joining technologies and welcomes the participation of persons and firms interested in the objectives of same.

It is born from the merger of ADESOL, "Spanish Association for the Development of Welding", and CES "Spanish Centre of Welding and Joining Technologies". The aforementioned proposes to join the interests of professionals in welding, associated to ADESOL, with those of the companies and entities related to welding and other joining technologies, associated to CES.

CESOL's aims are to improve the necessity for research, development and diffusion of joining technologies, in its widest sense, among the different industrial fields. Its function is based on the co-ordination and complementation of the resources available at national level.



Working environment at CESOL

The main action areas of CESOL are:

- Research and Development
- Assessment
- Technical Assistance
- Education, Training and Qualification
- Standardisation and Certification
- Information and Publications

Since 1986 CESOL has been an EWF Member and initiated its relations with IIW.

Presently, the General Director of CESOL actively participates in IIW, chairing the IAB WG B1 "Rules and Operating Procedures" and IAB WG A3b "Welding Inspection"; and in EWF as President. He also collaborates, as EWF/IAB Lead Assessor, with EWF/IAB Secretariat in maintaining the ANB/ANBCC network.

CESOL is authorised by EWF and IIW for issuing diplomas to International/European Welding Engineers, Technologists, Specialists, Practitioners, Inspection Personnel and Welders, and by EWF to certify companies in accordance with EN 729 (ISO 3834) standard.

For additional information please visit: www.cesol.es



EUROJOIN 6



Santiago de Compostela - Spain, 28-30 June 2006
6th European Conference on Welding, Joining and Cutting

The EUROJOIN 6 combined with the 16th Technical Sessions on Welding will take place in Santiago de Compostela, Spain, from 28 to 30 June 2006.

The Conference's target is to organise an international meeting among people interested in welding and allied technologies in order to exchange knowledge and experiences.

The Conference is specially directed to users of welding and joining technologies as researchers, designers, plant managers, plant engineers, welding co-ordination personnel, inspectors, students and NDT personnel.

In parallel with the Conference it is intended:

- to provide space for practical demonstrations, whenever required,
- to perform a Welders' Skill Championship,
- to award the best Thesis, the best End-of-Career Project, the best Research Paper or Poster on Thermal Spraying
- to give a prize to the best Conference Paper and Poster presented regarding applied research

Authors are kindly asked to send their work, or consultations, to the address Autor-Author@cesol.es.

Please send the Enrolment Form to the address Inscripcion-Enrolment@cesol.es

For any other matters use the address cesol@cesol.es

www.cesol.es/EUROJOIN6/16JTS.php



ASOCIACION ESPAÑOLA
DE SOLDADURA Y
TECNOLOGÍAS DE UNIÓN



PROJECT NEWS



Economically Welding in a healthy way

The **ECONWELD** project is an European project approved and supported by the European Commission under the 6th Framework Programme. The project aims at matching the experience of RTD players with the necessities of SMEs and Industrial associations, in what concerns the emission of harmful welding fumes, the lack of ergonomical positions and procedures in the welding performance, and the analysis of how these aspects reduce industrial competitiveness.



Econweld Team meeting Eindhoven

Having started in October 2005 and gathering a total of 19 partners, the kick-off meeting took place in Eindhoven on the 18th & 19th October. This meeting allowed to establish personal contacts between the partners and to identify synergies and cooperation methods so as to achieve the project envisaged objectives.

Having the cooperation of 4 EWF members the project will last for the next three years (until September 2008) specifically aiming at:

- Reducing welding costs by 15-20%
- Reducing welding fumes in the welding environment
- Reducing sick leave among welders
- Developing a decision making tool for virtual welding, so ergonomics as well as welding fumes can be predicted in an early stage of a new production process
- Promoting a better image of welding professions

The **ECONWELD** project is constituted by Research Institutions, Industrial Associations and SMEs from 8 European countries which are aware of the project ambitious goals.

Project Promotional actions are already being taken and more information about the project is already available at:

www.econweld.com.



The general purpose of this project is to give some recommendations

in order to improve qualifications of building inspectors by identifying the gap between currently running vocational education and training systems expectations. The project involves five countries (Greece, Hungary, Poland, Portugal, Romania). State-of-art reports on the characteristics of the construction inspectors' job of all countries was produced and a field work survey on the vocational training offer and needs for construction inspectors is in course.

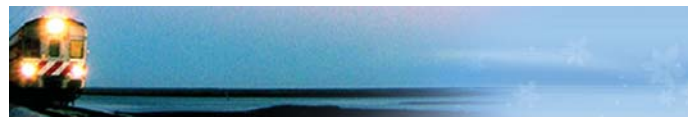
EWF has been sub-contracted to conduct the survey for welding inspectors that operate in civil construction.

RAILSAFE

Education, Qualification and Certification

The **RAILSAFE** project is supported by the "Community action programme on Vocational Training - Leonardo da Vinci" and it aims at harmonising the education, qualification and certification of railway welders. Just ending its first year of development, the consortium is gathering information about the performance objectives for railway track welding personnel and is developing the database of Certified railway track welders.

Further information about EWF cooperation projects can be obtained at: www.ewf.be/asp/cooperation_projects.asp



These Projects are co-funded by the European Commission/ DG Research

6th EU Framework Programme for Research, Technological development and demonstration (2002-2006)