



# NEWS Letter

AUTUMN / WINTER • 1998 • 7

## Editorial

The power of a company consists of two production factors: Facilities (machines, equipment) and Personnel (knowledge and I skill of all coworkers).

Machines and equipment can be bought, if money and time for delivery and installation are available.

Is it that simple with personnel, too? - Not at all! Try to find the coworkers with the specific profile of skill and knowledge you need on the "market"! For this reason you can forget the ancient slogan "hire and fire". It never was reasonable! Try the modern slogan "**hire train and keep!**" For this reason the EWF has set up a modular education system covering the field of joining technology to train your coworkers to exactly the profile of knowledge and skill you need in your company.

EWF has started a harmonized training and qualification Scheme for Welding Personnel by publishing the first guideline EWE on 1.1.1991. This course is now running in 17 European countries and there are now more than 12000 holders of an EWE diploma.

Following this first experience EWF has developed several other Guidelines covering all professional levels in welding technology and also in related areas such as Adhesive Bonding. The EWF training and qualification scheme now comprises 14 Guidelines leading to mutually recognized qualification in 20 European countries.

This has led to the implementation of one single system in Europe for professional training in welding technology, giving the European industry easy access to well trained professionals.

The CEN TC 121 has appreciated the work of the EWF and more and more includes the profile of knowledge gained in EWF courses into CEN standards - see for instance EN 719.

In 1997, EWF and IIV have reached an agreement for the extension of the EWF Scheme to the countries outside Europe. This agreement is now on its second year and all European institutions recognized for awarding EWF qualifications in Europe have been accepted for awarding IIV equivalent qualifications at the Engineer, Technologist and Specialist levels. It is expected that 10 to 15 more countries worldwide will be joining this Scheme in the near future.

The present newsletter is aimed at presenting updated information about the actual scope of EWF training and qualification scheme.

Prof. Dr.-Ing. H. Thier  
(Chairman EWF Committee 2)

For more details please contact  
the EWF Secretariat:

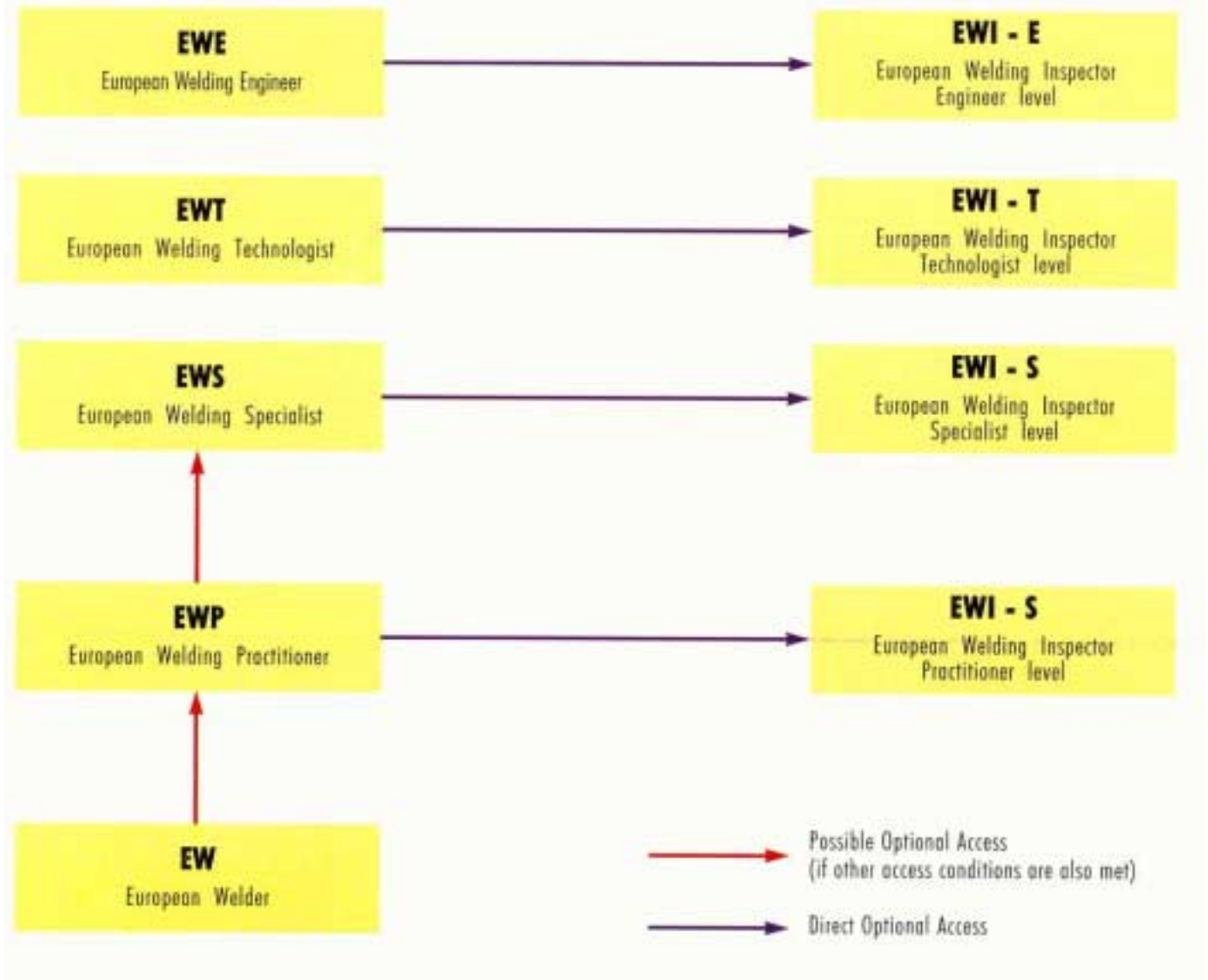
Taguspark - Apartado 119  
P-2781 OEIRAS Codex - PORTUGAL  
Tel.: +351.1.4211351, Fax: +351.1.4228122,  
E-mail: [ewf@isq.pt](mailto:ewf@isq.pt)



· EUROPEAN EDUCATION IN WELDING  
TECHNOLOGY  
· THE EWF QUALIFICATION SCHEME

# EUROPEAN EDUCATION IN WELDING TECHNOLOGY

(EWF Main Qualification Scheme)



## The EWF Qualification Scheme

The EWF courses are acknowledged all over Europe and are offered by the EWF ANBs (Authorized National Bodies) currently established in a total of 20 countries.

The candidates who successfully pass the final examination are given an EWF diploma and a title corresponding to the course. In the case of the three main EWF Guidelines (European Welding Engineer, European Welding Technologist and European Welding Specialist), as a result of an Agreement signed between EWF and IIW (International Institute of Welding), in most countries the successful candidates receive also an equivalent IIW diploma.

These diplomas state that, at the time of the examination, the diploma holder has attained a certain level of knowledge. The diplomas are "qualifications" and are valid for life. Until the end of 1997 there was a total of more than 26000 diplomas awarded throughout Europe and it is expected that the totals of 1998 will rise this figure to more than 32000 diplomas.

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 are given a certificate valid for a two years period and renewable at that point. This "certification" is according to EN 719 standard (ISO 45000 series). Although it is possible to access these courses in other ways, those who already have an EWF Diploma at the appropriate level can enter the Inspection courses directly (as shown in the diagram above).

A short description of the EWF courses available at this time is given hereafter.



The EWE Course provides a comprehensive practically oriented advanced knowledge in welding technology at the level of graduate engineer. This includes knowledge about European and National

Standards, safety regulations, quality assurance, fabrication methods and application engineering. The participant of the EWE course has a nationally approved engineering degree

before entering the postgraduate Welding Engineers Course. Having successfully passed the final examination the participant gets a diploma of "European Welding Engineer".

WELDING PROCESSES AND EQUIPMENT	100h
MATERIALS	130h
CONSTRUCTION AND DESIGN	60h
FABRICATION APPLICATIONS	110h
PRACTICAL PART	80h
<b>TOTAL</b>	<b>480h</b>



The EWT has a general advanced knowledge in welding technology at one level below the graduate engineer. He is able to perform high quality job functions in industry for instance in the fields of construction and design production (Welding

Coordinator level 2, see EN 719 and other CEN standards) quality assurance, research and development, etc. Prior to entering the course the participant has received a technical education and qualification one

level lower than the engineering degree. In some countries this is the level of "Technicians". Having successfully passed the final examination, the participant gets the "European Welding Technologist" diploma.

WELDING PROCESSES AND EQUIPMENT	80h
MATERIALS	80h
CONSTRUCTION AND DESIGN	40h
FABRICATION APPLICATIONS	80h
PRACTICAL PART	80h
<b>TOTAL</b>	<b>360h</b>



The Welding Specialists are appreciated in industry for their theoretical knowledge in combination with practical skill and experience. They are able to lead a group of foremen and welders in production as well as taking over tasks of welding production or quality assurance.

In large companies they are mostly the co-workers of welding engineers or welding technologists. For the access to the course no previous higher education or degree is required. So, for instance, Welding Practitioners can enter this education

as well as foremen or "Meister" of more practically oriented professions concerned with metal or plastics and their technical use. After a successful examination the participant gets a diploma of "European Welding Specialist".

WELDING PROCESSES AND EQUIPMENT	45h
MATERIALS	45h
CONSTRUCTION AND DESIGN	25h
FABRICATION APPLICATIONS	30h
PRACTICAL PART	80h
<b>TOTAL</b>	<b>325h</b>



The Welding Practitioner is a highly skilled welder with industrial experience as a welder, theoretically trained in the EWP course, to be the

assistant of the EWS in industry. He is able to read technical drawings and is well informed about production methods concerning welded

products. Having successfully passed the final examination the participant gets a diploma of "European Welding Practitioner".

WELDING PROCESSES AND EQUIPMENT	20h
MATERIALS	20h
CONSTRUCTION AND DESIGN	8h
FABRICATION APPLICATIONS	32h
PRACTICAL PART	80h
<b>TOTAL</b>	<b>160h</b>



The European Standard EN 287, parts 1 and 2, is designed to evaluate and to certify the skill of a welder for a certain welding task in production, but does not provide an education program based on experience by which steps and sequence, a high skill in

welding, can be acquired. At the same time, industry, especially small and medium enterprises, need welders with a more comprehensive capability for the sake of flexibility in production. In case of a change in production, the comprehensively trained welder

can very quickly be certified according to EN 287 for a different job, because the EWF education scheme for welders includes the corresponding EN 287 qualifications. There are three levels for the four welding processes (MMA, MIG/MAG, TIG

WELDING PROCESSES AND EQUIPMENT	20h
MATERIALS	20h
CONSTRUCTION AND DESIGN	8h
FABRICATION APPLICATIONS	32h
PRACTICAL PART	80h
<b>TOTAL</b>	<b>160h</b>

## Other supplementary EWF qualifications also leading to a diploma:

- . European Thermal Spraying Specialist
- . European Thermal Sprayer
- . European Adhesive Engineer
- . European Adhesive Specialist
- . European Adhesive Bonder
- . European Welding Inspector Engineer
- . European Welding Inspector Technologist
- . European Welding Inspector Specialist
- . European Welding Inspector Practitioner

The Last EWF General Assembly took place in The Netherlands and approved a new type of courses which do not have strict minimum access conditions and are short and very specific to their field. The participants will not receive a diploma (as these courses are not qualifications) but they will receive an official statement that they have participated and successfully completed an examination. For now, the approved Special Courses are:

Special Course in Laser Welding  
Special Course for Robot Welding (at the Specialist Level)

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

- European Fillet Welder (level 1)
- European Plate Welder (level 2)
- European Tube Welder (level 3)

# ETCETERA

## EWFLATESTNEWS

- The EWF ANB Network now comprises a total of 20 countries throughout Europe with the approval of "Magyar Hegesztéstechnikai Egyesülés" as the ANB for HUNGARY.

- The existing EWF Observer members (Bulgaria, Czech Republic and Russia) are now in the process of establishing their Authorised National Bodies. There are also two new EWF Observer members from Bosnia Herzegovina and Ukraine.

- As Dr. Van den Brug's term of office as the President has come to an end, we welcome our new President Dr. Giulio Costa from Italy.

### FOR FURTHER INFORMATION PLEASE CONTACT THE ANB IN YOUR COUNTRY:

<b>AUSTRIA:</b> Schweisstechische Zentralanstalt Arsenal OBJ. 207 - A-1030 VIENNA Tel: (43.1 )79826260 Fax: (43.1 )798262628 <a href="mailto:sza@aon.at">sza@aon.at</a>	<b>NORWAY:</b> Norwegian Welding Society Oscargt. 20 - N-0306 OSLO Tel: (47)22590100. Fax: (47)22590129
<b>BELGIUM:</b> Association Beige du Soudage Building Diamond A. Reyerslaan 80 - B-1 030 BRUXELLES Tel: (32.2)7068150 robert. <a href="mailto:vennekens@rug.ac.be">vennekens@rug.ac.be</a>	<b>POLAND:</b> Instytut Spawalnictwa ul B1 Czeslawa 16/18 - PL-44-101 GLIWICE Tel: (48.32)2310011 . vFax: (48.32)2314652 <a href="mailto:is_sk_di@alpha.is.gliwice.pl">is_sk_di@alpha.is.gliwice.pl</a>
<b>CROATIA:</b> Croatian Welding Society Ivana Lucica 1 - HR 10 000 ZAGREB Tel: (385.1.)6168597 . Fax: (385.1 )61571 08 <a href="mailto:holtz.cws@fsb.hr">holtz.cws@fsb.hr</a>	<b>PORTUGAL:</b> ISQ-Instituto de Soldadura e Qualidade TagusPark, Apartado 199 - P-2781 OEIRAS Codex Tel: (351.1)4228100. Fax: (351.1)4228121 <a href="mailto:rmiranda@isq.pt">rmiranda@isq.pt</a>
<b>DENMARK:</b> FORCE Dantest Cert Park Allé 345 - DK-2605 BRONDBY Tel: (45.43)267000 . Fax: (45.43)267011 <a href="mailto:bj@force.dk">bj@force.dk</a>	<b>ROMANIA:</b> ASR - CertPers Bv. Mihai Viteazul nr. 30 - R-1900 TIMISOARA Tel: (40.56)200041 . Fax: (40.56)200041 <a href="mailto:asr@isim.sorostm.ro">asr@isim.sorostm.ro</a>
<b>FINLAND:</b> The Welding Society of Finland Makelankatu 36 A 2 - SF-0051 0 HELSINKI Tel: (358.9)7732199 . Fax: (358.9)7732661	<b>SLOVAKIA:</b> Vyskumny Ustav Zvaracsky Racianska 71 - 83259 BRATISLAVA Tel: (42.17)44253821 . Fax: (42.17)44452145 <a href="mailto:rozvoj@vuz.sanet.sk">rozvoj@vuz.sanet.sk</a>
<b>FRANCE:</b> Association Française du Soudage ZI Paris Nord II - BP 50362 - F-95942 ROISSY COG Cedex Tel: (33.1 )49903603 . Fax: (33.1 )49903650	<b>SLOVENIA:</b> Zveza Drustev Varilno Tehniko Slovenije Karlovska Cesta 3/1 - 1000 LJUBLJANA Tel: (386.61)221631 . Fax: (386.61)348282 <a href="mailto:pavel.stular@quest.arnes.si">pavel.stular@quest.arnes.si</a>
<b>GERMANY:</b> DVS - Deutscher Verband für Schweisstechnik Aachener Strasse 172 -0-40223 DUSSELDORF Tel: (49.211)1591174 . Fax: (49.211)151200 <a href="mailto:dvs_hg@compuserve.com">dvs_hg@compuserve.com</a>	<b>SPAIN:</b> CESOL - Asociacion Espanola de Soldadura y Tecnologfas de Union C/ San Bernardo, 123, 4ª Planta - E-28015 MADRID Tel: (34.91)4456800. Fax: (34.91)4443174. <a href="mailto:cesol@cesol.es">cesol@cesol.es</a>
<b>HUNGARY:</b> Magyar Hegesztéstechnikai Egyesules Fogarasi ut 10/14 - H-1148 BUDAPEST Tel: (36.1 )467281 0 . Fax: (36.1 )3633295 <a href="mailto:mhte@elender.hu">mhte@elender.hu</a>	<b>SWEDEN:</b> Swedish Welding Commission Box 5073 - S-10242 STOCKHOLM Tel: (46.8)7912900. Fax: (46.8)6799404 <a href="mailto:l.johansson@svets.a.se">l.johansson@svets.a.se</a>
<b>ITALY:</b> Istituto Italiano della Saldatura Lungo Bisagno Istria 15 - I-GENOVA Tel: (390.10)83411 . Fax: (390.10)8367780 <a href="mailto:iis@assicomitalia.it">iis@assicomitalia.it</a>	<b>SWITZERLAND:</b> Schweizerischer Verein für Schweisstechnik St. Alban-Rheinwegg 222 - CH-4052 BASEL Tel: (41.61)3178484. Fax: (41.61)3178480
<b>NETHERLANDS:</b> Nederlands Instituut voor Lastechniek Krimkade 20 - NL-2251 KA VOORSCHOTEN Tel: (31.71)5611211' Fax: (31.71)5611426 <a href="mailto:info@nil.nl">info@nil.nl</a>	<b>UNITED KINGDOM:</b> TWI Certification Ltd Granta Park - Great Abington - UK-CAMBRIDGE CB1 6 AL Tel: (44.1223)891162. Fax: (44.1223)894219 <a href="mailto:tjessop@twi.co.uk">tjessop@twi.co.uk</a>

**EWFL Secretariat:** c/o ISO - TagusPark, Apartado 119 - P-2781 OEIRAS Codex - PORTUGAL  
Tel: +351.1.4211351 . Fax: +351.1.4228122 . E-mail: [ewf@isq.pt](mailto:ewf@isq.pt)