# **EWF Guideline EUROPEAN ADHESIVE BONDER**



### Minimum Requirements for the Education, Examination and Qualification



EWF-515r1-10/SV-02



## MINIMUM REQUIREMENTS FOR THE EDUCATION, TRAINING, EXAMINATION, AND QUALIFICATION OF PERSONNEL

### EUROPEAN ADHESIVE BONDER (EAB)

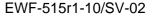
This is a reduced version; it is not the full Guideline

For more information regarding the EWF Qualification System,
the EWF-IAB/IIW Combined Secretariat or the National ANB
should be contacted
(see in the EWF and/or IIW sites the ANB contacts)

GUIDELINE OF THE EUROPEAN FEDERATION FOR WELDING, CUTTING AND JOINING - EWF

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## Minimum Requirements for the Education, Examination and Qualification of European Adhesive Bonder

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#### Section I: Minimum Requirements for the Education of European Adhesive Bonder

The use of this guideline is restricted to organisations approved by the Authorised National Body (ANB). The section II of this guideline covers the examination and qualification of European Adhesive Bonders.

ANB is accredited according to EN ISO/CEI 17024

#### Introduction

This guideline for the European Education and training of Adhesive Bonders has been prepared, evaluated and formulated by Members of the Committee for Education and Training of the EWF. It is designed to provide the basic core education in adhesive technology required for a number of adhesive personnel being active in job functions such as foreman, instruction, technical sales etc. It is possible that additional training and/or experience may be required by the adhesive personnel beyond the basic core education to lead to qualification in the applicable job functions.

A European Adhesive Bonder has industrial experience and can carry out bonding without supervision. He is able to read and understand working instructions and is well informed about production methods concerning bonded products.

The guideline covers the minimum requirements for education and training, agreed upon by all national welding and joining societies within the EWF, in terms of themes, keywords and times devoted to them. It will be revised periodically by the Committee to take into account any changes which may affect the "state of the art". Students having successfully completed this course of education will be expected being capable of applying adhesive technology as covered by this guideline. The subsequent Part II of this document covers the examination and qualification.

The contents are given in the following structure.

Theoretical Education	Teaching hours
1. Fundamentals of Adhesion and Adhesives	1
2. Surface Preparation Before Adhesive Bonding	4
3. The Main Families of Adhesives and Sealants	3
4. Design and Construction of Adhesive Joints	1
5. Quality Control of Bonded Structures	3
6. Durability of Adhesively Bonded Joints	1
7. Benefits and Limitation of Adhesive Bonding Technology	2
8. Health and Safety	1
9. Practical	18
10.Examination	6
Total	40

This is not the full version of this document, this version has only the aim to supply general information European Adhesive Bonder - EAB

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A teaching hour will contain at least 50 minutes of direct teaching time. It is not obligatory to follow exactly the order of topics given in this guidance and choice in the arrangements of the syllabus is permitted.

It is to be noted that the overall structure of the syllabus for all levels (EAE, EAS and EAB) is similar, but some items are not considered appropriate in the Education of EAB. The depth to which each topic is dealt with is indicated by the number of hours allocated to it in the guideline. This will be reflected in the scope and depth of the examination.

It is not obligatory to follow exactly the order of the topics given in this guideline and choice in the arrangement of the syllabus is permitted. The depth to which each topic is dealt with is indicated by the number of hours allocated to it in the guideline. This will be reflected in the scope and depth of the examination.

### Adhesive Bonder Course Theoretical Education - Total 16 hours

(Only the main Syllabus Themes)

- 1. Fundamentals of adhesive and adhesives
- 2. Surface preparation before adhesive bonding
- 2.1 DIFFERENT STEPS: (WITH A FOCUS ON THE NECESSITY OF THE COURSE)
- 2.2 DIFFERENT SURFACE PREPARATIONS OF MATERIALS:
- 3. The main families of adhesives and sealants
- 4. Design and construction of adhesive joints
- 5. Quality control of bonded structures
- 6. Durability of adhesively bonded joints
- 7. Benefits and limitation of adhesive bonding technology
- 8. Health and safety

#### PRACTICAL TRAINING – Duration - 18 Hours

- 9.1 Surface Pre-treatment of Substrates
- 9.2 Use of Different Adhesives
- 9.3 Quality Control of Joints/Testing
- 9.4 Safety Instructions

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#### **EXAMINATION - 6 Hours**

The examination will take the form of an oral examination, linked to written and practical examination

The final theoretical examination papers shall be multi-choice or essay and will be set under the authority of the Board of Examiners of the ANB, sealed, and opened in the presence of the candidates and Authorised Examiner immediately before the examination begins. The Authorised Examiner must sign all completed papers to confirm that the examination has been conducted in a proper manner.

### Appendix 0

#### Access to the Education:

For entry to the European Adhesive Bonder Course a minimum age of 16 is necessary. Basic skills in material processing are required otherwise a basic training is recommended. Course attendees and teachers shall have a good command of a common language; so that they can successfully participate in instruction and take part in theoretical tests.

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