



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

**SPECIAL COURSE FOR TRAINING AND QUALIFICATION
IN “WELD IMPERFECTIONS FOR
NON-DESTRUCTIVE TESTING PERSONNEL”**

(at Specialist level)

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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Special Course on Weld Imperfections for Non-Destructive Testing Personnel

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Section I: Minimum Requirements for the Education

The use of this guideline is restricted to organisations approved by the Authorised National Body (ANB).

1 Introduction

This guideline for the European education and training on Weld Imperfections for Non-Destructive Testing Personnel has been prepared, evaluated and formulated by the Working Group "Special Course on Weld Imperfections" of the Technical Committee of EWF. It is designed to provide the supplementary education in welding technology required for job functions in non-destructive testing.

This first section of the guideline covers the minimum requirements for education and training, agreed upon by all national welding societies within the EWF in terms of objectives, keywords expected results and recommended times devoted to them. It will be revised periodically by the Technical 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 to be capable of applying non-destructive testing on welded joints as covered by this guideline. A subsequent section covers the examination and qualification.

The contents are given in the following structure:

Education	teaching hours
1. Introduction, Quality in welding	2
2. Welding processes and equipment	6
3. Materials and their behaviour in welding	6
4. Welding imperfections	6
5. Practical demonstrations	4
Total	24

A teaching hour will contain at least 50 minutes of direct teaching time. It is not obligatory to follow exactly the order of the topics given in this guideline and choice in the arrangements of the syllabus is permitted. The depth to which each topic is dealt with is indicated by the recommended number of hours allocated to it in the guideline. This will be reflected in the scope and depth of the examination.

2 Access to the Education

For the entry to the program, proper education according to eight years of primary and medium school or equivalent is recommended.

3 Theoretical supplementary education regarding Weld Imperfections

(Only the main Syllabus Themes)

The module for Weld Imperfections aims at teaching technical knowledge in the specific field of weld imperfections of steels and aluminium alloys supplementary to existing basic knowledge in non-destructive testing.

The module deals with the following subjects:

<u>Subject</u>	<u>Hours</u>
<u>1.Introduction, Quality in welding</u>	minimum number of hours: 2
<u>2.Welding processes and equipment</u>	minimum number of hours: 6
<u>3. Materials and their behaviour during welding:</u>.....	minimum number of hours: 6
<u>4. Weld imperfections</u>	minimum number of hours: 6
<u>5. Practical demonstrations</u>	recommended number of hours: 4
<u>Total hours:</u>.....	24