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I.S. EN 12517-2:2008

Non-destructive testing of welds - Part 2: Evaluation of welded joints in aluminium and its alloys by radiography - Acceptance levels

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EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 12517-2

August 2008

ICS 25.160.40

English Version

Non-destructive testing of welds - Part 2: Evaluation of welded joints in aluminium and its alloys by radiography - Acceptance levels

Essais non destructifs des assemblages soudés - Partie 2: Évaluation par radiographie des assemblages soudés en aluminium et ses alliages - Niveaux d'acceptation

Zerstörungsfreie Prüfung von Schweißverbindungen - Teil 2: Bewertung von Schweißverbindungen in Aluminium und seinen Legierungen mit Durchstrahlung - Zulässigkeitsgrenzen

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Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Radiographic technique 4

4 General 5

5 Acceptance levels 5

Annex A (informative) **Guide to the limitations of radiographic testing**[)] 8

A.1 Volumetric imperfections in butt welds 8

A.2 Cracks in butt welds 8

A.3 Planar imperfections in butt welds 8

Annex B (informative) **Examples for determination of percentage (%) of imperfections** 9

Annex C (informative) **Sum of acceptable areas** 11

Bibliography 13

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Foreword

This document (EN 12517-2:2008) has been prepared by Technical Committee CEN/TC 121 “Welding”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2009, and conflicting national standards shall be withdrawn at the latest by February 2009.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

EN 12517 *Non-destructive testing of welds* comprises a series of European Standards for acceptance levels for radiographic testing which is made up of the following parts:

— *Part 1: Evaluation of welded joints in steel, nickel, titanium and their alloys by radiography — Acceptance levels*

— *Part 2: Evaluation of welded joints in aluminium and its alloys by radiography — Acceptance levels*

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1 Scope

This European Standard specifies acceptance levels for indications from imperfections in aluminium butt welds detected by radiographic testing. If agreed, the acceptance levels may be applied to other types of welds or materials.

The acceptance levels may be related to welding standards, application standards, specifications or codes.

This European Standard assumes that the radiographic testing has been carried out in accordance with EN 1435.

When assessing whether a weld meets the requirements specified for a weld quality level, the sizes of imperfections permitted by standards are compared with the dimensions of indications revealed by a radiograph made of the weld.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1435, *Non-destructive examination of welds — Radiographic examination of welded joints*

EN ISO 10042, *Welding — Arc-welded joints in aluminium and its alloys — Quality levels for imperfections (ISO 10042:2005)*

EN ISO 6520-1, *Welding and allied processes — Classification of geometric imperfections in metallic materials — Part 1: Fusion welding (ISO 6520-1:2007)*

3 Radiographic technique

Depending on the weld quality level, radiographic technique A or B in accordance with EN 1435 shall be used as shown in Table 1.

Table 1 — Radiographic testing

Quality levels in accordance with EN ISO 10042	Testing techniques and classes in accordance with EN 1435	Acceptance levels in accordance with EN 12517-2
B	B	1
C	B [a]	2
D	A	3

[a] However, the minimum number of exposure for circumferential weld testing may correspond to the requirements of class A of EN 1435.

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