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Non-destructive testing of welds — Phased array ultrasonic testing (PAUT) — Acceptance levels

Essais non destructifs des assemblages soudés — Technique ultrasons multi-éléments (PAUT) — Niveaux d'acceptation

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Foreword

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This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 5, *Testing and inspection of welds*.

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Non-destructive testing of welds — Phased array ultrasonic testing (PAUT) — Acceptance levels

1 Scope

This document specifies acceptance levels for the phased array ultrasonic testing technique (PAUT) of full penetration welds in ferritic steels of minimum thickness of 6 mm which correspond to the quality levels of ISO 5817.

These acceptance levels are applicable to indications classified in accordance with ISO 13588.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 5577, *Non-destructive testing — Ultrasonic testing — Vocabulary*

ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

ISO 11666, *Non-destructive testing of welds — Ultrasonic testing — Acceptance levels*

ISO 13588, *Non-destructive testing of welds — Ultrasonic testing — Use of automated phased array technology*

ISO 15626, *Non-destructive testing of welds — Time-of-flight diffraction technique (TOFD) — Acceptance levels*

ISO 17640, *Non-destructive testing of welds — Ultrasonic testing — Techniques, testing levels, and assessment*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5577 and ISO 13588 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 Symbols

h	height
h_g	sum of the heights of the individual indications plus the distance between them
l	length
l_g	sum of the lengths of the individual indications plus the distance between them
t	thickness

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