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Welding for aerospace applications — Visual inspection of welds

*Soudage pour applications aérospatiales — Inspection visuelle des
soudures*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 14, *Welding and brazing in aerospace*.

Requests for official interpretations of any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 14 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

Welding for aerospace applications — Visual inspection of welds

1 Scope

This document specifies the requirements for visual inspection of welds in metallic materials and requirements for qualification and certification of personnel for visual weld inspection.

This document is also applicable to the visual inspection of the joint prior to or between welding sequences, and of brazed joints. In this case, the contents of theoretical and practical training will need to be adapted accordingly.

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 18490, *Non-destructive testing — Evaluation of vision acuity of NDT personnel*

EN 4179¹⁾, *Aerospace series — Qualification and approval of personnel for non-destructive testing*

3 Terms and definitions

For the purposes of this document, the following terms and definitions 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/>

3.1

authorization

written statement by an employer that an individual is entitled to perform visual weld inspection within the organization

3.2

examiner

person who is designated by the employer to certify and recertify visual weld inspectors

Note 1 to entry: The examiner can be at the employer's or an external organization.

3.3

employer

organization employing or contracting the services of one or more individuals who perform visual weld inspection, including self-employed individuals

1) Under a Memorandum of Understanding, this is identical to NAS 410[10].