INTERNATIONAL STANDARD

ISO 19828

First edition
2017-04

Welding for aerospace applications — Visual inspection of welds

Soudage pour applications aérospatiales — Inspection visuelle des soudures

Reference number
ISO 19828:2017(E)

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

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 4179[1)], *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].