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Welding coordination — Tasks and responsibilities

Coordination en soudage — Tâches et responsabilités

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

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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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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 11, *Qualification requirements for welding and allied processes personnel.*

Any feedback, question or request for official interpretation related to any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 11 via your national standards body. A complete listing of these bodies can be found at www.iso.org/members.html. Official interpretations, where they exist, are available from this page: https://committee.iso.org/sites/tc44/home/interpretation.html.

This third edition cancels and replaces the second edition (ISO 14731:2006), which has been technically revised.

The main changes compared to the previous edition are as follows:

— informative reference to IIW has been removed due to anticompetition rules;

— Annex A now addresses the assessment of welding coordination personnel;

— the term responsible welding coordinator, RWC, has been deleted;

— the concept of competence and levels (see Clause 6) has been introduced;

— new subclause B.20 has been added to address Health and Safety and Environment.

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Introduction

Validation and verification of welding requires competent personnel to perform welding coordination to establish confidence in weld quality and to ensure reliable performance in service.

The tasks and responsibilities of welding coordination personnel involved in welding-related activities (e.g. planning, executing, supervising and inspection) need to be clearly defined.

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Welding coordination — Tasks and responsibilities

1 Scope

This document identifies the essential welding quality related tasks and responsibilities included in welding coordination.

The principle of an assessment according to this document is that welding coordination personnel need to be competent in the welding-related tasks allocated to them.

It is presumed that welding coordination personnel have the necessary education, qualifications and experience and are appointed by the manufacturer.

Regulatory documents, application standards and contracts can give specific requirements for welding coordination personnel. Otherwise, it is the responsibility of the manufacturer to determine the requirements to be in compliance with this document.

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 3834 (all parts), *Quality requirements for fusion welding of metallic materials*

ISO/TR 25901-1, *Welding and allied processes — Vocabulary — Part 1: General terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/TR 25901-1 and the following apply.

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

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

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

3.1
manufacturer
entity carrying out welding and related activities under the same technical and quality management

Note 1 to entry: Welding and related activities may be carried out in a workshop or onsite or both, but the manufacturer remains responsible for the welding production.

3.2
welding coordination
coordination of manufacturing operations for all welding and welding-related activities

Note 1 to entry: Welding coordination can be assigned to an individual or a team.

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3.3
welding coordination personnel
welding coordinator
person or group of people performing defined welding coordination tasks

Note 1 to entry: Different personnel may be appointed by the *manufacturer* (3.1) for different welding and related tasks.

Note 2 to entry: A qualification and/or practical experience may be required.

3.4
welding inspection
conformity evaluation of welding variables by observation and judgment accompanied as appropriate by measurement or testing

Note 1 to entry: Welding inspection is a part of welding coordination.

3.5
skill
ability to apply knowledge and experience to complete tasks and solve problems

Note 1 to entry: Skills are described as cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).

[Adapted from European Council Recommendation 2017/C 189/03, Annex I, (g)][1]

3.6
knowledge
outcome of the assimilation of information, the body of facts, principles, theories and practices that is related to a field of work, through learning (theoretical and/or factual)

[Adapted from European Council Recommendation 2017/C 189/03, Annex I, (f)][1]

3.7
qualification
<personnel> formal outcome of an assessment and validation process to determine that an individual has achieved learning outcomes to a given program

[Adapted from European Council Recommendation 2017/C 189/03, Annex I, (a)][1]

3.8
competence
proven ability to use effectively knowledge, skills and personal, social and/or methodological abilities, in a wide variety of work situations in terms of responsibility and autonomy

[Adapted from European Council Recommendation 2017/C 189/03, Annex I, (i)][1]

3.9
responsibility
accountability, duties, obligations and associated rights assigned by the *manufacturer* (3.1) as a result of competence in the job

4 Tasks and responsibilities

4.1 Welding quality related tasks

Annex B shall be used by the manufacturer as a guide to allocate welding quality related tasks and responsibilities to welding coordination personnel. It may be supplemented for special applications. Not all the items are required for all manufacturers or quality system requirements, and selection shall be made as appropriate. For example, where there is no destructive testing or post-weld heat treatment, B.14 c) and B.15 do not apply.

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