International Standard

ISO 14344

Welding consumables — Procurement of filler materials and fluxes

Produits consommables pour le soudage — Approvisionnement en matériaux d'apport et flux

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Foreword

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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 document 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 3, *Welding consumables,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 121, *Welding and allied processes,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 14344:2010), which has been technically revised.

The main changes are as follows:

— content from scope has been moved to the introduction;

— in Clause 2, reference is made to ISO 544, ISO 10474 and EN 10204;

— in Clause 3, terms and definitions have been revised and the list expanded;

— Clause 5 has been significantly revised.

Any feedback or questions on this document should be directed to the user's 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. Official interpretations, where they exist, are available from this page: https://committee.iso.org/sites/tc44/home/interpretation.html.

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Introduction

In production, the components of welding consumables are divided into discrete, predetermined quantities so that satisfactory tests with a sample from that quantity will establish that the entire quantity meets specification requirements. These quantities, known by such terms as heats, lots, blends, batches and mixes, vary in size according to the manufacturer. For identification purposes, each manufacturer assigns a unique designation to each quantity. This designation usually consists of a series of numbers or letters, or combinations thereof, which will enable the manufacturer to determine the date and time (or shift) of manufacture, the raw materials used, and the details of the procedures used in producing the welding consumable. This designation stays with the welding consumable and can be used to identify the material later, in those cases in which identification is necessary.

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Welding consumables — Procurement of filler materials and fluxes

1 Scope

This document specifies tools for communication between a purchaser and a supplier of welding consumables within quality systems, such as those based upon ISO 9001.

This document, together with an applicable welding consumable standard (ISO or other), provides a method for preparing the specific details needed for welding consumable procurement which consists of:

a) the welding consumable classification (selected from the applicable welding consumable standard);

b) the lot classification (selected from Clause 4);

c) the testing schedule (selected from Clause 5).

Selection of the specific welding consumable classification, lot classification, and testing schedule depends upon the requirements of the application for which the welding consumable is being procured.

This document does not apply to non-consumable electrodes or shielding gases.

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 544, *Welding consumables – Technical delivery conditions for filler materials and fluxes – Type of product, dimensions, tolerances and markings*

ISO 10474, *Steel and steel products — Inspection documents*

EN 10204, *Metallic products – Types of inspection documents*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 544 and the following apply.

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

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

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

3.1
controlled chemical composition
<covered or tubular electrodes> covering or core ingredients consisting of one or more wet mixes, dry batches, or dry blends that are subjected to sufficient tests to ensure that all within the *lot* (3.8) are equivalent

Note 1 to entry: These tests shall include chemical analysis, the results of which shall fall within the manufacturer's acceptance limits. The identification of the test procedure and the results of the tests shall be recorded.

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