



SLOVENSKI STANDARD SIST EN ISO 18275:2026

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Nadomešča:
SIST EN ISO 18275:2018

Dodajni in pomožni materiali za varjenje - Oplaščene elektrode za ročno obločno varjenje visokotrdnostnih jekel - Razvrstitev (ISO 18275:2026)

Welding consumables - Covered electrodes for manual metal arc welding of high-strength steels - Classification (ISO 18275:2026)

Schweißzusätze - Umhüllte Stabelektroden zum Lichtbogenhandschweißen von hochfesten Stählen (ISO 18275:2026)

Produits consommables de soudage - Électrodes enrobées pour le soudage manuel à l'arc des aciers à haute résistance - Classification (ISO 18275:2026)

Ta slovenski standard je istoveten z: EN ISO 18275:2026

ICS:

25.160.20 Potrošni material pri varjenju Welding consumables

SIST EN ISO 18275:2026

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 18275

May 2026

ICS 25.160.20

Supersedes EN ISO 18275:2018

English Version

Welding consumables - Covered electrodes for manual
metal arc welding of high-strength steels - Classification
(ISO 18275:2026)

Produits consommables de soudage - Électrodes
enrobées pour le soudage manuel à l'arc des aciers à
haute résistance - Classification (ISO 18275:2026)

Schweißzusätze - Umhüllte Stabelektroden zum
Lichtbogenhandschweißen von hochfesten Stählen
(ISO 18275:2026)

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European foreword

This document (EN ISO 18275:2026) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2026, and conflicting national standards shall be withdrawn at the latest by November 2026.

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**International
Standard**

ISO 18275

**Welding consumables — Covered
electrodes for manual metal arc
welding of high-strength steels —
Classification**

*Produits consommables de soudage — Électrodes enrobées
pour le soudage manuel à l'arc des aciers à haute résistance —
Classification*

**Fourth edition
2026-05**

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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.

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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 fourth edition cancels and replaces the third edition (ISO 18275:2018), which has been technically revised.

The main changes are as follows:

- this document has been reformatted in single column showing System A and System B in tables and separate clauses and subclauses, some which are new;
- this document shows system A and system B in a simplified manner with an explanation of each system in [Clause 4](#) and the scope;
- normative references have been updated;
- all tables have been updated and reorganized;
- N6M4 has been added to [Table 6](#);
- E7618-N6M4 A has been added to [Table 11](#) and [Table 12](#);
- the type of current has been updated in [Table 7](#) has been updated to reflect ISO 2560;
- in [5.6.2](#), the tolerance for holding time has been relaxed except for E6218-N4M2 P
- in [6.1](#), clarification regarding when 4,0 mm diameter electrodes are not manufactured;

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ISO 18275:2026(en)**Introduction**

This document recognizes that there are two somewhat different approaches in the global market to classifying a given electrode, and allows for either or both to be used, to suit a particular market need. Application of either type of classification designation (or of both, where suitable) identifies a product as classified in accordance with this document. The classification in accordance with system A was originally based on EN 757:1997 which has been withdrawn and replaced by this document. The classification in accordance with system B is mainly based on standards used around the Pacific Rim.

This document provides a classification system for covered electrodes for high-strength steels in terms of the tensile properties, impact properties and chemical composition of the all-weld metal, as well as the type of electrode covering. The ratio of yield strength to tensile strength of weld metal is generally higher than that of parent metal. Users should note that matching weld metal yield strength to parent metal yield strength does not necessarily ensure that the weld metal tensile strength matches that of the parent metal. Therefore, where the application requires matching tensile strength, selection of the consumable should be made by reference to column 3 (Tensile strength) of [Table 3](#) or column 2 (Tensile strength) of [Table 11](#).

The mechanical properties of all-weld metal test specimens used to classify covered electrodes can vary from those obtained in production joints because of differences in welding procedure such as electrode size, width of weave, welding position, and parent metal composition.

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