



National Standards Authority of Ireland

STANDARD

I.S. EN ISO 18274:2004

ICS 25.160.20

**WELDING CONSUMABLES - SOLID WIRES,
STRIPS AND RODS FOR FUSION WELDING
OF NICKEL AND NICKEL ALLOYS -
CLASSIFICATION (ISO/FDIS 18274:2002(E))**

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English version

**Welding consumables - Solid wires, strips and rods for fusion
welding of nickel and nickel alloys - Classification (ISO/FDIS
18274:2002(E))**

Produits consommables pour le soudage - Fils-électrodes
et feuillards, fils et baguettes pour le soudage à l'arc du
nickel et des alliages de nickel - Classification (ISO
18274:2004)

Schweißzusätze - Massivdrähte, -bänder und -stäbe zum
Schmelzschiessen von Nickel und Nickellegierungen -
Einteilung (ISO 18274:2004)

This European Standard was approved by CEN on 10 October 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This document (EN ISO 18274:2004) has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 44 "Welding and allied processes".

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of an identical text or by endorsement, at the latest by September 2004, and conflicting national standards shall be withdrawn at the latest by September 2004.

Annexes A, B and C are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

For nickel welding consumables there is no unique relationship between the product form (solid wire, strip or rod) and the welding process used (e.g. gas-shielded metal arc welding, gas tungsten arc welding, plasma arc welding, submerged arc welding, strip overlay welding, laser welding or other welding processes). For this reason the solid wire, strip or rod may be classified on the basis of any of the above product forms and can be used as appropriate, for more than one of the above processes.

1 Scope

This standard specifies requirements for classification of solid wires, strips and rods for fusion welding of nickel and nickel alloys. The classification of the solid wires, strips and rods is based on their chemical composition.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN ISO 544, *Welding consumables – Technical delivery conditions for welding filler metals – Type of product, dimensions, tolerances and markings (ISO 544:2003)*.

ISO 31-0:1992, *Quantities and units – Part 0: General principles*.

ISO 14344, *Welding and allied processes – Flux and gas shielded electrical welding processes – Procurement guidelines for consumables*.

3 Classification

The classification is divided into two parts:

- a) the first part indicates the product form being solid wires, strips or rods, see 4.1;
- b) the second part gives a numerical symbol indicating the chemical composition of the solid wire, strip or rod, see Table 1.

4 Symbols and requirements

4.1 Symbols for the product form

The symbol for the solid wire and rod shall be S and for the solid strip it shall be B.

NOTE One product form may be used for more than one welding process.



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