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Welding consumables — Wire electrodes, wires and rods for welding of aluminium and aluminium alloys — Classification

Produits consommables pour le soudage — Fils-électrodes, fils et baguettes pour le soudage de l'aluminium et les alliages d'aluminium — Classification

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Foreword

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The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, Subcommittee SC 3, *Welding consumables*.

This second edition cancels and replaces the first edition (ISO 18273:2004), which has been technically revised.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 3, through your national standards body, a complete listing of which can be found at www.iso.org.

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Introduction

For aluminium welding consumables, there is no unique relationship between the product form (solid wire or rod) and the welding process used (e.g. gas shielded metal arc welding, gas tungsten arc welding, plasma arc welding, or other welding processes). For this reason, the solid wires or rods can 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.

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Welding consumables — Wire electrodes, wires and rods for welding of aluminium and aluminium alloys — Classification

1 Scope

This International Standard specifies requirements for classification of solid wires and rods for fusion welding of aluminium and aluminium alloys. The classification of the solid wires and rods is based on their chemical composition.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 14344, *Welding consumables — Procurement of filler materials and fluxes*

ISO 80000-1:2009, *Quantities and units — Part 1: General.* Corrected by ISO 80000-1:2009/Cor 1:2011

3 Classification

The classification is divided into two parts.

a) The first part indicates the product form being solid wires or rods (see 4.1).

b) The second part gives a numerical symbol indicating the chemical composition of the solid wire or rod (see Table 1).

The aluminium or aluminium alloy chemical composition limits specified are strictly identical to those registered to the Aluminium Association, Washington, DC 20006, U.S.A. for the corresponding alloys.

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