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Welding for aerospace applications — Fusion welding of metallic components —

Part 2: Acceptance criteria

Soudage pour applications aérospatiales — Soudage par fusion des composants métalliques —

Partie 2: Critères d'acceptation

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Foreword

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This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 14, *Welding and brazing in aerospace*.

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Welding for aerospace applications — Fusion welding of metallic components —

Part 2: Acceptance criteria

1 Scope

This document specifies acceptance criteria for fusion weldments on metallic components.

It is to be applied provided it is referenced or approved by the responsible engineering/design authority.

This document covers the following processes given in Table 1 and the material groups given in Table 2.

Table 1 — Fusion welding processes covered by this document

Process	Process number (ISO 4063:2009)
Oxyfuel welding	31
Gas shielded arc welding with non-consumable tungsten electrode, gas tungsten arc welding	14
Plasma arc welding	15
Electron beam welding	51
Laser welding, laser beam welding	52

Table 2 — Material groups covered by this document

Material group	Description
A	Unalloyed steel, low alloyed steels, high alloyed ferritic steels
B	Austenitic, martensitic and precipitation hardening steels
C	Titanium and titanium alloys, niobium, zirconium and other reactive metals
D	Aluminium and magnesium alloys
E	Materials that do not conform to other material groups (e.g. molybdenum, tungsten, copper alloys)
F	Nickel alloys, cobalt alloys.
NOTE Material groups according to ISO 24394.	

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 6520-1, *Welding and allied processes — Classification of geometric imperfections in metallic materials — Part 1: Fusion welding*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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