
Welding — Arc-welded joints in aluminium and its alloys — Quality levels for imperfections

*Soudage — Assemblages en aluminium et alliages d'aluminium
soudés à l'arc — Niveaux de qualité par rapport aux défauts*

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Published in Switzerland

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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 documents 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 10, *Quality management in the field of welding*.

This third edition cancels and replaces the second edition (ISO 10042:2005), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

- reference numbers from ISO 4063 have been deleted in the Scope;
- in [Table 1](#), 1.3, reference number ISO 6520-1 has been changed from “2012 - uniformly distributed porosity” to “2018 - surface porosity”;
- in [Table 1](#), 1.8, a new figure has been inserted and changes to quality levels B and C have been made;
- in [Table 1](#), 1.9, changes to quality level C have been made;
- in [Table 1](#), 1.14, a drawing has been added;
- in [Table 1](#), 1.15, changes to quality level D have been made;
- in [Table 1](#), 1.18, a drawing has been deleted and a new one inserted, and reference to 6520-1-5013 “shrinkage groove” has been deleted;
- in [Table 1](#), 1.19 to 1.21, imperfections have been added with values from ISO 5817: poor restart, stray arc, spatter;
- in [Table 1](#), 2.2, changes to quality levels B and C have been made;
- in [Table 1](#), 2.10, changes to quality levels C and D have been made;
- in [Table 1](#), 2.11, a drawing has been deleted and new ones introduced, requirements for “Butt joint (full penetration)” have been updated;
- in [Table 1](#), 2.12, a new drawing has been introduced with new requirements, and changes to quality levels C and D have been made;