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Welding_ — Arc stud welding of metallic materials

Soudage_ — Soudage à l'arc des goujons sur les matériaux métalliques

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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 document 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*, 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 fifth edition cancels and replaces the fourth edition (ISO 14555:2017), of which has been technical revised.

The main changes are as follows:

- ~~normative references and bibliography have been updated;~~
- ~~Clause 3.3~~ terms and definitions revised;
- ~~reorganization and revision of Clause 9.9;~~
- ~~Tables 1~~ Tables 1 to 3 regarding examination and testing merged in one table;
- ~~Clause 11 revised;~~
- ~~11 revised;~~
- informative ~~Annex A~~ Annex A deleted;
- ~~informative Annexes D and E~~ merged into a single ~~annex D~~ Annex D;

— ~~—~~informative Annexes F and G merged into a single ~~annex E.~~Annex E.

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Introduction

The purpose of arc stud welding is to weld predominantly pin-shaped metal parts to metal workpieces. In this document, arc stud welding is referred to simply as stud welding. Among ~~applicaitons~~applications, stud welding is used in bridge building (especially in composite structures), steel structures, shipbuilding, facade-wall fabrication, vehicle manufacture, apparatus engineering, steam-boiler construction, and the manufacture of household appliances.

The quality of a stud weld depends not only on strict conformance with the welding procedure specification but also on the correct function of the actuating mechanism (e.g. welding guns), and on the condition of the components, of the accessories and of the power supply.

This document does not invalidate former specifications, providing the technical requirements are equivalent and satisfied.

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