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Welding — Electron and laser-beam welded joints — Guidance on quality levels for imperfections —

Part 1: Steel

Soudage — Assemblages soudés par faisceau d'électrons et par faisceau laser — Guide des niveaux de qualité des défauts —

Partie 1: Acier



Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and nongovernmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 13919-1 was prepared by the European Committee for Standardization (CEN) in collaboration with ISO Technical Committee TC 44, *Welding and allied processes*, Subcommittee SC 10, *Unification of requirements in the field of metal welding*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 13919 consists of the following parts, under the general title Welding — Electron and laser beam welding joints — Guidance on quality levels for imperfections:

- Part 1: Steel
- Part 2: Aluminium and its weldable alloys

Annex A of this part of ISO 13919 is for information only.

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The text of EN ISO 13919-1:1996 has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DS, in collaboration with Technical Committee ISO/TC 44 "Welding and allied processes".

This European Standard is composed of the two following parts:

-Part 1: Steel; -Part 2: Aluminium and its weldable alloys.

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of an identical text or by endorsement, at the latest by February 1997, and conflicting national standards shall be withdrawn at the latest by February 1997.

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

Introduction

This European standard should be used as a reference in the drafting of application codes and/or for other application standards. It may be used within a total quality system for the production of satisfactory welded joints. It provides three sets of dimensional values from which a selection can be made for a particular application. The quality level necessary in each case should be defined by the application standard or the responsible designer in conjunction with the manufacturer, user and/or other parties concerned. The level shall be prescribed before the start of production, preferably at the inquiry or order stage. For special purposes, additional details may need to be prescribed.

The quality levels given in this standard are intended to provide basic reference data and are not specifically related to any particular application. They refer to welded joints and not the complete product or component itself. It is possible, therefore, for different quality levels to be applied to individual welded joints in the same product or component. Quality levels are listed in table 1.

Level symbol	Quality level
D	Moderate
C	Intermediate
В	Stringent

Table 1: Quality levels for weld imperfections