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English Version

Non-destructive testing of welds - Ultrasonic testing -  
Characterization of indications in welds (ISO 23279:2010)

Contrôle non destructif des assemblages soudés - Contrôle  
par ultrasons - Caractérisation des indications dans les  
assemblages soudés (ISO 23279:2010)

Zerstörungsfreie Prüfung von Schweißverbindungen -  
Ultrasonic testing - Charakterisierung von Anzeigen in  
Schweißnähten (ISO 23279:2010)

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## Foreword

This document (EN ISO 23279:2010) has been prepared by Technical Committee CEN/TC 121 "Welding", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 44 "Welding and allied processes".

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of an identical text or by endorsement, at the latest by September 2010, and conflicting national standards shall be withdrawn at the latest by September 2010.

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# Non-destructive testing of welds — Ultrasonic testing — Characterization of indications in welds

## 1 Scope

This International Standard specifies how to characterize embedded indications by classifying them as planar or non-planar.

This procedure is also suitable for indications that break the surface after removal of the weld reinforcement.

## 2 Normative references

The following referenced documents are indispensable for the application 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 17640, *Non-destructive testing of welds — Ultrasonic testing — Techniques, testing levels, and assessment*

## 3 Principle

Classification of indications as planar or non-planar is based on several parameters:

- a) welding techniques;
- b) geometrical position of the indication;
- c) maximum echo amplitude;
- d) directional reflectivity;
- e) echostatic pattern (i.e. A-scan);
- f) echodynamic pattern.

The process of classification involves examining each of the parameters against all the others in order to arrive at an accurate conclusion.

For guidance, Figure A.1 gives the classification of internal weld indications suitable for general applications. Figure A.1 should be applied in conjunction with the two first parameters listed above and not taken in isolation.

The classification procedure specified in this International Standard is also suitable for indications that are surface breaking after removal of the weld reinforcement (see Figure 1).