
**Non-destructive testing — Ultrasonic
testing — Vocabulary**

Essais non destructif — Contrôle par ultrasons — Vocabulaire



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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 non-governmental, 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.

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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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

ISO 5577 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 138, *Non-destructive testing*, in collaboration with ISO Technical Committee TC 135, *Non-destructive testing*, Subcommittee SC 3, *Ultrasonic testing*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 5577:2000), which has been technically revised with changes to terms and definitions and structure.

Non-destructive testing — Ultrasonic testing — Vocabulary

1 Scope

This document defines the terms used in ultrasonic non-destructive testing and forms a common basis for standards and general use. This document does not cover terms used in ultrasonic testing with phased arrays.

NOTE Terms for phased array ultrasonic testing are defined in EN 16018.

2 Normative references

There are no normative references in this document.

3 Terms related to frequencies, waves and pulses

For the purposes of this document, the terms and definitions given in this clause and those given in Clauses 4, 5 and 6 for sound, test equipment and ultrasonic testing apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 Frequencies

3.1.1

frequency

number of cycles per second

Note 1 to entry: Expressed in Hertz (Hz).

3.1.2

nominal frequency

probe frequency

frequency (3.1.1) of the *probe* (5.2.1) as stated by the manufacturer

3.1.3

test frequency

effective ultrasonic frequency of a system used to test a material or object

3.1.4

frequency spectrum

distribution of *amplitude* (3.2.2) in relation to *frequency* (3.1.1)

Note 1 to entry: See [Figure 1](#).

3.1.5

centre frequency

arithmetic mean of the cut-off frequencies

Note 1 to entry: See [Figure 1](#).