
Neporušitvene preiskave - Karakterizacija in preverjanje ultrazvočne opreme sklopljene z zrakom (ISO/DIS 25222-2:2026)

Non-destructive testing - Characterization and verification of ultrasonic air-coupled equipment - Part 2: Probes (ISO/DIS 25222-2:2026)

Zerstörungsfreie Prüfung - Charakterisierung und Verifizierung von Prüfausrüstung für luftgekoppelten Ultraschall - Teil 2: Prüfköpfe (ISO/DIS 25222-2:2026)

Essais non destructifs - Caractérisation et vérification des équipements de contrôle par ultrasons à couplage par air - Partie 2: Traducteurs (ISO/DIS 25222-2:2026)

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Part 2: Probes

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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 135, Non-destructive testing, Subcommittee SC 3. Ultrasonic testing.

A list of all parts in the ISO 25222 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO/DIS 25222-2:2026(en)**Introduction**

This document was drafted following and complementing ISO 22232-2:2020 to include air-coupled ultrasonic transducers.

This document is based on the guideline DGZfP US-08E which was originally prepared by members of German Society for Non-Destructive Testing (DGZfP), Committee Ultrasonic Testing, Subcommittee Air-coupled Ultrasonic Testing.

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Non-destructive testing — Characterization and verification of ultrasonic air-coupled equipment —

Part 2: Probes

1 Scope

This document specifies the characteristics of probes used for non-destructive air-coupled ultrasonic testing with centre frequencies from 10 kHz to 3 MHz, with focusing or without focusing means. This document refers to probes based on the piezoelectric effect. Air-coupled probes based on other physical principles can be characterized according to this guideline if it is judged as appropriate, but adaption of tests can be necessary.

This document covers tests under standard environmental conditions. The procedures given in the standard can be applied to extended environmental conditions e.g. higher air pressures, but additional tests can be necessary.

This document excludes periodic tests for probes.

If parameters specified in this document are to be verified during the probe's lifetime, as agreed upon by the contracting parties, the procedures of verification for these parameters can be selected from those given in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 5577:2017, *Non-destructive testing — Ultrasonic testing — Vocabulary*

ISO 9613-2:2024, *Acoustics — Attenuation of sound during propagation outdoors — Part 2: Engineering method for the prediction of sound pressure levels outdoors*

ISO/IEC 17050-1:2004, *Conformity assessment — Supplier's declaration of conformity — Part 1: General requirements*

ISO 22232-1:2020, *Non-destructive testing — Characterization and verification of ultrasonic test equipment — Part 1: Instruments*

ISO 22232-2:2020, *Non-destructive testing — Characterization and verification of ultrasonic test equipment — Part 2: Probes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5577:2017, as well as the following apply.

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

— IEC Electropedia: available at <http://www.electropedia.org/>