

TR ISO/TS 25107:2022
ISO/TS 25107:2019, IDT
(ICS 19.100)

TECHNICAL REFERENCE

**Non-destructive testing – NDT training
syllabuses**

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Non-destructive testing – NDT training syllabuses

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National Foreword

This Technical Reference (TR) was prepared by the Working Group on Non-destructive Testing (also known as National Mirror Working Group on ISO/TC 135) set up by the Technical Committee on Workplace Safety and Health under the purview of the Quality and Safety Standards Committee.

This TR is an identical adoption of ISO/TS 25107:2019, “Non-destructive testing – NDT training syllabuses” published by the International Organization for Standardization.

NOTE 1 – Where appropriate, the words “Technical Specification” are read as “Technical Reference”.

NOTE 2 – Reference to International/Overseas Standards are replaced by applicable Singapore Standards or Technical References.

NOTE 3 – Where numerical values are expressed as decimals, the comma is read as a full point.

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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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 135, *Non-destructive testing*, Subcommittee SC 7, *Personnel qualification*.

This first edition cancels and replaces ISO/TR 25107:2006.

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.

Introduction

The body of technical knowledge required of non-destructive testing (NDT) personnel is essential for the development of deliverables concerning NDT methods. No deliverables can be developed appropriately for NDT methods, without sufficient information on the technical background knowledge of the personnel who utilize the methods.

Role of NDT

Non-destructive testing makes an important contribution to the safety, economic and ecological welfare of our society.

NDT is the only choice for the testing of an object which cannot be destroyed, modified or degraded by the testing process. This is generally required for objects which are to be used after testing, for example, safety parts, pipelines, power plants, and also constructions under in-service inspection, but even for unique parts in archaeology and culture.

NDT is based on physical effects at the surface or the inner structure of the object under test. Often, the outcome of the test needs to be interpreted to give a useful result; sometimes different NDT methods are combined or verified by other test methods.

NDT personnel and professional ethics

NDT personnel have a great responsibility, not only with respect to their employers or contractors but also under the rules of good workmanship. The NDT personnel is independent and free from economic influences with regard to his/her test results, otherwise the results are compromised. The NDT personnel is aware of the importance of his/her signature and the consequences of incorrect test results for safety, health and environment.

Finally, the NDT personnel is responsible for all interpretations of test results carrying his/her signature and he/she never signs test reports beyond his/her certification.

[Annex B](#) provides standards numbers that can be of interest for the application of the provisions laid out in this document.

Non-destructive testing — NDT training syllabuses

1 Scope

This document gives requirements and recommendations for non-destructive testing (NDT) training syllabuses, with the intention of harmonizing and maintaining the general standard of training of NDT personnel for industrial needs.

It also establishes the minimum requirements for effective structured training of NDT personnel to ensure eligibility for qualification examinations leading to third-party certification according to recognized standards. In addition to non-destructive testing in general, its guidelines for syllabuses cover acoustic emission testing, eddy current testing, leak testing, magnetic testing, penetrant testing, radiographic testing, ultrasonic testing, visual testing, thermographic testing, and strain gauge testing.

ISO/TS 25108 gives requirements and recommendations for NDT training organizations.

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 9712, *Non-destructive testing — Qualification and certification of NDT personnel*