

Non-destructive testing - Thermographic testing - Part
1: General principles

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16714-1:2016 sisaldab Euroopa standardi EN 16714-1:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 16714-1:2016 consists of the English text of the European standard EN 16714-1:2016.
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ICS 19.100

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English Version

Non-destructive testing - Thermographic testing - Part 1: General principles

Essais non destructifs - Analyses thermographiques -
Partie 1: Principes généraux

Zerstörungsfreie Prüfung - Thermografische Prüfung -
Teil 1: Allgemeine Grundlagen

This European Standard was approved by CEN on 25 June 2016.

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European foreword

This document (EN 16714-1:2016) has been prepared by Technical Committee CEN/TC 138 “Non-destructive testing”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Non-destructive testing — Thermographic testing consists of the following parts:

- *Part 1: General principles*
- *Part 2: Equipment*
- *Part 3: Terms and definitions*

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the general principles for thermography of non-destructive testing. Thermographic testing is used for the detection and localization of discontinuities (e.g. cracks, delamination and inclusions) in different materials (e.g. composites, metals and coatings).

Usually a thermal stimulation is required. The choice of thermal stimulation depends on the application (e.g. type of material, geometry of test object, type of defects to be determined).

Acceptance criteria are not defined in this standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1330-1, *Non destructive testing - Terminology - Part 1: List of general terms*

EN 1330-2, *Non destructive testing - Terminology - Part 2: Terms common to the non-destructive testing methods*

EN 16714-2, *Non-destructive testing — Thermographic testing — Part 2: Equipment*

EN 16714-3, *Non-destructive testing — Thermographic testing — Part 3: Terms and definitions*

EN ISO 9712, *Non-destructive testing - Qualification and certification of NDT personnel (ISO 9712:2012)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1330-1, EN 1330-2 and EN 16714-3 apply.

4 Apparatus

According to EN 16714-2.

5 Preparation for testing

5.1 Test instruction

A test instruction shall be prepared that specifies the minimum test requirements relating to each of the items listed in 5.4.

5.2 Description of method

If required, for example by a product standard or contract, a description of the method shall be prepared.