

STN	Nedeštruktívne skúšanie Termografické skúšanie Aktívna termografia	STN EN 17119 01 5081
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Non-destructive testing - Thermographic testing - Active thermography

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/19

Obsahuje: EN 17119:2018

128018

EUROPEAN STANDARD

EN 17119

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2018

ICS 19.100

English Version

Non-destructive testing - Thermographic testing - Active thermographyEssais non destructifs - Analyse thermographique -
Thermographie activeZerstörungsfreie Prüfung - Thermografische Prüfung -
Aktive Thermografie

This European Standard was approved by CEN on 20 April 2018.

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EN 17119:2018 (E)

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European foreword

This document (EN 17119:2018) 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of an identical text or by endorsement, at the latest by February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

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.

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EN 17119:2018 (E)**1 Scope**

This document defines the procedures for non-destructive testing using active thermography. These testing procedures can be applied to different materials (e.g. composites, metals and coatings) and are appointed, but not limited to the:

- detection of discontinuities (e.g. voids, cracks, inclusions, delaminations);
- determination of layer or part thicknesses;
- determination and comparison of thermophysical properties.

This standard is describing data acquisition and analysis principles for active thermography and is giving an informative guideline for appropriate selection of the excitation source. Acceptance criteria are not defined in this standard.

Active thermography is applied in industrial production (e.g. compound materials, vehicle parts, engine parts, power plant parts, joining technology, electronic devices) and in maintenance and repair (e.g. aerospace, power plants, civil engineering).

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.

EN 16714-1, *Non-destructive testing - Thermographic testing - Part 1: General principles*

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 15042-2:2006, *Thickness measurement of coatings and characterization of surfaces with surface waves - Part 2: Guide to the thickness measurement of coatings by photothermic method*

CEN/TR 14748, *Non-destructive testing - Methodology for qualification of non-destructive tests*

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