

Non-destructive testing - Thermographic testing - Part
2: Equipment

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16714-2:2016 sisaldab Euroopa standardi EN 16714-2:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 16714-2:2016 consists of the English text of the European standard EN 16714-2:2016.
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English Version

Non-destructive testing - Thermographic testing - Part 2: Equipment

Essais non destructifs - Analyses thermographiques -
Partie 2: Equipement

Zerstörungsfreie Prüfung - Thermografische Prüfung -
Teil 2: Geräte

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

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European foreword

This document (EN 16714-2:2016) 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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.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.

EN 16714, *Non-destructive testing — Infrared thermographic testing* consists of the following parts:

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

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1 Scope

This European Standard describes properties and requirements of infrared cameras used for thermographic testing for non-destructive testing.

This document gives also examples of excitation sources, the properties and requirements are described in application standards for active thermography.

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 16714-3, *Non-destructive testing — Infrared thermographic testing — Part 3: Terms and definitions*

3 Terms and definitions

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

4 Equipment

4.1 Selection of infrared camera

The infrared camera (IR camera) has to be selected according to the application and the temperature of the inspected object.

IR camera relevant parameters are:

- spectral sensitivity;
- temperature range;
- thermal resolution;
- spatial resolution;
- frame rate;
- temporal resolution.

These parameters shall be provided by the manufacturer.

4.2 Classification of IR cameras

4.2.1 General

IR cameras are classified according to detector arrangement and working principle.

The classification according to the detector arrangement is:

- single element detector with two-dimensional opto-mechanical scanning;
- line scanner with one-dimensional opto-mechanical scanning or linear array;