

TNI	Nedeštruktívne skúšanie Osvetlenie pri kapilárnom skúšaní a skúšaní magnetickou práškovou metódou, správne vykonávanie	TNI CEN/TR 17108
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Non-destructive testing - Lighting in penetrant and magnetic particle testing, good practice

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Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnrožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

TECHNICAL REPORT

CEN/TR 17108

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

June 2017

ICS 19.100

English Version

**Non-destructive testing - Lighting in penetrant and
magnetic particle testing, good practice**

Essais non destructifs - Bonnes pratiques d'éclairage
lors des contrôles par ressuage et par magnétoscopie

Zerstörungsfreie Prüfung - Beleuchtung in Eindring-
und Magnetpulverprüfung, bewährte Verfahren

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (CEN/TR 17108:2017) has been prepared by Technical Committee CEN/TC 138 “Non-destructive testing”, the secretariat of which is held by AFNOR.

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1 Scope

This Technical Report describes the good practices of lighting under UV-A radiation and in white light as used for penetrant testing (PT) and magnetic particle testing (MT) for improved probability of detection (POD).

This informative document deals with the irradiance and the illuminance used in PT and MT. It is intended for:

- manufacturers, who are encouraged to supply the criteria and the restrictions on use of their products, as well as detailed characteristics for the appropriate choice and the optimum use of sources available on the market;
- users, to enable them to make the best use of lighting sources for efficient inspection in working conditions;
- supervision and training personnel, who may design and optimally arrange inspection areas, recommend the principles of visual ergonomics for ensuring inspector efficiency, comfort and safety.

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 170, *Personal eye-protection — Ultraviolet filters — Transmittance requirements and recommended use*

EN 12464-1, *Light and lighting — Lighting of work places — Part 1: Indoor work places*

CEN/TR 16638, *Non-destructive testing — Penetrant and magnetic particle testing using blue light*

EN 62471, *Photobiological safety of lamps and lamp systems (IEC 62471)*

EN ISO 12706, *Non-destructive testing — Penetrant testing — Vocabulary (ISO 12706)*

EN ISO 12707, *Non-destructive testing — Magnetic particle testing — Vocabulary (ISO 12707)*

ISO/CIE 19476 (CIE S 023/E), *Characterization of the performance of illuminance meters and luminance meters*

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