



ISO 14096-1

Non-destructive testing — Qualification of radiographic film digitisation systems —

Part 1: Definitions, quantitative measurements of image quality parameters, standard reference film and qualitative control

*Essais non destructifs — Qualification des systèmes de
numérisation des films radiographiques —*

*Partie 1: Définitions, mesures quantitatives des paramètres
de qualité de l'image, film de référence normalisé et contrôle
qualitatif*

**Second edition
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This second edition cancels and replaces the first edition (ISO 14096-1:2005), which has been technically revised.

The main changes are as follows:

- definitions of terms [3.2](#), [3.6](#), [3.7](#), [3.13](#), [3.16](#) and [3.17](#) updated;
- [Clause 4](#) symbols and abbreviations added;
- in [5.1.3](#), details added on digitisers capable to capture densities $D > 4,5$;
- in [5.1.5](#), details on the calculation of the standard deviation σ_D of the calibrated density $D(gI)$ and Note 2 added;
- determination of the basic spatial resolution of the digitiser (SR_b^D) added in the new subclause 5.2.5;
- [clause 6](#) "Presentation of results" with a new [Figure 2](#) added;
- [Table 2](#) with quality numbers for representation of results in [Figure 2](#) added;
- new [Figure 1](#) presents examples of line pair test pattern for direct evaluation of SR_b^D ;
- "MTF calculation" moved to [Annex A](#) and "standard reference film" description moved to [Annex B](#);
- editorial revision.

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Radiographic film systems are used for industrial inspection by X- and gamma rays. For computer-supported analysis, transmission and storage, the information stored in the radiographic film is converted into digital data (digitisation). This document provides quantitative evaluation procedures which form the basis for minimum requirements specified in ISO 14096-2.