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Metallic materials — Leeb hardness test —

Part 3: Calibration of reference test blocks

Matériaux métalliques — Essai de dureté Leeb —

Partie 3: Etalonnage des blocs de référence

Reference number
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Foreword

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary Information

The committee responsible for this document is ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 3, *Hardness testing*.

ISO 16859 consists of the following parts, under the general title *Metallic materials — Leeb hardness test*:

— *Part 1: Test method*

— *Part 2: Verification and calibration of the testing devices*

— *Part 3: Calibration of reference test blocks*

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Metallic materials — Leeb hardness test —

Part 3: Calibration of reference test blocks

1 Scope

This part of ISO 16859 specifies a method for the calibration of reference test blocks that are used for the indirect verification of Leeb hardness testers according to ISO 16859-2 and for the periodic checking according to ISO 16859-1.

The procedures necessary to ensure metrological traceability of the calibration machine are also specified.

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.

ISO 16859-1, *Metallic materials — Leeb hardness test — Part 1: Test method*

ISO 16859-2, *Metallic materials — Leeb hardness test — Part 2: Verification and calibration of the testing devices*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

3 Manufacture of reference test blocks

3.1 The block shall be specially manufactured for use as a reference test block.

Attention is drawn to the need to use a manufacturing process which will give the necessary homogeneity, stability of texture and uniformity of surface hardness.

3.2 The uniformity of the metallic reference test block shall meet the requirements specified in 7.2 and Table 3.

3.3 The impact nature of a Leeb test requires a reference test block with a minimum mass and thickness, as specified in Table 1.

NOTE Examples of common dimensions of reference test blocks are specified in Annex C.

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