

JIS

JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS B 7725 : 2020

(JTM/JSA)

**Vickers hardness test — Verification and
calibration of testing machines**

B 7725 : 2020

Date of Establishment: 1952-06-21

Date of Revision: 2020-12-21

Date of Public Notice in Official Gazette: 2020-12-21

Investigated by: Japanese Industrial Standards Committee
Standards Board for ISO area

JIS B 7725 : 2020, First English edition published in 2021-04

Translated and published by: Japanese Standards Association
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

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Printed in Japan

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Testing Machine Association (JTM)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS B 7725**:2010), which has been technically revised.

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Vickers hardness test — Verification and calibration of testing machines

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 6507-2** : 2018, Edition 4, with some modifications of the technical contents.

The dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB. Annex JA is unique to **JIS** and not given in the corresponding International Standard.

1 Scope

This Standard specifies a method of verification and calibration of testing machines for determining Vickers hardness (hereafter referred to as testing machines) in accordance with **JIS Z 2244-1**.

A direct method of verification and calibration is specified for the testing machine, indenter and the diagonal length measuring system. An indirect verification method using reference blocks is specified for the overall checking of the machine.

If a testing machine is also to be used for other methods of hardness testing, it shall be verified independently for each method.

This Standard is also applicable to portable Vickers hardness testing machines, but not applicable to hardness testing machines based on different measurement principles, e.g. ultrasonic impedance method.

It should be noted that using the method specified in this Standard for determination from indentations <20 µm in diagonal length may cause large uncertainties in the results.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 6507-2 : 2018 *Metallic materials — Vickers hardness test — Part 2 : Verification and calibration of testing machines* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

WARNING Persons carrying out tests based on this Standard should be familiar with normal laboratory practice. This Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this Standard to establish appropriate safety and health practices.