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Metallic materials - Designation of test specimen axes in relation to product texture (ISO 3785:2023)

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/23

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English Version

## Metallic materials - Designation of test specimen axes in relation to product texture (ISO 3785:2023)

Matériaux métalliques - Désignation des axes des éprouvettes en relation avec la texture du produit (ISO 3785:2023)

Metallische Werkstoffe - Kennzeichnung von Probenachsen in Bezug zur Halbzeuggefügetextur (ISO 3785:2023)

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**EN ISO 3785:2023 (E)**

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## **European foreword**

This document (EN ISO 3785:2023) has been prepared by Technical Committee ISO/TC 164 "Mechanical testing of metals" in collaboration with Technical Committee CEN/TC 459/SC 1 "Test methods for steel (other than chemical analysis)" 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of an identical text or by endorsement, at the latest by November 2023, and conflicting national standards shall be withdrawn at the latest by November 2023.

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## **Endorsement notice**

The text of ISO 3785:2023 has been approved by CEN as EN ISO 3785:2023 without any modification.

# INTERNATIONAL STANDARD

# ISO 3785

Third edition  
2023-05

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## **Metallic materials — Designation of test specimen axes in relation to product texture**

*Matériaux métalliques — Désignation des axes des éprouvettes en  
relation avec la texture du produit*



Reference number  
ISO 3785:2023(E)

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## ISO 3785:2023(E)

### Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 164, *Mechanical testing of metals*, Subcommittee SC 4, *Fatigue, fracture and toughness testing*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459/SC 1, *Test methods for steel (other than chemical analysis)*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 3785:2006), which has been technically revised.

The main changes are as follows:

- a reference to [Annex A](#) was added in the Introduction;
- in [6.5](#) a reference to ISO 15653 was added;
- a new [Subclause 6.6](#) (Additive manufacturing) was added.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).



## Introduction

The measured mechanical properties of a metallic product, especially those characterizing ductility and toughness, such as elongation, reduction of area, fracture toughness and impact resistance, are dependent on the test specimen location within the product and orientation with respect to the product's principal directions of metal working, grain flow or otherwise-produced texture. This document specifies a method for designating specimen orientation in relation to product texture.

Additional information on the influence of mechanical working on material structure and properties is provided in [Annex A](#).



# **Metallic materials — Designation of test specimen axes in relation to product texture**

## **1 Scope**

This document specifies a method for designating test specimen axes in relation to product texture by means of an X-Y-Z orthogonal coordinate system.

This document applies equally to unnotched and notched (or precracked) test specimens.

This document is intended only for metallic materials with uniform texture that can be unambiguously determined.

Test specimen orientation is decided before specimen machining, identified in accordance with the designation system specified in this document, and recorded.

## **2 Normative references**

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**