



# SLOVENSKI STANDARD SIST EN ISO 642:2024

01-november-2024

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## Jeklo - Preskus kaljivosti jekla po Jominyju (ISO 642:2024)

Steel - Hardenability test by end quenching (Jominy test) (ISO 642:2024)

Stahl - Stirnabschreckversuch (Jominy-Versuch) (ISO 642:2024)

Acier - Essai de trempabilité par trempe en bout (essai Jominy) (ISO 642:2024)

Ta slovenski standard je istoveten z: EN ISO 642:2024

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### ICS:

77.040.99	Druge metode za preskušanje kovin	Other methods of testing of metals
77.080.20	Jekla	Steels

**SIST EN ISO 642:2024**

**en,fr,de**



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NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

## Steel - Hardenability test by end quenching (Jominy test) (ISO 642:2024)

Acier - Essai de trempabilité par trempe en bout (essai  
Jominy) (ISO 642:2024)

Stahl - Stirnabschreckversuch (Jominy-Versuch) (ISO  
642:2024)

This European Standard was approved by CEN on 31 August 2024.

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Contents	Page
European foreword.....	3

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## European foreword

This document (EN ISO 642:2024) has been prepared by Technical Committee ISO/TC 17 "Steel" 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of an identical text or by endorsement, at the latest by March 2025, and conflicting national standards shall be withdrawn at the latest by March 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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# International Standard

**ISO 642**

## Steel — Hardenability test by end quenching (Jominy test)

*Acier — Essai de trempabilité par trempe en bout (essai Jominy)*

**Third edition  
2024-08**

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## ISO 642:2024(en)

## Contents

Page

Foreword.....	iv
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Symbols and designations</b> .....	<b>1</b>
<b>5 Principle</b> .....	<b>2</b>
<b>6 Form of test pieces and their preparation</b> .....	<b>2</b>
6.1 Sampling.....	2
6.2 Dimensions.....	3
6.3 Heat treatment.....	4
6.4 Machining.....	4
<b>7 Apparatus</b> .....	<b>4</b>
<b>8 Heating and quenching of test piece</b> .....	<b>6</b>
8.1 Heating.....	6
8.2 Quenching.....	6
<b>9 Measurement of hardness after quenching</b> .....	<b>7</b>
<b>10 Expression of results</b> .....	<b>8</b>
10.1 Hardness at any one point.....	8
10.2 Drawing of the hardness curves.....	8
10.3 Description of the hardenability characteristics of a particular steel.....	9
10.4 Codification of test result.....	9
<b>11 Test report</b> .....	<b>10</b>
<b>Annex A (informative) Specification for the hardenability of a product</b> .....	<b>11</b>
<b>Annex B (informative) Additional information to <a href="#">Clause 11</a></b> .....	<b>15</b>
<b>Annex C (informative) Computational methods for determination of hardenability</b> .....	<b>18</b>
<b>Bibliography</b> .....	<b>19</b>

## ISO 642:2024(en)

## Foreword

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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 document 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)).

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This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 7, *Methods of testing (other than mechanical tests and chemical analysis)*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459, *ECISS - European Committee for Iron and Steel Standardization*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 642:1999), which has been technically revised.

The main changes are as follows:

- updated the normative references;
- added a new symbol, *J<sub>d</sub>*, in [Table 1](#);
- minimum recommended reduction ratio of 5:1, see [6.1](#);
- revised the test piece dimensions, see [6.1](#), [6.2](#) and [Figures 1](#) and [2](#);
- revised the heat treatment requirements, see [6.3](#);
- revised configuration of fixing and centring device, see [7.3](#) and [Figure 3](#);
- revised text concerning water temperature, see [7.4](#);
- revised requirement for nitric acid solution concentration, see [9.2](#);
- revised codification of test result, see [10.4](#) and [Figure 6](#);
- revised [A.2](#) and [Figures A.2](#) and [A.3](#);
- revised [Annex C](#) and Bibliography;
- editorial clarifications;

**ISO 642:2024(en)**

— reduced the number of bibliographical references.

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