

**Betooni sarrustamiseks ja pingestamiseks kasutatav teras. Katsemeetodid. Osa 1: Armatuurraud, armatuurvõrk ja armatuurtraat**

Steel for the reinforcement and prestressing of concrete - Test methods - Part 1: Reinforcing bars, wire rod and wire

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Stähle für die Bewehrung und das Vorspannen von Beton - Prüfverfahren - Teil 1: Bewehrungsstäbe, -walzdraht und -draht (ISO 15630-1:2010)

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

The text of ISO 15630-1:2010 has been prepared by Technical Committee ISO/TC 17 "Steel" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15630-1:2010 by Technical Committee ECISS/TC 104 "Concrete reinforcing and prestressing steels" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

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## Introduction

The aim of ISO 15630 is to provide all relevant test methods for reinforcing and prestressing steels in one standard. In that context, the existing International Standards for testing these products have been revised and updated. Some further test methods have been added.

Reference is made to International Standards on the testing of metals, in general, as they are applicable. Complementary provisions have been given if needed.

# Steel for the reinforcement and prestressing of concrete — Test methods —

## Part 1: Reinforcing bars, wire rod and wire

### 1 Scope

This part of ISO 15630 specifies test methods applicable to reinforcing bars, wire rod and wire for concrete.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

ISO 9513, *Metallic materials — Calibration of extensometers used in uniaxial testing*

### 3 Symbols

The symbols used in this part of ISO 15630 are given in Table 1.

**Table 1 — Symbols**

Symbol	Unit	Description	Reference
$a'$	mm	Height of longitudinal rib	10.3.2, 11.3
$a_m$	mm	Rib height at the mid-point or indentation depth in the centre	10.3.1.2, 11.3.2, 11.4.2
$a_{\max}^a$	mm	Maximum height of transverse rib or maximum indentation depth	10.3.1.1
$a_{s,i}$	mm	Average height of a portion $i$ of a rib subdivided into $p$ parts of length $\Delta l$ , or average depth of a portion $i$ of an indentation subdivided into $p$ parts of width $\Delta b$	11.3.1, 11.4.1
$a_{1/4}$	mm	Rib height at the quarter-point or indentation depth at the quarter of their width	10.3.1.2, 11.3.2, 11.4.2
$a_{3/4}$	mm	Rib height at the three-quarters point or indentation depth at the three-quarters of their width	10.3.1.2, 11.3.2, 11.4.2
$A$	%	Percentage elongation after fracture	5.1, 5.3
$A_g$	%	Percentage non-proportional elongation at maximum force ( $F_m$ )	5.3