INTERNATIONAL STANDARD

ISO 15630-1

> Third edition 2019-02

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

Part 1: Reinforcing bars, rods and wire

Aciers pour l'armature et la précontrainte du béton — Méthodes es, fils macı. d'essai —

Partie 1: Barres, fils machine et fils pour béton armé





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Published in Switzerland

Coı	ntent	S	Page	
Fore	word		v	
Intr	oductio	n	vi	
1	Scone	e	1	
2	50°	native references		
3		s, definitions and symbols		
4	Gene	ral provisions concerning test pieces	3	
5		ile test at room temperature		
	5.1 5.2	Test piece		
	5.3	Test procedure		
6	Bend test			
	6.1	Test piece		
	6.2	Test equipment		
	6.3	Test procedure		
	6.4	Interpretation of test results		
7		nd test	7	
	7.1 7.2	Test piece		
	7.2	Test equipment 7.2.1 Bending device		
		7.2.2 Rebending device		
	7.3	Test procedure	7	
		7.3.1 General		
		7.3.2 Bending		
		7.3.3 Artificial ageing		
	7.4	Interpretation of test results		
8	Avial	force fatigue test		
Ü	8.1	Principle of test		
	8.2	Test piece		
	8.3	Test equipment		
	8.4	Test procedure	10	
		8.4.1 Provisions concerning the test piece	10	
		8.4.2 Upper force (<i>F</i> _{up}) and force range (<i>F</i> _r)	10	
		8.4.4 Counting of force cycles	10	
		8.4.5 Frequency	10	
		8.4.6 Temperature		
		8.4.7 Validity of the test		
9	Chen	nical analysis	10	
10	Measurement of the geometrical characteristics			
	10.1	Test piece	11	
	10.2	Test equipment		
	10.3	Test procedure 10.3.1 Heights of transverse ribs or depths of indentations		
		10.3.2 Height of longitudinal ribs (a')		
		10.3.3 Transverse rib or indentation spacing (<i>c</i>)	12	
		10.3.4 Pitch (<i>P</i>)	12	
		10.3.5 Part of the circumference without ribs or indentations (Σe_i)		
		10.3.6 Transverse rib or indentation angle (β)	12 12	
		LV.J. LLAUSVELSE LIV HAUN HICHHAUUH UU	1 /	

ISO 15630-1:2019(E)

		10.3.8 Width of transverse rib or width of indentation (<i>b</i>)	13
11	Detei	rmination of the relative rib or indentation area ($f_{ m R}$ or $f_{ m P}$)	14
	11.1	General	14
	11.2		
	11.3	, , , , , , , , , , , , , , , , , , ,	
		11.3.1 Relative rib area	
		11.3.2 Simplified formulae f_R	
	11.4	Calculation of f_P	
	11.1	11.4.1 Relative indentation area	15
		11.4.2 Simplified formulae	
		11.4.3 Formula used for the calculation of $f_{\rm P}$	17
	Dete	rmination of deviation from nominal mass per metre	17
	12.1	Test piece	
	12.2	Accuracy of measurement	
	12.3	Test procedure	
	Speci	ialized tests	17
	13.1	Tensile test at elevated temperature	17
		13.1.1 General	
		13.1.2 Test piece	
		13.1.3 Test equipment	
	12.2	13.1.4 Test procedure	
	13.2	Tensile test at low temperature	18 10
		13.2.2 Test piece	10 10
		13.2.3 Test equipment	18
		13.2.4 Test procedure	18
	13.3	Cyclic inelastic load test	18
		13.3.1 Principle of the test	18
		13.3.2 Test piece	19
		13.3.3 Test equipment	19
		13.3.4 Test procedure	19
,	Test 1	report	20
ne	ex A (inf	formative) Options for agreement between the parties involved	21
bli	ograph	ny	22
			2
			Q_{j}

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).

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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.

This document was prepared by ISO/TC 17, *Steel*, Subcommittee SC 16, *Steels for the reinforcement and prestressing of concrete.*

This third edition cancels and replaces the second edition (ISO 15630-1:2010), which has been technically revised. Changes have been introduced in the Introduction, <u>Clause 2</u>, <u>Clause 3</u>, <u>Clause 4</u>, <u>Clause 5</u> (only the title), <u>5.3</u>, <u>6.3</u>, <u>8.3</u>, <u>8.4.5</u>, <u>10.3.1.1</u>, <u>10.3.1.2</u>, <u>10.3.3</u> and <u>11.3.2</u> and <u>Figure 6</u>. A new <u>Clause 13</u> has been added for "specialized" tests. The Bibliography has been updated and the dated references have been replaced by undated references.

A list of all parts in the ISO 15360 series can be found on the ISO website.

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.

Introduction

The aim of ISO 15630 (all parts) is to provide all relevant test methods for reinforcing and prestressing steels in one standard series.

This document covers standard test methods (see <u>Clauses 5</u> to <u>12</u>), as well as specialized test methods (gathered in <u>Clause 13</u>) that are not commonly used in routine testing and that should only be considered where relevant (or specified) in the applicable product standard.

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have been E 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, rods and wire

1 Scope

This document specifies chemical and mechanical test methods and measurement methods of geometrical characteristics applicable to reinforcing bars, rods and wire for concrete.

This document does not cover the sampling conditions that are dealt with in the product standards.

A list of options for agreement between the parties involved is provided in Annex A.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 4965-1, Metallic materials — Dynamic force calibration for uniaxial fatigue testing — Part 1: Testing systems

ISO 4965-2, Metallic materials — Dynamic force calibration for uniaxial fatigue testing — Part 2: Dynamic calibration device (DCD) instrumentation

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

ISO 6892-2, Metallic materials — Tensile testing — Part 2: Method of test at elevated temperature

ISO 6892-3, Metallic materials — Tensile testing — Part 3: Method of test at low temperature

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

ISO 9513, Metallic materials — Calibration of extensometer systems used in uniaxial testing

ISO 16020, Steel for the reinforcement and prestressing of concrete — Vocabulary

3 Terms, definitions and symbols

For the purposes of this document, the terms and definitions given in ISO 16020 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/