საქართველოს სტანდარტი

სსკ: 77.140.15

არმატურა ბეტონის არმირებისა და დაწნეხის გამოცდარების მეთოდები - ნაწილი 1: საარმატურე ზოლები, წნული და მავთული

სსტისო 15630-1:2019/2020

საინფორმაციო მონაცემები

- 1 მიღებულია და დაშვებულია სამოქმედოდ: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს გენერალური დირექტორის 22/10/2020 წლის № 103 განკარგულებით
- 2 მიღებულია "თავფურცლის" თარგმნის მეთოდით: სტანდარტიზაციის საერთაშორისო ორგანიზაციის (ისო) სტანდარტი ისო 15630-1:2019 "არმატურა ბეტონის არმირებისა და დაწნეხის გამოცდარების მეთოდები ნაწილი 1: საარმატურე ზოლები, წნული და მავთული"

3 პირველად

4 რეგისტრირებულია: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 22/10/2020 წლის №268-1.3-018876

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 d'essai —

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





COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Foreword			Page	
Fore	word		v	
Intr	oductio	1	vi	
1	Scope	3	1	
2	-	native references		
3		s, definitions and symbols		
4 5	General provisions concerning test pieces			
	5.1	le test at room temperature Test piece		
	5.2	Test equipment		
	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	6	
7	Rebe	nd test		
	7.1	Test piece		
	7.2	Test equipment		
		7.2.1 Bending device 7.2.2 Rebending device		
	7.3	Test procedure		
	7.5	7.3.1 General		
		7.3.2 Bending		
		7.3.3 Artificial ageing	8	
		7.3.4 Rebending		
	7.4	Interpretation of test results	8	
8	Axial force fatigue test			
	8.1	Principle of test		
	8.2	Test piece		
	8.3 8.4	Test equipment Test procedure		
	0.1	8.4.1 Provisions concerning the test piece		
		8.4.2 Upper force (F_{up}) and force range (F_r)		
		8.4.3 Stability of force and frequency	10	
		8.4.4 Counting of force cycles		
		8.4.5 Frequency		
		8.4.6 Temperature 8.4.7 Validity of the test		
_	Q.	•		
9		ical analysis		
10		urement of the geometrical characteristics		
	10.1	Test piece		
	10.2 10.3	Test equipment Test procedure		
		10.3.1 Heights of transverse ribs or depths of indentations		
		10.3.2 Height of longitudinal ribs (a')	12	
		10.3.3 Transverse rib or indentation spacing (c)	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)		
		10.5.7 Hallovel of HD Hally Highlianoll (a)		

		10.3.8 Width of transverse rib or width of indentation (b)	13	
11	Dete	rmination of the relative rib or indentation area ($f_{ m R}$ or $f_{ m P}$)	14	
	11.1	General		
	11.2	Measurements		
	11.3	Calculation of $f_{ m R}$		
		11.3.1 Relative rib area		
		11.3.2 Simplified formulae		
		11.3.3 Formula used for the calculation of f_R		
	11.4	Calculation of $f_{\rm P}$		
		11.4.1 Relative indentation area		
		11.4.2 Simplified formulae		
		11.4.3 Formula used for the calculation of f_P	17	
12	Determination of deviation from nominal mass per metre			
	12.1	Test piece		
	12.2	Accuracy of measurement	17	
	12.3	Test procedure	17	
13	Specialized tests			
	13.1	Tensile test at elevated temperature		
		13.1.1 General		
		13.1.2 Test piece	17	
		13.1.3 Test equipment		
		13.1.4 Test procedure	18	
	13.2	Tensile test at low temperature	18	
		13.2.1 General	18	
		13.2.2 Test piece	18	
		13.2.3 Test equipment	18	
		13.2.4 Test procedure		
	13.3	Cyclic inelastic load test		
		13.3.1 Principle of the test		
		13.3.2 Test piece		
		13.3.3 Test equipment		
		13.3.4 Test procedure	19	
14	Test	report	20	
Annex A (informative) Options for agreement between the parties involved				
Rihliogranhy				

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, Clause 2, Clause 3, Clause 4, Clause 5 (only the title), 5.3, 6.3, 8.3, 8.4.5, 10.3.1.1, 10.3.1.2, 10.3.3 and 11.3.2 and Figure 6. A new Clause 13 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.

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