Cathodic protection - Competence levels of cathodic protection persons - Basis for certification scheme (ISO 15257:2017)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 15257:2017 sisaldab Euroopa standardi EN ISO 15257:2017 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 15257:2017 consists of the English text of the European standard EN ISO 15257:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 14.06.2017.	Date of Availability of the European standard is 14.06.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 77.060

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE

EN ISO 15257

EUROPÄISCHE NORM

June 2017

ICS 77.060

Supersedes EN 15257:2006

English Version

Cathodic protection - Competence levels of cathodic protection persons - Basis for certification scheme (ISO 15257:2017)

Protection cathodique - Niveaux de compétence des personnes en protection cathodique - Base pour un dispositif particulier de certification (ISO 15257:2017)

Kathodischer Korrosionsschutz - Qualifikationsgrade von mit kathodischem Korrosionsschutz befassten Personen - Grundlage für ein Zertifizierungsverfahren (ISO 15257:2017)

This European Standard was approved by CEN on 15 February 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

This document (EN ISO 15257:2017) has been prepared by Technical Committee ISO/TC 156 "Corrosion of metals and alloys" in collaboration with Technical Committee CEN/TC 219 "Cathodic protection" the secretariat of which is held by BSI.

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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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.

This document supersedes EN 15257:2006.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 15257:2017 has been approved by CEN as EN ISO 15257:2017 without any modification.

Con	tents	Page
Forew	ord	iv
Introd	luction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	
4	Levels of competence	
•	4.1 General	
	4.2 Level 1, cathodic protection data collector (or tester)	
	4.3 Level 2, cathodic protection technician	
	4.4 Level 3, cathodic protection senior technician.	
	4.5 Level 4, cathodic protection specialist4.6 Level 5, cathodic protection expert	
	4.7 Designation of competence levels	
_	Application sectors	
5	5.1 General	4 4
	5.2 On-land metallic structures	
	5.3 Marine metallic structures	
	5.4 Reinforced concrete structures	
	5.5 Inner surfaces of metallic structures containing an electrolyte	6
6	Requirements for competence of persons at various levels and for various	
	applications sectors	
	6.1 General	
	6.2 Knowledge required for all application sectors and all levels	
	 Tasks to be fulfilled in all application sectors for Levels 1 to 4 Specific tasks for on-land metallic structures application sector for Levels 1 to 4 	/ 10
	6.5 Specific tasks for marine metallic structures application sector for Levels 1 to 4	
	6.6 Specific tasks for reinforced concrete structures application sector for Levels 1 to 4	
	6.7 Specific tasks for inner surfaces of metallic structures application sector for Levels	
	1 to 4	
	6.8 Requirements for Level 5 CP persons	16
Annex	A (normative) Certification scheme: Eligibility for competence assessment for Levels 1 to 4	17
Annex	B (normative) Certification scheme: Examination and assessment	22
	x C (normative) Certification scheme: Certificate, validity, re-certification,	
THITCE	transition periods	27
Rihlio	graphy	

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 on 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 the following /TC 156, URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 156, Corrosion of metals and alloys.

Introduction

This document enables the competence of cathodic protection (CP) persons carrying out cathodic protection survey, design, installation, testing and maintenance work to be defined and verified.

The relevant application sectors concern on-land metallic structures, marine metallic structures, reinforced concrete structures and the inner surfaces of metallic structures containing an electrolyte.

Demonstration of competence is possible by certification. This document offers a certification scheme in accordance with ISO/IEC 17024.

In preparation of <u>Clauses 4</u>, <u>5</u> and <u>6</u>, a detailed job task analysis (JTA) was undertaken by consensus of the experts in ISO TC 156. This JTA was then subject to review by international experts during CONS R perfor the ISO enquiry process. It is considered that <u>Clauses 4</u>, <u>5</u> and <u>6</u> constitute a rigorous JTA. The JTA is largely based on similar work performed by CEN/TC 219, which produced EN 15257, which has been in widespread use since 2007.

Cathodic protection — Competence levels of cathodic protection persons — Basis for a certification scheme

1 Scope

This document defines five levels of competence (detailed in <u>Clause 4</u>) for persons working in the field of cathodic protection (CP), including survey, design, installation, testing, maintenance and advancing the science of cathodic protection. It specifies a framework for establishing these competence levels and their minimum requirements.

Competence levels apply to each of the following application sectors:

- on-land metallic structures;
- marine metallic structures;
- reinforced concrete structures;
- inner surfaces of metallic structures containing an electrolyte.

These application sectors are detailed in <u>Clause 5</u>.

This document specifies the requirements to be used for establishing a certification scheme as defined in ISO/IEC 17024. It is not mandatory to apply all of the levels and/or application sectors. This certification scheme is detailed in Annexes A, B and \underline{C} .

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/IEC 17024, Conformity assessment — General requirements for bodies operating certification of persons

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8044 and the following apply.

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

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

3.1

application sector

particular section of industry or technology where specialized cathodic protection survey, design, installation, testing and maintenance practices are used or the science of cathodic protection is advanced, requiring specific sector-related knowledge, skill, equipment or *training* (3.13)

3.2

assessment committee

group appointed by the certification body which reviews applications and examination results and determines compliance with the requirements for CP certifications offered by the certification body