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**Barve in laki - Protikorozijska zaščita jeklenih konstrukcij z zaščitnimi premaznimi sistemi - 9. del: Zaščitni premazni sistemi in laboratorijske preskusne metode za konstrukcije na morju in sorodne konstrukcije (ISO 12944-9:2018)**

Paints and varnishes - Corrosion protection of steel structures by protective paint systems - Part 9: Protective paint systems and laboratory performance test methods for offshore and related structures (ISO 12944-9:2018)

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Beschichtungsstoffe - Korrosionsschutz von Stahlbauten durch Beschichtungssysteme - Teil 9: Beschichtungssysteme und Leistungsprüfverfahren im Labor für Bauwerke im Offshorebereich (ISO 12944-9:2018)

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Peintures et vernis - Anticorrosion des structures en acier par systèmes de peinture - Partie 9: Systèmes de peinture protectrice et méthodes d'essai de performance en laboratoire pour la protection des structures offshore et structures associées (ISO 12944-9:2018)

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**ICS:**

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47.020.01	Splošni standardi v zvezi z ladjedelništvom in konstrukcijami na morju	General standards related to shipbuilding and marine structures
87.040	Barve in laki	Paints and varnishes
91.080.13	Jeklene konstrukcije	Steel structures

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Peintures et vernis - Anticorrosion des structures en acier par systèmes de peinture - Partie 9: Systèmes de peinture protectrice et méthodes d'essai de performance en laboratoire pour la protection des structures offshore et structures associées (ISO 12944-9:2018)

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This European Standard was approved by CEN on 22 January 2018.

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[SIST EN ISO 12944-9:2018](#)

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.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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## European foreword

This document (EN ISO 12944-9:2018) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes" 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 August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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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### Endorsement notice

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The text of ISO 12944-9:2018 has been approved by CEN as EN ISO 12944-9:2018 without any modification.

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**Paints and varnishes — Corrosion  
protection of steel structures by  
protective paint systems —**

Part 9:

**Protective paint systems and  
laboratory performance test methods  
for offshore and related structures**

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*Peintures et vernis — Anticorrosion des structures en acier par  
systèmes de peinture*

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*Partie 9: Systèmes de peinture protectrice et méthodes d'essai de  
performance en laboratoire pour la protection des sctructures  
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## ISO 12944-9:2018(E)

## 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](http://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](http://www.iso.org/patents)).

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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 URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html). (standards.iteh.ai)

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This first edition of ISO 12944-9 cancels and replaces ISO 20340:2009, which has been technically revised.

A list of all parts in the ISO 12944 series can be found on the ISO website.

## Introduction

Unprotected steel in the atmosphere, in water and in soil is subject to corrosion that can lead to damage. Therefore, to avoid corrosion damage, steel structures are normally protected to withstand the corrosion stresses to which they will be subjected during the service life required of the structure.

There are different ways of protecting steel structures from corrosion. ISO 12944 (all parts) deals with protection by paint systems and covers, in the various parts, all features that are important in achieving adequate corrosion protection. Additional or other measures are possible but require particular agreement between the interested parties.

In order to ensure effective corrosion protection of steel structures, owners of such structures, planners, consultants, companies carrying out corrosion protection work, inspectors of protective coatings and manufacturers of coating materials need to have at their disposal state-of-the-art information in concise form on corrosion protection by paint systems. It is vital that such information is as complete as possible, unambiguous and easily understandable to avoid difficulties and misunderstandings between the parties concerned with the practical implementation of protection work.

ISO 12944 (all parts) is intended to give this information in the form of a series of instructions. It is written for those who have some technical knowledge. It is also assumed that the user of ISO 12944 (all parts) is familiar with other relevant International Standards, in particular those dealing with surface preparation.

Although ISO 12944 (all parts) does not deal with financial and contractual questions, attention is drawn to the fact that, because of the considerable implications of inadequate corrosion protection, non-compliance with requirements and recommendations given in this document may result in serious financial consequences.

ISO 12944-1 defines the overall scope of ISO 12944. It gives some basic terms and definitions and a general introduction to the other parts of ISO 12944. Furthermore, it includes a general statement on health, safety and environmental protection, and guidelines for using ISO 12944 (all parts) for a given project.

Offshore and related structures require specific attention in order to be able to withstand the severe corrosion stresses to which they are exposed during their service life and to minimize the risk of failures that would impact safety, operating costs or capital cost.

In order to establish sufficient corrosion protection and ensure optimum performance of the coating, it is necessary to specify the requirements for the protective paint system(s) along with the relevant laboratory performance tests to assess its (their) likely durability.

In order to achieve the same performance as indicated by testing, proper surface preparation and application of the paint is essential. Close attention needs to be given to the execution of the work.

This document places emphasis on high-durability paint systems, with the aim of minimizing maintenance and hence reducing safety considerations and environmental impact.

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