

**Värvid ja lakid. Teraskonstruksioonide
korrosioonitõrje värvkattesüsteemidega.
Osa 7: Värvimistööde korraldamine ja
järelvalve**

Paints and varnishes - Corrosion protection of steel
structures by protective paint systems - Part 7:
Execution and supervision of paint work

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 12944-7:2000 sisaldab Euroopa standardi EN ISO 12944-7:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 12944-7:2000 consists of the English text of the European standard EN ISO 12944-7:1998.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: Standardi see osa käsitleb teraskonstruktsioonide värvimist ja kontrollimist nii töökojas kui ka ehitusplatsil.</p>	<p>Scope:</p>
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ICS 87.020

Võtmesõnad: kaitsekatted, korrosioon, korrosioonitõrje, lakid, teraskonstruktsioon, värvid, värvimine

ICS 87.020; 91.080.10

Descriptors: Paint coatings, corrosion protection, structural steelwork.

English version

Paints and varnishes

**Corrosion protection of steel structures by
protective paint systems**

**Part 7: Execution and supervision of paint work
(ISO 12944-7 : 1998)**

Peintures et vernis – Anticorrosion
des structures en acier par systèmes
de peinture – Partie 7: Exécution et
surveillance des travaux de peinture
(ISO 12944-7 : 1998)

Beschichtungsstoffe – Korrosions-
schutz von Stahlbauten durch
Beschichtungssysteme –
Teil 7: Ausführung und Überwachung
der Beschichtungsarbeiten
(ISO 12944-7 : 1998)

This European Standard was approved by CEN on 1997-11-13.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 12944-7 : 1998 Paints and varnishes – Corrosion protection of steel structures by protective paint systems – Part 7: Execution and supervision of paint work,

which was prepared by ISO/TC 35 'Paints and varnishes' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 139 'Paints and varnishes', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by November 1998 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 12944-7 : 1998 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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Introduction

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

There are different ways of protecting steel structures from corrosion. ISO 12944 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, it is necessary for owners of such structures, planners, consultants, companies carrying out corrosion protection work, inspectors of protective coatings and manufacturers of coating materials to have at their disposal state-of-the-art information in concise form on corrosion protection by paint systems. Such information has to be as complete as possible, unambiguous and easily understandable to avoid difficulties and misunderstandings between the parties concerned with the practical implementation of protection work.

This International Standard - ISO 12944 - 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 is familiar with other relevant International Standards, in particular those dealing with surface preparation, as well as relevant national regulations.

Although ISO 12944 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 standard may result in serious financial consequences.

ISO 12944-1 defines the overall scope of all parts 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 for a given project.

This part of ISO 12944 describes how paint work on steel structures is to be executed and supervised after the surface has been prepared in accordance with ISO 12944-4. Examples of protective paint systems suitable for this purpose are given in ISO 12944-5.

1 Scope

1.1 This part of ISO 12944 deals with the execution and supervision of paint work on steel structures in the workshop or on site.

1.2 This part of ISO 12944 does not apply to:

- the preparation of surfaces to be painted (see ISO 12944-4) and the supervision of such work,
- the application of metallic coatings,
- pre-treatment methods such as phosphating and chromating and paint application methods such as dipping, powder coating or coil coating.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 12944. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 12944 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 1512:1991,	<i>Paints and varnishes – Sampling of products in liquid or paste form.</i>
ISO 1513:1992,	<i>Paints and varnishes – Examination and preparation of samples for testing.</i>
ISO 2409:1992,	<i>Paints and varnishes – Cross-cut test.</i>
ISO 2808:1997,	<i>Paints and varnishes – Determination of film thickness.</i>
ISO 4624:1978,	<i>Paints and varnishes – Pull-off test for adhesion.</i>
ISO 8502-4:1993,	<i>Preparation of steel substrates before application of paints and related products – Tests for the assessment of surface cleanliness – Part 4: Guidance on the estimation of the probability of condensation prior to paint application.</i>
ISO 9001:1994,	<i>Quality systems – Model for quality assurance in design, development, production, installation and servicing.</i>
ISO 9002:1994,	<i>Quality systems – Model for quality assurance in production, installation and servicing.</i>

- ISO 12944-1:1998, *Paints and varnishes – Corrosion protection of steel structures by protective paint systems - Part 1: General introduction.*
- ISO 12944-4:1998, *Paints and varnishes – Corrosion protection of steel structures by protective paint systems - Part 4: Types of surface and surface preparation.*
- ISO 12944-5:1998, *Paints and varnishes – Corrosion protection of steel structures by protective paint systems - Part 5: Protective paint systems.*
- ISO 12944-8:1998, *Paints and varnishes – Corrosion protection of steel structures by protective paint systems - Part 8: Development of specifications for new work and maintenance.*

3 Preconditions for the execution of the paint work

3.1 Qualification

3.1.1 Companies contracted to apply protective paint systems to steel structures, and their personnel, shall be capable of carrying out the work properly and safely. Work requiring particular care with regard to its execution shall only be carried out by personnel having qualifications which have been certified by an approved body, provided no other agreements have been made between the parties concerned.

3.1.2 Where the contractor has a quality management system in operation, a quality plan shall be prepared by the contractor which includes his general standards of workmanship. A method statement shall be provided for each stage of the work.

The contractor shall show that he will be able to achieve the specified quality level at each stage. Evidence for this is, for example, given by the use of a quality assurance system in accordance with ISO 9001 or ISO 9002.

Unless otherwise agreed, the contractor shall provide the client with extracts of all execution and supervision standards given in his quality manual that are relevant to the specification.

3.2 Condition of the substrate

A protective paint system requires proper surface preparation, which depends on the initial and final condition of the surface. The respective requirements shall be specified in the painting specification and be capable of achievement.

Methods of surface preparation are described in ISO 12944-4. The prepared surfaces shall be assessed with regard to visual cleanliness, surface profile and chemical cleanliness, using the methods given in ISO 12944-4.

The requirements for the supervision of these aspects of the work, the frequency of assessment, and the location of the assessment work shall be agreed between the parties concerned.

If the condition of the surface differs from that described in the specification, the client shall be informed.

The temperature of the surface shall be without doubt above the dew point of the surrounding air, unless otherwise specified in the paint manufacturer's technical data sheet.

3.3 Health and safety and environmental protection

The applicable regulations concerning health and safety and environmental protection shall be complied with. See ISO 12944-1 and ISO 12944-8.