

## DIN EN ISO 12944-4



ICS 25.220.10

Supersedes  
DIN EN ISO 12944-4:1998-07

**Paints and varnishes –  
Corrosion protection of steel structures by protective paint systems –  
Part 4: Types of surface and surface preparation (ISO 12944-4:2017);  
English version EN ISO 12944-4:2017,  
English translation of DIN EN ISO 12944-4:2018-04**

Beschichtungsstoffe –  
Korrosionsschutz von Stahlbauten durch Beschichtungssysteme –  
Teil 4: Arten von Oberflächen und Oberflächenvorbereitung (ISO 12944-4:2017);  
Englische Fassung EN ISO 12944-4:2017,  
Englische Übersetzung von DIN EN ISO 12944-4:2018-04

Peintures et vernis –  
Anticorrosion des structures en acier par systèmes de peinture –  
Partie 4: Types de surface et de préparation de surface (ISO 12944-4:2017);  
Version anglaise EN ISO 12944-4:2017,  
Traduction anglaise de DIN EN ISO 12944-4:2018-04

Document comprises 32 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

*A comma is used as the decimal marker.*

## National foreword

This document (EN ISO 12944-4:2017) has been prepared by Technical Committee ISO/TC 35 “Paints and varnishes” in collaboration with Technical Committee CEN/TC 139 “Paints and varnishes” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was *DIN-Normenausschuss Beschichtungsstoffe und Beschichtungen* (DIN Standards Committee Coatings and Coating Materials), Subcommittee NA 002-00-10-04 UA “Surface preparation and testing” of Working Committee NA 002-00-10 AA “Corrosion protection of steel structures”.

The DIN Standards corresponding to the International Standards referred to in this document are as follows:

ISO 1461	DIN EN ISO 1461
ISO 2063	DIN EN ISO 2063
ISO 2409	DIN EN ISO 2409
ISO 4618:2014	DIN EN ISO 4618:2015-01
ISO 4628-1	DIN EN ISO 4628-1
ISO 4628-2	DIN EN ISO 4628-2
ISO 4628-3	DIN EN ISO 4628-3
ISO 4628-4	DIN EN ISO 4628-4
ISO 4628-5	DIN EN ISO 4628-5
ISO 4628-6	DIN EN ISO 4628-6
ISO 8501-1:2007	DIN EN ISO 8501-1:2007-12
ISO 8501-2:1994	DIN EN ISO 8501-2:2002-03
ISO 8501-3	DIN EN ISO 8501-3
ISO 8501-4	DIN EN ISO 8501-4
ISO 8502-3:2017	DIN EN ISO 8502-3:2017-05
ISO 8502-4	DIN EN ISO 8502-4
ISO 8503-1	DIN EN ISO 8503-1
ISO 8503-2	DIN EN ISO 8503-2
ISO 8503-5	DIN EN ISO 8503-5
ISO 8504 (all parts)	DIN EN ISO 8504 (all parts)
ISO 9000	DIN EN ISO 9000
ISO 9001	DIN EN ISO 9001
ISO 9004	DIN EN ISO 9004
ISO 11124-1:1993	DIN EN ISO 11124-1:1997-06
ISO 11124-2	DIN EN ISO 11124-2
ISO 11124-3	DIN EN ISO 11124-3
ISO 11124-4	DIN EN ISO 11124-4
ISO 11126-1	DIN EN ISO 11126-1
ISO 11126-3	DIN EN ISO 11126-3
ISO 11126-4	DIN EN ISO 11126-4
ISO 11126-5	DIN EN ISO 11126-5
ISO 11126-6	DIN EN ISO 11126-6
ISO 11126-7	DIN EN ISO 11126-7

ISO 11126-8	DIN EN ISO 11126-8
ISO 12944-1	DIN EN ISO 12944-1
ISO 12944-3	DIN EN ISO 12944-3
ISO 16276 (all parts)	DIN EN ISO 16276 (all parts)

## Amendments

This standard differs from DIN EN ISO 12944-4:1998-07 as follows:

- a) normative references have been updated;
- b) a new definition 3.13 “chemical treatment” has been added;
- c) subclause 5.6 “Surfaces with chemical treatment” has been added;
- d) subclause 6.1.6 “Cleaning by means of chemical conversion” has been deleted;
- e) subclause 6.3 “Flame cleaning” has been deleted;
- f) in subclause 6.3.4 “Water jetting”, a reference to ISO 8501-4 has been added;
- g) subclause 6.2.8 “Chemical treatment” has been included;
- h) subclause 7.2 “Uncoated surfaces” has been revised;
- i) Clause 9 “Assessment of prepared surfaces” has been revised;
- j) Clause 11 “Preparation of temporarily or partly protected surfaces before application of further coatings” has been revised;
- k) Annex A “Standard preparation grades for primary (overall) surface preparation” has been revised;
- l) Annex C “Procedures for removal of extraneous layers and foreign matter, native layers and contaminants” has been revised;
- m) Annex D has been updated and transformed into a separate Bibliography;
- n) Annex E “Alphabetical index of terms” has been deleted;
- o) Annex ZA “Normative references to international publications with their respective European publications” has been deleted; this comparison has now been included in the national foreword;
- p) the standard has been editorially revised.

## Previous editions

DIN 55928: 1956-11, 1959-06x  
DIN 55928-4: 1977-01, 1991-05  
DIN EN ISO 12944-4: 1998-07

## National Annex NA (informative)

### Bibliography

DIN EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods*

DIN EN ISO 2063, *Thermal spraying — Metallic and other inorganic coatings — Zinc, aluminium and their alloys*

DIN EN ISO 2409, *Paints and varnishes — Cross-cut test*

DIN EN ISO 4618:2015-01, *Paints and varnishes — Terms and definitions (ISO 4618:2014); Trilingual version EN ISO 4618:2014*

DIN EN ISO 4628-1, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 1: General introduction and designation system*

DIN EN ISO 4628-2, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering*

DIN EN ISO 4628-3, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 3: Assessment of degree of rusting*

DIN EN ISO 4628-4, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 4: Assessment of degree of cracking*

DIN EN ISO 4628-5, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 5: Assessment of degree of flaking*

DIN EN ISO 4628-6, *Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 6: Assessment of degree of chalking by tape method*

DIN EN ISO 8501-1:2007-12, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings (ISO 8501-1:2007)*

DIN EN ISO 8501-2:2002-03, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 2: Preparation grades of previously coated steel substrates after localized removal of previous coatings (ISO 8501-2:1994)*

DIN EN ISO 8501-3, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 3: Preparation grades of welds, edges and other areas with surface imperfections*

DIN EN ISO 8501-4, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 4: Initial surface conditions, preparation grades and flash rust grades in connection with high-pressure water jetting*

DIN EN ISO 8502-3:2017-05, *Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness — Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method) (ISO 8502-3:2017)*

DIN EN ISO 8502-4, *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*

DIN EN ISO 8503-1, *Preparation of steel substrates before application of paints and related products — Surface roughness characteristics of blast-cleaned steel substrates — Part 1: Specifications and definitions for ISO surface profile comparators for the assessment of abrasive blast-cleaned surfaces*

DIN EN ISO 8503-2, *Preparation of steel substrates before application of paints and related products — Surface roughness characteristics of blast-cleaned steel substrates — Part 2: Method for the grading of surface profile of abrasive blast-cleaned steel — Comparator procedure*

DIN EN ISO 8503-5, *Preparation of steel substrates before application of paints and related products — Surface roughness characteristics of blast-cleaned steel substrates — Part 5: Replica tape method for the determination of the surface profile*

DIN EN ISO 8504-2, *Preparation of steel substrates before application of paints and related products — Surface preparation methods — Part 2: Abrasive blast-cleaning*

DIN EN ISO 9000, *Quality management systems — Fundamentals and vocabulary*

DIN EN ISO 9001, *Quality management systems — Requirements*

DIN EN ISO 9004, *Quality management — Quality of an organization — Guidance to achieve sustained success*

DIN EN ISO 11124-1:1997-06, *Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives — Part 1: General introduction and classification (ISO 11124-1:1993)*

DIN EN ISO 11124-2, *Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives — Part 2: Chilled-iron grit*

DIN EN ISO 11124-3, *Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives — Part 3: High-carbon cast-steel shot and grit*

DIN EN ISO 11124-4, *Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives — Part 4: Low-carbon cast-steel shot*

DIN EN ISO 11126-1, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 1: General introduction and classification*

DIN EN ISO 11126-3, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 3: Copper refinery slag*

DIN EN ISO 11126-4, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 4: Coal furnace slag*

DIN EN ISO 11126-5, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 5: Nickel refinery slag*

DIN EN ISO 11126-6, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 6: Iron furnace slag*