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STN	**Galvanické anódy na katódovú ochranu v morskej vode a slanom bahne (ISO 9351: 2025)**	**STN EN ISO 9351** 03 8383

Galvanic anodes for cathodic protection in seawater and saline sediments (ISO 9351:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/25

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English Version

Galvanic anodes for cathodic protection in seawater and saline sediments (ISO 9351:2025)

Anodes galvaniques pour la protection cathodique dans l'eau de mer et les sédiments salins (ISO 9351:2025)

Galvanische Anoden für den kathodischen Schutz in Meerwasser und salzhaltigen Sedimenten (ISO 9351:2025)

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European foreword

This document (EN ISO 9351:2025) 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of an identical text or by endorsement, at the latest by August 2025, and conflicting national standards shall be withdrawn at the latest by August 2025.

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Endorsement notice

The text of ISO 9351:2025 has been approved by CEN as EN ISO 9351:2025 without any modification.

International Standard

ISO 9351

First edition
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Galvanic anodes for cathodic protection in seawater and saline sediments

Anodes galvaniques pour la protection cathodique dans l'eau de mer et les sédiments salins

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Foreword

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This document was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 219, *Cathodic protection*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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

This standard defines the minimum requirements for the galvanic anode quality levels and verification procedures.

The anticipated performance of the cast galvanic anodes for use in seawater and saline mud or sediment is determined by their composition, anode dimensions and the quality of their manufacture.

In addition, the document provides guidance and recommendations related to the environmental impact.

International Standard **ISO 9351:2025(en)**

Galvanic anodes for cathodic protection in seawater and saline sediments

1 Scope

This document defines requirements and gives recommendations for the chemical composition, electrochemical properties, physical tolerances and test and inspection procedures for cast galvanic anodes of aluminium, magnesium and zinc-based alloys for cathodic protection in seawater, saline sediment and brackish water.

Information on salinity ranges can be found in Annex A.

The requirements and recommendations of this document can be applied to any available anode shape for cast anodes, e.g. trapezoid, circular, half-spherical cross sections, bracelet type.

Whilst other metals, such as soft iron, can be used as galvanic anode material to protect more noble metals than iron and steel, these are not covered in this document.

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 630 (all parts), *Structural steels*

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

ISO 8501-1, *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 9606-1, *Qualification testing of welders — Fusion welding — Part 1: Steels*

EN 10025, *Hot rolled products of structural steels (all parts)*

ISO 10474:2013, *Steel and steel products — Inspection documents*

ISO 15607, *Specification and qualification of welding procedures for metallic materials — General rules*

ISO 15609-1, *Specification and qualification of welding procedures for metallic materials — Welding procedure specification — Part 1: Arc welding*