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## Corrosion control engineering life cycle — Risk assessment

*Ingénierie du contrôle de la corrosion au cours du cycle de vie —  
Évaluation des risques*



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## 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)).

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For an explanation of 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 [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 156, *Corrosion of metals and alloys*, Subcommittee SC 1, *Corrosion control engineering life cycle*.

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](http://www.iso.org/members.html).

# Corrosion control engineering life cycle — Risk assessment

## 1 Scope

This document specifies the general requirements for risk assessment in the life cycle of corrosion control engineering.

This document is applicable to a risk assessment of all types of corrosion control engineering programmes.

## 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 23123, *Corrosion control engineering life cycle — General requirements*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

### 3.1

#### **risk assessment**

overall process of *risk identification* (3.2), *risk analysis* (3.3) and *risk evaluation* (3.4)

### 3.2

#### **risk identification**

process of finding, recognizing and describing the corrosion risk of all elements in the corrosion control engineering life cycle

### 3.3

#### **risk analysis**

process to understand the nature of the corrosion risk and the degree of damage

Note 1 to entry: Risk analysis is the basis of *risk assessment* (3.1).

### 3.4

#### **risk evaluation**

process of comparing the results of the *risk analysis* (3.3) and summarizing the traceability and supporting documents to determine whether the corrosion risk of all elements in the corrosion control engineering life cycle and/or its magnitude is acceptable or tolerable

### 3.5

#### **consequence**

outcome of an event affecting objectives

Note 1 to entry: A consequence can be certain or uncertain and can have positive or negative direct or indirect effects on objectives.