
Cranes — Inspections —

Part 1: General

*Appareils de levage à charge suspendue — Vérifications —
Partie 1: Généralités*



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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. www.iso.org/directives

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The committee responsible for this document is ISO/TC 96, *Cranes*, Subcommittee SC 9, *Bridge and gantry cranes*.

This third edition cancels and replaces the second edition (ISO 9927-1:2009), which has been technically revised.

ISO 9927 consists of the following parts, under the general title *Cranes — Inspections*:

- *Part 1: General*
- *Part 3: Tower cranes*

Bridge and gantry cranes are to form the subject of a future Part 5. Other parts are planned.

Cranes — Inspections —

Part 1: General

1 Scope

This International Standard specifies the general requirements for inspections to be carried out on cranes as defined in ISO 4306-1. Additional requirements for particular types of cranes are intended to be covered by relevant specific parts of ISO 9927.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4306 (all parts), *Cranes — Vocabulary*

ISO 4310, *Cranes — Test code and procedures*

ISO 8686, *Cranes — Design principles for loads and load combinations*

ISO 10245-1, *Cranes — Limiting and indicating devices — Part 1: General*

ISO 12480-1, *Cranes — Safe use — Part 1: General*

ISO 12482-1, *Cranes — Condition monitoring — Part 1: General*

ISO 23814, *Cranes — Competency requirements for crane inspectors*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4306 and the following apply:

3.1

critical component

component, the failure of which would result in a risk to the health and safety of persons using the crane or located in its vicinity

3.2

design life

estimation of the allowable service life of a crane based on its original design specifications and taking into consideration the stress cycles and stress collectives (design constraints) before a special assessment and general overhaul are required

Note 1 to entry: The design life of a crane as a whole is usually governed by the life of a limited number of critical components (see ISO 12482-1).

Note 2 to entry: The design life may vary from the estimation if the stress cycles and stress collectives experienced during its service life deviate from those expected.

3.3

inspection

all relevant activities for the inspection of a crane including testing, as applicable