

INTERNATIONAL STANDARD

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Cranes — Classification —

Part 3: Tower cranes

Appareils de levage à charge suspendue — Classification —
Partie 3: Grues à tour



Reference number
ISO 4301-3:1993(E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 4301-3 was prepared by Technical Committee ISO/TC 96, *Cranes*, Sub-Committee SC 7, *Tower cranes*.

ISO 4301 consists of the following parts, under the general title *Cranes — Classification*:

- *Part 1: General*
- *Part 2: Mobile cranes*
- *Part 3: Tower crane*
- *Part 4: Jib cranes*
- *Part 5: Overhead travelling and portal bridge cranes*

Cranes — Classification —

Part 3:

Tower cranes

1 Scope

This part of ISO 4301 establishes a classification of tower cranes as defined in ISO 4306-3, according to their category.

NOTE 1 For the classification of cranes, as defined in ISO 4306-1, based on the number of operating cycles to be carried out during the expected life of the crane and a load spectrum factor which represents a nominal state of loading, see ISO 4301-1.

It applies to the classification of

- tower cranes for building and general construction work that can be dismantled,
- permanently erected tower cranes,
- hammerhead cranes;
- dockside and shipbuilders' tower cranes.

It does not apply to the classification of

- power-driven mobile jib cranes which may be fitted with a tower attachment,
- erection masts, with or without jibs.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 4301. 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 4301 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 4301-1:1986, *Cranes and lifting appliances — Classification — Part 1: General*.

ISO 4306-1:1990, *Cranes — Vocabulary — Part 1: General*.

ISO 4306-3:1991, *Cranes — Vocabulary — Part 3: Tower cranes*.

3 Definitions

For the purposes of this part of ISO 4301, the definitions given in ISO 4306-1 and ISO 4306-3 apply.

4 Categories of tower cranes

Tower cranes can be divided into three general categories based on the service they are expected to be subject to, as follows:

Category 1: Tower cranes in irregular use or having a light state of loading

Category 2: Tower cranes for building

Category 3: Tower cranes in regular use or having a heavy state of loading