BS ISO 4306-3:2016

BSI Standards Publication

Cranes — Vocabulary

Part 3: Tower cranes

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National foreword

This British Standard is the UK implementation of ISO 4306-3:2016.

The UK participation in its preparation was entrusted to Technical Committee MHE/3/5, Mobile cranes.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 96, *Cranes*, Subcommittee SC 7, *Tower cranes*.

This fourth edition cancels and replaces the third edition (ISO 4306-3:2003), which has been technically revised. It also incorporates the Amendment ISO 4306-3:2003/Amd 1:2011.

ISO 4306 consists of the following parts, under the general title *Cranes — Vocabulary*:

— *Part 1: General*

— *Part 2: Mobile cranes*

— *Part 3: Tower cranes*

— *Part 5: Bridge and gantry cranes*

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INTERNATIONAL STANDARD ISO 4306-3:2016(E)

Cranes — Vocabulary —

Part 3: Tower cranes

1 Scope

ISO 4306 as a whole establishes a vocabulary of the most commonly used terms in the field of cranes.

This part of ISO 4306 gives the general definition of a tower crane and illustrates the terminology used with each type of tower crane by the use of figures with referenced term numbers.

It is applicable to

— tower cranes that can be assembled and dismantled (by element or self-erecting cranes),

— permanently erected tower cranes, and

— mobile self-erecting tower cranes.

It is not applicable to

— mobile cranes, or

— erection masts, with or without jibs.

2 Terms and definitions

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

2.1
tower crane
power-driven slewing jib type crane with the jib located at the top of a tower, which stays approximately vertical in the working position

Note 1 to entry: A tower crane is equipped with means for raising and lowering suspended loads and for the configuration of such loads by changing the load-lifting radius, travelling of the load, slewing or travelling of the complete appliance. Some tower cranes perform several, but not necessarily all of these movements.

2.1.1
tower crane erected from parts
tower crane (2.1) which is transported to site in parts and erected with use of a separate lifting appliance where the design of the crane allows the crane to remain in the erected position in out-of-service conditions and to be dismantled for transportation to another site

2.1.2
self-erecting tower crane
tower crane (2.1) which is transported to site and mostly erected without use of a separate lifting appliance, where the design of the crane allows the crane to remain in the erected position in out-of-service conditions and to be lowered for transportation to another site

2.1.3
mobile self-erecting tower crane
self-erecting tower crane (2.1.2) mounted on a self-propelled or trailer mounted chassis

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3 Types of tower crane

The following four groups of characteristics describe tower cranes:

a) assembly:

— erected from parts;

— self-erecting (rapid erection without use of an auxiliary appliance);

b) slewing level:

— top slewing;

— bottom slewing;

c) type of jib (boom):

— horizontal jib (also hammerhead type);

— luffing jib (boom);

— articulated jib (also gooseneck jib);

— extending jib;

— jack-knife jib (boom);

d) configuration:

— travelling;

— stationary (fixed);

— climbing.

4 Nomenclature

4.1 General

A selection of different types of tower crane is shown in Table 1, which refers to the appropriate figure.

The figures illustrate the terms, for which the definitions are self-evident. The terms are identified by their reference numbers.

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