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# Cranes — Design principles for loads and load combinations —

## Part 3: Tower cranes

*Appareil de levage à charge suspendue — Principes de calcul des  
charges et des combinaisons de charges —*

*Partie 3: Grues à tour*



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## Foreword

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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)).

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](http://www.iso.org/patents)).

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This document was prepared by Technical Committee ISO/TC 96, *Cranes*, SC 7, *Tower cranes*.

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).

This second edition cancels and replaces the first edition (ISO 8686-3:1998) and ISO 12485:1998 which have been technically revised.

The main changes compared to the previous edition are as follows:

- integration and rules for application of ISO 8686-1;
- integration of special rules regarding the calculation of wind loads on tower cranes in the out-of-service state;
- integration of rules regarding the calculation of rigid body stability in this document;
- integration of rules regarding the calculation of loads on crane support structure;
- integration of rules for the calculation of climbing systems;
- integration of rules for the calculation of mobile self-erecting tower cranes.

A list of all parts in the ISO 8686 series can be found on the ISO website.