



ISO 16881-1

Cranes — Design calculation for wheel/rail contacts and associated trolley track supporting structure —

Part 1: General

*Appareils de levage à charge suspendue — Calcul de conception
des contacts galets/rails et de la structure porteuse du chariot de
roulement —*

Partie 1: Généralités

Second edition
2024-07

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This document was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 10, *Design principles and requirements*.

This second edition cancels and replaces the first edition (ISO 16881-1:2005), which has been technically revised.

The main changes are as follows:

- improvements were made to [Annex B](#) (local stresses);
- tables were added to [Annex C](#) to cover American, Chinese, and Japanese steels.

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This document establishes requirements and gives guidance and design rules that reflect the state of the art in crane machine design. The rules represent good design practice that ensures that essential safety requirements are met and that the components have an adequate service life. Deviation from these rules can increase risk or reduce service life. However, new technical innovations and materials provide solutions that result in equal or improved safety and durability.