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**Cranes — Bridge and gantry cranes —
International Standards for design and
manufacturing requirements and
recommendations**

*Appareils de levage à charge suspendue — Ponts roulants et ponts
portiques — Normes Internationales sur les exigences de conception et
de fabrication*



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Cranes — Bridge and gantry cranes — International Standards for design and manufacturing requirements and recommendations

1 Scope

This Technical Report collects the design and manufacturing requirements and recommendations for bridge and gantry cranes in ISO and IEC International Standards.

2 Requirements

2.1 Particular ISO International Standards for bridge and gantry cranes

The International Standards marked with an x are also applicable for cranes in use. Units and symbols can be found in ISO 31¹⁾ (all parts).

ISO 4301-1

Cranes and lifting appliances — Classification — Part 1: General

Abstract: Establishes a general classification of cranes 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. Classification considers only the operating conditions which are independent of the type of crane and the way it is driven.

ISO 4301-5

Cranes — Classification — Part 5: Overhead travelling and portal bridge cranes

Abstract: Establishes the classification of cranes based on the number of operating cycles to be carried out during the expected life of the appliance and its mechanisms, and a load spectrum factor which represents the nominal state of loading.

ISO 4302

Cranes — Wind load assessment

Abstract: Gives a simplified method of calculation and assumes that the wind blows horizontally from any direction, that the wind blows at a constant velocity and that there is a static reaction to the loadings applying to the crane structure. It includes built-in allowances for the effects of gusting (rapid changes in wind velocity) and for dynamic response.

1) ISO 31, *Quantities and units*