TECHNICAL REPORT

ISO/TR 16880

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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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Foreword

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The main task of technical committees is to prepare International Standards. 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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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ISO/TR 16880 was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 9, *Bridge and gantry cranes*.

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 31[1)] (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*