

ICS 53.020.20

CCS J 80



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 22437.5-2008

**Cranes -- Design principles for loads and load combinations --
Part 5: Overhead traveling and portal bridge cranes**

起重机 载荷与载荷组合的设计原则

(English Translation)

Issued on: October 22, 2008

Implemented on: May 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the PRC**

Table of Contents

Foreword	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Symbols	6
5 Application of phii factors	6
6 Hoisting classes	9
7 Combination of acceleration effects	10

1 Scope

This Part of GB/T 22437 establishes the application of GB/T 22437.1 to overhead travelling and portal bridge cranes as defined in GB/T 6974.1, and gives specific values for the factors to be used.

2 Normative references

The following documents contain provisions which, through reference in this

Part of GB/T 22437, constitute provisions of this Part. For the dated references, their subsequent amendments (excluding corrections) or revisions do not apply to this Part. However, the parties who enter into agreement based on this Part are encouraged to investigate whether the latest editions of these documents are applicable. For undated reference documents, the latest editions apply to this Part.

GB/T 5905-1986 Cranes - Test code and procedures (idt ISO 4310:1981)

GB/T 6974.1 Crane - Vocabulary - Part 1: General (GB/T 6974.1-2008, ISO 4306-1:2007, IDT)

GB/T 10183 Cranes - Overhead travelling cranes and portal bridge cranes -

Tolerances for cranes manufacture and tracks laying (GB/T 10183-2005, ISO 8306:1985, IDT)

GB/T 22437.1-2008 Cranes - Design principles for loads and load combinations - Part 1: General (ISO 8686-1:1989, MOD)

ISO 4302 Cranes - Wind load assessment

3 Terms and definitions

The terms and definitions established in GB/T 22437.1-2008 apply to this Part of GB/T 22437.

4 Symbols

The symbols used in this Part are in accordance with the provisions in GB/T 22437.1-2008.

5 Application of phii factors

5.1

The phii factors for dynamic effects which are used for load combinations are given in Table 1.

5.2

The numerical values for different phii factors are given in Table 2.