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

GB/T 24811.1-2009

**Cranes and lifting appliances -- Selection of wire ropes -- Part 1:
General**

起重机和起重机械 钢丝绳选择 第1部分：总则
(English Translation)

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Foreword

GB/T 24811 "Cranes and Lifting rope selection" is divided into two parts.

--- Part 1. General;

--- Part 2. Mobile cranes utilization factor.

This section GB/T 24811 Part 1.

This part identical with ISO 4308-1:2003 "Cranes and lifting appliances Selection of wire ropes - Part 1. General" (in English).

This section is equivalent translation ISO 4308-1:2003.

For ease of use, this section also made the following editorial changes.

--- The term "this part of ISO 4308" with the words "GB/T 24811 in this section";

"," --- With a decimal point instead of a comma as the decimal point, "";

--- Delete ISO 4308-1:2003 Foreword;

--- The scope of Appendix B and Appendix D, deleting instructions, described in Appendix C of the body moved to the appropriate location in Chapter 6;

--- For ISO 4308-1:2003 international standard references, use has been tantamount to the adoption of international standards for the country's standard replaces corresponding to its. He was not identical with direct reference to international standards for our standards.

This section in Appendix A, Appendix D is a normative appendix; Appendix B, Appendix C is informative appendix.

This part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee crane (SAC/TC227) centralized.

This part mainly drafted by. DHI DCW Group Co., Ltd., Beijing Institute of lifting the transport machinery design.

1 Scope

This section GB/T 24811 requirements for use in two press GB/T 6974.1 definition crane rope selection method, a it is selected according to kind of rope coefficient C, and the other is based on the use of ZP (safety) factor.

This part of the crane according to the design, application and maintenance requirements for the minimum requirements rope allowable strength and performance levels.

This section provides the minimum requirements associated with the selected reel rope and pulley diameter.

This section applies to the type of crane in Appendix A.

2 Normative references

The following documents contain provisions which, through reference GB/T 24811 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 5972 crane wire rope maintenance,, installation, examination and discard (GB/T 5972-2009, ISO 4309.

2004, IDT)

GB/T 6974.1 crane terminology - Part 1. General terms (GB/T 6974.1-2008, ISO 4306-1:2007, IDT) GB/T 20863.1 crane classification - Part 1. General (GB/T

20863.1-2007, ISO 4301-1. 1986, IDT) ISO 2408:2004 Minimum requirements for general purpose wire rope

3 Terms and Definitions

The following terms and definitions apply to this part of the GB/T 24811 of.

At least two layers of wire rope twisting the strands composed of its strands spirally wound in a tight rope-strand or fiber rope core.

When under load can be reduced torque or rotational degree of multi-strand wire rope.

Note 1: The rotating wire rope barrier usually have two or more layers around a core helix strands twisted together, and the inner and outer strands twist in the opposite shares.

Note 2: The three or four strands of rope can be designed to have a blocking rotation performance.

Surrounded by a layer of shares helical twisting a cord made of multi-strand wire rope.

GB/T 24811.1-2009/ISO 4308-1:2003