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

GB 12141-2008

Replacing GB 12141-1989; GB/T 15388.1-1994; GB/T 15388.2-1994

Safety code for material aerial ropeways

货运架空索道安全规范

(English Translation)

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Foreword

This standard 3.1.2,3.1.7,3.1.8,3.1.9,3.2.2,3.3.1,3.3.2,4.2.1 .1,4.2.2.1,4.2.2.2,4.3.5.1, 4.3.5.2,6.4.1.3,6.4.3.4,6.4.3.5,6.5.4,7.1.1,7.1.5, 7.1.6,7.1.12,7.3.6.2,7.4.1.4,7.4.3.5, 8.1.2 ~ 8.1.9,8.2.2,8.3.1,8.3.6,9.1.3,10.1.1,10.1.2,10. 3.5,10.3.8 mandatory, others are recommended Nature.

This standard replaces GB 12141-1989 "freight ropeway safety norms", GB/T 15388.1-1994 "Double Circulating freight planes Empty cableway design specifications "and GB/T 15388.2-1994" singlet circulating aerial ropeway design specifications. " this standard and GB 12141-1989, GB/T 15388.1-1994, GB/T 15388.2-1994 compared to the main changes are as follows.

--- Type Selection increase the cableway, ropeway design, equipment development, the basic principles of equipment factory (see 3.1.1,3.1.2);

--- Increased use of load cable clamp blocks and anchor manner prescribed anchoring cylinder mode (see 4.3.5.1,4.3.5.2);

--- Increase the wire rope maintenance, inspection, scrap, partial replacement, etc. (see 4.4, 4.5);

--- Increasing the basic requirements of truck design (see 5.1.3);

--- Increase the use of passenger ropeway tramway in the spring to hold the cable technical

content (see 5.2.2.1);

--- Increased circulating cableway and ropeway reciprocating line selection requirements (see 6.2.2,6.2.3);

--- Increasing the basic provisions of the circuit design (see 6.3.1 ~ 6.3.5,6.3.7);

--- Increased traction cable guide device requirements (see 6.4.2);

--- Increased Torr (pressure) cable wheel design requirements (see 6.4.3);

--- Modified stent design requirements (this version 6.5.4, GB/T 15388.1-1994 Version 10.2);

--- Base stent design requirements were modified (this version 6.5.6, GB/T 15388.1-1994 Version 10.4);

--- Increased stent anchor, lifting frame, repair platform design requirements (see 6.5.7,6.5.8);

--- Increasing the station house design safety requirements (see 7.1.1,7.1.5,7.1.6,7.1.11,7.1.12);

--- Increasing the drive station, automatic corner station, multi-segment driven circulating cableway intermediate drive station, carrying cable tension in the zone Location between station requirements (see 7.2.4 - 7.2.7);

--- Increasing the loading station and unloading station silo effective volume requirements (see 7.3.3);

--- Of friction drive slip safety content has been modified (Excerpts 7.4.1.8, GB/T 15388.1-1994 Version 6.2.1);

--- For the content of the brake and a motor drive unit has been modified (Excerpts 7.4.1.10,7.4.1.11, GB/T 15388.1-1994 Edition 6.2.2,6.2.3);

--- Increased requirements for safety and equipment levels associated tensioning device (see 7.4.2.1,7.4.2.2,7.4.2.4);

--- Increased disengaged with the hanging knot, designed content acceleration and deceleration devices means oblique saddles and other equipment (see 7.4.5 - 7.4.7);

--- Added cableway power supply, signaling, control prescribed manner, shield and other aspects of the safety function (see 8.1);

--- Electrical drag and increase control of safety requirements (see 8.2);

--- Increased electrical protection and security requirements (see 8.3.3 - 8.3.7);

- Increasing the provision of electrical equipment operating and display color selection (see 8.4.8);
- Increases mine aspect cableway safety requirements (see 8.5.2 - 8.5.4);
- Change the setting conditions for line protection facilities (edition 9.1, GB/T 15388.1-1994 Version 9);
- Increased operational cableway basic requirements (see 10.1.2);
- Are required to increase the content of cableway operational positions and personal responsibility (see 10.2);
- Cableway increased daily, monthly, yearly inspections and regular and unscheduled inspection requirements (see 10.3.2 - 10.3.5);
- Increased the fixed grip monocable circulating ropeway cable periodically displaced provisions (see 10.3.9);
- Increased its skyline were channeling position requirements (see 10.3.10).

This standard by the national ropeway, amusement and recreational facilities and Standardization Technical Committee centralized.

This standard was drafted. Nonferrous Metallurgy Design and Research Institute in Kunming, China Nerin Engineering Co., Ltd., Changsha Nonferrous Metallurgy Design and Research Hospital, Ningxia Hengli Steel Wire Rope Co., Ltd. Tai'an City Wing ropeway engineering.

1 Scope

This standard specifies the basic safety requirements for cargo ropeway design, manufacture, testing, use and management aspects.

This standard applies to circulating aerial cableway and ropeway reciprocating freight.

This standard does not apply to forestry cableway skidding, simple lifts and goods passenger lifts in other sectors as well as portable lifts temporary erection.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 8918 important uses rope (GB 8918-2006, ISO 3154. 1988, Strandedwireropesformine

hoisting-Technical delivery requirements, MOD) GB/T 9075 cableway wire rope inspection and scrap specification GB/T 20118 General Purpose Wire Rope (GB/T 20118-2006, ISO/DIS2408.2002, Steel wire ropes general purposes-Minimum requirements, MOD) GB 50007 Code for design of building foundation GB 50009 building structural load specifications GB 50010 Design of Concrete Structures Design of steel structures GB 50017 GB 50127 ropeway engineering technical specifications GB 50191 Code for seismic design of structures YB/T 5295 Sealing rope

3.1 General provisions

3.1.1

tramway divided into. one-line circulating tramway, double circulating tramway, singlet Reciprocating Cargo, bilinear and other types of cargo cableway, ropeway choice of type should be based on construction conditions, technical conditions, after a comprehensive technical and economic comparison OK.

3.1.2

tramway design, equipment development should be technologically advanced, economical and reliable principle, when the device is manufactured according to relevant standards into Line inspection, the establishment of technical files and issue a certificate does not meet the design requirements of equipment, the factory is strictly prohibited.

3.1.3

Select cableway lines and sites, taking into account local climatic conditions, geographical conditions, environmental requirements, traffic conditions and funicular Factors across the building facilities.

3.1.4

corner station or device is not set cableway, its horizontal projection of the centerline of the line should be a straight line; corner with a corner station or device Horizontal projection of the line between the center lines of the cableway, the adjacent station house or devices should also be a straight line.

3.1.5 Work System

3.1.5.1

cableway system of work should be consistent with convergence of the enterprise system work the same.

3.1.5.2

On weekdays should comply with the relevant industries, but non-continuous duty ropeway not less than 290d; continuous duty ropeway inappropriate Greater than 330d.