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

GB/T 7679.3-2023

Mining machinery terminology - Part 3: Winding equipment

矿山机械术语 第3部分：提升设备

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting: This document is Part 3 of GB/T 7679 "Mining Machinery Terminology": GB/T 7679 has released the following parts:

---Part 1: Mining equipment;

---Part 2: Loading equipment;

---Part 3: Lifting equipment;

---Part 4: Mining transportation equipment;

---Part 5: Crushing and grinding equipment;

---Part 6: Mining screening equipment;

---Part 7: Washing equipment;

---Part 8: Roasting equipment: This document replaces GB/T 7679:3-2005 "Mining Machinery Terminology Part 3: Lifting Equipment" and is consistent with GB/T 7679:3-2005 In addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) "Permanent magnet motor built-in single rope winding mine hoist and mining hoisting winch" (see 3:3:1:4), "Mine hoisting auxiliary "Elevator" (see 3:3:1:5) terms and definitions;
- b) Added the term and definition of "disc brake mining hoisting winch" (see 3:3:6);
- c) "Speed limiting cam plate" (see 2:3:6:5:5 of the:2005 version), "micro drag device" (see 2:3:6:8 of the:2005 version), "elasticity "Spring-based coaxial reducer" (see 2:3:6:9 of the:2005 edition) terms and definitions;
- d) Added the terms and definitions of "proportional relief valve" (see 3:3:9:2:5) and "servo valve" (see 3:3:9:2:6);

e) Added "signal" (see 3:3:9:12:1) and "middle section (horizontal) indication signal" (see 3:3:9:12:2), "Promotion category signal" (see 3:3:9:12:3), "Maintenance signal" (see 3:3:9:12:4), "Work execution signal" (see 3:3:9:12:5), "accident signal" (see 3:3:9:12:6), "standby signal" (see 3:3:9:12:7) terms and definitions;

1 Scope

GB/T 7679.3-2023 is Part 3 of the Chinese mining machinery vocabulary and covers winding equipment - the hoists that move men and coal up and down a shaft. It is the machine on which everything else in a deep mine depends, and its vocabulary is unusually specific because the hoists come in families that share almost nothing mechanically: drum hoists and friction Koepe hoists, with disc, block or belt braking, in hydraulic explosion-proof and standard forms. The standard defines the terms: the classification by drum diameter and by main structural type, the common technical terms, and then the structural terminology of winding mine hoists and hoisting winches, of friction mine hoists, of hydraulic explosion-proof hoists and of the disc, block and belt braked machines, together with the terms for the shared components. It took effect on 1 July 2024.

This document defines terms and definitions for mining lifting equipment: This document applies to the design, scientific research, manufacturing, use, teaching, management, publishing, academic exchanges and international trade of mining lifting equipment: field:

2 Normative reference documents

This document has no normative references:

3 Terms and definitions

1 Classification 3:1:

1 Classification by drum diameter and use 3:1:1:1 mine hoist minehoist The drum diameter is 2m and above: The rotation of the drum drives the lifting container connected to the wire rope to lift or lower people or objects in the mine: Material electromechanical equipment: 3:1:1:

2 Mining winch minewinder The drum diameter is less than 2m (excluding 2m): The drum rotation drives the lifting container or auxiliary equipment connected to the wire rope in the mine and tunnel: Or mechanical and electrical equipment for lifting or lowering people or materials and performing operations in the stope: 3:1:1:

3 Hoisting winch hoistingwinder A mining winch used to lift or lower people or materials in a mine: 3:1:1:4 auxiliary winch auxiliarywinch Mining winches are used to dispatch vehicles, rake ore rocks, recover pillars, open and close dampers and other auxiliary operations in underground tunnels and stopes:

Note: There are mainly types such as dispatching, raking, sinking, returning columns, opening and closing dampers, swimming and transportation: 3:1:

2 Classification according to main structural types 3:1:2:

1 Classification according to working mode of wire rope 3:1:2:1:

1 Winding One end of the wire rope is fixed and wound on the drum, and the other end goes around the sky wheel to suspend and lift the container: The rotation of the drum is used to lift the container: Raising or lowering hoist or lifting winch: