

ICS 73.100.40
CCS D 93

MT

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

MT/T 779-1998

**Drawing hoist
(English Translation)**

Issued on: November 10, 1998

Implemented on: April 1, 1999

Issued by: State Administration of Work Safety

Table of Contents

Foreword
1 Scope
2 Normative references
3 Classification and naming
4 Requirement
5 Test method
6 Inspection rules
7 Marking, packaging, transportation and storage

Foreword

In order to adapt to the development of the design and production of domestic back column winches, and to facilitate the standardization and serialization of such products, this standard is specially formulated.

This standard is proposed by the Industry Management Department of the State Coal Industry Bureau.

This standard is under the jurisdiction of the Technical Committee for Standardization of Special Equipment for Coal Mines.

This standard was drafted. Huainan Coal Mine Machinery Plant.

1 Scope

This standard specifies a return column winch (hereinafter referred to as the winch) Classification and naming, requirements, test methods, inspection rules, Marking, packaging, shipping Loss and storage.

This standard applies to winches used in environments with coal dust or explosive gases.

2 Reference standards

The following standards contain provisions that, through reference in this standard, constitute provisions of this standard. When this standard was published, the editions shown were all is effective. All standards will be revised, and all parties using this standard should explore the possibility of using the latest versions of the following standards.

3836.1-1983 General requirements for explosion-proof electrical equipment for explosive

environments GB 3836.2-1983 Explosion-proof electrical equipment for explosive environments "d" GB/T 10089-1988 Cylindrical worm and worm gear accuracy GB/T 10095-1988 involute cylindrical gear accuracy GB/T 13306-1991 Signage GB/T 13384-1992 general technical requirements for packaging of mechanical and electrical products "Coal Mine Safety Regulations" formulated by the Ministry of Energy of the People's Republic of China in 1992

3 Classification and naming

3.1

The type of winch is single-cylinder winding type, which adopts worm reducer and open gear transmission.

3.2

Product Model.

winch

Back column

Wire rope average static tension, unit 10 kN Modify the serial number

3.3

The basic parameters of the winch shall meet the requirements in Table 1.

Table 1

Model	JH-5	JH-8	JH-14	JH-20	JH-26	(28)	Wire rope average static tension, kN	50	80
	140	200	260	(280)	Wire rope average rope speed, m/s	≤ 0.2	reel Diameter, mm	260	300
	400	440	520	Capacity of rope, m	80	100	130	170	200
	Wire rope Diameter, mm	15.5	17	21.5	24.5	28	Structure rope	6 x 19	Nominal tensile strength, MPa
	1550								

4.1 Basic requirements

The winch shall meet the requirements of this standard and be manufactured in accordance with the drawings and technical documents approved by the prescribed procedures.

4.2.2 Ambient relative humidity does not exceed 95% (25

4.2.3 The methane, coal dust, hydrogen sulfide, carbon dioxide, etc. in the surrounding air must not exceed the safe content specified in the Coal Mine Safety Regulations;

4.2.4 The duty system is a low-speed heavy-duty discontinuous type.

4.3 Performance

4.3.1

The winch operation should be stable and reliable, and the transmission and bearings should not have abnormal vibration and sound during operation.

4.3.2

When the winch is operating under the rated load, the temperature rise of the reducer lubricant must not exceed 600 °C, the maximum oil temperature should not be greater than 80 °C.

4.3.3

There shall be no oil leakage in the winch reducer.

4.3.4

The winch base has holes for convenient fixed installation, and is compatible with the tension.

4.3.5

The winches of the same type shall be interchangeable.

4.4 Safety, health and environmental protection

4.4.1

The winch shall comply with the relevant regulations in the Coal Mine Safety Regulations.

4.4.2

The rims of the rope baffles at both ends of the winch drum should be 2.5 times the diameter of the outermost wire rope.

4.4.3

The electrical equipment supporting the winch shall comply with GB 3836.1 and GB 3836.2 and must be approved by the National Product Quality Inspection Center.

Explosion-proof inspection, and obtain inspection certificate.

4.4.4

The noise value of the winch in working condition shall not exceed the requirements in Table 2.

Table 2

Model JH-5 JH-8 JH-14 JH-20 JH-26 (28) Noise value, dB (A) 88 90

4.4.5

The drive part of the winch shall be provided with safety protection devices.

4.5 Manufacturing and assembly requirements

4.5.1

The accuracy of the spur gear of the winch shall not be less than GB/T Regulations 9-9-8 of 10095-1988; cylindrical and arcuate worms, worms Wheel accuracy should conform to GB/T 10089-1988 level 8 requirements.

4.5.2

The materials and purchased parts of the winch shall comply with the relevant national and industry standards and have a certificate of conformity. Outsourcing documents should conform to the figure the sample requirements can be used after passing the inspection.

4.5.3

The surface roughness of the rims of the rope stoppers at both ends of the drum shall not be greater than 50.

4.5.4

All parts should be cleaned of burrs and flashes before assembly. The sand in the gearbox should be cleaned, and no iron filings, oxide scale, etc. are allowed.

Materials should be painted with paint resistance after cleaning. The cleanliness of the reducer shall not exceed the requirements in Table 3.

table 3

Model JH-5 JH-8 JH-14 JH-20 JH-26 (28) Cleanliness, mg 600 900 1100 Note.

Check with 80 mesh strainer.

4.5.5

The connection of all fasteners shall be reliable and there shall be no looseness. The screws on the roll must not be higher than the circumference of the roll.

4.6 Appearance quality requirements

4.6.1

The burrs and sharp edges on the surface of each component shall be leveled and polished, and iron filings, rust, welding slag, scale and oil shall be cleaned up.

4.6.2

The winch shall be painted in accordance with the following requirements.

a) Appearance surface is painted with gray magnetic paint;