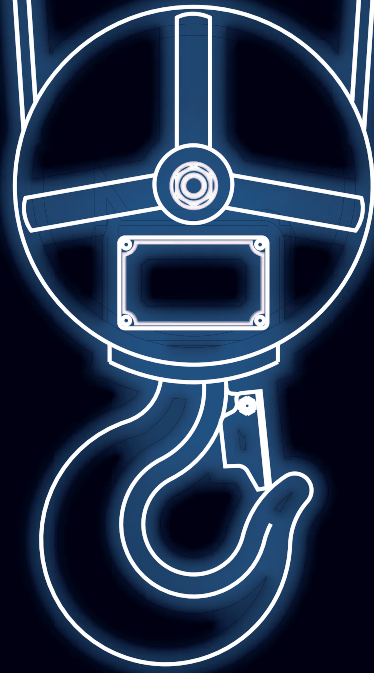




Rope Hoists

HITACHI
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Hitachi Rope Hoist Catalog

Hitachi Rope Hoist

A *series*

V *series*

O *thers*

Various Features Focusing on Safety and Maintainability Makes Hoists More Serviceable and Reliable.

1 Highly Reliable Braking System Unique to Hitachi

- The hoist detects the amount of lining abrasion. The brake is equipped with an automatic adjusting device to apply brake torque in proportion to the amount of lining abrasion.
- The double braking system consists of the main brake and the auxiliary brake unit

2 Hoisting Motor with a Thermal Protector

- The hoisting motor automatically stops when sensing the heat of the motor coil in order to protect the motor from burning damage caused by heat due to overwork.

3 Efficient Maintenance is Possible

- The starting time counter in the control box facilitates checking of the lifetime of consumable parts.
- The gear inspection window in the control box allows visual checks of the condition of the gear teeth surface and lubrication to some degree.
- The punch mark on the hook indicates the reference point for the hook inspection of deformation.
- The inspection of the rope end is easy.

The Hitachi Hoist is composed of a rational system with unitized brake, motor, drum, reduction gear, and auxiliary brake.

- *Disassembly and assembly are easy.
- *Maintainability and serviceability are improved.

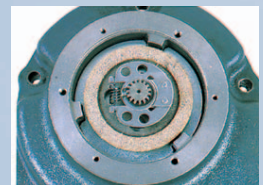


● GEAR INSPECTION WINDOW

Visual checks of the gear case teeth surface and lubrication conditions to some degree will improve inspection accuracy.

● REDUCTION GEAR UNIT

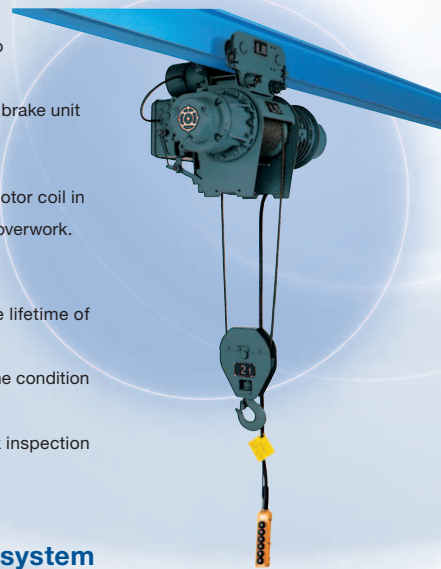
With a grease lubricating system, grease is filled in the gear unit on shipment, eliminating the replenishment prior to use, and prolonging the operation time. The building blocks of the spur gears (helical 1st stage) facilitate the maintenance inspection.



● AUXILIARY BRAKE UNIT

If the braking force of the main brake is reduced, the auxiliary brake unit, a new system with minimal impact, prevents the drop of the load. Together with the automatic brakes, it composes a double braking mechanism.

Auxiliary Brake Unit
Patent No. 1364105 (6 patents)
USA PAT No. 4216848



● Motor unit

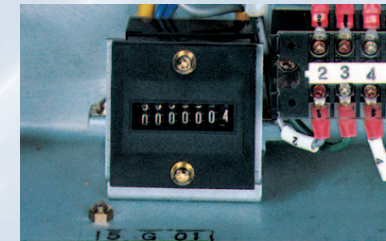
Each hoist is equipped with a motor, which provides optimal starting torque for the hoist. Employing cooling fans and large-capacity ball bearings, the class B insulating motor (class F for 7.5 and 10 tons) can withstand severe operating conditions. The hoisting motor is provided with a thermal protector, which senses the heat of the motor coil and functions to protect the motor from burning damage caused by over-frequent starting times.

Overheat alarm
Patent No. 39-886535

■ CONTROL BOX

● Starting time counter

The cumulative number of starting times is indicated on this counter. Because the total number of times the parts have been operated is known on this counter, it is useful for planning the maintenance and procurement of consumable parts such as brakes, electromagnetic switches, and wire ropes.



● Electromagnetic switch with mechanical interlock

A mechanical interlock is provided for the electromagnetic switch to prevent malfunction.

● Double-limit switch

When the load block has reached the upper limit, the control circuit of the electromagnetic switch is turned off and the operation is stopped. Should a short-circuit occur, or the main circuit continue to operate due to a reverse phase connection, causing the load block to move further upward, the motor main circuit is cut off.

● Clamp type cover

The clamp type control box cover facilitates opening and closing.

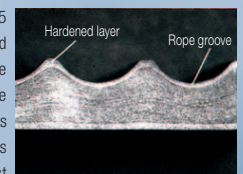
● Brake unit

The brake is equipped with an automatic adjusting device, which automatically adjusts brake torque in proportion to the amount of lining abrasion. Conventional adjustments of the brake will not be required.

Brake Unit with Automatic Adjusting Device
Patent No. 899967 (5 patents)
USA PAT No. 3908802, Germany PAT No. 2354044

■ STEEL DRUM and SHEAVE

The drums (2- and 4-fall models for 2 to 5 tons, except for ultra high lift hoists) and sheaves (except for 7.5 and 10 tons) are made of steel plate, and the grooves are processed by a special press method. This makes the life of the drums and sheaves about three times longer than existing cast metal ones (compared with our products).



Steel plate rolling groove forming method
Patent No. 1072752

