

JIS

JAPANESE INDUSTRIAL STANDARD

Manually operated chain hoists

JIS B 8802—1995

Translated and Published

by

Japanese Standards Association

Printed in Japan

In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

JAPANESE INDUSTRIAL STANDARD

J I S

Manually operated chain hoists

B 8802-1995

1. Scope This Japanese Industrial Standard specifies the manually operated spur geared chain hoists (hereafter, referred to as "chain hoists").

Further, this applies also to the chain hoists capable of traversing by trolley.

Remarks: The standards cited in this Standard are given in the following:

JIS B 0148 Glossary of terms for hoists

JIS B 2803 Hooks

JIS B 8812 Link chain for chain hoists

JIS Z 8601 Preferred numbers

2. Definitions For the purposes of this Standard, the definitions given in JIS B 0148 apply.

3. Types and grades

3.1 Types according to rated loads and grades according to using frequencies The types according to the rated loads and the grades according to the using frequencies of the chain hoists shall be as given in Table 1.

Table 1. Types according to rated loads and grades according to using frequencies

Unit: t

Type	Rated load	Grade
$\frac{1}{2}$ T	0.5	Grade H ⁽¹⁾ Grade L ⁽²⁾
1 T	1	
$1\frac{1}{2}$ T	1.6	
2 T	2	
$2\frac{1}{2}$ T	2.5	
3 T	3.2	
5 T	5	
$7\frac{1}{2}$ T	7.5	
10 T	10	

Table 1. (continued)

Unit: t

Type	Rated load	Grade
15 T	16	Grade H ⁽¹⁾
20 T	20	
25 T	25	
30 T	32	
40 T	40	
50 T	50	

Notes (¹) This means those used in comparatively high frequencies.

(²) This means those used in comparatively low frequencies.

Remarks: The numerical values of the rated loads shall be in accordance with JIS Z 8601.

3.2 Types according to suspension systems The types according to the suspension systems of the chain hoists shall be the following three types.

- (1) Suspended type (see Fig. 1)
- (2) Trolley type(³) (see Fig. 2)
- (3) Trolley combination type(⁴) (see Figs. 3 and 4)

Notes (³) Chain hoist suspended from the trolley using a top hook.

(⁴) Chain hoist combined directly with trolley without using top hook.

3.3 Types according to driving systems of trolley The trolleys shall be classified into the following two types according to the driving systems of the trolley.

- (1) Geared trolley type (see Fig. 3)
- (2) Plane trolley type (see Figs. 2 and 4)

4. Performances

4.1 Strength The chain hoist shall be capable of holding the static tensile force (hereafter, referred to as "tensile force") of four times the force equivalent to the rated load.

4.2 Working The working shall meet the following requirements when suspending the test load given in Table 2 and lifting and lowering in the test working distance of Table 3, two times⁽⁵⁾.

- (1) The workings between hand chain and hand chain wheel, and between load chain and load sheave shall be favorable.
- (2) The working of gear shall be favorable and operated smoothly.
- (3) The brake shall work surely.
- (4) The load chain shall be free from twists and tangles at the time of lifting and lowering.
- (5) Manually operating force shall not vary remarkably during the lifting.

Note ⁽⁵⁾ The number of times is so counted as a cycle of lifting and lowering to be one time.

Table 2. Test load in working test

Unit: t

Type	Test load	Type	Test load
T	0.75	10 T	12.5
1 T	1.5	15 T	20
1 T	2.4	20 T	25
2 T	3	25 T	31.3
2 T	3.8	30 T	40
3 T	4.8	40 T	50
5 T	7.5	50 T	62.5
7 T	9.5		

Table 3. Working distance in working test

Number of falls of load chain ⁽⁶⁾	1	2	3	4	5	6	7	8	9
Working distance cm	50	25	15	13	10	8	8	6	6

Note ⁽⁶⁾ Number of falls of load chain for one set of chain hoist.

4.3 Braking functions The braking functions shall be as follows: Suspend each test load of the first, second and third given in Table 4, respectively, lower it to the length equivalent to one turn or more of the load sheave. The load shall not descend even when it is left as it is for one hour.

Fig. 1. Suspended type
(an example)

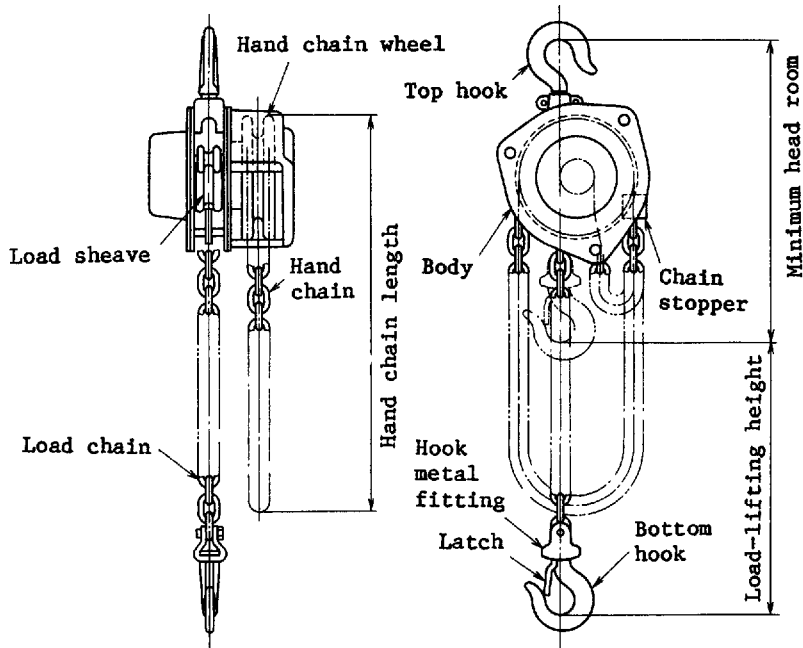


Fig. 2. Trolley type (plane trolley type) (an example)

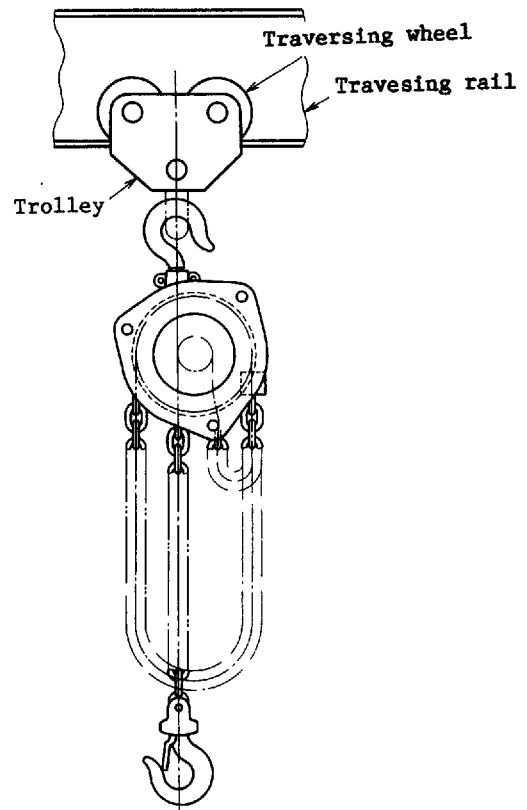


Fig. 3. Trolley combination type (geared trolley type) (an example)

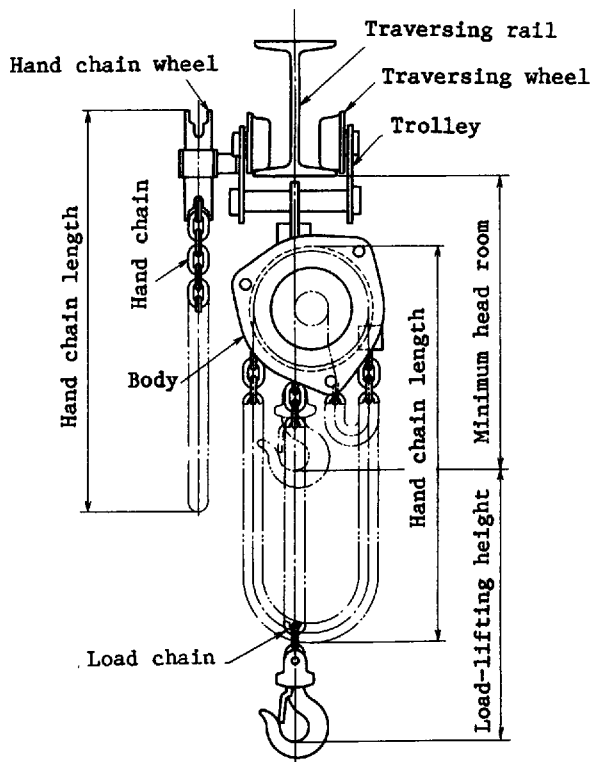


Fig. 4. Trolley combination type (plane trolley type) (an example)

