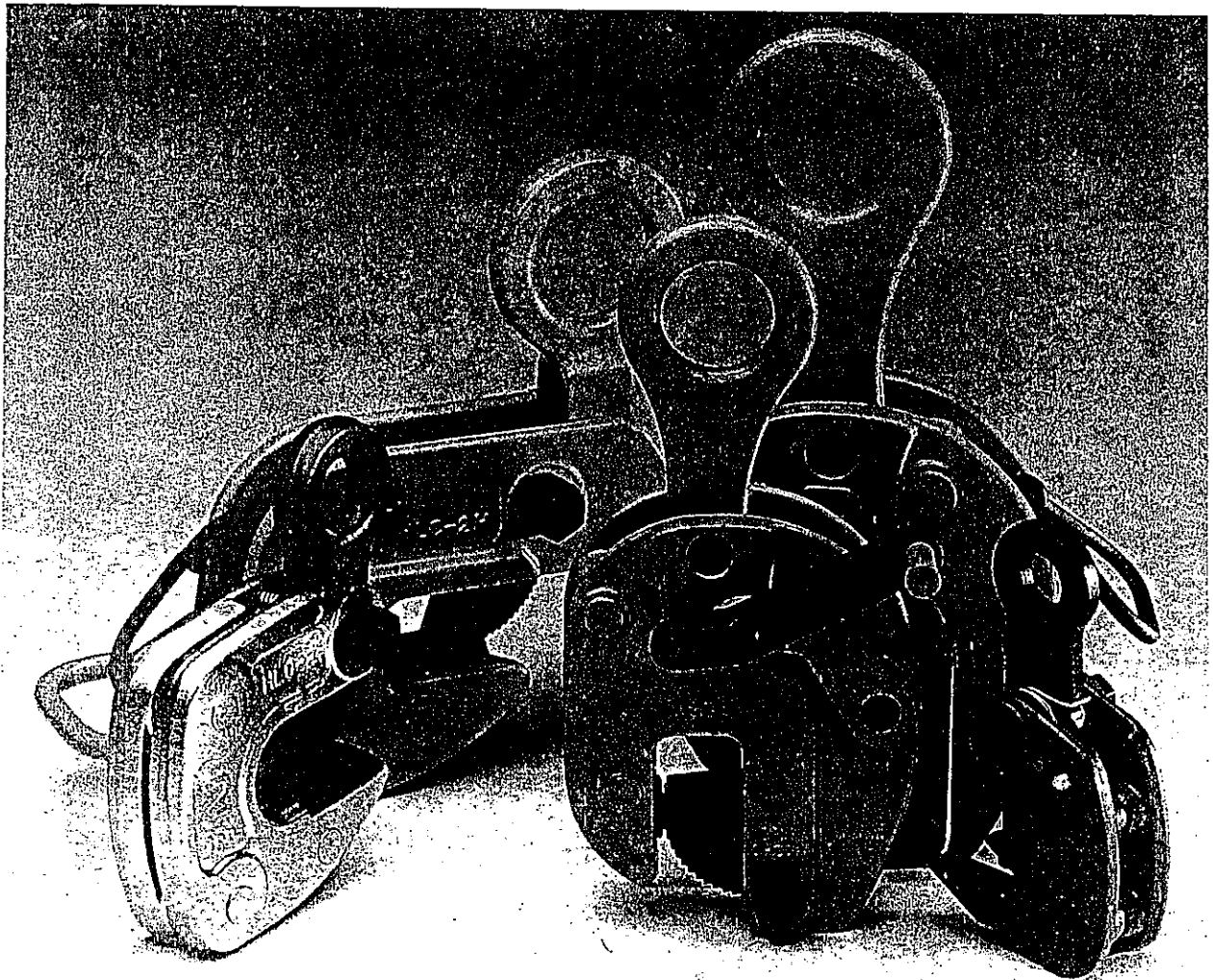


SAFETY LIFTING CLAMPS



INSTRUCTION FOR OPERATION
OF
"SUPER" BRAND
LIFTING CLAMPS

LSB-2H



SUPER TOOL CO., LTD.

OSAKA, JAPAN

On the Proper Handling of Lifting Clamps with Super Tool's Mark

We are thankful to you for your selection and purchase of our Lifting Clamps with Super Tool's mark on them. Our Lifting Clamps with Super Tool's mark on them (hereinafter to be called "Lifting Clamp" or "Clamp") is energy-saving lifting tools designed and developed for transportation of U-shaped reinforced and semi-thick-walled reinforced concrete gutters, U-shaped flumes, and concrete shelf boards.

Proper use of Lifting Clamps demanded

You are kindly asked to operate the Lifting Clamps after careful reading and understanding of this instruction manual for the purpose of enhancing safety and efficiency at work.

Prime efficiency and economy

The sophisticated functions, reasonableness and wide applications of the finely and carefully designed Lifting Clamps ensure prime efficiency and economy.

Special care of safety

We have executed tensile tests with loads three times (or twice) the rated capacity according to the testing standards set forth by the National Institute of Industrial Safety of Ministry of Labor and attached inspection numbers to individual products, thus directing special attention to the aspect of safety.

Attachment of products and completed operation liability insurance

If there occur damages due to the defective qualities of the Lifting Clamps under the normal conditions of use, insurance money under the products and completed operation liability insurance will be paid for them. If the damages are, however, incurred due to intentional misbehavior or mistaken use (non-safety actions), abrasion of the clamp pads, they are not covered. Be careful. Never fail to post before use the application for registration for products and completed operation liability insurance attached with the clamp (return post card) after filling in all the required items of information.

Cautions for safety operation

Please do not fail to carefully read this instruction manual before use of the Lifting Clamps. Mistaken use of the Lifting Clamps (hereinafter to be called "Clamps") may cause troubles such as the dropping of lifted work.

Please never fail to carefully read this manual for proper operation before use.

Education of "crane safety regulations," "operation manual for lifting clamps," "in-house operation standards," etc. is to be given before actual operation not only to business owners who have purchased the Clamps but also to their operators to ensure that actual operators will have acquired enough knowledge of clamps, safety information, and cautions.

As according to the "Lifting clamp safety council," we have divided cautions in general into "Dangers" and "Cautions," which are used in this instruction manual.

◇DANGER: Indicates mistaken handling may cause a potentially hazardous situation which, if not avoided, could result in death or serious injury.

△CAUTION: Indicates mistaken handling may cause a potentially hazardous situation which, if not avoided, could result in medium damage or slight injury, or could result in property damage.

Even though only mentioned in the Cautions, those incidents may lead to a serious disaster.

So, do not fail to pay attention both to dangers and cautions which are of great importance in operating the Clamps properly.

Meanings of Signs

The signs of ◊ and △ indicate that attention is to be given to the marks indicative of dangers and cautions respectively. The signs figuratively show the contents of danger or caution. (The left-side sign indicates a caution to the pinching.)

The sign indicates prohibited actions.

The sign of ○ indicates that an action is enforced or instructed to be executed. Inside the sign or beside it is shown a concrete instruction is described. (The left-side sign requires a lifting at two points.)

* After reading of this manual, please keep it at a convenient place to which any user can gain easy access for reference.

1. About handling in general

Dangers	
<ul style="list-style-type: none"> ● Any person who is not well-informed about instruction manual, tags, and signs of cautions is not eligible for use of the Lifting Clamps. ● Any person who is not legally qualified is never to operate a crane and a lifting clamp. (Clauses 221 and 222, Crane Safety Regulations) ● While lifting or turning the work, do not enter the area where the lifted work threatens to drop off or fall over. (Clauses 28 and 29, Crane Safety Regulations) ● Do not use this lifting clamp for other purposes than lifting work. 	
<ul style="list-style-type: none"> ● Never fail to execute an inspection before use and periodical inspections. (Clauses 217 and 220, Crane Safety Regulations) 	

2. About checkings before operation

Dangers	
<ul style="list-style-type: none"> ● Do not use a clamp other than applicable to the operation method. ● Do not use an abnormal clamp with deformation, cracks, operational trouble, abrasion, etc. ● If the work to lift is under the following conditions, do not apply the clamp. (fragile material, high-hardness material, low-hardness or extremely low-hardness material, and members with the gripping part of no pitchedness and of more than 10 degrees in temperature of itself) 	
<ul style="list-style-type: none"> ● Please check on the clamp main unit the type, basically applicable load, opening diameter, and indication of periodical inspections executed. ● The load of the work to lift shall be within the allowable range of the basically applicable load of the clamp. ● The thickness of the work to lift shall be within the allowable clamping range. 	
Cautions	
<ul style="list-style-type: none"> ● Do not use the clamp with tags and signs of cautions attached to it taken away, and with them kept invisible. ● Do not use the clamp for the work under the following conditions. (The work to lift is more than 150 degrees, is less than minus 20 degrees in temperature, and acidic or alkaline chemicals.) 	
<ul style="list-style-type: none"> ● The sling to be used for the clamp shall be an appropriate one for 	

the lifting operation.	
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3. About the method of use and lifting operation

◇Dangers	
<ul style="list-style-type: none"> ●Do not use the Clamp, lifting at one point. ●Do not use the Clamp in the following way of lifting: (overlapped works, padded work, engrafted lifting, concurrent lifting, and side gripping) ●Do not use the Clamp for pulling out from among steel sheet pilings and not lift pulled-out steel sheets vertically. ●Do not use the Clamp when strong wind threatens to cause any danger. ●Do not use the Clamp for a hydraulic excavator. 	
<ul style="list-style-type: none"> ●Install two or more Clamps in a balanced way to keep the work' balance. 	
<ul style="list-style-type: none"> ●The lifting angle of the Clamp and the dividing angle are to be kept within the allowable angles according to types. ●The work is to be inserted to the innermost end of the Clamp opening. ●When you use the Clamp with a locking system, never fail to use the Clamp with the locking system on. 	
△Cautions	
<ul style="list-style-type: none"> ●If oil, paint, scales, rust, etc. are on the gripping pad, do not use the Clamp. ●Do not drop to the ground or drag along the ground the Clamp. 	

About the operation of a crane

◇Dangers	
<ul style="list-style-type: none"> ●Never lift the work weighing more than the basic working load. ●Do not operate the crane in such a way as to give an impacting load to the work or the Clamp. ●Do not allow a man to stand on the lifted work. Never use the Clamp for the purpose of carrying a man. ●Do not lift the earth itself. ●In the course of lifting the work, do not release the lock of the Clamp. ●Do not let the Clamp removed from the work collide with the work or an adjacent member. ●When you wind up the wire by the crane and notice the load at the lifting ring, stop the operation temporarily for safety checking (depth of the work into the Clamp opening; status of locking). ●Stop the operation of the crane just before the work reaches the ground, check the following items of things: (Slant and falling over of the work; security at the landing site and its surrounding) 	
<ul style="list-style-type: none"> ●When you wind up the wire by the crane and notice the load at the lifting ring, stop the operation temporarily for safety checking (depth of the work into the Clamp opening; status of locking). ●Stop the operation of the crane just before the work reaches the ground, check the following items of things: (Slant and falling over of the work; security at the landing site and its surrounding) 	
△Cautions	
<ul style="list-style-type: none"> ●Do not operate the crane in such a way as to drag the work along the ground. ●Do not step away from the crane (winder, etc.) operating position while keeping the work being lifted with the Clamp. 	
<ul style="list-style-type: none"> ●Hoisting and lowering operation by the crane are to be made slowly and 	

carefully.	
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About maintenance, storage and remodeling

◇Dangers	
<ul style="list-style-type: none"> ●Never execute any remodeling of the Clamp and its accessories. ●Do not apply welding work or heating to the Clamp and its accessories. ●Do not use any other parts than our company's brand-name parts. ●Store at a different place Clamps requiring repairing not to be used mistakenly. 	
<ul style="list-style-type: none"> ●A person with specialized knowledge specified by the business owner is to conduct maintenance and repairing work. ●When you detect abnormality with the Clamp, do not use it and immediately repair or dispose of it. ●Remove, if any, paint or mud sticking to the moving parts of the Clamp, cams, and pads. 	
△Cautions	
<ul style="list-style-type: none"> ●Conduct maintenance and repairing with no work lifted. ●Conduct maintenance and repairing after posting a sign indicating that you're working on the maintenance work. ●Never fail to put lubricating oil on the rotating part of the Clamp (around the pin), guide groove, sliding parts, etc. ●Store Clamps inside a room. 	

Note: Please contact our company's sales agents or sales offices to make advantage of our services in respect with items of inspections and maintenance standards accompanying disassembly and assembly.

BALANCE (Adjustable span type with ring and upper wire rope)

Model : LSB-2H

OPERATING METHOD

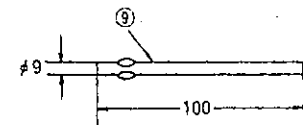
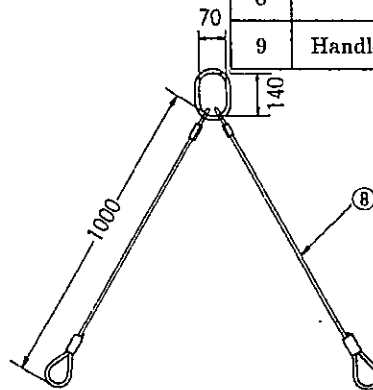
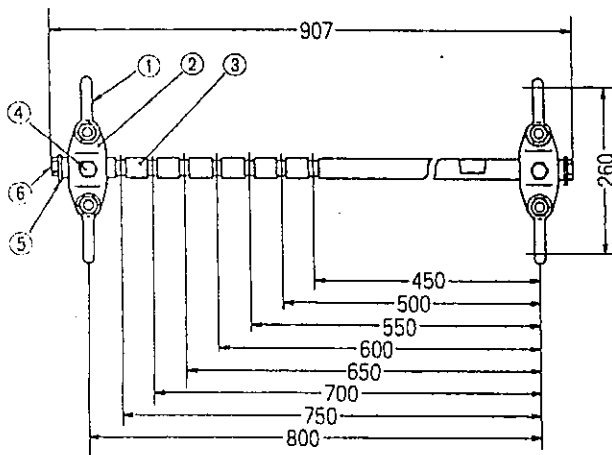
• SPECIFICATIONS AND MAJOR DIMENSIONS

1. SPECIFICATIONS

Item No.	Rated capacity	Span setting	Net weight
LSB-2H	2ton	450,500,550,600,650, 700,750, 800mm	20kg (15kg only for body)

2. PARTS NAME

No.	Parts Name	Qty
1	Shackle	4
2	Connecting link	2
3	Bar	1
4	Lock bolt	4
5	Washer	2
6	Stop bolt	2
8	Upper wire rope	1
9	Handle for installing lock bolt	1



When lifting a long work piece, use this balance for stable lifting and handling.

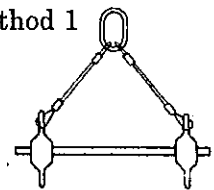
• FEATURES

1. This balance enhances the efficiency of laying operation and maximizes the capacity of lifting clamps.
2. The design of this balance enables for safety operation without incorrect and excessive uses.

• Reference figure of operating method 1

• OPERATING METHOD

1. Connect the wire rope to the balance.
2. Connect the crane hook to the ring of wire rope and lifting clamps to the lower part of shackle of the balance.
3. Loosen the lock bolt and move the connecting link up to the correct groove position according to the length of the lifting work piece. Adjust the length and tighten the lock bolt again with the handle for installing lock bolt.



- WARNINGS

1. Never exceed the rated capacity. Never use this balance out of the span setting.
2. The lifting angle of the upper wire rope must be kept within 90°
3. Please refer, also, to the warnings in the catalog.