

EN

OPERATOR'S MANUAL



STAINLESS STEEL CHAIN HOIST 0.25 TON THROUGH 5 TON

**These Hand Chain Hoists
meet or exceed
the following
standards:**

**CE
AS1418.2
ASME B30.21
ASME B30.16**



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Important Information and Precautions

This manual contains general instructions dealing with the normal installation, operation and maintenance of the products described herein.

This product should not be installed, operated, or maintained by any person who has not read all the contents of these instructions. Failure to read and comply with these instructions, warnings, or limitations noted might result in bodily injury, death, or property damage. Contact the distributor for further explanation if information is not fully understood.

It is the responsibility of the owner/user to install, test, maintain, and operate these products in accordance with OSHA regulations, other federal, state, and local regulations, and ASME standards including:

- ASME B30.21- Manually Operated Chain Hoists
- Other applicable volumes within ASME B30

Only trained and qualified personnel shall operate and maintain this equipment.

Maintain Records

Schedule and maintain records of regular inspection and maintenance of the product in compliance with ASME standards.

Record your hoists Serial Number on the front cover of this manual to allow for easier referencing.

Precautions

Do not use OZ Lifting products in conjunction with other equipment unless the system designer, manufacturer, installer, or user has put the necessary safety devices in place.

Modifications to upgrade, re-rate, or alter these products should only be authorized by the original manufacturer.

Hoists should be used for lifting loads only within their load ratings.

These Chain Hoists meet or exceed the following standards:

CE

AS1418.2

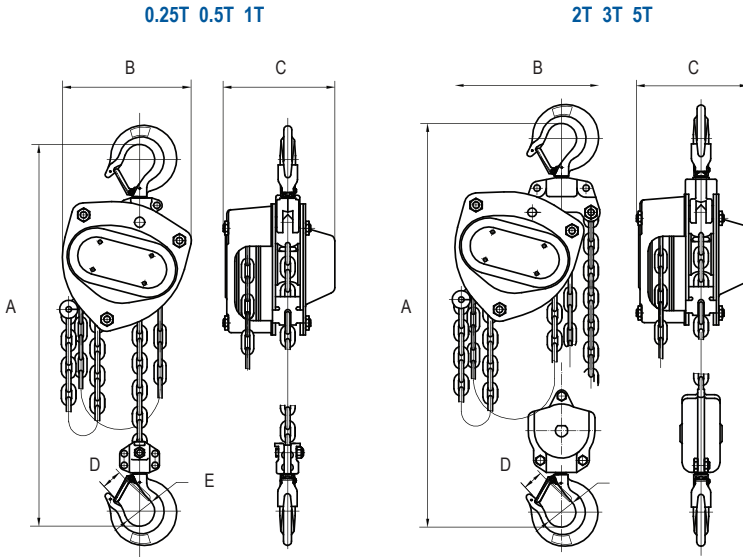
ASME B30.21

ASME B30.16



Technical Information

(0.25, 0.5, 1, 2, 3, 5 tons)



Specification

	OZSS0025-CH	OZSS005-CH	OZSS010-CH	OZSS020-CH	OZSS030-CH	OZSS050-CH	
Capacity (tons)	0.25	0.5	1	2	3	5	
Falls of Chain	1	1	1	2	2	3	
Effort to Lift S.W.L (lbs)	45	67	67	74	74	74	
Loadchain Diameter (mm)	4	7	7	7	9	9	
Dimensional Information (in)	A	9.84	14.8	14.8	16.73	22.24	27.95
	B	4.29	6.77	6.77	7.56	9.06	14.37
	C	4.13	5.94	5.94	5.94	6.81	7.44
Hook-opening, upper & lower	D	1.06	1.02	1.02	1.33	1.53	1.61
	E	1.26	1.57	1.57	1.96	2.16	2.55
Net Weight of Head Only (lbs)	8.82	16.3	16.3	22.9	34.7	66.1	

Hand Chain Hoist Operation

Attaching the Load

1. If there are no twists in the chain proceed on to attach the lower hook to the load.
2. Do not use the chain to wrap around the load.
3. The load should be seated in the bowl of the hook and should not bear against the tip of the hook or latch.
4. The hook latch should be tightly closed against the hook tip
5. Assure that the upper and lower hooks form a straight line and frame is able to swivel.

Lifting the Load

1. Pull chain clockwise.

Lowering the Load

1. Pull chain counterclockwise.

Inspection

In order to maintain quality operation of the product, a regular inspection schedule should be set up by each operator. All inspections should be reported and maintained in a dated record log. These records should be available to all personnel involved with the product, and should be made available to OZ Lifting Products when a warranty issue is in question.

Definitions

The following definitions are from the ANSI/ASME B03.21 and will be used in the inspections procedure that follows.

Designated Person- a person who is selected or assigned as being competent to perform specific duties to which they are assigned.

Qualified Person- a person that by possession of a recognized degree or certificate of professional standing, or through extensive knowledge, training, and experience, has successfully demonstrated they are able to resolve problems relating to the subject matter and work.

Normal Service- service that involves operation with randomly distributed loads within the rated load limit, or uniform loads less than 65% of rated load for not more than 15% of the time.

Heavy Service- service that involves operation within the rated load limit that exceeds normal service.

Severe Service- service that involves normal or heavy service with abnormal operating conditions.

Inspection Classifications

Initial inspection should be done on all new, modified, and repaired products in accordance with Table 1. Thereafter, items to be inspected are indicated in Table 1 by F (Frequent) or P (Periodic).

For hoists exposed to more severe environmental conditions inspections should be more frequent.

Frequent Inspections

The operator or other designated person performs frequent inspections by doing a visual examination and by listening for unusual sounds while product is operating. Frequent inspections are usually performed on the following schedule:

Normal Service- Monthly inspections

Heavy Service- Weekly to monthly inspections

Severe Service- Daily or before each use to weekly inspections

Periodic Inspections

A designated person performs periodic inspections, which are more detailed inspections, by doing visual examinations of external and internal conditions. These inspections are done on the following schedule:

Normal Service- Yearly inspection

Heavy Service- Semi-annually inspections

Severe Service- Quarterly inspections

Exception

Brakes require more than audible and visual inspection. Check daily by operating the product with and without a load, stopping at various positions to ensure safe operation.

Dimensions of Brake Disc for Chain Block:

	Outer Dia.	Inner Dia.	Thickness	Thickness for replacement
.25t	35 mm	22 mm	2 mm	1.7 mm
.5t	60 mm	30.5 mm	1.7 mm	1.4 mm
1t	60 mm	30.5 mm	1.7 mm	1.4 mm
2t	60 mm	30.5 mm	1.7 mm	1.4 mm
3t	68 mm	35.5 mm	1.7 mm	1.4 mm
5t	68 mm	35.5 mm	1.7 mm	1.4 mm

TABLE 1 - INSPECTION CHART

In chart, **F** indicates Frequent Inspection, **P** indicates Periodic Inspection

LOCATION		CHECK FOR	F	P
Braking mechanism		Slipping under load	•	
		Hard to release	•	
Brake parts:	Brake Discs	Glazing		•
		Oil contamination		•
	Pawl: Ratchet	Excessive wear		•
	Pawl: Spring	Corrosion: stretch		•
Hook		Chemical damage	•	
		Operation	•	
		Deformation	•	
		Cracks (dye penetrant, magnetic particle, or other suitable detection method)		•
Hook retaining members Not tight or secure (Pins, Bolts, Nuts)		Not tight, secure or damaged		•
Hook Latch		Damaged; does not close	•	
Suspension Members (Sheaves, Hand-wheels, Chain attachments, Suspension bolts or pins)		Excessive wear		•
		Cracks	•	•
Gears		Distortion		•
		Broken or worn teeth		•
		Cracks		•
		Inadequate lubrication		•
Load Block: Suspension housing		Distortion	•	•
		Crack	•	•
Trolley: Supporting structure		Possible inability to continue supporting loads or damaged		•
Bolts, Nuts, Rivets		Not tight or secure		•
WARNING Labels		Removed or illegible	•	
Hoist Lever		Bent, cracked	•	
Proper operation		Unusual sounds	•	

IMPORTANT

Any deficiency found on this inspection chart should be corrected before the hoist is put back into service.

Note: Following disassembly of the hoist during inspection, a load test is required by ANSI/ASME B30.21 and should be done before the product is put back into operation.

Hook Inspection

Warnings:

The OZ hoist with overload protection when used in accordance with safe operating procedures should greatly reduce the chance of a hook opening up.

1. Any OZ hook that requires replacement because of excessive bends, twists, or throat opening indicates abuse or overloading of the product. Therefore, other load-supporting components of the product should be inspected for possible damage when such conditions are found.
2. Never repair hooks by welding or reshaping. Heat applied to the hook will alter the original heat treatment of the hook material and reduce the strength of the hook.
3. Never weld handles or other attachments to the hook.

Hook Inspection Procedure

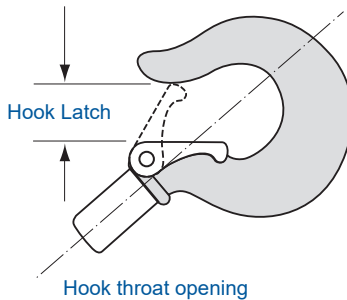
Where applicable, inspect hooks and measure throat opening at least once a month. Between regular inspections daily inspections of the hooks should be done. Check for the following:

- Deformation, distortion, twisting, damage
- Missing, bent, or damaged hook latches
- Chemical damage, deformation, or cracks
- Greater than a 10-degree twist from the plane of unbent hook
- Excessive opening or seat wear

Hook Latch

Hook latch inspection should include the following:

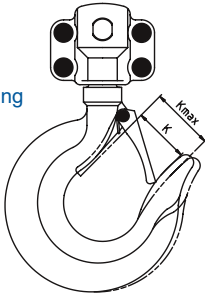
Replace hooks that are opened to an extent that the latch does not engage the tip.



Latch should have enough spring pressure to keep it tight against the tip of the hook and allow it to spring back to the tip when released.

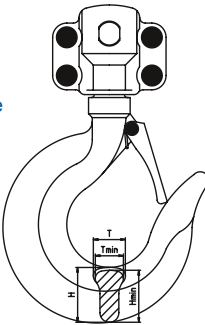
Use the following chart to determine when the hook must be replaced. Replacement of the hook is necessary if any of the previous page problems are found or the maximum dimensions on the charts that follow are reached.

Hook throat opening



Size	Standard K (mm)	Max K (mm)
0.25 ton	25	27
0.5 ton	27	29.5
1 ton	29	32
2 ton	38	42
3 ton	39	43
5 ton	56	63

Hook lower profile



Size	Standard H (mm)	Min H (mm)	Standard T (mm)	Min T (mm)
.25 ton	20.5	20	15	14.5
.5 ton	20.5	20	15	14.5
1 ton	27.5	26.5	21.5	20.5
2 ton	35	34	25	24
3 ton	41	39	30	28
5 ton	52	50	36	34

Chain Inspection

Inspect chain before each use. Between regular inspections visually check on a daily basis the following:

- Clean chain before inspection using a non-caustic/non-acid solvent
- Lubrication of the chain may be necessary if it binds up or is noisy
- Chain feeds smoothly into and from the hoist and does not emit cracking noise when hoisting a load
- Visually examine link by link for any nicks, gouges, weld splatter, corrosion, or distorted links pay close attention to chain's contact points, which may show excessive wear.
- Test hoist with load and observe operation of chain over load sheaves.



Maintenance

Lubrication

Proper lubrication with machine oil is necessary to increase the life of the chain. Lubrication should be done based on usage and on a regular basis. It may be necessary on a weekly basis for heavy use or monthly if used less often.

- Clean the chain with an acid free cleaning solution to remove debris.
- Apply oil to chain focusing on bearing surfaces such as interlink areas.
- Do not apply oil to braking surfaces.
- Gears and shafts run on roller bearings and do not require lubrication.

BRAKE & TOP HOOK INSPECTION & REPLACEMENT

Disassembly

1. Remove the cover using a standard socket wrench.
2. Remove the hand chain from the wheel.
3. Use needle nose-pliers to straighten the cotter pin.
4. Remove nut.
5. Remove secondary cover (protects the brake).
6. Remove brake
7. To disassemble the top hook remove the pin and the hook comes off.

Assembly

1. Chain should be well seated in the wheel.
2. Put the hand wheel back on.
3. Should hear a click, indicating the brake is set.
4. Hand tighten the nut.
5. Push the cotter pin back in.
6. Use pliers to flare the ears so it stays in place.
7. Reattach the hand chain; making sure the weld is out.
8. Attach cover and tighten locknuts.

Storage of Hoist

Store the hoist in a clean dry area.

Maintain proper lubrication of the hoist while it is being stored.

If the hoist is malfunctioning clearly mark it before placing it in storage.

Outdoor Hoist Usage

Store hoist indoors when not in use.

Frequently inspect the hoist for signs of corrosion due to environmental factors.



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