

NITCHI

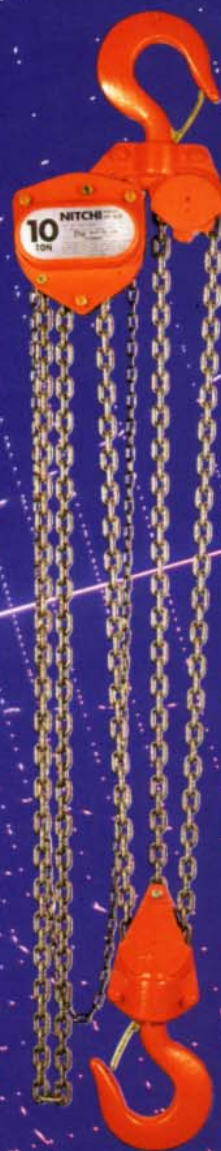
CHAIN HOIST H-50A

available from 0.5 ton through 50 ton capacities



ISO 9001
ISO 14001
JQA-2734
JQA-EM1902

No.9



NITCHI CO., LTD.
OSAKA, JAPAN

new ultra-lightweight compact hoist that beats the heavies.....

NITCHI MODEL H-50A HAND-OPERATED

COMPACT AND LIGHTWEIGHT

H-50A is made in our ultra-modern production facilities incorporating high quality materials, up-to-minute engineering and manufacturing techniques. The robust steel construction gives H-50A its lightweight and compact size for the advantages to present convenient portability, easy installation and simple relocation. The exceptional short headroom, when the bottom hook is in its highest position, permits the highest possible lift where the last inch of lift must be obtained.

DURABILITY

When durability is taken into consideration, H-50A is in a class of its own ahead of the other chain hoists. Tests have proven that the durability of H-50A clearly exceeds the former H-40 which was a legend in its own era for its durability and ruggedness.

PULLING EFFORT

Extra attention was given to the pulling efforts and they are lowered remarkably to obtain higher productivity with as small as possible effort from operators. The pulling efforts to release the brake exceptionally light with H-50A.

TWO INDEPENDENT PAWLS

Failure of a pawl is very rare, but if one pawl should fail, the second backup pawl on H-50A will hold a load securely and prevent the dangerous free falling of the load.

DOUBLE-COVER PROTECTION

Chain hoists are known to be used in all types of harsh environments. The brake system of H-50A is guarded by both the handwheel cover and ratchet cover for higher protection against rain, dust and other foreign matters.

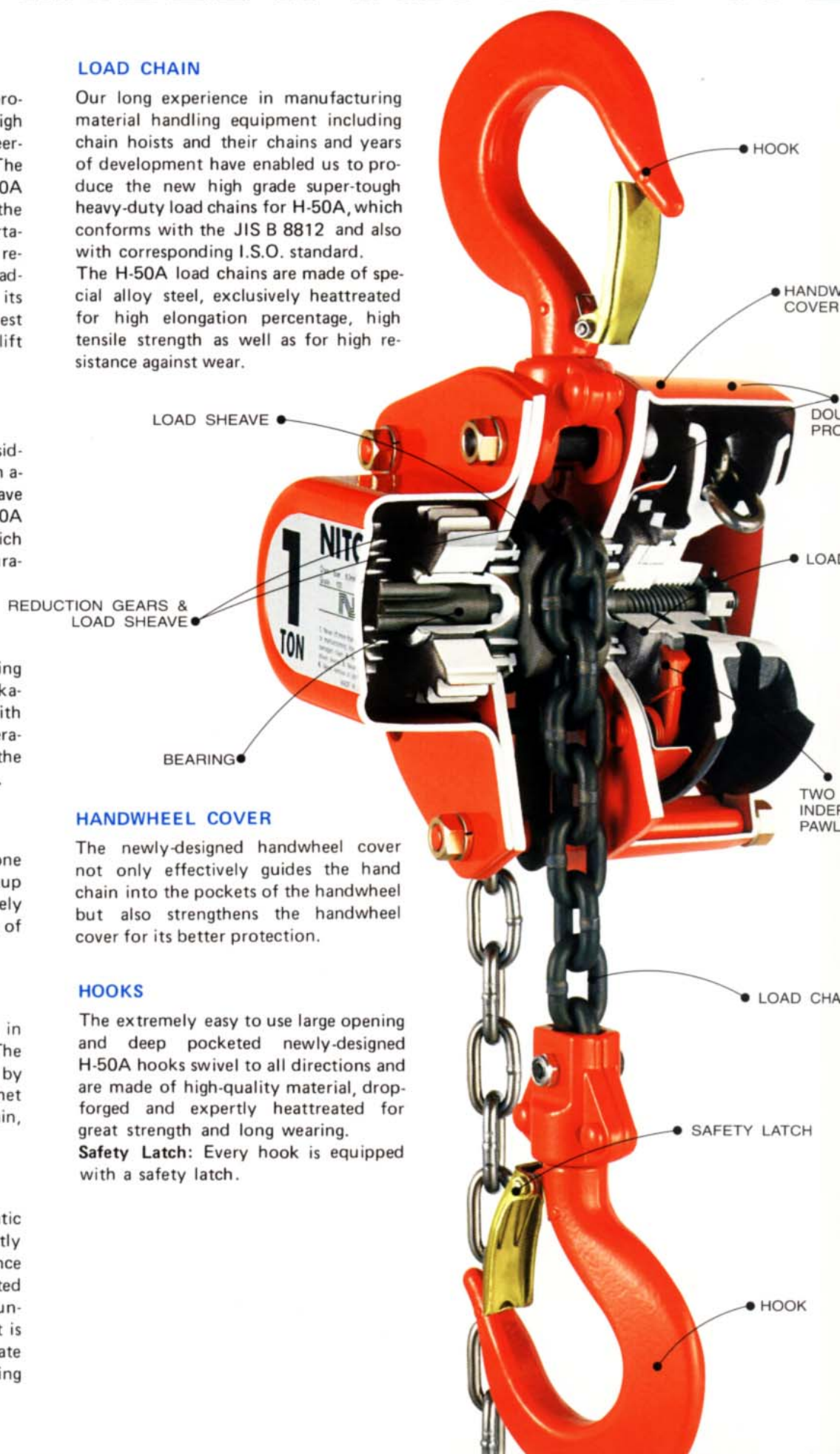
LOAD BRAKE

The precision ratchet type automatic mechanical brake engages instantly and provides uniform performance with rated loads or less than the rated capacity. When lowering, a load is under perfect control at all times, that is exceptionally valuable where accurate movement is demanded for spotting loads.

LOAD CHAIN

Our long experience in manufacturing material handling equipment including chain hoists and their chains and years of development have enabled us to produce the new high grade super-tough heavy-duty load chains for H-50A, which conforms with the JIS B 8812 and also with corresponding I.S.O. standard.

The H-50A load chains are made of special alloy steel, exclusively heattreated for high elongation percentage, high tensile strength as well as for high resistance against wear.



HANDWHEEL COVER

The newly-designed handwheel cover not only effectively guides the hand chain into the pockets of the handwheel but also strengthens the handwheel cover for its better protection.

HOOKS

The extremely easy to use large opening and deep pocketed newly-designed H-50A hooks swivel to all directions and are made of high-quality material, drop-forged and expertly heattreated for great strength and long wearing.

Safety Latch: Every hook is equipped with a safety latch.

RATED CHAIN HOIST (triple spur geared)

BEARING

The latest technology in bearing efficiency for chain hoists has led us to the combined use of high-grade precision needle bearings, long wearing special hardened steel bushings and ultra-modern carbon bushings.

Bearing supported pinion shaft: This is a totally new concept in bearing efficiency for chain hoists. The carbon bushings used on 0.5 ton and 1 ton and the precision needle bearing on 1.6 ton and large H-50A provide high and stable bearing efficiencies for super-smooth operation and eliminate the possibility of pinion shaft seizures.

REDUCTION GEARS

The H-50A reduction gears are made of chromium molybdenum steel and the load sheave is made of spheroidal graphite cast iron and are precision machined and exclusively heat-treated. These materials and special heat-treating processes have already proven themselves to be remarkably tough and wear resistant on the reduction gears.

SAFETY LINK A specially processed safety link joins the endless hand chain and wards off sudden excessive power that may be imposed on the hand chain when H-50A is operated under overload and other unexpected causes.

SAFETY FACTOR: The high safety factors of H-50A assure maximum safety to men and materials. H-50A 0.5 ton to 50 ton are made with over 4 times safety.

CONVERTIBILITY: Besides conventional hook-suspension system, all H-50A are designed to join them directly with our trolleys of the equivalent capacity. Direct-coupling is very effective for obtaining the lowest possible headroom and for improving stability with H-50A when used together with our trolleys.

INTERCHANGEABILITY: All the components are precisely manufactured by our skilled craftsmen under severe quality control and are replaceable for easy and economical servicing.

USEFUL MANUAL: A comprehensive handbook giving detailed instructions and information on installation, operation and maintenance is supplied with each H-50A, with inspection certificate.

OPTIONAL EQUIPMENT

Listed below are some optional equipment available with H-50A at moderate extra costs. Please contact your nearest authorized NITCHI products distributor or agent for further information:

NN Chains: This is a series of standard chains with a special non-electrolytic nickel plating that rigidly bonds itself into the material of the chains. This special plating called NN chains does not effect the original features of the chains and will not peel off like conventional surface plated chains. The NN chains have outstanding characteristics in resisting rust and corrosion caused by rain, seawater, steam and chemicals.

Chain Collecting Bucket: The chain collecting bucket can be easily connected to H-50A without modifications.

Eye (Ring) Type Hooks: The ring type top and bottom hooks are ideal for all types of special applications.

STANDARD SPECIFICATIONS (H-50A)

Capacity (ton)	Lift (m)	Pulling Efforts (N)	Drawn-up head room G (mm)	Net weight (≒kg)	Test Load (t)	Major Dimension (approx.) (mm)							
						A	B	C	D	E	F ₁	F ₂	Π (m)
0.5	2.5	206	260	8	0.75	82	56	100	90	48	24	36	2.5
1		235	300	10.5	1.5	84	66	110	100	59	29	43	2.5
1.6		289	345	15	2.4	91	77	120	115	69	33	48	2.5
2	3.0	329	380	21	3.0	99	88	125	132	82	35	52	3.0
3.2		373	435	30.5	4.8	106	94	140	160	94	40	60	3.0
5		353	575	35	7.5	91	77	200	205	94	47	68	3.1
10	3.5	422	790	76	12.5	106	94	260	283	122	68	95	3.8
16		461	1,040	155	20.0	106	94	350	340	212	75	105	4.0
20		441×2	1,080	250	25.0	153	153	345	390	390	79	125	4.0
25		431×2	1,100	≒320	31.3	183	183	345	390	390	79	125	4.0
32		461×2	1,470	≒440	40.0	213	213	435	400	400	95	135	4.3
40		451×2	1,700	≒650	50.0	255	255	530	400	400	105	165	4.6
50		461×2	1,820	≒850	62.5	328	328	590	400	400	115	180	4.6

NOTES:

a - Only the hoists with the standard lifts are covered in the above table. Extra long lifts available on specific orders.

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1 ton



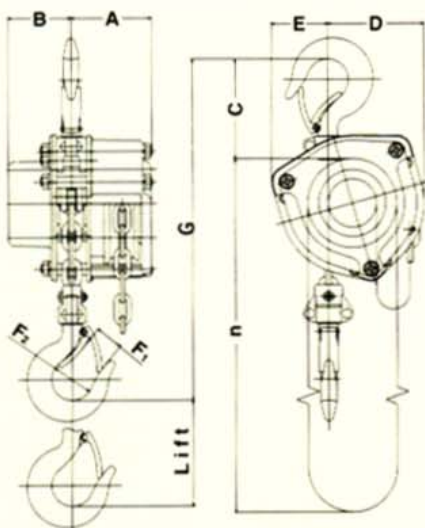
2 ton



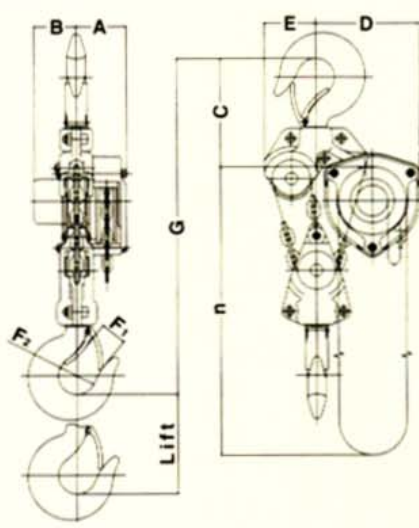
10 ton



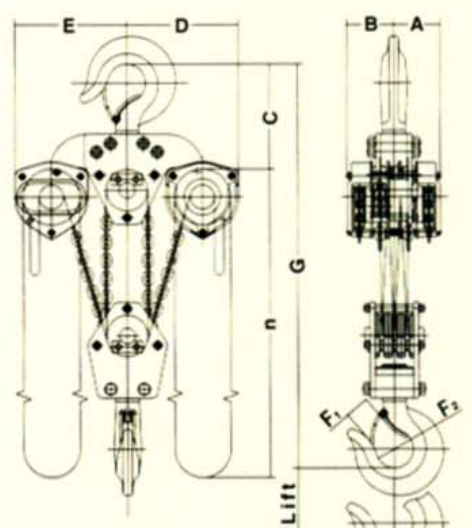
20 ton



0.5 - 3.2 ton Diagrammatic only



5 - 16 ton Diagrammatic only



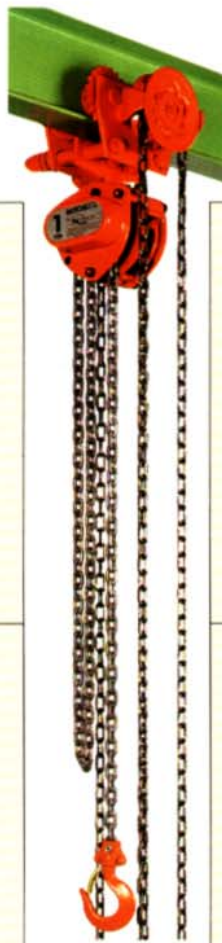
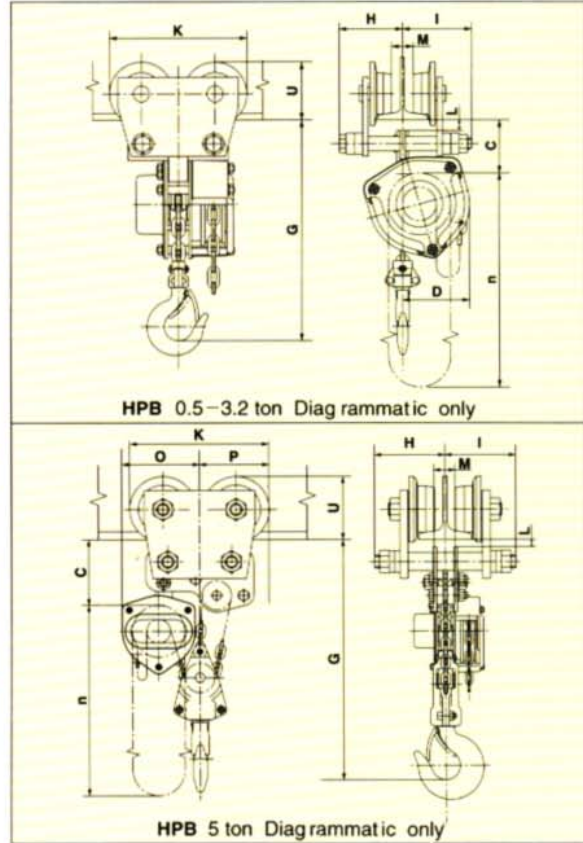
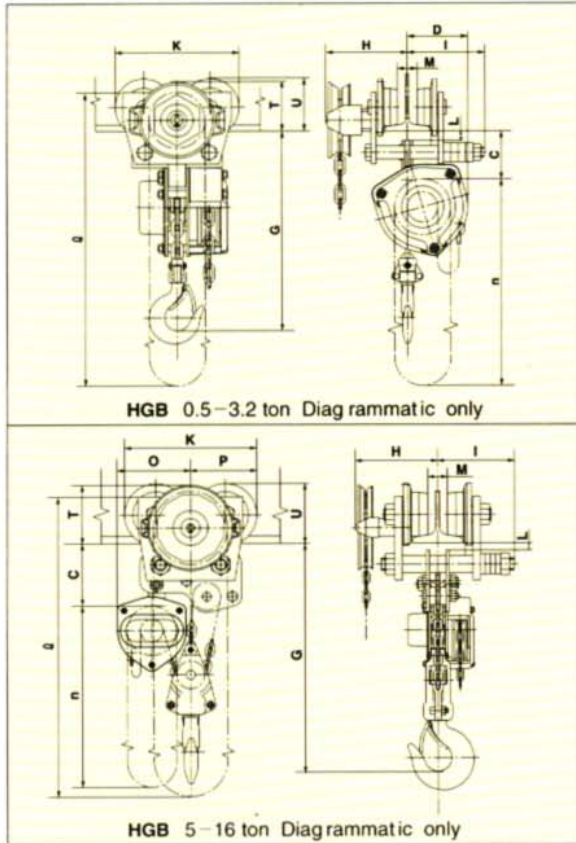
20 ton Diagrammatic or more

CHAIN HOIST WITH TROLLEY (HGB & HPB)

The ingenious direct-coupling connection makes the headroom remarkably short and always faces the chain hoist in the same direction for easy operation of the hand chain. Precision anti-friction ball bearings that are located in the unique profile trolley wheels, provide smooth and easy transportation of the loads on either flat or taper beams.

SMALL CURVE RADIDS :

The NITCHI Trolleys are usable on beams with small curve radiuses. This outstanding features makes it possible to install trolley systems for the efficient transportation of loads in areas of limited space.



STANDARD SPECIFICATIONS

Cap. (ton)	Lift (m)	Drawn-up head room G (mm)	Standard I-Beam (mm) a × b × t ₁	Minimum curve radius (mm)	Test Load (t)	HGB & HPB											HGB					HPB		
						Major Dimension(approx.) (mm)											Net weight (^{kg})	H (mm)	I (mm)	T (mm)	ℓ (m)	Net weight (^{kg})	H (mm)	I (mm)
						C	D	K	L	M	U	Π	O	P	C	H								
0.5	2.5	245	125 × 75 × 5.5 180 × 100 × 6 250 × 125 × 7.5	800	0.75	90	90	195	23-t ₂	b-43	72+t ₂	2.5	-	-	17	b/2 +73	168- b/2	96+t ₂	2.5	14	93	105		
1		285	150 × 75 × 5.5 180 × 100 × 6 250 × 125 × 7.5	1,000	1.5	60	100	206	25-t ₂	b-42	78+t ₂	2.5	-	-	22	b/2 +98	168- b/2	72+t ₂	2.5	18	95	103		
1.6		340	150 × 75 × 5.5 180 × 100 × 6 250 × 125 × 7.5	1,100	2.4	60	115	221	29-t ₂	b-41	85+t ₂	2.5	-	-	29	b/2 +98	174- b/2	72+t ₂	2.5	25	112	112		
2	3.0	375	200 × 100 × 7 250 × 125 × 7.5 300 × 150 × 8	1,200	3.0	110	132	263	31-t ₂	b-63	102+t ₂	3.0	-	-	43	b/2 +108	203- b/2	115+t ₂	3.0	37	128	128		
3.2		415	200 × 100 × 7 250 × 125 × 10 300 × 150 × 11.5	1,500	4.8	110	160	306	28-t ₂	b-63	126+t ₂	3.0	-	-	61	b/2 +108	208- b/2	119+t ₂	3.0	55	133	133		
5		555	250 × 125 × 10 300 × 150 × 11.5 450 × 175 × 11	1,500	7.5	125	-	329	37-t ₂	b-76	132+t ₂	3.1	200	165	80	b/2 +141	253- b/2	128+t ₂	3.3	73	166	166		
10	3.5	710	400 × 150 × 12.5 450 × 175 × 13	3,000	12.5	185	-	420	45-t ₂	b-84	175+t ₂	3.8	278	210	175	b/2 +189	b/2 +104	130+t ₂	4.1	-	-	-		
16		940	450 × 175 × 13	5,000	20.0	210	-	760	24	60	292+t ₂	4.0	340	380	430	358	203	298+t ₂	4.3	-	-	-		

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