HAND WINCHES

2 Ton & 5 Ton All Steel **Hand Winches**

- All steel construction with replaceable bronze bearings
- Fast two-speed gear change 4:1 for slack cable take-up only
- One piece handle with adjustable pinion
- · Easy free-spooling
- · Spring loaded holding dog with release handle
- · Handle operated adjustable holding brake

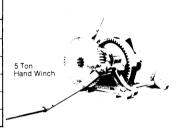
Optional Features:

- Safety Brake Handle load automatically held when cranking stops
- Marine Models have cable clamp, zinc metallized brake drum. rust-resistant paint
- Divided Drum
- Reverse Direction Holding Dogs
- 28" Diameter Hand Wheels
- · Gear Covers
- #3 or #4 Morse Taper Pinions for fast take-up by power of slack line



Specifications:

		(TONS)	GEAR		D	RUM CAP	ACITY (F	T)		SHIPPING
Part No.	MODEL	1ST LAYER	RATIO	1/4	5/16	3/8	7/16	1/2	5%	WEIGHT (LBS)
077-5030	K-5006	2	4:1-22:1	278	180	133	97	66		67
077-5021	K-5010	2	4:1-22:1	464	300	222	161	111		77
077-5227	K-5008	5	4:1-24:1			358	284	220	123	124
077-5423	K-5012	5	4:1-24:1			537	425	330	185	140
077-5628	K-5016	5	4:1-24:1			716	566	440	247	155
077-5824	K-5024	5	4:1-24:1			1075	850	660	371	180



30 Ton All Steel **Hand Winches**

- All steel construction with replaceable bronze bearings
- Three speed gear change
- One piece handle with adjustable pinion
- Two spring loaded holding dogs with release
- · Adjustable hand operated holding brake

Optional Features:

- 10" and 14" Drum Diameters
- BW Models are free standing, no side clearance required
- 28" diameter hand wheels
- Wide Drums for extra cable capacity
- Gear Covers
- Safety Brake Handle Load held automatically whenever cranking is stopped • #3 or #4 Morse Taper Pinions for fast take-up
- by power of slack line



BW14 30 Ton Hand Winch

R10 30 Ton Hand Winch

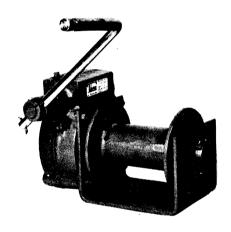
Specifications:

Part No.			CAPACITY (TONS) 1ST LAYER			D	RUM C	APACI	TIES (F	T)	SHIPPING
077-5067	MODEL	WINCHING	TIGHT- ENING	(DOG) (TONS)	GEAR RATIOS	1/2	5/8	3/4	1	11/8	(LBS)
077-5263	K-5110	15	20	30	4:1, 19:1, 109:1	1120	675	520	290		654
077-5469	K-5114	10	15	30	4:1, 19:1, 109:1	842	510	360	218	142	687
077-5664	K-5210	15	20	30	4:1, 19:1, 109:1	1120	675	520	290		760
077-5860	K-5214	10	15	30	4:1, 19:1, 109:1	842	510	360	218	142	793



WORM GEAR WINCHES FOR HAND OPERATION

FULLY ENCLOSED GEARS IN OIL BATH FOR LONG LIFE AND SMOOTH OPERATION



FEATURES

WORM GEAR WINCHES—seem less efficient because they are slow and harder to turn, but since the worm gearing does retard movement these winches if outfitted with the *Disc Brake are generally recommended over the spur gear type for loads which need lifting. DRUM and GEARCASE—of all worm gear hand-operated models are of cast iron, the FRAME is of steel WORM GEAR—is machine cut of cast iron, the WORM is of steel.

HANDLE—adjusts easily to turn either on a small radius for light loads, or on a larger radius for heavier loads. HANDLE SLEEVE—is free turning to provide an easy

grip. WORM GEARS—may be self-locking when new but can lose this feature with wear-in, vibration, shock loads, climate changes, handle movement to start the load, or other conditions. Consequently, loads should be additionally held by locking the handle against turning or locking the load with pins or chain, or a *Disc Brake.

MODEL NUMBER		462	472	482
LOAD RATING	lbs	1000	2000	4000
(2 layers)	kg	450	900	1800
LOAD RATING	lbs	400	1000	2000
(full drum)	kg	180	450	900
111	1/8	125	315	1235
DRUM Zi	3/16	55	140	550
CAPACITY W	1/4		75	300
DRUM CAPACITY (feet) SIZE	5/16		50	200
AE	3/8			140
O	1/2			80
GEAR RATIO		15:1	24:1	26:1
‡PULL REQUIRED LIFT 1000 lbs (A	TO pprox.)	34	15	31
Part No.		077- 5003	077- 5209	077- 5405



*DISC BRAKE

Replaces the regular handle, to provide load-holding ability in the play out of the cable. The Model B441 Disc Brake handle can be adopted onto Worm Gear Hand Winch Models 472 and 482.

A winch not equipped with the Disc Brake should never be used for lifting, lowering, or dragging loads on an incline.

SPUR GEAR WINCHES

New X-tra features provide more value

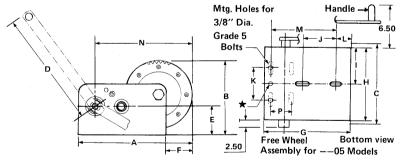
- Gear covers protect gearing from outside interference.
- Bronze bushings oil impregnated, meeting SAE 841 and ASTM B438 specifications, lower friction for longer life and easier cranking.
- Two independent ratchet systems for additional load security.
- · New cable clamp is simpler to install.
- · Larger handle roller grips better in your hand.
- Double-Disc automatic brake designed for positive load control, both raising and lowering, without having to disengage the ratchet pawl.
- Industry Standards, like ASAE S361.1T, require these features:
 - · Low handle efforts at rated loads.
 - · Automatic brake load control.
 - Large drum diameters (10X recommended cable size) protect steel cable from damage.

K-4048



SPECIFICATIONS

	Max. Line	Rated Pull		lax. Cable Size D Galvanized Aircra			Mechanical Da	ta	Max.	
Model	1st Layer	Full Drum	Diameter	Test Strength	Drum Storage	Gear Ratio	Handle Length	Drum Hub. Dia.	Mech. Adv.	Free Wheel
K-4049	4000 lbs. 1800 kg.	2300 lbs. 1000 kg.	3/8" 9 mm	14,400 lbs. 6,500 kg.	75 ft. 23 m	20.9:1	14'' 360 mm	3 3/4" 95 mm	142:1	Yes
K-4050 K-4051	2500 lbs. 1100 kg.	1500 lbs. 680 kg.	5/16'' 8 mm	9,800 lbs. 4,445 kg.	75 ft. 23 m	15.8:1	11" 280 mm	3 1/8" 79 mm	101:1	No Yes
K-4048 K-4053	1500 lbs. 700 kg.	700 lbs. 320 kg.	1/4′′ 6 mm	7,000 lbs. 3,175 kg.	88 ft. 27 m	5.1:1	11" 280 mm	2 1/2'' 63 mm	41:1	No Yes
K-4055	1000 lbs. 450 kg.	600 lbs. 270 kg.	7/32'' 5.5 mm	5,600 lbs. 2,540 kg.	60 ft. 18 m	4.1:1	10'' 250 mm	2 1/4'' 57 mm	33:1	No



WORK WINCH CAPACITY RATINGS

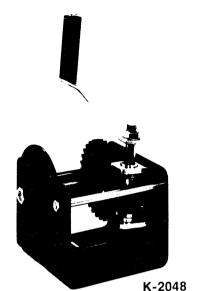
The maximum rated line pull is the greatest pulling force that should be exerted by the winch. As cable wrap layers build up on the drum, the mechanical advantage of the winch is reduced, so the rating must be reduced as well. The full drum ratings are the maximum pull developed without exceeding 50 lbs. of handle input force. To meet ASAE standard S361.1T, the maximum rated line pull is limited to 20% of cable test strength for the cable being used. For complete details, refer to ASAE Standard S361.1T.

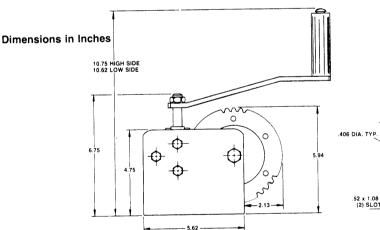
Model	Α	В	С	D	E	F	G	Н	1	J	К	L	М	N	Р
K-4049	12.21	7.68	11.00	14.50	3.09	2.88	9.34	7.50	3.75	2.13	3.12	1.59	6.31	10.50	1.75
K-4050	11.31	7.25	9.40	11.50	2.08	2.69	8.62	7.07	3.54	3.19	3.12	.94	6.46	9.81	_
K-4051	11.31	7.25	11.90	11.50	2.08	2.69	8.62	7.07	3.54	3.19	3.12	.94	6.46	9.81	_
K-4048	8.84	7.13	7.11	11.50	2.43	2.75	6.09	5.17	2.59	-	2.12	1.63	3.88	7.13	_
K-4053	8.77	7.06	8.93	11.50	2.43	2.68	6.09	5.17	2.59	_	2.12	1.63	3.88	7.06	
K-4055	7.62	6.13	6.78	10.63	1.91	2.38	5.25	4.06	2.03	_	2.12	1.19	3.43	5.75	_

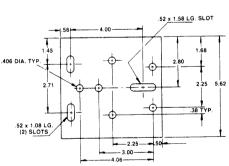
WORM GEAR WINCHES

Six key features mean more value.

- Bronze bushings on the worm gear shaft extend life by reducing friction and wear.
- Rear frame reinforcing bar keeps the frame straight under heavy loads, preventing damage to gearing caused by misalignment.
- Hardened steel worm gear resists wear for longer service life.
- Drum hub of seamless steel tube won't collapse under heavy loads.
- 5) High carbon SAE1050 steel on drum gears lasts longer than soft steel gears.
- 6) Large handle grip is easy to crank.
- Large 1½" drum hub protects steel cable from premature failure.
- Winch mounting bolt holes in the frame base match other winches, making replacement of worn out winches easy.
- · Mounts on ceiling, walls or posts.
- Electric drill or extension handle driving with drive ring models.
- Two drum styles split or full. Split drum allows two lines to be controlled with one winch.
 Simplified cable attachment requires no hardware fastening.







Winch Specifications

MODEL	DESCRIPTION	CAPACITY LBS (kg.)	GEAR RATIO	CABLE S'	TORAGE (ft) 3/16"	DRUM HUB DIAMETER (in.)	DRIVE
K-2048	Regular drum, handle drive	1500	31:1	115	50	1.5	8" Handle
K-2049	Regular drum, ring drive	1500	31:1	115	50	1.5	Drive Ring
K-2050	Split drum, ring drive	1500	31:1	55	25	1.5	Drive Ring
K-2051	Regular drum, handle drive	2000	41:1	235	100	1.5	8" Handle
K-2052	Regular drum, ring drive	2000	41:1	235	100	1.5	Drive Ring
K-2053	Split drum, ring drive	2000	41:1	100	50	1.5	Drive Ring

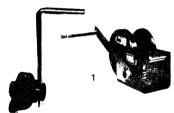
MARINE GRADE WINCHES

Marine spur gear winches are identical in size and rating to the industrial models, but they have superior corrosion resisting features:

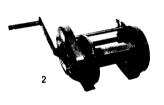
- All marine winches are painted with a primer base coat followed by an enamel finish coat. Excellent resistance to salt spray corrosion.
- Stainless steel fasteners and springs.
- · Oil impregnated bronze bushings and sealed ball bearings.
- marine winches have been tested in accordance with the procedures of ASTM Method B117-73 Salt Fog Test.



MARINE-GENERAL PURPOSE SPUR GEAR HAND WINCHES



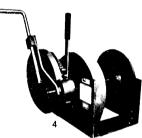
Model M4021 (Shown)-2" Drum Model M4031—3" Drum Disc Brake



Model M4311-3" Drum Model M4411 (Shown)—6" Drum Model M4421—6" Drum



Model M4321 (Shown)-3" Drum



Model M452 Model M492

Complete information on all winches identified as 1, 2, and 3 above is given in Bulletin 40A — that of the two models shown at 4 may be seen in Bulletin 40C. For the Disc Brake, refer to Bulletin 40B.

NOTE: Final responsibility for determining suitability of equipment to any particular use is that of the owner and/or user; thus all applicable codes, regulations, and manuals of material handling should be studied.

SPECIFICATIONS

Shaded figures are more commonly used.

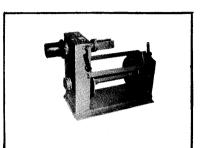
Part No.				RATING FULL Ibs.		1/8	3/16		RUM (CABL 5/16	E SIZE		5/8	3/4		RATIO DOUBLE GEAR	*PULL REQD TO LIFT 1000	DI	DRU MENS			OVERA DIMENSI		MOUNT- ING
																lbs.	ID	OD	W	LENGTH	WIDTH	HEIGHT	BOLT
075-2956	M4021	1000	450	300	135	125	55							2.85		55	1.50	4.56	2.00	5.00	7.25	5.75	3/8
075-2965	M4031	1000	450	300	135	250	110							2.85		55	1.50	4.56	4.00	8.25	8.25	5.75	3/8
075-2974	M4311	2000	900	850	385	235	105	70	45					3.83	14.7	22	2.50	5.44	3.00	8.50	9.75	7.25	3/8
075-2983	M4321	2000	900	850	385	235	105	70	45					3.83	14.7	22	2.50	5.44	3.00	8.50	9.75	7.25	3/8
075-2992	M4411	2000	900	850	385	470	210	140	90					3.83	14.7	22	2.50	5.44	6.00	11.50	9.75	7.25	3/8
075-3009	M4421	2000	900	850	385	470	210	140	90					3.83	14.7	22	2.50	5.44	6.00	11.50	9.75	7.25	3/8
075-3020	M452	4000	1800	2000	900	1220	550	290	200	140	80	50	35	4.42	19.54	4.5	4.00	8.50	6.38	16.00	15.00	10.75	1/2
075-3029	M492	10000	4500	4000	1800	3300	1500	800	540	380	220	145	100	5.00	25.00	5.4	5.00	12.38	7.62	19.00	20.40	14.00	3/4

^{*}Handle pull (lbs) required to lift 1000 lbs on an empty drum using maximum handle length.

Add the suffix "B" to any model to specify the addition of the Disc Brake (example: M4021B).

K-5000 SERIES WINCHES

Single or Double Drum Hydraulic or Mechanical Drive



CONSTRUCTION FEATURES

- * Stainless Steel Brake Bands
- * Anti Friction Bearings
- * Fully Enclosed Oil Bathed Drive System
- * Free Spooling Drum
- * Single or Double Drum Configuration
- * Positive Locking Heavy Duty Clutch
- * Screw Type Tension Brake
- * All Steel Construction
- * Two Standard Drum Sizes
- * Custom Drum Sizes Available (Special Order)

	<u> </u>			Over	all Height	Overa	II Length	Overa	ll Width
DIMEN	SIONS T	14" DR	UM	28-1	NCHES	38-1	NCHES	18-11	NCHES
		19" DF	RUM	28-1	NCHES	43-11	NCHES	18-11	NCHES
	. K-5000 e Specifications	MODEL B 11.5 - 5	MODEL C 14.3 - 5	MODEL D 17.2 - 5	MODEL E 23 5	MODEL F 9.9 - 20	G	Н	MODEL I 19.2 - 20
LINE	BARE DRUM	4650	4650 5000		5600	4800	5500	6400	7100
PULL	MID DRUM	2270 2500		2595	2690	2335	2680	3113	3500
(LBS)	(LBS) FULL DRUM		1650	1700	1800	1600	1775	2100	2500
LINE	BARE DRUM	62	50	45	35	126	105	84	67
SPEED	MID DRUM	125	98	84	65	260	221	174	138
(FT/MIN)	FULL DRUM	188	147	125	95	395	335	264	210
(1 1 / 1 / 1 / 1	AVERAGE	125	98	84	65	260	221	174	138
	IYDRAULIC SYSTEM REQUIREMENTS GPM/PSI		¹⁵ /1600	¹⁵ /1600	¹⁵ /1300	²⁰ /2000	20 _/ 2000	²⁰ / ₁₈₀₀	²⁰ / ₁₆₀₀
WIRE	WIRE DIAM	ETER	3/	16"	1/4"	5/16	" 3	/8"	7/16"
CAPACITY FEET	WIRE CAPACITY	14" DRUM	3300	550	1740/290	1320/2		0/150	660/110
FATHOMS	WIRE CAPACITY	19" DRUM	4500	750	²³⁷⁵ / ₃₉₅	1800/3			⁹⁰⁰ / ₁₅₀

ALSO AVAILABLE UP TO 22,000 LB. LINE PULL. WRITE FOR SPECIFICATIONS



HYDRAULIC WINCHES AND WINCH HEADS



41/2" winch head

3½ WINCH HEAD SHOWN WITH BEARINGED MOUNTING PLATE AND HYDRAULIC MOTOR



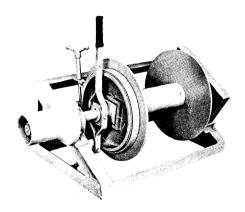
4½" WINCH PERFORMANCE CHART

3½" WINCH PERFORMANCE CHART

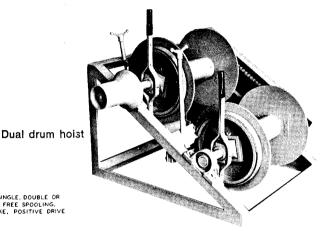
Model B Fathoms/ Min. 525# Line Pull	Model C Fathoms/ Min. 650# Line Pull	Model E Fathoms/ Min. 1100# Line Pull	Model K Fathoms/ Min. 1550# Line Pull	Model P Fathoms/ Min. 2550# Line Pull	Power Pack	Pump RPM	Model A Fathoms/ Min. 400# Line Pull	Model B Fathoms/ Min. 675# Line Pull	Model C Fathoms/ Min. 850# Line Pull	Model E Fathoms/ Min. 1400# Line Pull	Model K Fathoms/ Min. 2000# Line Pull	Model P Fathoms/ Min. 3200# Line Pull
15	12	6	4	2	Р	300	20	11	9	5	3	2
31	24	13	8	5	Р	450	39	24	20	10	7	4
47	36	21	13	8	Р	600	58	37	28	16	- 10	6
62	47	27	18	11	Р	750	76	48	37	21	14	9
78	60	34	23	14	Р	900	94	61	46	27	18	11
95	72	42	28	18	Р	1050	114	74	56	32	22	14
112	82	49	33	21	Р	1200	134	87	64	38	26	16
57	44	25	17	10	В	300	69	44	34	20	13	8
92	70	40	27	17	В	450	110	71	54	31	21	13
126	95	55	37	23	В	600	150	98	74	43	29	18
160	120	69	47	30	В	750	189	124	93	54	37	23
182	144	84	57	36	В	900	228	142	112	65	44	28



HYDRAULIC DRUM HOIST



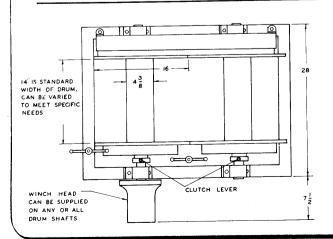
Single drum hoist

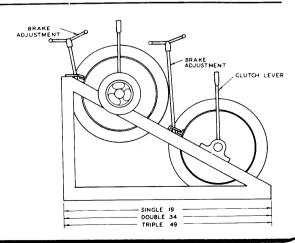


AVAILABLE IN SINGLE, DOUBLE OR TRIPLE DRUM. FREE SPOOLING, FRICTION BRAKE, POSITIVE DRIVE

DRUM HOIST PERFORMANCE CHART

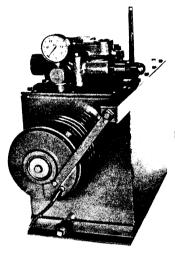
Power Pack	Pump RPM	Model A Fathoms/Min. 600# Line Pull	Model B Fathoms/Min. 1100# Line Pull	Model C Fathoms/Min. 1350# Line Pull	Model E Fathoms/Min. 2200# Line Pull	Model K Fathoms/Min. 3000# Line Pull	Model P Fathoms/Min. 5000# Line Pull
P	300	15	8	7	4	2	1
P	450	29	18	14	8	5	3
P	600	42	27	20	12	8	5
P	750	55	35	27	15	10	6
, P	900	69	44	34	19	13	8
Р	1050	84	54	41	24	16	10
P	1200	98	63	46	28	19	12
В	300	51	32	25	14	9	6
В	450	80	52	39	23	15	10
В	600	109	72	54	31	21	13
В	750	138	90	68	39	27	17
В	900	166	103	82	47	32	20
В	1050	195	128	95	55	38	24
В	1200	220	146	110	62	44	28







POWER PACK



Power pack B with electric clutch

POWER PACK B PERFORMANCE CHART

Pump RPM	Gallons/Min.
300	6.3
450	9.7
600	13.1
750	16.4
900	19.7
1050	23.0
1200	26.3

LENGTH: (w/o electric clutch) - 21" (with electric clutch) - 24 1/8" WIDTH: (of tank) - 11"

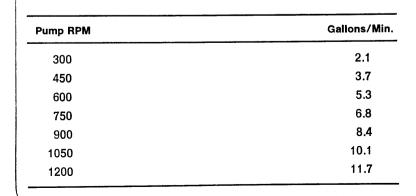
(overall) - 12 3/4" HEIGHT: (of tank) - 14 3/4"

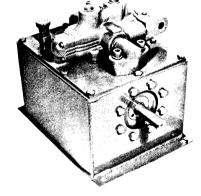
(to top of control

handle) - 22"

Power pack P

POWER PACK P PERFORMANCE CHART





LENGTH: (w/o electric clutch) - 12" (with electric clutch) - 13 1/8"

WIDTH: (of tank) - 8 3/4" (overall) - 9 3/8"

HEIGHT: 10 3/16"



HYDRAULIC HAULER

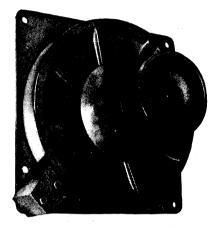
8"

12"

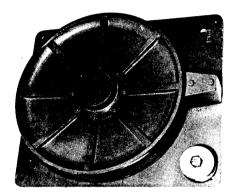
16"



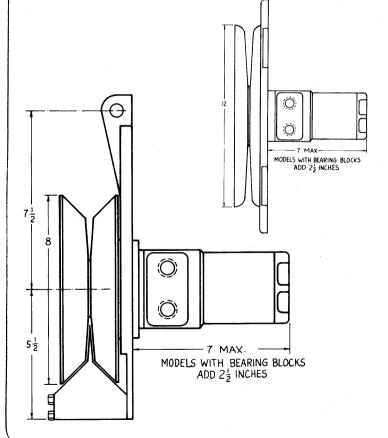
Standard 8" hauler

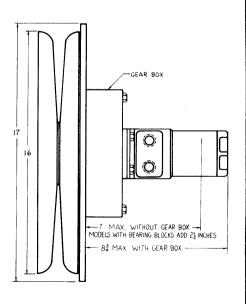


Economy 12" hauler with winch head



16" hauler with roller guide





ELECTRIC WINCHES

Shur-Worm 1500 Lbs. to 3000 Lbs.

Convert to Power
For heavy duty hand or convert to power use.
Same features as hand winches, but special
anti-friction bearings make these models
convertible to intermittent power. (Not
furnished with free spooling.)

Specifications:

	CAPACIT	TY (LBS.)	LINE			D	RUM C	Y	SHIPPING	
MODEL	HAND 1ST LAYER	POWER 2ND LAYER	SPEED FPM	GEAR RATIO	HORSE- POWER	1/8"	3/16"	14"	5/16"	WEIGHT (LBS.)
K-4060	1500	750	10	20:1	3/4	120	60	34		21
K-4061	1500	750	10	20:1	3/4	240	120	67		21¾
K-4062	3000	1500	11	30:1	11/2	560	253	135	96	51



Electric Winches 750 Lbs. to 2000 Lbs.

Worm Gear

Features: Automatic self-locking machine-cut gears, fully enclosed with anti-friction bearings.
Fully reversing motors are 15-minute duty.

Specifications:

MOI	DEL	LINE PULL 2ND LAYER	LINE SPEED 2ND LAYER	DUTY	HORSE	MAX.	DRUM	STOF	AGE	SHIPPING WEIGHT
1/60/115V-230V	3/60/230V-460V	(LBS)	(FPM)	(MIN)	POWER	3/16"	1/4"	5/16"	3%"	(LBS)
K-4063	K-4064	1000	30	15	11/2	253	135	96		117
K-4065	K-4066	1100	20	15	11/2	253	135	96		117
K-4067	K-4068	1500	20	15	11/2	338	200	122	87	111
K-4069	K-4070	2000	20	10	11/2	338	200	122		111
K-4071	:K-4072	750	43	15	11/2	338	200	122	87	105

^{12&}quot; Drums Available

¹EW and EBT Models are belt driven ²DT models are direct driven

ELECTRIC WINCHES

Electric Winches 200 Lbs. to 25,000 Lbs.

Features:

- · Automatic Brake load automatically held when power is off
- · Crane and Hoist Duty Motors Provide full rate capacities. 15 minute duty.
- · Reversing Motors for full remote control

Optional and Custom Features:

- · Watertight Electrical Enclosure
- Upper and Lower Geared Limit Switches
- Grooved Drum
- · Adjustable Torque Limiters
- · Drum Divider Flange and extra Cable Fasteners
- · Load Reversing Drums for movement in two directions



Medium Duty Electric Winches

MC	DDEL	CAPACITY	APPROXIMATE	"A" MODEL SINGLE PHASE	"B" MODEL	HORSE-	D	RUM CAPACI	ΓY	SHIPPING
SINGLE PHASE	THREE PHASE	SINGLE LINE	LINE SPEED (FPM)	60-CYCLE VOLTAGE	THREE PHASE 60-CYCLE VOLTAGE	POWER	LINE SIZE (IN)	2ND LAYER (FT)	FULL DRUM (FT)	WEIGHT (LBS)
200A40	200B40	200	40	115-230	230-460	1/3	1/4	81	288	158
250A20	250B20	250	20	115-230	230-460	1/4	1/4	81	288	158
500A20	500B20	500	20	115-230	230-460	1/2	1/4	81	288	248
700A40	700B40	700	40	115-230	230-460	1	1/4	81	288	248
800A20	800B20	800	20	115-230	230-460	3/4	1/4	81	288	248
*1300A20	*1300B20	1300	20	115-230	230-460	1	5/16	120	605	369
*1400A40	*1400B40	1400	40	115-230	230-460	2	5/16	120	605	369
1600A90	1600B90	1600	90	230	230-460	5	3/8	105	460	540
*2000A20	*2000B20	2000	20	115-230	230-460	11/2	3/8	105	460	374
*2000A40	*2000B40	2000	40	230	230-460	3	3/8	105	460	465
2000A60	2000B60	2500	55	230	230-460	5	3/8	105	460	540
*3000A40	*3000B40	3000	40	230	230-460	5	7/16	119	422	539
	3500B80	3500	80		230-460	10	7/16	125	875	825
*4000A20	*4000A20	4000	20	230	230-460	3	1/2	107	309	524
	*4500B50	4500	50		230-460	71/2	1/2	107	309	682
*6000A20	*6000B20	6000	20	230	230-460	5	5/8	146	422	1010
	*6000B40	6000	40		230-460	71/2**	5/8	146	422	1300
	*10000B20	10000	20		230-460	71/2**	3/4	146	440	2032
	*10000B40	10000	40		230-460	121/2**	1	230	825	2850
	*15000B20	15000	20		230-460	10**	1	230	825	2850
	*25000B25	25000	25		230-460	20**	11/4	240	860	3550

^{*}Chain drive from motor drum. Safety factor 6:1 or more

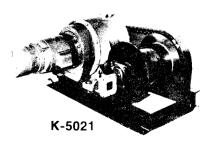
Single Drum Car Pullers Starting Pulls to 62,800 Lbs.

- · Lever operating jaw clutch for disengagement of the drum to pull out rope
- · Adjustable drag brake to control spinning and overrun when taking off rope
- · Motor mounted magnetic brake for holding loads on inclines, etc.
- · Crane and hoist duty motors—full rated capacities and starting pulls

Specifications approx. the same as Electric Winches. Details on request.

Optional Features:

- · Watertight Electrical Enclosure
- Load Reversing Drums for short movements in two directions
- Upper and Lower Geared Limit Switches
- Grooved Drum
- · Adjustable Torque Limiters
- · Drum Divider Flange and extra Cable
- · Watertight Electrical Enclosure



^{*}Units furnished with parallel shaft gear motors.

Capacities rated at specified voltage with line on second layer on drum

AIR WINCHES

Single Drum Air Winches 1000 Lbs. to 20,000 Lbs.

Standard Sizes - Stocked Worldwide



Features and Benefits:

- All steel construction (except DT and OEWJ)*
- · Overload resistant impact resistance
- Piston type radial air motors reversible high torque — high starting power and good load control with throttle
- Heavy duty drum brake holds and controls rated loads
- Easy to use raise throttle to lift depress throttle to lower — use brake and throttle for precise load control
- Logical control position all on one side of drum — operator does not need to reach across drum
- Overload stalls motor does not damage
- Heavy duty construction bearings, shafts, gears, etc. for industrial use
 Uses aluminum for lightweight portability

Optional Features:

- Automatic Brake "winchmatic®" control — "up" for up — "Down" for down-brake sets as throttle spring returns to neutral
- Special drums on request barrel diameters, drum widths and flange diameters can be customized
- Disengaging clutch for free-spooling drum
- Air strainer and filter inline lubricators
- · Removable drum guards
- Grooved drums
- · Many other accessories and options

Specifications:

Standard Single Drum Air Tugger

		RATED C	APACITY	.1		ANSI R	ATING ²			CF PER	SIZE PIPE	нс	SE		PING
MODEL	LINE	PULL	LINE	SPEED	LINE	PULL	LINE	SPEED	PSI	FOOT OF	TAP INLET	SI	ZE	WE!	GHT
	LBS	KG	FPM	MPM	LBS	KG	FPM	MPM			IN	IN	MM	LBS	KG
K-5055	1000	454	60	18	1000	454	60	18	90	2.4	3/4	3/4	19	76	34
K-5056	2000	907	35	11	2500	1134	25	8	90	3.2	3/4	1	25	280	125
K-5057	2000	907	95	28	2500	1134	50	15	90	3.4	, 1	11/4	32	420	190
K-5058	4000	1814	65	20	5000	2268	50	15	90	3.5	1	11/4	32	650	294
K-5059	3000	1361	130	39	3500	1588	130	39	90	3.8	1	11/4	32	690	313
K-5060	4000	1814	120	36	5000	2268	100	30	90	4	1	11/4	32	1230	549
K-5061	5000	2268	120	36	6000	2722	60	18	90	5	11/4	11/2	38	1555	705
K-5062	7000	3175	80	23	10000	4536	50	15	90	9	11/4	11/2	38	2236	1014
K-5063	10000	4536	60	18	12000	5443	50	15	90	9	11/4	11/2	38	2236	1014
K-5064	20000	9072	50	15	20000	9072	50	15	90	17.5	11/2	2	50	5530	2508

	BODE	SIZE							MAXI	NUM DRI	UM ST	ORAGE	3					
MODEL	NOFE	SIZE	3/16	(5 mm)	1/4	(6 mm)	5/16	(8 mm)	3/8	(10 mm)	1/2	(13 mm)	9/16	(14 mm)	5/8	(16 mm)	3/4	(19mm
	IN	MM	FT	м	FT	м	FT	М	FT	М	FT	м	FT	М	FT	м	FT	М
K-5055	1/4	6	811	247	480	146	292	89	208	63		1		<u> </u>				
K-5056	5/16	8	950	292	550	168	338	103	219	67								
K-5057	3/8	10	5740	1749	3070	936	2060	628	1470	448	785	239						
K-5058	1/2	13	5740	1749	3070	936	2060	628	1470	448	785	239						
K-5059	1/2	13	5740	1749	3070	936	2060	628	1470	448	785	239						
K-5060	1/2	13	1		4666	1422	3260	994	2240	683	1312	400	1082	330	828	252		
K-5061	5/8	16							4828	1471	2457	749	2100	640	1765	538	1213	370
K-5062	3/4	19													1500	457	1150	350
K-5063	3/4	19	1												1500	457	1150	350
K-5064	11/8	28																

¹Rated capacity based on 5:1 safety factor for hoisting requirements. Properly adjusted brake will hold this rated capacity. Bearings at K = .65 B10-5000 hours.

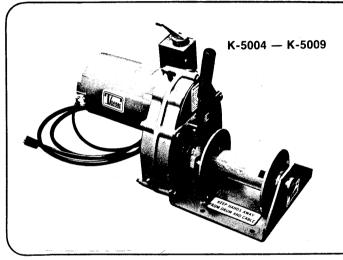
NOTE: Automatic brakes, properly adjusted have same ratings as number 1. Use handle extension for additional manual brake holding power.



ELECTRIC POWER WINCH - Spur Gear Type

NOT FOR LIFTING PEOPLE.
OR THINGS OVER PEOPLE.

Spur gearing offers fast, efficient performance and gives faster line speed per horsepower than do worm-geared winches. The spur gear power winch is an excellent choice for level dragging operations. THESE WINCHES ARE NOT SUITABLE FOR LIFTING, LOWERING, OR PULLING-ON-INCLINE APPLICATIONS BECAUSE THEY DO NOT AUTOMATICALLY HOLD THE LOAD IN PLACE WHEN POWER IS OFF. Use extreme caution in all winching operations. Read the Owner's Manual.

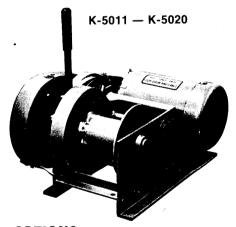


STANDARD FEATURES:

The GEARS are machine-cut and totally enclosed for smooth, quiet, clean operation.

The CLUTCH allows for rapid, free pay-out of the cable.

The MOTOR is totally enclosed, fan-cooled (TEFC), single-phase, 115 or 230V, with momentary-contact drum controller. 8 ft. power cord with grounding plug is furnished on 115V single phase through 1 horsepower. THESE WINCHES ARE NOT FOR LIFTING AND LOWERING because they do not automatically hold the load in place when power is off.



STANDARD FEATURES:

The GEARS are machine-cut steel, guarded for the protection of personnel and equipment. The DRIVE PINION is hardened for extra strength and wear. The DRUM rotates on bronze BEARINGS, the drive shaft is mounted on sealed BALL BEARINGS. The FRAME and DRUM are fabricated of steel. The MOTOR is totally enclosed, fan cooled (TEFC), three-phase, reversible, 230 or 460V. The HAND BRAKE assists in load control but is never to be used to hold loads in suspension. THESE WINCHES ARE NOT FOR LIFTING AND LOWERING because they do not automatically hold the load in place when power is off.

OPTIONS:

- BRAKEMOTOR
- MAGNETIC CONTROL
- CLUTCH: a clutch permits free-wheeling of the drum for long or rapid pay-out of the cable. It is an integral part of the winch and cannot be field-installed. It must be manufactured into the winch, 'C' added to the model number denotes clutch.

K-5011 to K-5020 CAN BE MOUNTED UPSIDE-DOWN.



K-5011 (with clutch as shown)



SPECIFICATIONS

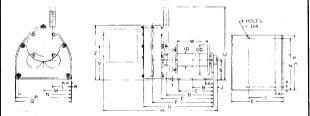
POWER WINCH SERIES

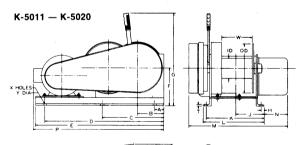
NOT FOR LIFTING PEOPLE OR THINGS OVER PEOPLE

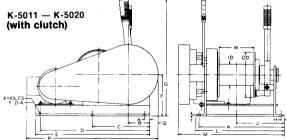
SEF	RIES		K-5	004	K-5	005	K-5	007	K-5	009	K-5	011	K-50	013	K-E	014	K-5	015	K-5	017	K-5	018	K-5	019	K-5	020
HORSE	POWER		1.	/2	3,	/4		_	1-1	1/2	- 2	2	3		- !	5	2	?		3	,		7-1	/2	1	10
			2ND Layer	FULL Drum																						
LOAD		lbs.	600	250	900	370	1200	500	1800	750	1400	800	2000	1200	3500	2000	1400	700	2000	1000	3500	1750	5000	2500	7000	3500
RATING		kg	270	110	400	160	540	225	810	340	635	360	900	540	1580	900	635	310	900	450	1580	790	2260	1100	3100	1580
DRUM		1/8	65	600	65	600	65	600	65	600	100	1235	100	1235	100	1235	170	3500	170	3500	170	3500	170	3500	170	3500
CAPACITY	SE	3/16	45	270	45	270	45	270	45	270	70	550	70	550	70	550	110	1580	110	1580	110	1580	110	1580	110	1580
(FEET)	E S	1/4	35	140	35	140	35	140	35	140	55	300	55	300	55	300	90	850	90	850	90	850	90	850	90	850
SHADED	Z Z	5/16	30	90	30	90	30	. 90	30	90	45	200	45	200	45	200	70	570	70	570	70	570	70	570	70	570
FIGURES	₹≃	3/8	25	70	25	70	25	70	25	70	35	140	35	140	35	140	60	410	60	410	60	410	60	410	60	410
ARE MORE		1/2									30	80	30	80	30	80	50	240	50	240	50	240	50	240	50	240
COMMONLY	USED	5/8															35	150	35	150	35	150	35	150	35	150
LINE SPEED	- FPM		21	40	21	40	21	40	21	40	40	65	40	65	40	65	35	75	35	75	35	75	35	75	35	75
WEIGHT - APP	PROX. 1b	S.	6	0	6	5	8	5	9	5	20)3	22	25	24	10	27	70	29	90	30)5	34	11	38	82

K-5004 — K-5009

DIMENSIONS







DIMENSIONS (Inches)

SERIES	ID.	00	W	Α	В	С	D	Ε	F	G	Н	J	K	L	М	N	Р	Q	R	S	T	U	٧	Z	Y	X
K-5004	2.50	6.00	6.00	1.53	4.06	6.78	9.78	10.28	11.93	13.58	22.88	.80	.62	1.88	5.50	10.38	11.00	11.10	.05	4.00	.25	15.00	6.88	11.00	.42	4 HOLES
K-5011	4.00	8.50	6.50	1.00	4.06	10.69	20.38	21.38	7.81	22.00	.62	5.88	12.88	13.50	16.62		24.38	1.50			.38				.53	6 HOLES
K-5011	4.00	8.50	6.50	1.00	4.06	10.69	20.38	21.38	7.81	22.00	.62	9.00	16.00	16.62	19.75		24.38	1.50			.38				.53	6 HOLES
K-5015	5.00	12.38	7.34	2.25	6.62	16.00	29.75	32.00	9.50	23.12	.75	6.88	14.75	15.50	24.00	5.75	32.38				.38				.78	6 HOLES
K-5015	5.00	12.38	7.34	2.25	6.62	16.00	29.75	32.00	9.50	23.12	.75	10.12	18.00	18.75	27.25	5.75	32.38				.38				.78	6 HOLES
1.4 44 14	3.00				U.UL	20.00	120.70	02.00	5.00	-0.12	., 5			10.70	27.25	5.75	02.00		L		.50	I			.70	U HOLLS

All figures (but "X") designate inches.

ALL DRUM CAPACITIES

shown in the table above are based upon uniform cable winding. Considerable over-lapping often occurs in actual practice, especially with small cables. This will reduce the capacities approximately 25%-30%. The amount of tension applied when spooling the cable will also affect the amount of cable that can be held on the drum.

SAFETY TIP

Depending upon the nature of your work, the load should not exceed 1/3 to 1/5 the breaking strength of new cable. For safety, we recommend the load NEVER exceed 1/3 the breaking strength. Consult a cable supplier for size and type of cable for your application. Cable is not supplied with the winch.

BREAKING STRENGTH OF NEW 7 X 19 GALVANIZED AIRCRAFT CABLE

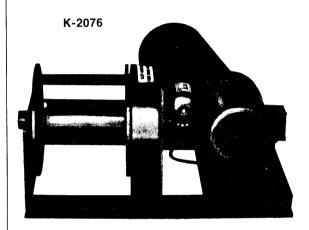
AIRCHAF	- I CABLE
Steel Cable Diameter	Pounds
3/4 "	49,600
5/8 "	35,000
1/2"	22,800
3/8 "	14,400
5/16 "	9,800
1/4 "	7,000
3/16 "	4,200
1/8 "	2.000

Final responsibility for determining suitability of equipment to any particular use is that of the owner and/or user; thus, all applicable codes, regulations, and manuals of material handling should be studied.

ELECTRIC POWER WINCH SPUR/ WORM COMBINATION

NOT FOR LIFTING PEOPLE OR THINGS OVER PEOPLE

OUR LIGHTWEIGHT ANSWER TO YOUR HEAVYWEIGHT PROBLEMS



OPTIONS:

SPECIAL DRUMS — Grooved Drum(s) Center Flange Non-standard Drum Sizes

MOTORS - for special (hazardous, special atmosphere, etc.) locations

MAGNETIC CONTROLS — for remote operation at inside/outside/or special locations

WEATHERPROOF BRAKE

LINE SPEED CHANGES

LIMIT SWITCHES — are available for controlling distance of load movement

EMERGENCY HANDLE — for manual operation in power failure

CLUTCH — manually operated, for rapid or long pay-out of cable. (Never use a clutch-equipped winch for vertical or drag-on-incline operations, since accidental release of the clutch could cause the load to drop.)

STANDARD FEATURES:

VERSATILITY — The smooth-running combination (see options) spur/worm gear reduction offers a range of line speeds and load ratings (from 2500 lbs. on the 2 HP model to 6000 lbs. on the 5 HP model), making the 489A a practical choice for a variety of lifting and dragging applications.

CONSTRUCTION — Frame and Drum are all-steel weldments. All bearings are bronze, with ball thrust bearings on the worm shaft. The gears are machinecut. The spur gears are protected by covers and the worm gears operate in an oil bath, totally enclosed in gear box. All shafts are of cold finish steel. The chain drive from motor to drive shaft is fully enclosed to protect from dirt and damage.

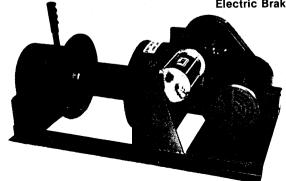
ELECTRICAL — The standard motor is continuous-duty design B, totally enclosed fan cooled (TEFC), reversible, 230 or 460V three phase. Always specify voltage and phase needed when ordering.

BRAKE — The Electric Brake is standard on all models of the 489A series to augment the varying self-locking tendencies of the worm gearing. A brake is necessary for all applications of lifting, lowering, and pulling on an incline. The option of no brake at a cost savings is available for level dragging operations.

THESE PRODUCTS ARE NOT FOR LIFTING PEOPLE, NOR FOR LIFTING THINGS OVER PEOPLE.

USE EXTREME CAUTION IN ALL WINCHING OPERATIONS. READ YOUR OWNER'S MANUAL.

K-2076 WC (with clutch and weatherproof Thern Electric Brake)





SPECIFICATIONS

ELECTRIC POWER WINCH SPUR/WORM GEAR SERIES

THESE PRODUCTS ARE NOT FOR LIFTING PEOPLE, NOR FOR LIFTING THINGS OVER PEOPLE.

WINCH MODEL NUMBER	٦	K-20	073	K-2	.074	K-2	075	K-20	76
HORSEPOWER		NO M	OTOR	2	2	3	3		5
		2ND LAYER	FULL DRUM	2ND LAYER	FULL DRUM	2ND LAYER	FULL DRUM	2ND LAYER	FULL DRUM
LOAD	lbs.			2500	1200	3600	1800	6000	3000
RATING	kg			1100	540	1600	800	2700	1350
DRUM	1/8	210	4450	210	4450	210	4450	210	4450
CAPACITY No	3/16	145	2000	145	2000	145	2000	145	2000
(FEET) ØÜ	1/4	110	1050	110	1050	110	1050	110	1050
SHADED 35	5/16	90	720	90	720	90	720	90	720
FIGURES #	3/8	70	510	70	510	70	510	70	510
ARE MORE O	1/2	60	300	60	300	60	300	60	300
COMMONLY USED	5/8	50	200	50	200	50	200	50	200
LINE SPEED - FP	М			15	30	15	30	15	30
WEIGHT - APPROX.	lbs.	25	8	30	00	32	22	3	28

Final responsibility for determining suitability of equipment to any particular use is that of the owner and/or user; thus, all applicable codes, regulations, and manuals of material handling should be studied.

BREAKING STRENGTH OF NEW 7 X 19 GALVANIZED AIRCRAFT CABLE

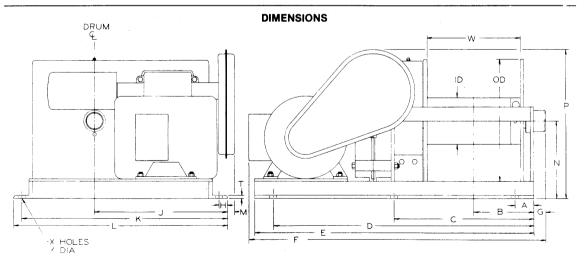
Steel Cable Diameter	Pounds
3/4 "	49,600
5/8 "	35,000
1/2 "	22,800
3/8 "	14,400
5/16"	9,800
1/4 "	7,000
3/16"	4,200
1/8 "	2.000

ALL DRUM CAPACITIES

shown in the table above are based upon uniform cable winding. Considerable overlapping often occurs in actual practice, especially with small cables. This will reduce the capacities approximately 25%-30%. The amount of tension applied when spooling the cable will also affect the capacity.

SAFETY TIP

Depending upon the nature of your work, the load should not exceed 1/3 to 1/5 the breaking strength of new cable. For safety, we recommend the load NEVER exceed 1/3 the breaking strength. Consult a cable supplier for size and type of cable for your application. Cable is not supplied with the winch.



DIMENSIONS (Inches)

ID	OD	W	Α	В	С	D	E	F.	G	н	J	К	L	М	N	Р	т	Y	X
5.00	13.25	10.00	2.00	6.50	15.00	28.00	30.00	31.25	1.25	0.88	14.38	22.12	23.00	0.88	8.50	16.12	0.38	0.81	6 Holes

*VARIES WITH MOTOR

The Heavy Duty Electric Winch-Hoist

Big job lifting in the plant and on the job site requires these heavy duty features:

- Power Source—115 Volt, AC
- Worm Gear System—so the Max AC 36 provides positive load holding and long life
- Dynamic Breaking—means instant stopping no matter what size load
- · Single Line Lift—3000 lbs.
- · Double Line Lift—6000 lbs.
- Cable Tensioner—assures better tracking of cable in both directions
- Compact Construction—offers a degree of portability not usually found in big job hoists



The Heavy Duty Battery Winch-Hoist

Big job lifting in the field from the truck requires these heavy duty features:

- Power Source—12 Volt, DC
- Worm Gear System—so the Max DC 48 provides positive load holding and long life
- Free Wheeling Clutch—allows the operator to get cable to the load quickly
- · Single Line Lift—4000 lbs.
- · Double Line Lift-8000 lbs.
- Cable Tensioner—assures better tracking of cable in both directions
- Compact Construction—offers a degree of portability not usually found in big job hoists



And There's More

In addition to those important features, the winch-hoists of the Max Series have ample cable capacity, accommodating 250 ft. of $\frac{1}{4}$ " cable, 160 ft. of $\frac{5}{16}$ ", and 110 ft. of $\frac{3}{8}$ ".

The Max Series includes fully sealed gear housings with external gear reduction completely enclosed by a gear guard. Highly reliable hardened steel shaft and gears with supported stress points and frictionless bearings provide safety and long efficient, maintenance free service.

Remote Hand Controls

The My-te Max winch-hoists employ remote hand control switching for safe, convenient load spotting in all lifting applications. With forward and reverse control, the operator can keep the load under complete control in both directions.

BARGE WINCHES

Barge Connector and Make-up Winches 10, 15 and 20 Ton Tightening 25, 50 and 75 Ton Holding

Low Profile Series—hand operated — single speed

- Final tightening by ratchet lever
- Quick Release Dog
- Spinner Knob on handwheel for fast takeup of slack line
- Ratchet Dog disengaged when not in use
- Foot Brake to control and prevent over running and birdnesting cable

Standard Series — Hand Operated

- Two speed with neutral for free-spooling
- · All tightening by handwheel
- Higher gear ratios
- · Wedge cable fastening system
- · Fully covered gears
- Spinner Knob on handwheel for fast takeup of slack line
- Foot Brake to control and prevent over running and birdnesting cable

Power Operated Series

- . Control from pilot house or deck
- Stall pulls to 40,000 #
- Improved brake, capacity to 35 tons
- · Electric, air or hydraulic power
- · Crane and hoist duty electric motors
- Drum guard—prevents slack cable from fouling gears







HYDRAULIC WINCHES

Heavy Duty Hydraulic Winches 1/2 Ton to 10 Ton

Standard Features:

- Steel Construction
- Automatic Brake
- Winchmatic® control up for up, down for down/release throttle and brake sets.
- Positive Control

Optional Features:

- Clutch—for free spooling drum
- Foot control valve
- Seperate brake valve
- Hydraulic power pack
- Special cable drums & drum guards

Specifications:

MODEL	CAPACITY	LINE SPEED	PSI A	T RATED LOAD	GPM	RELIEF	DDIIM	STORAGE	DE	RUM SI	70	APPROX.
MODEL	(LBS)	FPM 1ST LAYER	PSI	LAYER	Grim	PSI	LINE SIZE	FT./# LAYERS	BD	FD	W	WEIGHT (LBS)
K-5050	1000	40	650 1150	1st Layer 80% Full Drum	12.5	1450	1/4	17/first 82/fourth 195/seventh	4	8	5	70
K-5051	2000	60	600 1050	1st Layer 80% Full Drum	16	2000	3/8	66/first 402/fifth 984/tenth	65∕s	141/2	16	550
K-5052	8000	50	1200 1900	1st Layer 80% Full Drum	24	2200	3/4	122/first 770/fifth 1150/eighth	12¾	25	24	1700
K-5053	16000	40	1050 1820	1st Layer 80% Full Drum	40	2180	7/8	72/first 876/sixth 1925/eleventh	16	36	251/2	3000
K-5054	20000	30	1100 1930	1st Layer 80% Full Drum	39	2320	1	160/first 1000/fifth 2485/tenth	16	36	40	5200

HYDRAULIC CABLE WINCHES

BEARINGS Worm and worm gear shaft run on Timken tapered roller bearings in an oil enclosed gear case - outer end housing has sealed ball bearing.

DRUM SHAFT Heat treated alloy steel minimum yield point 150,000 lbs. - splined drive to drum. Available in 11/4" & 11/2" diameter shaft.

CABLE DRUM Made of high strength cast iron - available in 4 standard sizes.

SLIDING CLUTCH Heat treated steel dog type clutch enclosed in end housing - positive lock in and out - operates on splined shaft.

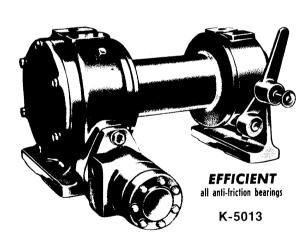
MOTOR MOUNT SAE (A) 2 bolt flange mount - standard.

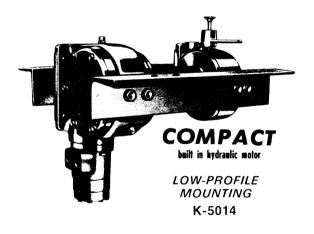
GEAR CASE Made of high strength cast iron, is completely sealed for oil enclosed operation and to keep out dirt.

WORM SHAFT One piece alloy steel hardened and ground to insure long service - hydraulic motor couples direct to shaft.

WORM GEAR High tensile aluminum-nickel alloy bronze. Through use of optimum lead and pressure angles maximum power is transmitted to the drum efficiently.

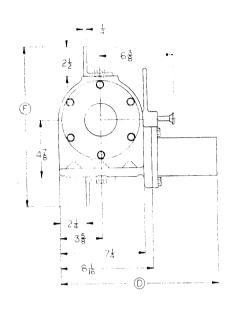
GEAR RATIOS 20-1 is standard providing optimum efficiency in power and speeds being powered by various hydraulic motors. 10-1, 27-1, and 40-1 ratios are available.

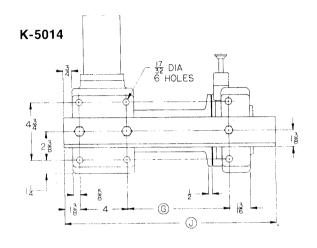


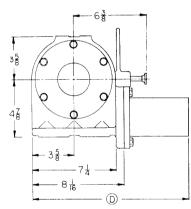


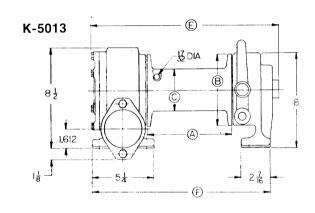
OTHER MODELS ALSO AVAILABLE WRITE FOR COMPLETE SPECIFICATIONS

HYDRAULIC CABLE WINCHES Specifications





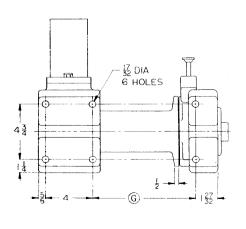




CLUTCH MODEL WINCH

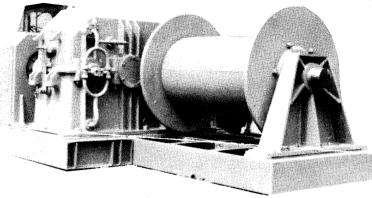
		MOT	OR SERIES	DIMENSION	(D)		
Α	В	С	Ε	G	М	T8	T16
13 1/4	13 3/8	13 1/2	13 7/8	14	15 9/16	15 1/2	16

			D.D.IM	0130			CABLE	DIAM	ETERS		
MODEL			DRUM	SIZE			1/4	5/16	3/8	7/16	1/2
	A	В	С	Ε	DRUM CAPACITIES						
7"	7 3/16	6	3 1/2	16	15 1/8	8 11/16	120	70	45	30	25
7"	7 3/16	8	4	16	15 1/8	8 11/16	260	160	105	. 75	55
8"	10 3/16	6	3 1/2	19	18 1/8	11 11/16	175	105	65	45	30
8"	10 3/16	8	4	19	18 1/8	11 11/16	390	240	160	110	80

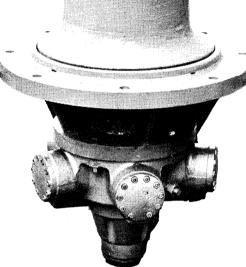




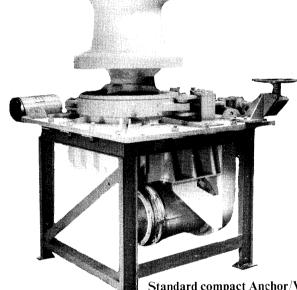
CAPSTANS WINDLASSES WINCHES



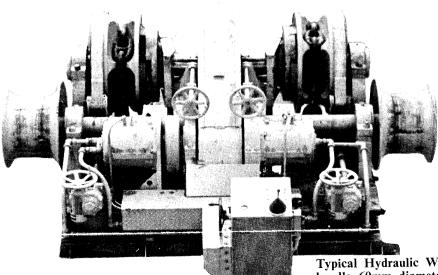
50/70 ton hydraulically driven Heavy-Lift Winch with drum to hold 1700m by 36mm diameter wire.



Standard hydraulic direct drive Warping Capstan. Range 1 ton to 15 tons. 5 ton model shown.



Standard compact Anchor/Warping. Capstan—note unit construction giving under deck protection for motor and gearbox with no installation problems. Full range cable sizes available. Shown with temporary frame for shipment protection only.



Typical Hydraulic Windlass. Size shown is designed to handle 60mm diameter cable. Made in sizes to handle up to the larger dias. of steel cables, U2 and U3.

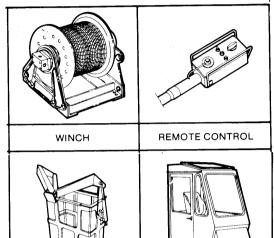


TRUCK AND MARINE HYDRAULIC CRANES

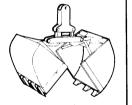
12 SIZES - 2 TO 22 TON

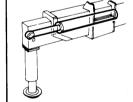


ACCESSORIES





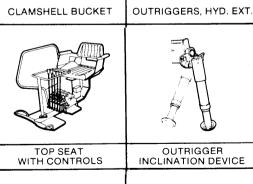


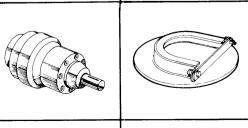


SPECIFICATIONS	2 TO	N	22TO	N	CLAM
Capacity classification	18082 ft	bs.	245922 ft	Ibs.	
Hydr. reach: Horizontai Vertical	ft. ft.	16 [.] 4 23 [.] 10	ft. ft.	27 [.] 4 38 [.] 10	
Reach with extensions: Horizontal Vertical	ft.	25 ⁻ 1'' 32'5''	ft.	38'10'' 50'6''	N N
Capacity: Horizontal	lbs. 3197 1896	ft. 57'' 9'6''	lbs. 4410 3748	ft. 0 5'5''	WIT
	1411 1102 661 400	12'8" 16'4" 20'10" 25'1"	2976 1951 1367 1047 848 665	4 12'4" 11 17'3" 13 22'4" 9 27'3" 9 33'5"	
Standard Boom length	1102	16'4''	5733 8489		

8 OTHER MODELS AVAILABLE

WRITE FOR SPECIFICATIONS

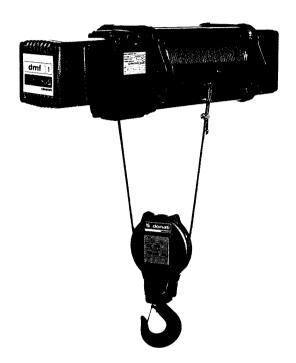




PUMP OUTRIGGER SHOE



WIRE ROPE HOISTS



- Mondular construction allowing 36 types from 4 basic units.
- 13 to 80 fpm lifting speed.
- Anti drop safety device on hook block.
- Low voltage control circuit.
- Manual, electric and low height trolleys.

36 types with capacities up to 16000 kg

Technical features

Modularity: 36 types of hoist with different capacities and speeds derived from 4 basic sizes.

Capacity: from 500 to 16.000 kg/daN.

Electric equipment: the low voltage control equipment, if required, is incorporated in the hoist. Realized with contactors for the motor drive and with line contactors.

The control is effectuated through a pendant push button panel, completely sealed and connected to a rapid switch by connector.

Motor: self-braking, tapered rotor with self-adjusting braking. The axial movement of the tapered rotor guarantees an accurate and stable braking.

The external position allows easy maintenance and a high level of cooling.

Bottom block: extremely compact realization with return pulley in throat profile turned steel mounted on permanently lubricated bearings. The hook in high resistant forged steel, mounted on a transverse, oscillating and turning on thrust bearings, is provided with an anti-drop safety device.

Pressure rope-guide: consisting of a threaded ring of ductile cast iron, self-lubricating, on which the rope-guide sector is fixed, so as to allow a safe winding of the rope itself.

Lifting speed: a vast range is available, from 4 to 24 m/min. All hoists may be fitted, even successively, with creep speeds for micrometric positioning. The realization of the second speed is obtained by application of a supplementary self-braking motor reducer, which commands the shaft of the main motor. The ratio between the two speeds is 1:8 standard. On request, creep speeds with ratios 1:6 - 1:12 - 1:16 - 1:24 can be supplied.

AIR CHAIN HOISTS

Air Chain Hoist 1/4 Ton to 40 Tons

- Heavy Duty Air Motors—Rotary vane type Positive load spotting—overloading stalls motor without damage to hoist. Motor inherently spark resistant.
- Heavy Duty Brake Spring set Air released
- Steel Load Bearing Parts-Shafts, gears,
- Anti-Friction Bearings
- Upper and Lower Limit Stops
- Heat Treated Steel Load Chain
- Oil Reservoir Furnished In line lubricator suggested
- Exhaust Air Lubricates Chain
- Heat treated, Forged Steel Hooks w/safety latch Chain Guide prevents twisting and jamming
- Low Headroom
- Compact and Lightweight

Optional:

- Plain, handgeared or air trolley
- Spark resistant hooks, chain, guides, trolley wheels, etc.
- Pull cord standard—pendant control available
- Chain Bucket







Specifications:

Part No.	Model	U.S. Tons CAP.	LBS. CAP.	Speed FPM	No Load Speed	Ft. Std. Lift	# Parts Chain	Chain Size (ins.)	Type Control	Max Lift (ft)	PSI	CFM.	Size Hose	Head- room (ins)	WT. LBS.
104-1349	BC500B	1/2	1100	11	19.8	10	2	.25	Rope	82	90	42	1/2"	17.5	34.3
104-1367	BC1000B	1	2200	7.5	13.5	10	2	.30	Rope	82	90	49	3/4"	17.7	49.5
104-1385	BCH1000BS	1	2200	23.0	41.4	10	1	.28	Rope	164	90	70	3/4"	14.25	35.2
104-1401	BCH1000BSP	1	2200	23.0	41.0	10	1	.28	Pendant	164	90	70	3/4"	14.25	35.2
104-1429	BC1500BS	11/2/	3300	9.5	17	20	1	.43	Rope	164	90	80	3/4"	18.25	102.5
104-1447	BCH3000BS	3/	6600	11.5	16	10	1	.44	Rope	164	90	140	3/4"	22.8	112.2
104-1483	BCH3000BSP	/3	6600	11.5	16	10	1	.44	Pendant	164	90	140	3/4"	22.8	112.2
104-1492	BC 5000B	⁷ 5	11000	3.25	5.5	10	2	.50	Rope	65	90	77.5	3/4"	27.5	135.7
104-1508	BCH6000B	6	13200	5.5	8.0	10	2	.44	Rope	82	90	140	3/4"	26.75	130.0
104-1526	BCH6000BP	6	13200	5.5	8.0	10	2	.44	Pendant	82	90	140	3/4"	26.75	130.0
104-0171	BC10000B	10	22000	3.10	5.5	10	4	.50	Rope		90	175	3/4"	39	283.0
104-0199	BCH12000B4	12	24000	3.0	3.75	10	4	.50	Rope		90	175	3/4"		407.0
104-0215	BCH20000B6	20	40000	2.0	2.77	10	6	.50	Rope		90	175	3/4"	39	550.0
104-0233	BCH25000B8	25	50000	1.5	2.0	10	8	.44	Rope		90	280	3/4"		
104-0251	BCH25000BSP	25	50000	1.5	2.0	10	8	.44	Pendant	<u> </u>	90	280	3/4"		
104-0279	BCH35000B12	35	70000	2.0	2.77	10	12	.44	Rope		90	280	3/4"	80	
104-0297	BCH40000B12	40	80000	2.0	2.00	10	16	.44	Rope	ł	90	280	3/4"	80	
104-0313	BCH50000B16	50	100000	1.5	2.0	10	16	.44	Rope		90	280	3/4"		

ELECTRIC CHAIN HOISTS & END TRUCKS

Electric Chain Hoists 1/4 Ton to 20 Ton

- Crane and hoist duty motors 30 minute rated
- Special cone brake, spring set, power release. Brake gives extra long service life without trouble and adjustment
- Upper and lower limit switches prevent over-travel
- Special chain guide prevents jamming
- Low voltage push button—buttons mechanically interlocked
- Non-reverse relay circuit if wired wrong, hoist will not run
- Meets or exceeds ANSI B30.16 Standards

Optional Features:

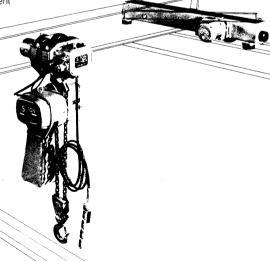
- Two Speed Motors
- Mechanical Load Brake
- Corrosion Proof Chain
- Special Controls
- Trolleys: power hand geared — plain
- Chain Buckets
- Low Headroom Configuration
- CSA approved electric controls
- Single Phase: Capacities 14-1 Ton

End Trucks For Bridge Cranes 1/2 Tons to 15 Tons

- Spans to 60 feet
- Electric driven hand geared driven push-pull
- Underunning (low headroom) and top running
- Dual motor drive on electric units for optimum traction. Motors furnished with cone brakes
- Two types of trucks:1) Side roller design for maximum stability
 - Conventional design uses flanged wheels for guidance and to carry load

Optional Features:

- Components may be customized to fit customer need
- Two Speed Motors
- Soft Start: Ballast resistors or powder coupling
- Control Boxes and complete electrification equipment



ELECTRIC CHAIN HOISTS & END TRUCKS

Specifications for Hook Mount Electric Chain Hoist

Part No.	MODEL	CAPACITY (TONS)	STD LIFT (FT)	LIFTING SPEED (FPM)	AMPS @ 230V	MOTOR 3-PHASE HP/KW	NUMBER CHAIN PARTS	SHIPPING WEIGHT (LBS)
104-1063	BBES003	1/4	10	32	3.7	.6/.45	1	62
104-1081	BBES005L	1/2-L	10	16	3.7	.6/.45	2	73
104-1107	BBES005S	1/2-S	10	27	5.2	1/.8	1	90
104-1125	BBES010L	1-L	10	14	5.2	1/.8	2	103
104-1143	BBES010S	1-S	10	27	8.2	2/1.5	1	125
104-1161	BBES015	11/2	10	34	15.8	4/3	1	220
104-1189	BBES020L	2-L	10	14	8.2	2/1.5	2	145
104-1205	BBES020S	2-S	10	26	15.8	4/3	1	220
104-1223	BBES025	21/2	10	21	15.8	4/3	1	229
104-1269	BBES030	3	10	17	15.8	4/3	2	288
104-1303	BBES050	5	10	11	15.8	4/3	2	306
104-1321	BBES100	10	10	11	31.6	4/3X2	4	682

Capacities Available to 20 Tons

Also Available With Plain, Geared or Motorized Trolley

L = Low Speed, S = Standard Speed

Specifications: Electric powered end trucks — contact factory for push-pull and hand geared specifications

MODEL ¹	CAPACITY (tons)	MAX. SPAN (ft.)	TRAVEL ² SPEED (fpm)	GUIDE WHEEL BASE (ins.)	I-BEAM FLANGE WIDTH (ins.)	ASCE RUNWAY RAIL SIZE (lbs. per ft.)	SHIPPING WEIGHT (lbs.)
UNDER RUNNING - SIDE ROLLE	R				·		
BB (R, Q or T) L330	3	40	40, 80, 110	471/4	3-6	_	380
BB (R, Q or T) L350	3-5	40-32	40, 80, 110	471/4	4-5	_	580
BB (R, Q or T) L350-1	5	40	40, 80, 110	74	5-7.5	_	830
BB (R, Q or T) L350-2	5	48	40, 80, 110	86	5-7.5	_	890
UNDER RUNNING - CONVENTION	NAL	•					
BBC (P, Q, T or V) L750-1*	71/2	40	60, 80, 115, 140	60	5-7.5	_	1000
BBC (P, Q, T or V) L750-2*	71/2	48	60, 80, 115, 140	72	5-7.5	_	1060
TOP RUNNING - SIDE ROLLER	-			***************************************		,	-
BB (R, Q or T) 0330	3	40	40, 80, 110	471/4		20, 25, 30	295
BB (R, Q or T) 0630*	3-5	60-40	40, 80, 115	70%	_	35, 45	433
BB (R, Q or T) 0350	3-5	40-32	40, 80, 115	471/4	_	35, 45	356
BB (Q, T or V) 0550*	5	60	80, 115, 145	70%		40, 45	730
BBQ0411*	10	40	80	59	_	40, 60	1166
BBQ0811*	10	65	80	9 ²⁷ /16	_	40, 60	1672
BBQ0615*	15	60	80	987/16		60, 80	3124
TOP RUNNING — CONVENTIONA	ıL .		-				<u> </u>
BBC (R, Q or T) 0350-1	5	40	45, 95, 130	60	_	40	850
BBC (R, Q or T) 0350-2	5	48	45, 95, 130	72	_	40	890
BBC (P, Q, T or V) 0750-1*	71/2	40	70, 85, 120, 150	60		40	1000
BBC (P, Q, T or V) 0750-2*	71/2	48	70, 85, 120, 150	72	_	40	1110
BBC (P, Q, T or V) 0411-1*	10	40	70, 80, 120, 150	60	_	40, 60	1025
BBC (P, Q, T or V) 0411-2*	10	48	70, 80, 120, 150	72		40, 60	1110

¹Refers to pair of end trucks.

²FPM Travel speed indicated as follows: R = 40-45, P = 60-70, Q = 80-95, T = 110-130, V = 140-150

*These models plus all side roller models with 120 fpm travel speed include power couplings as standard.

CHAIN HOISTS & TROLLEYS

Roughneck Lever Hoists 3/4 Ton & 11/2 Ton

- Safety latches available for all hooks
- Mainly for pulling, may be used for lifting or lowering.
- · Compact portable power.
- · Ratchet and pawl system provides one notch at a time lowering.

Specifications:

Opcon	ications.						
Part No.	MODEL	CAPACITY (LBS)	STD LIFT (FT.)	MINIMUM DISTANCE BETWEEN HOOKS (IN)	HANDLE LENGTH (IN)	HANDLE PULL AT CAPACITY LOAD (LBS)	SHIPPING WEIGHT (LBS)
103-9478	RN150	1500	5	101/4	15%	85	9
103-9496	RN300	3000	5	113/4	15%	100	13

Aluminum Manual Chain Hoists 1/2 Ton to 5 Ton Capacity

- For light to intermediate duty
- Mechanical load brake for precise load spotting
- Lightweight die-cast aluminum body
- Low maintenance
- Manufactured to meet or exceed ANSI B30.16 Standards
- Safety latch hooks standard

0	ications:		,						
Part No.	MODEL	CAPACITY (TONS)	STD. LIFT (FT)	HAND PULL (LBS)	CHAIN O'HAULED TO LIFT LOAD 1 FT (FT)	MIN. DIST. BETWEEN HOOKS (IN)	TEST HOOKS (T)	NUMBER CHAIN PARTS	SHIPPING WEIGHT (LBS)
103-9030	ME005	1/2	8′	59	19	13¾	.83	1	24
103-9058	ME010	1	8'	71	31	161/2	1.65	1	31
103-9076	ME015	11/2	8'	83	41	185/32	2.60	1	42
103-9094	ME020	2	10'	79	63	201/2	3.3	2	50
103-9110	ME030	3	10'	91	81	24	5.23	2	69
103-0138	ME050	5	10'	79	134	251/2	7	3	88

Plain & Geared Trolleys 1/2 Ton to 50 Tons

Features

Special Contour Wheels

Allows use on standard taper surface rolled I-Beams or flat surface welded ones. The contour of the wheels makes perfect contact with the beam.

Fully Adjustable

Trolley can easily be suspended from most I-Beams varying in width. This means

trolleys do not have to be custom built, allowing lower trolley cost and immediate availability. Also insures ease of relocation.

Pivot Mounted

Assures smooth transport of load. As trolley travels along I-Beam, the trolley wheels and truck are free to rotate on the central shaft smoothing out irregularities such as welded joints.

Specifications:

Part No.	MODEL	CAPACITY (TONS)	STANDARD HAND CHAIN REACH (FT)	MINIMUM HEADROOM (IN)	ADJUSTABLE TO ACTUAL FLANGE WIDTH (IN)	AT MAXIMUM I-BEAM WIDTH (IN)	SHIPPING WEIGHT (LBS)
104-2277	Universal Plain Trolley UPTA005	1/2▼		131/2	3-5	97/32	15
104-2295	UPTA010	1T	_	15%	3-5	911/16	28
104-2311	UPTA020	2T	_	201/s	4-6	117/32	43
104-2339	UPTA030	ЗТ	_	221/2	4-6	115/8	61
103-9012	UPTA050	5T		29¾	5-7	1315/16	100

Capacities available To 50 TONS





Universal Plain Trolley

Geared and Motorized trolleys also available.

RATCHET HOISTS

Roughneck

Roughneck is easy to operate and use and is furnished with flexible heat treated steel load chain.

Short handle and compactness make the Roughneck easy to use in tight areas. Roughneck has no brakes to slip, load is always in positive control.

Critical parts are weather protected for outdoor use.

Roughneck is practically maintenance free, requiring only occasional oiling of the chain, hook necks and dogs.

Roughneck is a very handy tool. It can be used as a hoist and puller and will operate in any position. It can be stored in most standard tool boxes.



FULL ONE YEAR WARRANTY

Hooks are drop forged heat treated steel and swivel through 360 degrees and accept standard safety latches.

Oil impregnated sintered bronze bearings are used for long life and easy operation.

One piece ratchet and chain wheel has precisioned machined pockets and is hardened for long life.

Ratchet pawl system provides positive load control. Cannot accidentally release load. Pawls are manganese bronze for high strength and corrosion resistance.

Free chain feature alows rapid take-up of slack chain. Cannot free chain under load.

ROUGHNECK

Standard reach is 5'10", additional reach is available by ordering length of chain desired.

Model Model ROUGHNECK SPECIFICATIONS: RN 150 RN 300

Capacity

Standard reach

Handle length

Net weight

Envelope size

Standard length of chain

Handle pull @ capacity load

Chain size (Heat treated steel)

Minimum distance between hooks

3000 lbs.

1360 kg

72¾ in. 1848 mm

3/16 in.

11¾ in.

15**% in.**

100 lbs.

9½ lbs. 4.3 kg

18x5x31/₄

45 kg

11 ft.

1500 lbs.

70 in. 1778 mm

3/16 in.

101/4 in.

15% in.

5 ft. 6 in.

85 lbs.

39 kg

7 lbs.

3.2 kg 18x5x3½ 457x127x 83 mm

HOISTS

Ratchet and Pawl Type — 32 models: 3/4-ton thru 6-ton

Fast and Easy Lift Designs



N SERIES

"Fast Lift" Hoists give you a faster take-up! Model NDC-1, shown left, takes up 15/16" per lever stroke—making it the fastest hoist of its type. All N Series models are designed with a direct drive for speed.

K-3009

E SERIES EASY LIFT

"Easy Lift" Hoists give you easier lift operation because of an internal mechanical advantage of 2% to 1. (For fast take-up use a standard ½" ratchet wrench in chain sheave as a direct drive.)

BOTH GIVE YOU!

UNIQUE HEAVY-DUTY CAST ALLOY STEEL HOUSING...

a special feature of all Hoists makes them stronger, yet most are lighter than comparable designs in aluminum alloy and malleable iron. This ALLOY STEEL STRONG quality with higher shock and fatigue resistance makes them unique among hand hoists and far less costly to maintain and repair.

LOWER USE COST

Superior quality and design of alloy steel head gives a more durable hoist for years of service.

LIGHT WEIGHT

Our $1\frac{1}{2}$, 3, $4\frac{1}{2}$ and 6-Ton sizes are the lightest and most compact hand hoists available.

COMPACT

 $1\frac{1}{2}$ -Ton models have minimal head room— $11\frac{1}{4}$ "(N)/11"(E); minimal face room— $\frac{7}{6}$ ".

VERSATILE

Controls are simple and easy to operate. Steel handle (designed to begin to bend at approximately twice the hoist's rated load) works in any of 12 positions.

MORE RELIABLE

Positive ratchet and pawl mechanism. No friction brake to slip or freeze. No lower shock resistant aluminum head or aluminum lever to break.

EFFICIENT

Side draft minimized by lever design. There's greater direct lifting or pulling power.

CONDENSED SPECIFICATIONS

POPULAR	R FAST-LIFT	N SERIES MODELS	POPULA	E SERIES MODELS	
Model No.	Rated Capacity	Net Weight	Model No.	Rated Capacity	Net Weight
NBC-1	3/4 Ton	125/s lbs.			
NDC-1	1½ Ton	15½ lbs.	EC-1	1½ Ton	15 lbs.
NDC-2	3 Ton	23 lbs.	EC-2	3 Ton	22½ lbs.
NDC-3	4½ Ton	37 lbs.	EC-3	4½ Ton	36½ lbs.
NDC-4	6 Ton	461/2 lbs.	EC-4	6 Ton	46 lbs.

LATCHES: Optional hook latches available at slight additional charge.





N SERIES "FAST LIFT" HOISTS

												-
Part No.	Model No.	Rated Capa- city, Tons	*Chain Descrip- tion	Chain Length Lineal Feet	Net Weight Pounds	Lever Length Inches	1. Approx Av. Pull w/Full Load, Pounds	mate Min. In- crement+ Lift/Lower Inches	Max. Lift, Inches	Min. Head Room, Inches	Face Room, Inches	Stand- ard Lift Inches
075-2956	NBC-1	3/4	C-1	5	125%	18	67	.281	.843	105/8	7/8	551/2
075-2965	NBR-1	3/4	R-1	5	13¾	18	67	.281	.843	10%	7∕8	55½
075-2974	NCC-1	1	C-1	5	123/4	20	80	.281	.843	105 s	78	551/2
075-2983	NCR-1	1	R-1	5	14	20	80	.281	.843	1058	7.8	551/2
075-2992	NBC-2	11.2	C-2	10	1858	18	71	.141	.423	1514	7 8	54
075-3009	NBR-2	112	R-2	10	203/4	18	71	.141	.423	151/4	7'8	54
075-2947	NDC-1	11/2	C-1	5	151/2	24	100	.312	.936	1114	7 8	551/2
075-5021	NDR-1	112	R-1	5	151/2	24	100	.281	.843	114.4	7/8	551/2
075-5227	NCC-2	2	C-2	10	193,4	20	85	.141	.423	151/4	7 8	.54
075-5423	NCR-2	2	R-2	10	21	20	85	.141	.423	15%	%	54
075-5628	NDC-2	3	C-2	10	23	24	105	.156	.468	1578	7.8	54
075-5824	NDR-2	3	R-2	10	23	24	105	.141	.423	15%s	7.8	54
075-6020	NDC-3	41.2	C-3	15	37	24	108	.104	.312	19	258	531/2
075-2938	NDR-3	412	R-3	15	37	24	108	.094	.282	19	2 ⁵ 8	5312
075-2910	NDC-4	6	C-4	20	461/2	24	120	.078	.234	1912	25 s	531.2
075-2894	NDR-4	6	R-4	20	461/2	24	120	.070	.210	1912	258	5312

C.1. Coil 1 chain 8-1 (Bollerless, 1 chain, † Lift can be twice or three times minimum lift by increased movement of lever

Positive ratchet and pawl mechanism. Loads are carried and held by alloy steel pawls against alloy steel gears. No friction brake to slip or freeze.
The "FAST LIFT" design feature of the "N

Series" is its one, two or three notch take-up capability per lever stroke. Each notch requires a 2215 power stroke of the handle so the operator can lift at 22120, 450 or 671s intervals. On Model NBC-1, rated at 34-ton. the total take-up per complete lever stroke is 27 32". This makes it the fastest 34-ton ratchet and pawl chain hoist of its type produced. Load lowering differs from load lifting. This is controlled to the standard one notch at a time to give precision lowering.

Practically no maintenance is required of this design because the housing is of cast alloy steel and all bushings are lifetime lubricated. Because of its unique, compact steel construction it is actually lighter in weight than most comparable models. Compare the weights, as shown in the accompanying charts, with any other similar product. You will be amazed to find them so much more advantageous 25 and 35% in large sizes.

E & A SERIES "EASY LIFT" HOISTS

How E SERIES and A SERIES Hoist designs differ.

features. They differ in that lever lengths of A designs are inches shorter AC-1: 14" HANDLE, HH-4 HOOK this type. EC-1: 17" HANDLE, HH-5 HOOK and hooks 1 size smaller.

Both have the same overall mechanical and heavy-duty construction | For working in confined quarters the Series A hoist is the most compact of all designs; in fact leads the industry for usage in applications of

Part No.	Model No.	Rated Capac- ity, Tons	Chain* Descrip- tion	Chain Length Lineal Feet	Net Weight. Lbs.	Lever Length. Inches	Av. Pull w/Full Load, Lbs.	Min. In- crement Lift/Lower, Inches	Min. Head- room, Inches	Face Room, Inches	Hook Throat Clear- ance	Stand ard Lift. Inche
075-0814	EC-1	11/2	C-1	5	15	17	72	.312	11	7/8	1 1/4	551/2
075-0832	ER-1	1 1/2	R-1	5	15	17	66	.281	11	7/8	1 1/4	551/2
075-0850	EC-2	3	C-2	10	221/2	17	75	.156	157/8	7/8	1 3/8	54
075-0878	ER-2	3	R-2	10	221/2	17	69	141	15%в	7/8	1 3/8	54
075-0896	EC-3	41/2	C-3	15	361/2	17	78	.104	19	2 ⁵ / ₈	13/4	531/2
075-0912	ER-3	41/2	R-3	15	361/2	17	72	.094	19	25/8	1 3/4	531/2
075-0930	EC-4	6	C-4	20	46	17	81	.078	191/2	25/8	17/8	531/2
075-3811	ER-4	6	R-4	20	46	17	75	.070	191/2	25/8	1 ½	531/2
075-3839	AC-1	1 1/4	C-1	5	14	14	73	.312	10³/a	7/8	11/8	551/:
075-3857	AR-1	1 1/4	R-1	5	14	14	67	.281	103/8	7/8	11/8	551/2
075-3875	AC-2	21/2	C-2	10	21	14	76	.156	151/4	7/8	1 1/4	54
075-3893	AR-2	21/2	R-2	10	21	14	70	.141	151/4	7/8	1 1/4	54
075-1010	AC-3	33/4	C-3	15	34	14	79	.104	18	25/8	1 1/2	531/
075-1038	AR-3	33/4	R-3	15	34	14	73	.094	18	25/8	1 1/2	531/2
075-1056	AC-4	5	C-4	20	421/2	14	82	.078	181/2	25/8	13/4	531/2
	AR-4	5	R-4	20	421/2	14	76	.070	181/2	25/8	13/4	531/2



E and A Series Hoists enables operator to lift full load with a minimum pull.
Single lever controls up, down, or freechaining—an exclusive Ratcliff feature.
You can actuate control with gloves on. and free-chain without holding handle. Lifts and lowers one notch per 60° power stroke.

SPECIAL SPEED LIFT FOR E & A SERIES

Another exclusive: You can use any standard ½" drive ratchet wrench in the square hole in end of chain sheave as a direct drive for speed lifting. This greatly increases the lift speed for lighter loads.

HEAVY DUTY CHAIN HOISTS









Roustabout Lever Chain Hoists 3/4 Ton to 9 Tons

- Steel construction impact and overload resistant
- Faster and easier to use easy free chain low handle force
- Fewer chain parts easier to carry lowers cost of extra chain
- Lightweight stronger and lighter than aluminum
- Super Compact Use in tight places
- 360 handle rotation use in any position
- Special design Load Brake resists jamming -- positive control and load spotting
- Safety latches standard

Optional Features:

- Overload Signal Handle
- Corrosion Resistant Chain

Specifications:

Part. No.	MODEL	CAPACITY (TONS)	STANDARD LIFT (FT)	HANDLE FORCE (LBS)	HANDLE LENGTH (INCHES)	MIN. DIST. BETWEEN HOOKS (IN)	NO. CHAIN PARTS	SHIPPING WEIGHT (LBS)
103-9334	LH150	3/4	5	36	101/4	111/2	1	17
103-9352	LH150A	1	5	48	101/4	111/2	1	17
103-9370	LH300	11/2	5	40	161/9	149/18	1	28
103-9398	LH300A	2	5	53	161/8	149/16	1	28
103-9414	LH600	3	5	65	161/s	181/2	1	44
103-9432	LH1200	6	5	71	161/8	23	2	70
103-9450	LH1800	9	5	98	161/s	281/2	3	98

All Steel Manual Chain Hoists 1/2 Ton to 100 Ton

- All steel construction impact and overload resistant - heavy duty
- Lightweight lighter and stronger than aluminum, easy to carry
- Manufactured to meet or exceed ANSI B30.16 Standards
- Mechanical Load Brake positive control and precise load spotting
- Fewer chain parts easier to use lowers cost of extra chain
- · Safety latches standard

Optional Features:

- · Spark Resistant Models special hooks, chain guards, trolley wheel, etc. for use in Division II areas
- Overload Slip Clutch prevents severe
- overloading

 Corrosion Resistant Chain

Spec	ific	atio	ns

Part No.	MODEL	CAPACITY (TONS)	STD LIFT (FT)	MINIMUM HEADROOM (IN)	CHAIN PULL TO LIFT FULL LOAD (LBS)	CHAIN O'HAULED TO LIFT LOAD 1 FT	TEST LOAD (TONS)	# PARTS CHAIN	SHIPPING WEIGHT (LBS)
084-1600	CH005	1/2	8	12	59	23'	.84	1	33
084-1628	CH010	. 1	8	131/2	69	38′	1.65	1	38
084-1646	CH015	11/2	8	151/2	75	51′	2.64	1	51
084-1664	CH020	2	9	171/2	77	66′	3.36	1	70
084-1682	CH030	3	10	19¾	88	82'	5.32	1	93
084-1708	CH040	4	10	19¾	117	82 ⁷	5.32	. 1	93
084-1806	CH050	5	10	261/2	67	199′	8.40	3	139
084-1824	CH060	6	10	261/2	80	199′	8.40	3	139
084-1842	CH100	10	12	30¾	105	248'	15.12	3	264
084-1860	CH120	12	12	30¾	126	248′	15.12	3	264
084-1888	CH150	15	12	441/2	102	414'	21.00	5	495
084-1904	CH160	16	12	441/2	109	414'	21.00	5	495
084-2002	CH200	20	12	501/2	106x2	248x2'	28.00	6	858
084-2020	CH300	30	12	531/4	102x2	414x2'	42.00	10	. 1155

CAPACITIES AVAILABLE TO 100 TONS

RATCHET PULLERS



Steel Ratchet Pullers 1/2 Ton & 1 Ton

- Mainly for pulling. May be used for lifting or lowering.
- Designed for industrial use, this is the best puller on the market.
- Tested to 50% overload One year warranty.
- Safety latches available for all hooks.
- Ratchet and pawl system provides one notch at a time lowering.

Specifications:

Part No. 075-1092	MODEL	CAPACITY 4:1 FACTOR	# LINES	NUMBER HOOKS	MIN. DIST. BETWEEN HOOKS (IN)	LIFTING DISTANCE (FT)	CABLE DIAMETER (IN)	SHIPPING WEIGHT (LBS)
075-1118	P6H	½ TON	Single Line	2	18	6	3/16	8
075-1136	P12H	½ TON	Single Line	2	18	12	3/16	. 8
075-1216	P12D-2H	½ TON 1 TON	Single Line Double Line	2	18 24	12 6	3/16	10
075-1234	P12D-3H	½ TON 1 TON	Single Line Double Line	3	18 24	12 6	3/16	10
075-1252	P15H	½ TON	Single Line	2	18	15	3/16	8
075-1270	P15D-2H	½ TON 1 TON	Single Line Double Line	2	22 24	15 71⁄2	3/16	10
075-1298	P15D-3H	½ TON 1 TON	Single Line Double Line	3	24 24	15 7½	3/16	10

Aluminum Ratchet Puller 1000 Lbs. to 3400 Lbs.

- Mainly for pulling. May be used for lifting or Cable guide helps wrap the cable on the lowering.
- Ratchet Pullers can be operated in any position. Handles are reversible so pull is always possible in the right direction
- drum evenly.
- Ratchet and pawl system provides one notch at a time lowering.

 Safety latches available for all hooks.

SHIPPING WEIGHT (LBS)

16

16

17

