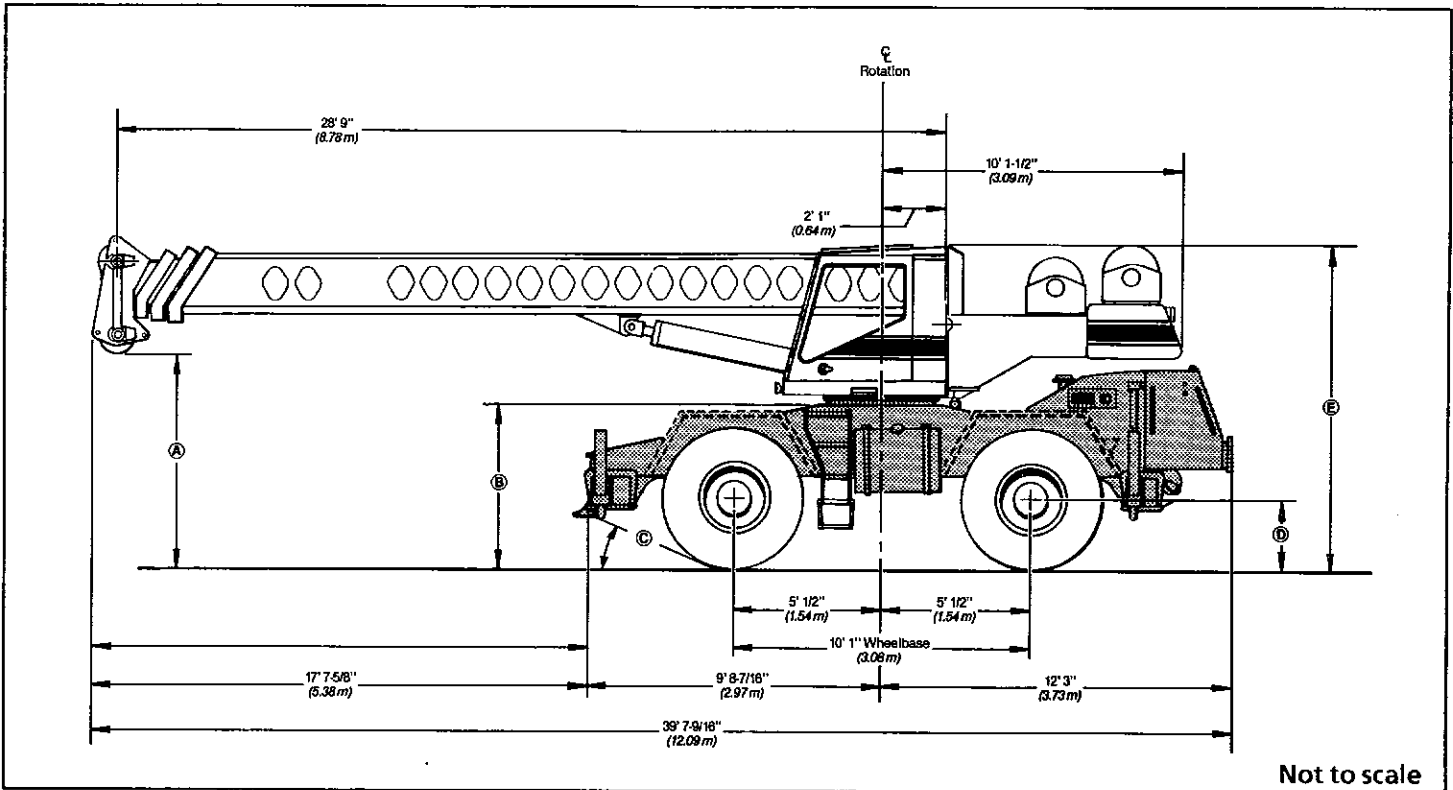


Specifications

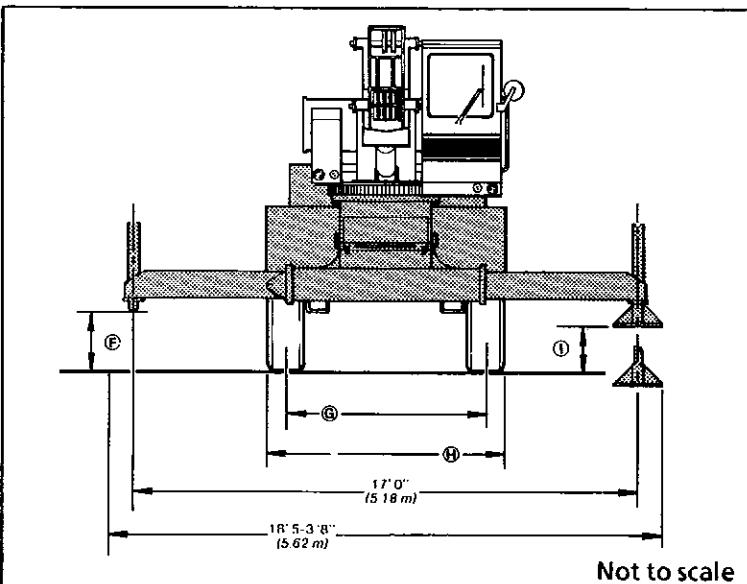
Hydraulic Rough Terrain Crane

HSP-8028S

28-ton (25.42 metric ton)



Not to scale



Not to scale

General dimensions	Feet	Meters
Turning Radius (4-wheel steer - centerline of track)	14' 11"	4.54
Tailswing of counterweight:	10' 6"	3.20

Dimensions affected by tires

Tires	16.0 X 24 (16-PR)		20.5 X 25 (20-PR)	
	Feet	meters	Feet	meters
A	-	-	8'3/4"	2.46
B	5' 7-5/16"	1.71	5'8-1/4"	1.73
C	19.4°	-	20°	-
D	2'1-13/16"	0.66	2'4-9/16"	0.73
E	11'7/16"	3.36	11'2-3/4"	3.42
F	20-1/8"	0.51	21"	0.53
G	6'6-7/16"	1.99	6'11-7/16"	2.12
H	8'0"	2.44	8'8-13/16"	2.66
I	12-1/8"	0.31	13"	0.33

Upperstructure

■ Boom

Patented Design. 28'9" — 70'3" (8.76 m — 21.41 m) three-section boom with two power sections. Boom side plates have diamond shaped impressions for superior strength to weight ratio and 100,000 p.s.i. (689.5 MPa) steel angle chords for lateral stiffness. Boom telescope sections are supported by wear shoes both vertically and horizontally to prevent metal to metal contact. Anti-two block with audio visual warning.

Optional boom — 28'9" — 49'6" (8.76 m — 15.09 m) 2-section boom with one power section.

Optional boom — 28'9" — 91'0" (8.76 m — 27.74 m) 4-section boom with two power sections and one manual section.

Boom head — Four 10-5/8" (0.27 m) root diameter head sheaves handle up to 8 parts of wire rope. Two easily removable wire rope guards, and rope dead end lugs provided on each side of boom head. Optional 12-1/8" (0.31 m) root diameter head sheaves; meets 23:1 ratio European safety code with 14 mm wire rope.

Auxiliary lifting sheave — Optional. Single 10-5/8" (0.27 m) root diameter sheave with removable wire rope guard, mounted to boom. For use with one or two parts of line off the optional auxiliary winch. Does not affect erection of fly, or use of main head sheaves for multiple reeving.

Boom elevation — One Link-Belt designed hydraulic cylinder with holding valve. Self aligning steel bushings. Hand and optional foot controls for controlling boom elevation from -3° to 80°. Boom angle indicator standard.

■ Fly

Optional — 24' 0" (7.32 m) stowable one-piece lattice type.

■ Jib

Optional — 14'6" (4.42 m) stowable A-frame. Attaches to boom head only. Can be offset 10°, 20° and 30°.

■ Cab and Controls

Environmental cab; isolated from sound and vibration by rubber mounts. All tinted and tempered safety glass windows. Sliding rear and right side window and swing up roof window for maximum visibility and ventilation. Slide-by-door opens to 3'0" (0.91 m) width. 6-way adjustable operator's seat. 4-way adjustable tilt / telescoping steering wheel. Ignition and steering wheel key lock. Control levers for swing, boom telescope, winch and boom hoist. Outrigger controls, sight level bubble. Optional foot control for boom hoist and swing brake.

Cab instrumentation — Dash mounted gauges for hydraulic oil temperature, converter temperature, fuel, water temperature, voltmeter and oil pressure.

■ Swing

Bi-directional hydraulic swing motor mounted to a planetary reducer for 360° continuous smooth swing at 3.0 r.p.m.

Swing parking brake — Manually applied/released, disc brake mounted on the speed reducer.

Swing lock — Standard two position pin-type (over front and rear) operated from the operator's cab.

Counterweight — Bolted to upperstructure frame.

■ Hydraulic system

Main pump — Double gear type pump. Powered by carrier engine through a straight mechanical drive or through an optional mechanical clutch pump disconnect. Pump operates at 2,800 p.s.i. (193.05 Bars) maximum system pressure.

Swing / steering pump — Single gear-type pump. Powered by carrier engine through a straight mechanical drive. Pump operates at 2,500 p.s.i. (172.37 Bars).

Reservoir — 100 gallon (378.50 L) capacity. Double diffusers for deaeration.

Filtration — Two 10-micron filters located inside of hydraulic reservoir. Accessible for easy replacement.

Control valves — Five separate control valves allow simultaneous operation of all crane functions.

■ Load hoist system

Standard: 1M main winch with single speed motor and automatic brake; power up/down mode of operation. Bi-directional gear-type hydraulic motor, driven through a double planetary reduction unit for positive operator control under all load conditions.

Optional — Model 2M main winch with two-speed motor and automatic brake, power up/power down mode of operation. Bi-directional, gear-type hydraulic motor.

Optional — Model 1M auxiliary winch with one-speed motor and automatic brake, power up/power down mode of operation. Available on rear winch only.

Line pulls and speeds — Maximum permissible line pull 9,600 lbs. (4 355 kg) and maximum permissible line speed of 416 f.p.m. (126.80 m/min) on standard 12" (0.30 m) root diameter smooth drum. Maximum permissible line pull 9,015 lbs. (4 089 kg) and maximum permissible line speed 443 f.p.m. (135.03 m/min) on optional 13-1/4" (0.34 m) diameter grooved drum.

■ Miscellaneous standard equipment

Sound suppressed cab, fire extinguisher, seat belt, warning horn, mirrors, travel lights, and windshield wiper.

■ Optional upperstructure equipment

360° house lock, electronic boom angle/length indicator, boom hoist foot control, propane heater, diesel heater, foot actuated swing brake, two-speed main winch, grooved drum, drum rotation indicators, 25-ton (22.68 metric ton) hook block, 30-ton (27.22 metric ton) hook block, 8-1/2 ton (7.71 metric ton) hook ball and swivel, anti two block with function kick-out, load moment device, rear steer indicator, boom mounted working light, engine monitoring system, tachometer, air conditioner, top hatch window wiper, amber rotating beacon, windshield washer, and 360° cab mounted spotlight.

Carrier

■ Type

8' 0" (2.44 m) wide, 121" (3.07 m) wheelbase.

4 × 4 × 4 — (4-wheel steer, 4-wheel drive)
Standard — for rough terrain with limited turning area.

4 × 2 × 4 — (4-wheel steer, 2-wheel drive) ;
Optional — for flat terrain with limited turning area.

4 × 4 × 4 — (4-wheel steer, 4-wheel drive)
Optional — Rear axle with no-spin differential; for rough terrain with limited turning area.

Frame — 100,000 p.s.i. (689.5 MPa) steel, double walled construction with integral 100,000 p.s.i. (689.5 MPa) steel outrigger boxes.

■ Axles

Front, Standard — heavy duty planetary drive/steer type.

Rear, Standard — heavy duty planetary drive/steer type.

Rear, Optional — heavy duty non-driving/steer type.

Rear, Optional — heavy duty no-spin differential, planetary drive/steer type.

Suspension

Front axle — Rigid mounted to frame.

Rear axle — Pin-mounted on welded steel box cradle. Automatic hydraulic rear axle oscillation lock-out engages when upper-structure rotates past 2-1/2° of centerline.

Tires

Front and rear

Standard — 20.5 × 25 (20-PR)

Optional — 16.0 × 24 (16-PR)

■ Brake

Service — Air over hydraulic brakes on all four wheels. 17 1/4" × 4" (0.43 m × 0.10 m) drum brakes on each wheel.

Parking — Spring applied, air released; cab controlled, mounted on front axle.

Transmission

Allison 4-speed fully automatic transmission. 8 speeds forward and 2 reverse with 2-speed Rockwell heavy duty transfer case. Electric over air controls. Completely automatic shifting in both low and high range for operator convenience.

Steering — Hydraulic two wheel, four wheel and "crab" steering; controlled from tilt telescoping steering wheel.

■ Outriggers

Four hydraulic, telescoping beam and jack outriggers. Vertical jack cylinders equipped with integral holding valve. Beams extend to 17' 0" (5.18 m) centerline-to-centerline and retract to within 8'0" (2.44 m) overall width. Equipped with stowable, lightweight 17-3/8" (0.44 m) square steel floats. Controls and sight level bubble located in upperstructure cab.

Miscellaneous standard equipment

Cab steps, 2 front and rear carrier steps, skid resistant finish on carrier deck, storage compartment, automatic rear axle disconnect, and fenders.

Optional chassis equipment

24-volt start, no-spin differential on rear axle, front and rear towing shackles, lifting lug package, engine block heater, ether injection package, spare tires and rims, pintle hook, manual pump disconnect, auxiliary steering system, air dryer, and carrier mounted working lights.

Travel speeds and gradeability

Engine	Tires	Maximum Speed		Gradeability at stall	Maximum tractive effort at stall		Gradeability at 1.0 mph (1.61 km/h)	Maximum tractive effort at 1.0 mph (1.61 km/h)	
		mph	km/h		pounds	kg.		pounds	kg.
GM 8.2N	16.0 × 24	18.1	29.7	186%	39,886	18 092	66%	25,148	11 407
	20.5 × 25	19.4	31.2	130%	37,090	16 824	60%	24,210	10 982
Cummins V378C*	16.0 × 24	19.4	31.2	133%	36,200	16 420	62%	23,978	10 876
	20.5 × 25	20.9	33.6	104%	33,662	15 269	56%	22,922	10 397

*Optional Equipment

Engine	GM 8.2N	Cummins V-378C*
Cylinders - cycle	8-4	6-4
Bore	4.25" (108.0 mm)	4.62" (117.5 mm)
Stroke	4.41" (112.0 mm)	3.75" (95.3 mm)
Displacement	500 cu. in. (8 200 cm ³)	378 cu. in. (6 195 cm ³)
Maximum brake hp	130 @ 2800 rpm	145 @ 3000 rpm
Peak torque	330 ft. lbs. (447 J)	280 ft. lbs. (380 J)
Electric system	12 volt negative ground	12 volt negative ground
Fuel capacity	75 gallons (283.9 L)	75 gallons (283.9 L)
Alternator	80 amps	80 amps
Crankcase capacity	12 quarts (11.4 L)	18 quarts (17.0 L)
Air compressor	12 c.f.m. (0.34 m ³ /min)	13.2 c.f.m. (0.37 m ³ /min)

Axle loads 3-section boom

Base machine with standard 28' 9"-70' 3" (8.67 m - 21.41 m) three-section boom, 385' (117.35 m) 9/16" (14 mm) wire rope, 4 x 4 x 4 carrier with GM 8.2N engine, 20.5 x 25.0 tires, counterweight.	G.V.W. [⊙]		Upper facing front				Upper facing rear			
			Front axle		Rear axle		Front axle		Rear axle	
	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.
	45,987	20 860	22,862	10 370	23,124	10 489	17,436	7 909	28,550	12 950
16.0 x 24.0 tires	-1,430	-649	-715	-324	-715	-324	-715	-324	-715	-324
Hookblock at bumper	350	176	577	261	-227	-103	—	—	—	—
Headache ball at bumper	325	147	506	230	-81	-82	—	—	—	—
Auxiliary lifting sheave	75	34	243	110	-168	-76	-168	-76	243	110
14' 6" (4.42 m) A-frame jib stowed	575	261	1,337	606	-762	-346	-762	-346	1,337	606
24' (7.32 m) lattice fly stowed	480	218	922	418	-442	-200	-442	-200	922	418
2-section boom and counterweight reduction	-3,956	-1 794	-3,632	-1 647	-324	-47	-324	-147	-3 632	-1 647

Axle loads 4-section boom

Base machine with optional 28' 9" - 91' (8.76 m - 27.74 m) 4-section boom, 400' (121.92 m) 9/16" (14 mm) wire rope, 4 x 4 x 4 carrier with GM 8.2N engine, 20.5 x 25.0 tires, counterweight.	G.V.W. [⊙]		Upper facing front				Upper facing rear			
			Front axle		Rear axle		Front axle		Rear axle	
	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.
	46,588	21 113	23,570	10 691	23,018	10 441	15,156	6 874	31,432	14 257
16.0 x 24.0 tires	-1,430	-649	-715	-324	-715	-324	-715	-324	-715	-324
Hookblock at bumper	350	176	577	261	-227	-103	-	-	-	-
Headache ball at bumper	325	147	506	230	-181	-82	-	-	-	-
Auxiliary lifting sheave	75	34	243	110	-168	-76	-168	-76	243	110
14' 6" (4.42 m) A-frame jib stowed	575	261	1,337	606	-762	-346	-762	-346	1,337	606
24' (7.32 m) lattice fly stowed	480	218	922	418	-442	-200	-442	-200	922	418

[⊙] Adjust gross vehicle weight & axle loading according to component weight.

Note: All weights are ±3%.

• Link-Belt is a registered trademark.

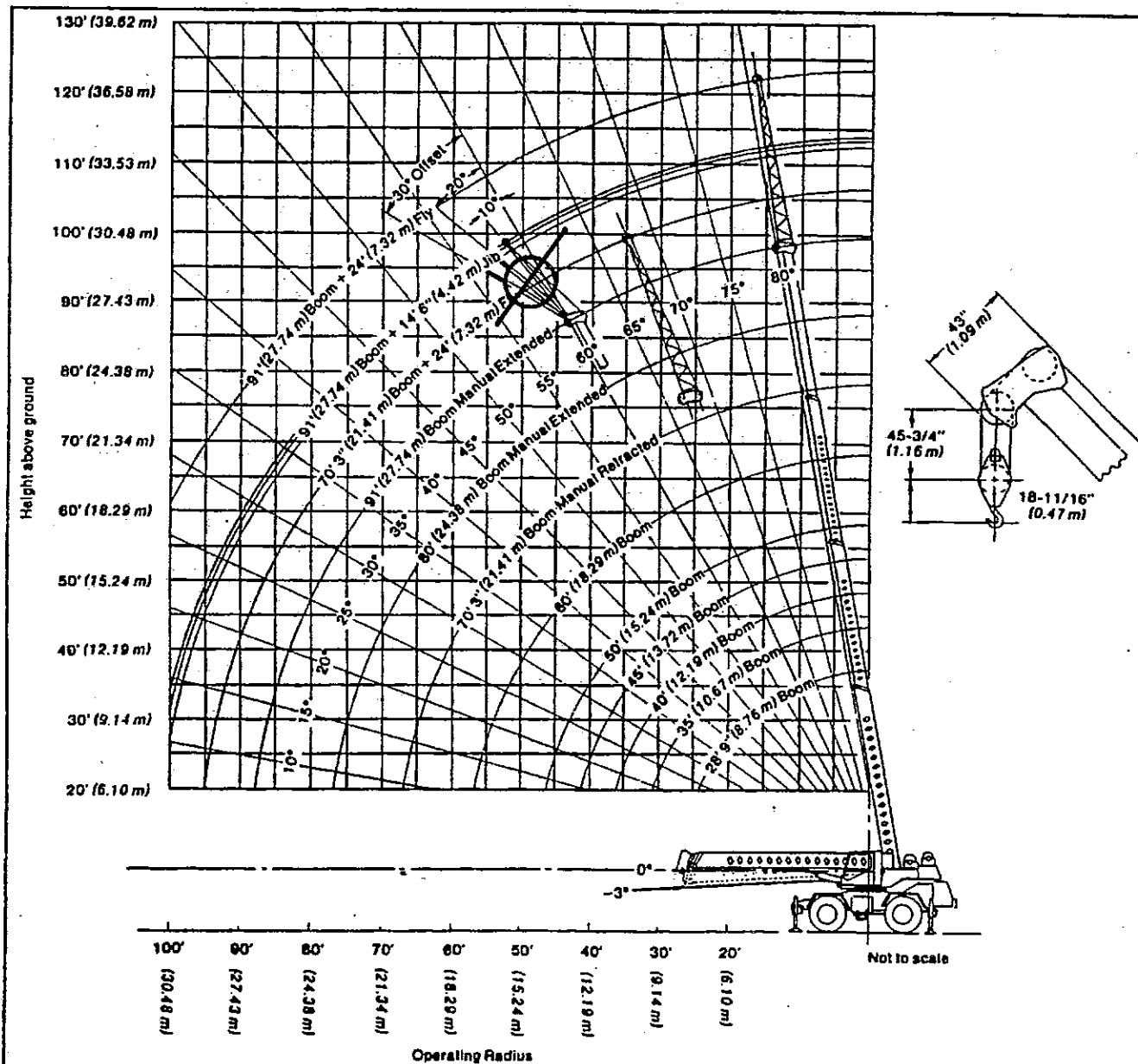
We are constantly improving our products and therefore reserve the right to change designs and specifications.

Link-Belt Construction Equipment Company Lexington, Kentucky

Lifting Capacities

Hydraulic Rough Terrain Crane

HSP-8028S 28-ton (25.42 metric ton) 4-Section Boom



Note: Boom and fly and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.

HSP-8028S Lifting Capacities

28' 9" (8.76 m)-91' 0" (27.74 m) 4-section boom

Capacities On Outriggers① – Manual Section Retracted															70.25' (21.41 m) Boom with 24' (7.32 m) Fly			
Load radius	28.75' (8.76 m)		35.0' (10.67 m)		40.0' (12.19 m)		45.0' (13.72 m)		50.0' (15.24 m)		60.0' (18.29 m)		70.25' (21.41 m)		94.25' (28.72 m)②			
	360°	Front	360°	Front	360°	Front	360°	Front	360°	Front	360°	Front	360°	Front	Angle	360°	Front	
10' 3.05 m	56,000 25 402	56,000 25 402	43,000 19 505	43,000 19 505	42,300 19 187	42,300 19 187	41,900 19 006	41,900 19 006	41,500 18 824	41,500 18 824								
12' 3.66 m	43,300 19 641	44,100 20 004	43,000 19 505	43,000 19 505	42,300 19 187	42,300 19 187	41,300 18 734	41,300 18 734	39,900 18 099	39,900 18 099	31,600 14 334	31,600 14 334						
15' 4.57 m	35,000 15 876	35,000 15 876	35,000 15 876	35,000 15 876	34,900 15 831	34,900 15 831	34,500 15 649	34,500 15 649	33,500 15 196	33,500 15 196	27,800 12 610	27,800 12 610	20,800 9 435	20,800 9 435				
20' 6.10 m	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	25,300 11 476	22,400 10 161	22,400 10 161	20,000 9 072	20,000 9 072	78.5	14,400 6 532	14,400 6 532	
25' 7.62 m	17,400 7 893	19,000 8 618	17,400 7 893	19,000 8 618	17,400 7 893	19,000 8 618	17,400 7 893	19,000 8 618	17,400 7 893	19,000 8 618	17,400 7 893	18,200 8 256	17,100 7 757	17,100 7 757	75.5	12,800 5 806	12,800 5 806	
30' 9.14 m			12,200 5 534	15,100 6 849	12,200 5 534	15,100 6 849	12,200 5 534	15,100 6 849	12,200 5 534	15,100 6 849	12,200 5 534	15,100 6 849	12,200 5 534	14,000 6 350	72.5	11,300 5 126	11,300 5 126	
35' 10.67 m					9,000 4 082	11,500 5 216	9,000 4 082	11,500 5 216	9,000 4 082	11,500 5 216	9,000 4 082	11,500 5 216	9,000 4 082	11,500 5 216	69.0	9,900 4 491	9,900 4 491	
40' 12.19 m							6,800 3 084	8,900 4 037	6,800 3 084	8,900 4 037	6,800 3 084	8,900 4 037	6,800 3 084	8,900 4 037	66.0	8,000 3 629	8,700 3 946	
45' 13.72 m								5,200 2 359	7,100 3 221	5,200 2 359	7,100 3 221	5,200 2 359	7,100 3 221	5,200 2 359	62.5	6,400 2 903	7,900 3 583	
50' 15.24 m											4,100 1 860	5,700 2 586	4,100 1 860	5,700 2 586	58.5	5,100 2 313	6,700 3 039	
55' 16.76 m											3,100 1 406	4,500 2 041	3,100 1 406	4,500 2 041	55.0	4,200 1 905	5,600 2 540	
60' 18.29 m													2,400 1 089	3,700 1 678	51.0	3,400 1 542	4,700 2 132	
65' 19.81 m														1,700 771	2,900 1 315	46.5	2,700 1 225	3,900 1 769
70' 21.34 m															42.0	2,200 998	3,300 1 497	
75' 22.86 m															36.5	1,700 771	2,700 1 225	
80' 24.38 m															31.0	1,300 590	2,300 1 043	
90' 27.43 m															13.5		1,500 680	

① Boom sections must be extended equal distances.

② Intermediate capacities for boom plus fly are permissible; See Operating Instructions Number 14.

Wire rope size and type

Wire rope application	Size and type used	Wire rope description
Main winch Auxiliary winch	9/16" (14 mm) diameter, Type "N" 9/16" (14 mm) diameter, Type "N"	Type "N" - 6 x 25 (6 x 19 class) filler wire, extra improved plow steel, preformed, independent wire rope core, right lay, regular lay.

Tire Inflation

Tires	PR	Stationary	'Pick & Carry'
16.00 x 24	16	80 p.s.i. (5.52 Bars)	80 p.s.i. (5.52 Bars)
20.50 x 25	20	80 p.s.i. (5.52 Bars)	80 p.s.i. (5.52 Bars)

Line Speeds and Pulls

Wire Rope Layer	Speed	Main or auxiliary winch 12" (0.30 m) drum				Main or auxiliary winch 13.25" (0.34 m) drum			
		Line Speeds		Available Line Pulls		Line Speeds		Available Line Pulls	
		(fpm)	(m/min)	(Lbs.)	(Kgs.)	(fpm)	(m/min)	(Lbs.)	(Kgs.)
1	Low	161	49.07	9,600	4,355	177	53.95	9,015	4,089
	High①	287	87.48	5,510	2,499	315	96.01	5,020	2,277
2	Low	175	53.34	9,090	4,123	191	58.22	8,350	3,787
	High①	313	95.40	5,060	2,295	341	103.94	4,650	2,109
3	Low	190	57.91	8,400	3,810	205	62.48	7,770	3,524
	High①	339	103.33	4,680	2,123	366	111.56	4,330	1,964
4	Low	204	62.18	7,810	3,543	219	66.75	7,270	3,298
	High①	365	111.25	4,340	1,969	391	119.18	4,050	1,837
5	Low	218	66.45	7,290	3,307	233	71.02	6,830	3,098
	High①	390	118.87	4,060	1,842	417	127.10	3,800	1,724
6	Low	233	71.02	6,840	3,103	246	74.98	6,440	2,921
	High①	416	126.80	3,810	1,728	443	135.03	3,590	1,628

① Two-speed motor optional

Refer to **Operating Instructions** page 4

Capacities On Outriggers ^① – Manual Section Extended									
Load radius	91.0' (27.74 m) Boom With 24' (7.32 m) Fly								
	80.0' (24.38 m) ^②			91.0' (27.74 m) ^②			115.0' (35.05 m) ^③		
	Angle	360°	Front	Angle	360°	Front	Angle	360°	Front
15' 4.57 m	80.0°	22,600 10251	22,600 10251						
20' 6.10 m	76.5°	18,700 8482	18,700 8482	79.0°	16,600 7530	16,600 7530			
25' 7.62 m	73.0°	15,800 7167	15,800 7167	76.0°	14,400 6532	14,400 6532	79.0°	9,000 4082	9,000 4082
30' 9.14 m	69.0°	13,600 6169	13,700 6214	72.5°	12,300 5579	12,300 5579	77.0°	8,900 4037	8,900 4037
35' 10.67 m	65.0°	10,200 4627	12,000 5443	69.0°	10,100 4581	10,600 4808	74.5°	7,900 3583	7,900 3583
40' 12.19 m	61.0°	8,000 3629	10,100 4581	65.5°	7,900 3583	9,200 4173	72.0°	7,000 3175	7,000 3175
45' 13.72 m	56.5°	6,400 2903	8,200 3720	62.0°	6,300 2858	8,100 3674	69.5°	6,200 2812	6,200 2812
50' 15.24 m	51.5°	5,100 2313	6,700 3039	58.0°	5,000 2268	6,600 2994	66.5°	5,500 2495	5,500 2495
55' 16.76 m	46.5°	4,200 1905	5,600 2540	54.0°	4,000 1814	5,500 2495	63.5°	4,600 2087	4,900 2223
60' 18.29 m	41.5°	3,400 1542	4,700 2132	50.0°	3,300 1497	4,600 2087	61.0°	3,800 1724	4,400 1996
65' 19.81 m	35.0°	2,700 1225	3,900 1769	45.0°	2,600 1179	3,800 1724	58.0°	3,100 1406	3,900 1769
70' 21.34 m	27.5°	2,200 998	3,300 1497	40.0°	2,100 953	3,200 1452	54.5°	2,600 1179	3,500 1588
75' 22.86 m	17.5°	1,700 771	2,700 1225	34.5°	1,600 726	2,600 1179	51.5°	2,100 953	3,100 1406
80' 24.38 m				28.0°	1,200 544	2,200 998	47.5°	1,700 771	2,700 1225
90' 27.43 m							40.0°	1,100 499	1,900 862
100' 30.48 m							30.0°		1,300 590

Capacity Deductions for Auxiliary Load Handling Equipment	
Aux. Head	100 lb. (45.36 kg)
Fly Stowed	300 lb. (136.08 kg)
Fly Erected	800 lb. (362.88 kg)
Jib Stowed	500 lb. (226.8 kg)
Jib Erected	800 lb. (362.88 kg)

- ① Boom sections must be extended equal distances.
- ② Intermediate capacities for boom with manual extended are permissible; See Operating Instructions Number 13.
- ③ Intermediate capacities for boom plus fly are permissible; See Operating Instructions Number 14.

Capacities ^① On Tires ^② – 4-Section Boom							
Load Radius	Max. Boom Length	16.00 x 24 (16-PR)			20.50 x 25 (20-PR)		
		Pick & Carry ^③	Stationary		Pick & Carry ^③	Stationary	
			Front	360°		Front	360°
10' 3.05 m	28.75' 8.76 m	28,700 13018	19,700 8936	28,700 13018	29,700 13472	21,300 9662	29,700 13472
12' 3.66 m	28.75' 8.76 m	24,800 11249	14,500 6577	25,300 11476	25,700 11658	15,600 7076	26,100 11839
15' 4.57 m	28.75' 8.76 m	20,300 9208	9,900 4491	20,600 9344	21,000 9526	10,700 4854	21,400 9707
20' 6.10 m	28.75' 8.76 m	12,800 5806	5,700 2586	12,800 5806	13,300 6033	6,200 2812	13,300 6033
25' 7.62 m	28.75' 8.76 m	8,400 3810	3,400 1542	8,400 3810	8,800 3992	3,700 1678	8,800 3992
30' 9.14 m	35.0' 10.67 m	5,900 2676	2,000 907	5,900 2676	6,200 2812	2,300 1043	6,200 2812
35' 10.67 m	40.0' 12.19 m	4,200 1905	1,100 499	4,200 1905	4,500 2041	1,300 590	4,500 2041
40' 12.19 m	45.0' 13.72 m	3,100 1406	—	3,100 1406	3,200 1452	—	3,200 1452
45' 13.72 m	50.0' 15.24 m	2,200 998	—	2,200 998	2,300 1043	—	2,300 1043
50' 15.24 m	60.0' 18.29 m	1,500 680	—	1,500 680	1,600 726	—	1,600 726
55' 16.76 m	60.0' 18.29 m				1,100 499	—	1,100 499

- ① Off main boom head only. Boom sections must be extended equal distances.
- ② Refer to tire inflation chart.
- ③ See Operating Instructions; Set-up Note Number 3.

Drum Wire Rope Capacities

Wire Rope Layer	Main or auxiliary winch 12" (0.30 m) root diameter smooth lagging				Main or auxiliary winch 13.25" (0.34 m) root diameter grooved lagging*			
	Wire Rope Diameter = 0.5625 in. (14.3 mm)							
	Capacity				Capacity			
	Rope Per Layer		Total Wire Rope		Rope Per Layer		Total Wire Rope	
Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	
1	82	25.0	82	25.0	94	28.7	94	28.7
2	93	28.3	175	53.3	106	32.3	200	61.0
3	101	30.8	276	84.1	109	33.2	309	94.2
4	108	32.9	384	117.0	117	35.7	426	129.8
5	112	34.1	496	151.2	125	38.1	551	167.9
6	119	36.3	615	187.5	132	40.2	683	208.2

*Optional equipment — recommended for export use only, 25:1 ratio.

HSP-8028S Warning and Operating Instructions

General:

- Rated lifting capacities in pounds as shown on lift chart pertain to this machine as originally manufactured and normally equipped by Link-Belt Construction Equipment Company. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
- Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with the information in the operator's, parts and safety manuals supplied with this machine. If these manuals are missing, order replacements through the distributor.
- The operator and other personnel associated with this machine shall fully acquaint themselves with the latest applicable American National Standards Institute (ANSI) safety standards for cranes.
- The maximum allowable lifting capacities are based on machine standing level on firm supporting surface.
- All capacities are in pounds with metric equivalent in *italics*.

Set-Up:

- The machine shall be leveled on a firm supporting surface. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats or tires to spread the load to a larger bearing surface.
- When making lifts on outriggers, outrigger beams must be fully extended with tires free of supporting surface.
- Crane Capacities on tires depend on tire capacity, condition of tires, and tire air pressure. On-tire picks require lifting from main boom head only on a smooth and level surface. Boom sections must be extended equally. Pick and carry operations (creep) are restricted to a maximum speed of 1 m.p.h. and not exceeding 200 ft. in a 30 minute period. The boom must be centered over front with swinglock engaged and the load must be restrained from swinging. Lifts with manual extended or Fly or Jib erected on tires are prohibited.

Operation:

- Rated lifting capacities at rated radius shall not be exceeded. Do not tip machine to determine allowable load. For concrete bucket operation, weight of bucket and load shall not exceed 80% of rated lifting capacity. For clamshell bucket operation, weight of bucket and bucket content is restricted to a maximum weight of 5,000 pounds or 80% of rated lifting capacity, whichever is less. For magnet operation, weight of magnet and load is restricted to a maximum weight of 5,000 pounds or 80% of rated lifting capacity, whichever is less. For clamshell and magnet operation, maximum boom length is restricted to 45 feet and the boom angle is restricted to a minimum of 35°. Manual extended, fly and jib are all prohibited for both clam and magnet operation.
- Crane capacities on outriggers do not exceed 85% of the tipping loads and capacities on tires do not exceed 75% of the tipping loads as determined by SAE Crane Stability Test Code J-765-a.
- The crane capacities above the bold lines are based on structural strength or hydraulic limitations.
- Rated lifting capacities include the weight of hook block, slings, bucket, magnet and auxiliary lifting devices. Their weights must be subtracted from the listed rated load to obtain the net load to be lifted. See also deductions for auxiliary head, fly and jib.
- Rated lifting capacities are based on freely suspended loads. No attempt shall be made to move a load horizontally on the ground in any direction.
- Rated lifting capacities are for lift crane service only.
- Do not operate at radii or boom lengths where capacities are not listed. At these positions, the machine can overturn without any load on the hook.
- The maximum loads which can be telescoped are not definable because of variation in loadings and crane maintenance, but it is permissible to attempt retraction and extension within the limits of the load rating chart.
- When either boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used.
- The user shall operate at reduced ratings to allow for adverse job conditions such as: soft or uneven ground, out of level conditions, wind, side loads, pendulum action, jerking or sudden stopping of loads, hazardous conditions, experience of personnel, two machine lifts, traveling with loads, electrical wires, etc. Side load on boom, fly or jib is extremely dangerous.
- When making lifts with auxiliary head machinery, the effective length of the boom increases by 2 feet. Effective length of boom is length shown on boom length indicator plus 2 feet.
- Power sections must be extended equally.
- For boom lengths less than 80 ft. or between 80 ft. and 91 ft. with manual extended, the rated loads are determined by boom angle only in the column headed by 80 ft. or 91 ft., respectively. For angles not shown, use next lower boom angle to determine allowable capacity.
- For boom lengths with fly less than 94.25 ft. with manual retracted or less than 115 ft. with manual extended, the rated loads are determined by boom angle only in the column headed by 94.25 ft. or 115 ft., respectively. For angles not shown, use next lower boom angle to determine allowable capacity.
- Do not lower 91 ft. boom length below 14°. Do not lower 70.25 ft. boom with 14.5 ft. jib or 24 ft. fly below 19°. Do not lower 91 ft. boom with 14.5 ft. jib or 24 ft. fly below 32°. Failure to follow note 15 will result in a tipping condition.
- The 14.5 ft. jib capacities are based on main boom angle regardless of main boom length. For angles not shown, use next lower boom angle to determine allowable capacity. Capacity values are for 360° operation.
- The 28.75 ft. boom length capacities are based on boom fully retracted. If not fully retracted, do not exceed ratings for the 35 ft. boom length.

Definitions:

- Load Radius:** Horizontal distance from a projection of the axis of rotation to the supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
- Loaded Boom Angle:** The angle between the boom base section and the horizontal after lifting the load at the rated radius. The boom angle, before loading, should be greater to account for deflections.
- Working Area:** Area measured in a circular arc about the centerline of rotation as shown on the working area diagram.
- Freely Suspended Load:** Load hanging free with no direct external force applied except by the hoist line.
- Side Load:** Horizontal side force applied to the lifted load either on the ground or in the air.

HSP-8028S Working Areas

