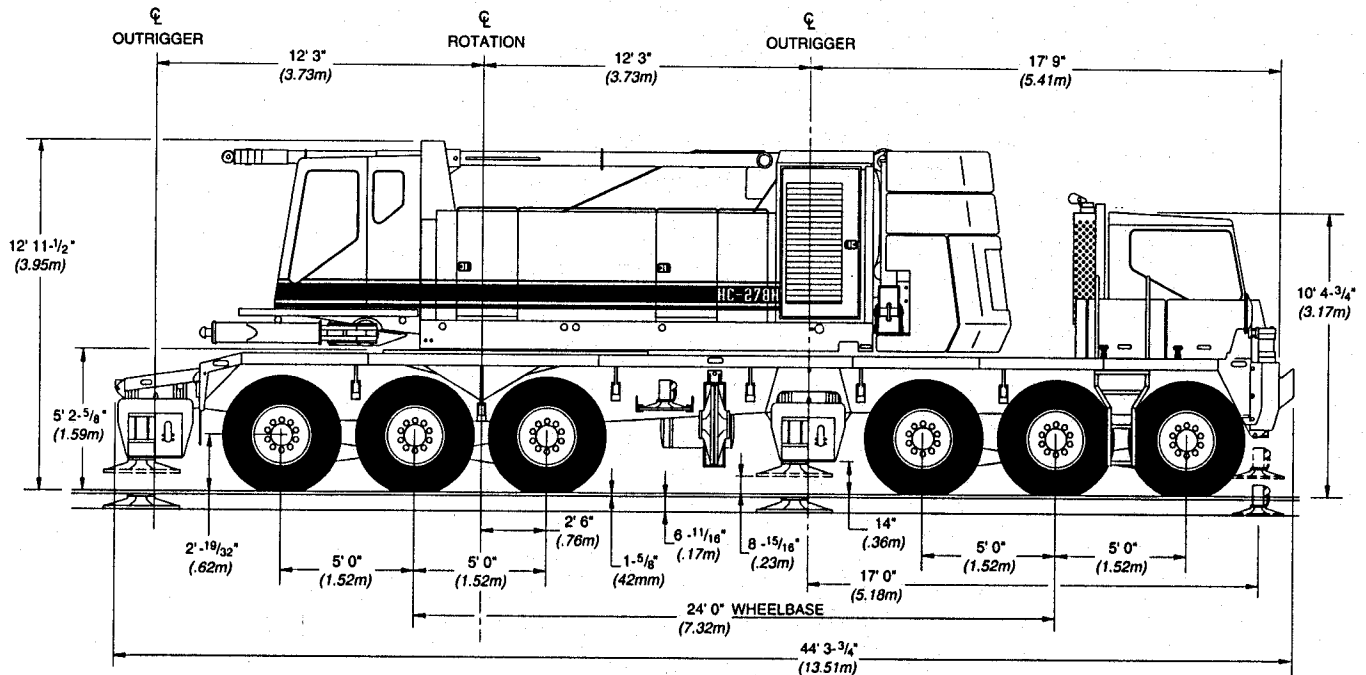


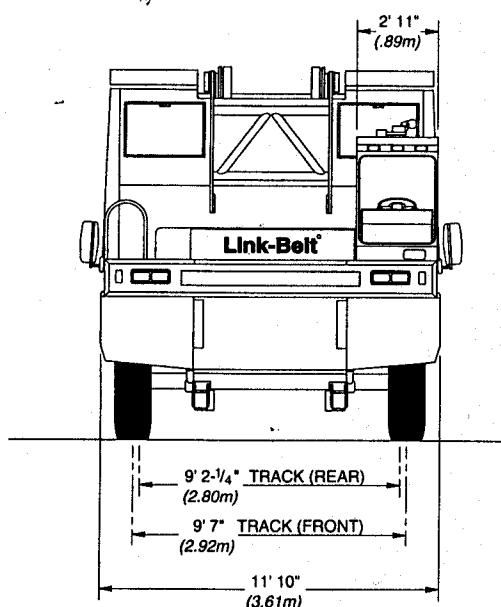
Specifications

300 ton - 272 metric ton - (HYLAB) Hydraulic Lattice Boom Truck Crane

HC-278H



Not to Scale

**General dimensions****feet****meters**

Overall width, outriggers extended, (over floats)	27' 4"	8.33
Overall width, outriggers extended, (c/l of jacks)	24' 6"	7.46
Overall width, outriggers retracted, jacks removed	11' 10"	3.61
Vehicle clearance circle over outside of front bumper	122' 10"	37.44
Vehicle clearance circle over outside of front bumper counterweight	125' 10"	38.35
Minimum ground clearance (at bottom of front bogie beams)	8-7/8"	0.22
Counterweight tailswing (at corners)	18' 9"	5.72
Overall cab width (upper)	11' 10"	3.61
Radius of boom hinge pin	3' 2"	0.97
Height of boom hinge pin	7' 3-3/8"	2.22
Ground clearance under counterweight	5' 5-3/8"	1.65

GENERAL INFORMATION ONLY

General Dimensions - Open Throat Boom	feet	meters
Basic Boom Length	60'	18.29
Overall length: boom in travel position over rear of carrier, with "A" upper and no bumper counterweights -	-	-
With 60' (18.29 m) basic boom - open throat	96' 4-1/2" ①	29.38 ①
Height: over boom live mast with boom in travel position -	-	-
With 60' (18.29 m) basic boom - open throat	21' 9-3/4"	6.65

General Dimensions - Hammerhead Boom	feet	meters
Basic Boom Length	45'	13.71
Overall length: boom in travel position over rear of carrier, with "A" upper and "A" bumper counterweights only -	-	-
With 45' (13.71 m) basic hammerhead boom -	79' 10-1/4" ①	24.34 ①
Height: over boom live mast with boom in travel position over rear of carrier -	-	-
With 45' (13.71 m) basic hammerhead boom	23' 5" ②	7.14 ②

① Interference with carrier cab prohibits over-the-road travel with boom horizontal over front of carrier.

② Special boom carrying links (for hammerhead boom only) reduce over-all height to 12' 11-1/2" (3.95 m).

Travel Weights - approximate

Carrier Only	Front tridem axle		Rear tridem axle		Total	
	lbs.	kg	lbs.	kg	lbs.	kg
Carrier with Detroit Diesel Series 60 engine and with revolving upperstructure removed	33,020	14 978	63,740	28 912	96,760	43 890
Remove front outrigger jacks	-1,350	-612	-850	-386	-2,200	-998
Remove rear outrigger jacks	+ 890	+ 404	-3,090	-1 402	-2,200	-998
Remove 5 outrigger floats from carrier storage.	-340	-154	-400	-181	-740	-335
Goodyear tires	-600	-272	-1,200	-544	-1,800	-816
Total	31,620	14 343	58,200	26 400	89,820	40 743

Revolving Upperstructure Only	Total	
	lbs.	kg
Basic crane upper with Cummins N14 - C360 diesel engine, boomhoist rope, boom stops, boom live mast, bail assembly, full fuel and self undecking equipment	71,440	32 405
Add 810' (247 m) of 1" (25 mm) Type "P" wire rope on rear drum	1,475	669
Add 1,025' (312 m) of 1-1/8" (29 mm) Type "LB" wire rope on front drum	2,400	1 089
Add 30' (9.14 m) open throat boom base section	75,315	34 163
	4,125	1 871
Total	79,440	36 034

Axle Loads - Approximate

Standard HC-278H revolving upperstructure equipped with Cummins N14-C360 diesel engine, load hoist drums, 30,000 lbs. (13 608 kg) counterweight "A", self undocking equipment mounted on 288" (7.32 m) wheelbase, 12 x 6 drive carrier, 11' 10" (3.61 m) wide, equipped with Detroit Diesel 60 Series engine, front center hydraulic jack, Michelin tires, and full fuel.	Basic Machine Gross Weight		Upper facing front				Upper facing rear				
	**	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg
	A	93,330	42 335	-25,666	-11 642	118,996	53 977	48,220	21 873	45,110	20 462
	B	70,500	31 979	30,020	13 617	40,480	18 362	30,020	13 617	40,480	18 362
	C	163,830	74 314	4,354	1 975	159,476	72 339	78,240	35 490	85,590	38 824
Adjust axle loadings accordingly for the following components:	Component Weights		Front axle		Rear axle		Front axle		Rear axle		
	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	lbs.	kg	
Upperstructure -											
Remove self undocking equipment from upper	-13,910	-6 310	-695	-315	-13,215	-5 994	-2,200	-998	-11,710	-5 312	
Remove counterweight "A"	-30,000	-13 608	18,625	8 448	-48,625	-22 056	-24,870	-11 281	-5,130	-2 327	
Rear drum wire rope - 810' (247 m) of 1" (25 mm) Type "P"	-	-	-	-	-	-	-	-	-	-	
Front drum wire rope - 1,025' (312 m) of 1-1/8" (29 mm) Type "LB"	1,475	669	-125	-57	1,600	726	430	195	1,045	474	
Boomhoist wire rope on drum - 870' (265 m) of 1" (25 mm) Type "W"	-	-	-	-	-	-	-	-	-	-	
Boom stops, support struts and lever arms	2,400	1 089	145	66	2,255	1 023	355	161	2,045	928	
	-	-	-	-	-	-	-	-	-	-	
	1,620	735	-335	-152	1,955	887	675	306	945	429	
	-1,365	-619	285	129	-1,650	-748	-570	-259	-795	-360	
Carrier -											
Add front outrigger box	10,560	4 790	6,490	2 944	4,070	1 846	6,490	2 944	4,070	1 846	
Add rear outrigger box	10,560	4 790	-4,290	-1 946	14,850	6 736	-4,290	-1 946	14,850	6 736	
Add front outrigger jacks	2,200	998	1,350	612	850	386	1,350	612	850	386	
Add rear outrigger jacks	2,200	998	-890	-404	3,090	1 402	-890	-404	3,090	1 402	
Add main outrigger floats	660	299	309	140	351	159	309	140	351	159	
Add bumper outrigger float	80	36	31	14	49	22	31	14	49	22	
Remove H/D axles	-2,080	-943	0	0	-2,080	-943	0	0	-2,080	-943	
Add Ceemat transmission	300	136	300	136	0	0	300	136	0	0	
Add "A" bumper counterweight	11,400	5 171	15,570	7 063	-4,170	-1 892	15,570	7 063	-4,170	-1 892	
Add "B" bumper counterweight	15,300	6 940	21,591	9 794	-6,291	-2 854	21,591	9 794	-6,291	-2 854	
Add Goodyear tires	-1,800	-816	-600	-272	-1,200	-544	-600	-272	-1,200	-544	
Attachment -											
30' (9.14 m) open throat tubular boom base section with 4 connecting pins - horizontal over rear of carrier.	-	-	-	-	-	-	-	-	-	-	
35' (10.67 m) boom live mast and bridle - mast horizontal over rear of carrier.	4,125	1 871	-	-	-	-	-2,515	-1 141	6,640	3 012	
Boomhoist wire rope (from bail to boom live mast) - mast horizontal over rear of carrier	-	-	-	-	-	-	-	-	-	-	
60' (18.29 m) open throat tubular boom - horizontal over rear of carrier.	6,490	2 944	7,235	3 282	-745	-338	-5,880	-2 667	12,370	5 671	
45' (13.72 m) hammerhead tubular boom - horizontal over rear of carrier.	-	-	-	-	-	-	-	-	-	-	
	1,620	735	1,070	485	550	250	-735	-333	2,355	1 068	
	-	-	-	-	-	-	-	-	-	-	
	9,300	4 218	-	-	-	-	-13,985	-6 344	23,285	10 562	
	-	-	-	-	-	-	-	-	-	-	
	9,860	4 472	-	-	-	-	-12,120	-5 498	21,980	9 970	

** A - Upper B - Carrier C - Total

Mounting

Type

288" (7.32 m) wheelbase, 12 x 6 drive.
11' 10" (3.61 m) wide.

Frame - Main members heat treated alloy steel, triple-box construction. Machined mounting surface for outer race of turntable bearing. Towing shackles front and rear.

Turntable bearing - Outer race, with integral external tooth swing (ring) gear bolted to carrier frame.

Outriggers

Dual outriggers, with hydraulic beams and jacks, mounted at center and rear of carrier. Hydraulic outrigger beams and jack cylinders individually controlled from valve at each outrigger beam location. Center outrigger box equipped with rollers which ride in a track to facilitate removal of outrigger assembly when required.

Outrigger box pin puller - hydraulic; standard.

Front center hydraulic jack with float - Single hydraulic jack, with float, mounted at front of the carrier. Jack setting controlled by valve at left front of carrier. Jack/float assembly required for handling 360° swing rated capacities. Warning horn sounds if ground surface allows front center jack/float to settle.

Floats - Four low profile, snap-on, alloy steel; 34" (.86 m) dia. base.

Front center: snap-on aluminum; 24" (.61 m) dia. base.

Axles

Front - Tubular; bogie mounted tridem axles, single wheels, 115" (2.92 m) track.

Rear - Planetary type; bogie mounted tridem axles, dual wheels, 110.25" (2.80 m) track.

Suspension - Hendrickson bronze bushed equalizer beams with rubber bushed torque rods and shock absorbers on front axle.

Wheels and rims - Front; disc type. Rear; integral with planetary hubs.

Tires

Single tires front, dual tires rear.

Standard - 14.00 x 24L (20-ply rating) transport type tread.

Optional - Michelin 14R24 XGC radials front and rear.

Brakes

Air brake system

Service - Dual circuit with modulated emergency brakes. Bendix dual circuit 12 wheel air brakes with service chambers on 6 front wheels and spring applied, air released emergency, parking, service chambers on 6 rear wheels. Air dryer standard.

Size -

Rear wheels; 16-1/2" x 7" (0.50 x 0.18 m)

Front wheels; 16-1/2" x 6" (0.50 x 0.15 m)

Steering - Sheppard full integral hydraulic power with one master gear (includes hydraulic control valving), one slave gear (includes no valving) and one hydraulic pump for each axle. Steering gears mounted high on side of frame to minimize exposure to hazards. Separate master and slave for each wheel eliminates transfer of steering force from entire system into one axle which could overload and damage linkage. Steering wheel is mechanically connected to axles to allow steering (with increased steering input effort) in the event of hydraulic system failure. Multiple pumps minimize possibility of total hydraulic system failure and only require increase in steering input effort sufficient to compensate for that portion of system that failed. High speed, high power system to maximize maneuverability both on the job site and on the road.

Engine/Transmissions

Carrier engine - 12.7 liter Series 60 DDEC diesel; with starter, full-pressure lubrication, power steering pump, dry-type air cleaner, air compressor and alternator.

Clutch - Valeo 17" (.43 m) single plate, dry disc, diaphragm spring.

Transmissions -

Main - Eaton RTO 14908LL, ten speeds forward, three reverse.

Auxiliary - Spicer P-1241-C; 4-speed, midship mounted.

Universals - Easy service half-round u-joints.

Automatic - Optional

Main - Eaton RTO 14109B ATE CEEMAT (Converter Enhanced Electronically Managed Automatic Transmission), 9 speeds forward, shifted fully automatically, 1 reverse. Ratios and speeds are similar to the manual transmission. Consult factory for more details.

Auxiliary - Spicer P-1241-D; 4-speed midship mounting. Same as the auxiliary transmission for the manual version except with a 1.59:1 1st gear ratio.

Bumper Counterweight

"A" counterweight - 11,400 lbs. (5 171 kg)

"B" counterweight - 15,300 lbs. (6 940 kg)

Carrier Cab

One-man, fully enclosed. Air suspension mounted bucket seat with seat belt. Noise absorbing insulation with vinyl covering, sound reduction headliner, rubber floor mat. Tilt-out instrument panel (for easy service) includes speedometer, odometer, tachometer, voltmeter, hourmeter, clock, and gauges for fuel level, engine temperature, engine oil pressure, air pressure, and transmission temperature (auto. trans. only). Control switches are included for cruise control, engine fan clutch, heater/defroster, and lights. Also included are low air pressure warning buzzer/light, transmission overheat warning buzzer/light (auto. trans only) and parking brake applied light. The tilt/telescoping steering column includes key locking ignition/starter, and 2-speed windshield wiper/washer. Sliding right and rear windows. Roll down door window. Front and roof fresh air vents.

Carrier

Electrical System

12-volt negative ground system with 12-volt starting. Includes dual sealed beam headlights, directional signals with 4-way flashing system, stop and tail lights, side turn indicators, clearance lights, horn, dome light, dimmer switch, and four 12-volt Group 31 batteries.

Fuel Tank

One 85 gallon (321.7 liter) capacity aluminum tank; side mounted on carrier frame.

Standard Equipment

West Coast type rear view mirrors with adjustable convex mirror, lug wrench, 2-way reading bubble levels on both sides of carrier. High pressure lube fittings at all bearing points, hand grab rails, fenders, mud flaps, skid-resistant finish on carrier deck, backup alarm, carrier deck access ladder both sides and rear of carrier.

Engine Specifications	Detroit Diesel Series 60 DDEC
Number of cylinders	6
Bore	5.12" (0.13 m)
Stroke	6.30" (0.16 m)
Piston Displacement	778 cu. in. (12 751 cm ³)
Max. brake h.p. @ r.p.m.	430 (321 kw) @ 2,100
Governed load speed r.p.m.	2,100
Peak torque @ r.p.m.	1,450 ft. lbs. (1 966 joules) @ 1,200
Electrical system	12-volt charging/12-volt starting
Batteries	Four 12-volt
Air compressor	Bendix TU-FLO 1400

Carrier Speeds

Main - Eaton RTO 14908LL			Auxiliary - Spicer P-1241-C							
			4th (.81)		3rd (1.00)		2nd (1.24)		1st (2.37)	
Gear	Ratio		mph	km/h	mph	km/h	mph	km/h	mph	km/h
High	8th	.74	58.5*	94.2*	47.4	76.3	38.2	61.5	20.0	32.2
	7th	1.00	43.2	69.5	35.1	56.5	28.3	45.5	14.8	23.8
	6th	1.36	31.8	51.2	25.8	41.5	20.8	33.5	10.9	17.5
	5th	1.83	23.6	38.0	19.2	30.9	15.5	24.9	8.1	13.0
Low	4th	2.53	17.1	27.5	13.9	22.4	11.2	18.0	5.9	9.5
	3rd	3.40	12.7	20.4	10.3	16.6	8.3	13.4	4.4	7.1
	2nd	4.63	9.3	15.0	7.6	12.2	6.1	9.8	3.2	5.1
	1st	6.24	6.9	11.1	5.6	9.0	4.5	7.2	2.4	3.9
	L	9.42	4.6	7.4	3.7	6.0	3.0	4.8	1.6	2.6
Deep Reduction	LL	14.56	3.0	4.8	2.4	3.9	1.9	3.1	1.0	1.6
Hi Rev.	Rev.	2.89	15.0	24.1	12.1	19.5	9.8	15.8	5.1	8.2
Lo Rev.	Rev.	9.85	4.4	7.1	3.6	5.8	2.9	4.7	1.5	2.4
Deep Reduction	Rev.	15.22	2.8	4.5	2.3	3.7	1.9	3.1	1.0	1.6
Deep Reduction @ 600 rpm	LL	14.56	.85	1.4	.7	1.2	.55	.9	.3	.5
Deep Reduction @ 600 rpm	Rev.	15.22	.8	1.3	.65	1.1	.5	.8	.3	.5

* Radial tires and pick and carry axles and rims required for top speeds above 50 mph (80.45 km/hr).

Turning Ability

Turning circle diameter	Curb clearance circle diameter	Vehicle clearance circle diameter		
Centerline of outer front tire	Outside of outer front tire	Over outside of front bumper	Over outside of front bumper counterweight "A"	Over outside of front bumper counterweight "AB"
118' 1" (35.99 m)	119' 5" (36.40 m)	122' 10" (37.44 m)	123' 10" (37.74 m)	125' 10" (38.35 m)

Upperstructure

■ Frame

All welded, precision machined; machinery side housings welded integral with frame.

■ Turntable Bearing

Bearing retainer is bolted to machined surface on underside of frame. Turntable bearing with integral external tooth swing (ring) gear is bolted on carrier. Patented

(hydraulic cylinder actuated) quick disconnect lock ring facilitates removing upper from carrier for transport without disturbing the turntable bearing mounting.

■ Self-Undecking Device

Standard; Four hydraulic jacks mounted on the upperstructure allow the upper to be removed from or remounted on carrier. No helper crane is needed for any phase of the undocking operation.

■ Engine

Diesel; full pressure lubrication, oil filter, air cleaner, hour meter, foot and hand throttles. Electrically energized control shutdown for Cummins engine, switch key operated.

■ Fuel Tank

143 gallon (541 liter) capacity; equipped with fuel level gauge and flame arrester filler pipe cap with locking eye for padlock.

HC-278H Load Hoisting Performance

Available line speed and line pull - Line pulls are not based on wire rope strength. See wire rope chart below for maximum permissible single part of line working loads.

Line Speeds and Pulls

Rope layer	Front Drum - 1-1/8" (28 mm) wire rope						Rear Drum - 1" (25 mm) wire rope					
	Maximum line pull		No load line speed		Full load line speed		Maximum line pull		No load line speed		Full load line speed	
	lbs.	kg	ft./min	m/min	ft./min	m/min	lbs.	kg	ft./min	m/min	ft./min	m/min
1	50,103	22 727	275	84	137	41	34,143	15 487	461	140	200	60
2	45,281	20 539	305	93	151	46	32,074	14 549	491	149	213	64
3	41,305	18 736	334	102	166	50	30,241	13 717	520	158	226	68
4	37,971	17 224	363	111	180	54	28,606	12 976	550	167	239	72
5	35,135	15 937	393	120	195	59	-	-	-	-	-	-
6	32,693	14 830	422	129	209	64	-	-	-	-	-	-

Rope layer	Boomhoist Drum - 1" (25 mm) wire rope						Third Drum - 1" (25 mm) wire rope					
	Maximum line pull		No load line speed		Full load line speed		Maximum line pull		No load line speed		Full load line speed	
	lbs.	kg	ft./min	m/min	ft./min	m/min	lbs.	kg	ft./min	m/min	ft./min	m/min
1	44,757	20 302	230	70	115	35	22,980	12 689	408	124	207	63
2	40,865	18 536	252	77	126	38	20,862	9 461	449	136	228	69
3	37,596	11 459	274	84	137	41	19,102	8 663	491	149	249	75
4	34,811	15 790	295	90	148	45	17,615	7 988	532	161	270	82
5	-	-	-	-	-	-	16,343	7 411	574	174	291	88

Wire Rope Drum Capacities

Rope layer	Boomhoist Drum Capacity - 1" (25 mm) wire rope					
	Pitch Diameter		Layer		Total	
	in.	mm	ft.	m	ft.	m
1	21	533	152	46	152	46
2	23	584	167	51	319	97
3	25	635	181	55	500	152
4	27	686	196	60	695	212

Rope layer	Front Drum Capacity - 1-1/8" (28 mm) wire rope					
	Pitch Diameter		Layer		Total	
	in.	mm	ft.	m	ft.	m
1	21.125	537	143	44	143	44
2	23.375	594	158	48	301	92
3	25.625	651	173	53	474	144
4	27.875	708	188	57	662	202
5	30.125	765	204	62	866	264
6	32.375	822	219	67	1,084	330

Rope layer	Rear Drum Capacity - 1" (25 mm) wire rope					
	Pitch Diameter		Layer		Total	
	in.	mm	ft.	m	ft.	m
1	31	787	236	72	236	72
2	33	838	251	77	486	148
3	35	889	266	81	752	229
4	37	940	281	86	1,034	315

Rope layer	Third Drum Capacity - 1" (25 mm) wire rope					
	Pitch Diameter		Layer		Total	
	in.	mm	ft.	m	ft.	m
1	19.7	500	150	46	150	46
2	21.7	551	165	50	315	96
3	23.7	602	180	55	495	152
4	25.7	652	195	60	690	210
5	27.7	703	211	64	901	275

Wire Rope: size, type and working strength

Wire rope application	Size: diameter		Type	Max. permissible load	
	inches	mm		lbs.	kg
Main hoist	1-1/8	28	LB	40,800	18 507
Auxiliary hoist (1 part)	1	25	P	16,800	7 620
Auxiliary hoist (2 part)	1	25	N	29,500	13 381
Auxiliary hoist	1-1/8	28	N	37,100	16 829
Boomhoist	1	25	W	29,500	13 381
Third drum	1	25	RB	22,700	10 297
Boom pendants	1-1/4	32	N	n/a	n/a
Midpoints pendants	1	25	N	n/a	n/a
Jib pendants	7/8	22	N	n/a	n/a

Wire Rope: types available

- Type "N" - 6 x 25 (6 x 19 class) filler wire, extra improved plow steel, preformed, independent wire rope center, right lay, regular lay.
- Type "LB" - 6 x 25 (6 x 19 class) filler wire, preformed, independent wire rope center, right lay, regular lay.
- Type "RB" - 18 x 19 rotation resistant, extra, extra improved plow steel, preformed, right lay, regular lay, swaged.
- Type "P" - 19 x 7 rotation resistant, extra improved plow steel, preformed, wire strand core. Inner 7 strands: left lang lay. Outer 12 strands: right regular lay.
- Type "W" - 6 x 26 (6 x 19 class), extra improved plow steel, preformed, independent wire rope core, right lay, alternate lay.

Engine	Cummins N14 - C360
Number of cylinders	6
Bore	5.5" (0.14 m)
Stroke	6" (0.15 m)
Piston Displacement	855 cu. in. (14 013 cm ³)
Maximum h.p. @ full load speed rpm	360 h.p. (269 kw) @ 1,800 rpm
High idle speed	2,000 rpm
Peak torque	1,215 ft. lbs. (168 kgm) @ 1,400 rpm
Electrical system	12 volt charging - 24 volt starting
Batteries	Two 12-volt

Hydraulic System

■ Transmission

Four pad pump drive; 1.289 to 1 gear ratio. Helical gears are mounted on tapered roller bearings. Flex plate driven. Front and rear drum pumps operate at 5,000 psi (352 kg/cm²). Boomhoist pump operates at 4,600 psi (323 kg/cm²). Variable displacement swing drive pump operates at 4,350 psi (306 kg/cm²). Speed-o-Matic® control system is powered by a fixed displacement gear pump.

■ Hydraulic Oil Reservoir

Link-Belt, 89 gallon (337 liter) capacity with filter and strainer assembly.

■ Relief Valves

Each function is equipped with relief valves to protect the circuit from overload or shock.

■ Hydraulic Filtration

Pumps for front, rear, and boomhoist drums and for swing drive have a built-on 10-micron filter in the charge pressure circuit.

■ Counterbalance Valves

Hoist motors are equipped with counterbalance valves to provide positive load lowering and prevent accidental load drop when hydraulic power is suddenly reduced.

Principal Operating Functions

■ Control System

Speed-o-Matic® power hydraulics; a variable pressure system requiring no bleeding. Operating pressure is transmitted through oil to all pumps. System includes a gear pump to provide a constant flow, an accumulator to maintain operating pressure, oil filter, relief valve, and variable pressure operator controlled valves to regulate pressure to each pump.

■ Load Hoisting & Lowering

Main and auxiliary hoist drums are driven by individual axial piston motors and reduction gearing. Load hoisting or lowering is provided by actuating or reversing a hydraulic motor. Smooth, precise, power load lowering is attained with automatic hydraulic brake. Hoisting or lowering speeds are proportional to lever movement.

■ Load Hoist Drums

Front drum - One-piece, smooth 20" (0.51 m) root diameter.

Rear drum - One-piece, smooth 30" (0.76 m) root diameter.

■ Drum Brakes

Multiple disc, integral with drum drive unit. Spring applied, hydraulically released. Brakes automatically apply when control lever is in neutral position.

■ Drum Rotation Indicators

Standard for front, rear, and boomhoist drums. Solenoid operated indicator button, recessed in drum control lever handles; button pulsates when rope drums rotate.

■ Drum Locking Pawl

Standard for front and rear drums; spring applied and hydraulically released. Prevents drum rotation in a lowering direction. Pawls automatically apply when control lever is in neutral position.

■ Swing System

Independent, hydraulic swing is driven by a bent axis, fixed displacement piston motor through a gear reduction system. Free swing when lever is in neutral position.

Swing Brake - Spring applied, hydraulically released multi-plate swing brake mounted at input side of planetary gear box. Brake controlled by button on swing control lever.

Swing lock - Hydraulically controlled, 360°.

Maximum swing speed - 2.4 r.p.m.

■ Boom Hoisting & Lowering

Independent, hydraulic boomhoist is driven by a variable displacement, axial piston motor through a gear reduction system. Boom hoisting or lowering is performed by actuating or reversing the motor. Boomhoist speed is infinitely variable.

■ Boomhoist Drum

One-piece, smooth; 20" (0.51 m) root diameter. Ratchet wheel for drum locking pawl integral with drum flange.

Boomhoist brake - Spring applied, hydraulically released, multiple disc type brake. Brake is automatically applied when control lever is in neutral position.

■ Boomhoist Drum Locking Pawl

Spring applied, hydraulically released. Prevents drum rotation in a lowering direction. Pawl automatically applies when control lever is in neutral position.

Boomhoist limiting device - Provided to restrict hoisting boom above maximum recommended boom angle; located on exterior right-hand side of operator's cab. Electrical switch contacted by boom striker bracket, deactivates hydraulic solenoid valve which shuts off hydraulic pressure in line to boomhoist pump and brake. As pressure is shut off, boomhoist brake is spring applied.

■ Electrical System

Battery: Two 12-volt, 225 ampere hour batteries and 12-volt, 105 ampere alternator.

■ Operator's Cab

Environmental cab, modular type with sliding door; isolated from upper machinery cab. Cab door and windows equipped with safety tinted glass panels. Standard cab equipment includes hand grab rail, cab heater/defroster and windshield wiper/washer.

■ Machinery Cab

Equipped with warning horn, hinged doors for access to machinery, rooftop access ladder and skid resistant finish on roof.

■ Gantry

Mounted to upper frame; supports boom suspension system.

■ Gantry Bail

Pinned to gantry; supports boom suspension system. Bail contains 8 sheaves for 18-part boomhoist rope reeving; sheaves mounted on anti-friction bearings.

 Counterweights

Total - 98,200 lbs. (44 544 kg)

"A" cwt. - 30,000 lbs. (13 608 kg)

"B" cwt. - 25,200 lbs. (11 431 kg)

"C" cwt. - 21,500 lbs. (9 752 kg)

"D" cwt. - 21,500 lbs. (9 752 kg)

Attachment - Open Throat

Boom - Tubular; two section basic boom 60' (18.29 m) long.

Base section - 30' (9.14 m) long, 80" (2.03 m) wide, 68" (1.73 m) deep. Lifting lugs on top side of base section to attach carrying links for carrying boom base section.

Boom extensions - Available in 10' (3.05 m), 20' (6.10 m), 30' (9.14 m), 40' (12.19 m) and 50' (15.24 m) lengths; 80" (2.03 m) wide, 68" (1.73 m) deep, centerline-to-centerline of main chords. Extensions furnished with appropriate length pendants, and one hoist line deflector roller per extension.

Boom connections - In-line, tapered pins.

Boom top section - Open throat; 30' (9.14 m) long.

Boompoint machinery - Six 21" (0.53 m) root diameter head sheaves mounted on anti-friction bearings.



Boom midpoint suspension pendants - Required for all boom lengths exceeding 240' (73.15 m). Pendants connected at 140' (42.67 m) point of boom.

Maximum open throat boom length permitted - 330' (100.58 m) boom or 300' (91.44 m) + 100' (30.48 m) boom and jib combination.

Attachment - Hammerhead

Boom - Tubular; three section basic boom 45' (13.71 m) long.

Base section - 30' (9.14 m) long; 80" (2.03 m) wide, 68" (1.73 m) deep.

"J" Wall Straight Boom Extensions - Available in 10' (3.05 m), 20' (6.10 m) and 30' (9.14 m) lengths.

Note: When using hammerhead attachment the first 40' (12.19 m) of boom extension must be "J" wall extensions. All other extensions are standard open throat boom extensions.

Straight Boom Extensions - Available in 10' (3.05 m), 20' (6.10 m), 30' (9.14 m), 40' (12.19 m) and 50' (15.24 m) lengths; 80" (2.03 m) wide, 68" (1.73 m) deep, centerline-to-centerline of main chords. In making up various boom lengths, straight extensions must be arranged in the boom as outlined in Crane Rating Manual.



Tapered Boom Extension - 10' (3.05 m) long; 80" (2.03 m) wide, 68" (1.73 m) deep at lower

end and 55" (1.40 m) wide, 41" (1.04 m) deep at top end.

Note: Tapered boom extension must always be used as last boom section prior to mounting hammerhead top section.

Hammerhead Top Section - 5' (1.52 m) long; 55" (1.40 m) wide, 41" (1.04 m) deep lower end.

Maximum hammerhead boom length permitted - 245' (74.68 m).

Boompoint Machinery - Six 21" (0.53 m) root diameter sheaves; mounted on anti-friction bearings.

Items Applicable to Both Hammerhead and Open Throat Tip Booms**Boom Stops**

Dual lever type; connected to upper frame and top of boom base section. Spring loaded bumper ends.

Boom Live Mast

Mounted on front of upper frame; supports boomhoist bridle, spreader bar and boom midpoint suspension pendants. Mast 35' (10.67 m) long; may be used as short boom for handling counterweight, outrigger assemblies, etc. in machine stripdown and for boom assembly/disassembly.

Boom live mast stops - Incorporated with boom stops; manually positioned when using live mast as short boom.

Boomhoist Bridle

Bridle contains nine 15" (0.38 m) root diameter sheaves (for 18-part boomhoist reeving) and two 15" (0.38 m) root diameter auxiliary load hoist sheaves which enable boom live mast to be used as short boom for machine assembly/disassembly.

Sheaves mounted on anti-friction bearings.

Boom pendants - Standard; furnished for basic boom lengths plus appropriate length pendants with each boom extension.

Deflector rollers - Deflect load hoist wire rope off boom to avoid chafing; steel rollers mounted on anti-friction bearings. One roller furnished with each boom extension.

Jib

Tubular; two-piece basic jib 30' (9.14 m) long; 32" (0.81 m) wide, 24" (0.61 m) deep at centerline of connections. Alloy steel tubular chords 2-1/4" (57 mm) outside diameter.

Base section - 13' 3" (4.04 m) long.

Jib extensions - Available in 10' (3.05 m) and 20' (6.1 m) lengths with appropriate length pendants.

Jib connections - In-line, tapered pins.

Tip section - 15' (4.57 m) long; equipped with single peak sheave 21" (0.53 m) root diameter, heat treated and mounted on anti-friction bearings. Anchor provided at peak of jib tip section for two-part load hoist wire rope (whipline) connection.

Maximum jib length permitted - 100' (30.48 m). All jib lengths may be mounted at 5°, 15° or 25° offset to boom.

Jib Mast

17' 10" (5.44 m) long, mounted on jib base section. Two deflector sheaves mounted within mast to guide whipline; mounted on anti-friction bearings. Two equalizer sheaves mounted on top of mast - one for jib frontstay line, one for jib backstay line.

Jib staylines - Front and back staylines. Back staylines vary in length depending on degree of jib offset from boom centerline; back staylines attached at bottom end of boom top section.

Jib stops - Telescoping type; pinned from jib mast to boom top section and from jib mast to jib base section.

Boomfeet - 4" (101.60 mm) wide on 66" (1.68 m) centers; 5" (0.13 m) diameter boomfoot pins. Pins hydraulically removed/inserted for ease in stripdown. Double-acting hydraulic cylinder mounts on frame between boomfoot lugs.

Boomfoot pins - one connected to cylinder rod end, the other connected to the cylinder body - are pushed in, or pulled from, connection with boomfeet.

Auxiliary Equipment**Boom Angle Indicator**

Pendulum type; mounted on boom base section.

Anti Two-Block System

Standard - A switch mounted on the boom peak activates a buzzer to warn the operator of a two-block condition and simultaneously disengages hoist function while applying the hoist brakes.

Rated Capacity Limiter

Standard; PAT DS-350 rated capacity limiter.

Hook Blocks

Blocks, or weighted ball with swivel hook, optional - refer to price list.

Link-Belt Construction Equipment Company

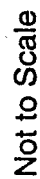
HC-278H

Upper Counterweight = ABCD

Lower Counterweight = A

Boom Length (ft)	Load Radius (ft)	Boom Angle (deg)	Over Rear Capacity (lbs)		360 Degree Capacity (lbs)	
100	40	68.4	152,800	*	152,800	*
100	41	67.8	149,000	*	149,000	*
100	42	67.1	145,300	*	145,300	*
100	43	66.5	141,700	*	141,700	*
100	44	65.9	138,300	*	138,300	*
100	45	65.3	135,000	*	135,000	*
100	46	64.6	131,900	*	131,000	
100	47	64.0	128,900	*	127,000	
100	48	63.4	126,000	*	123,200	
100	49	62.7	123,300	*	119,600	
100	50	62.1	120,600	*	116,200	
100	51	61.4	118,100	*	113,000	
100	52	60.8	115,600	*	110,100	
100	53	60.1	113,300	*	107,200	
100	54	59.4	111,200	*	104,400	
100	55	58.8	109,000	*	101,800	
100	56	58.1	106,900	*	99,300	
100	57	57.4	104,900	*	96,900	
100	58	56.7	102,900	*	94,500	
100	59	56.1	101,000	*	92,300	
100	60	55.4	99,200	*	90,200	

GENERAL INFORMATION ONLY



Not to Scale

HC-278H Lattice Boom Lift Crane Capacities

PCSA Class 12-1534
Refer to notes page 20

Boom - Tube; 80" (2.03 m) wide, 68" (1.73 m) deep with open throat top section.

Jib - Tube; 32" (.81 m) wide, 24" (.61 m) deep.

Mounting - rubber tire mobile base: Link-Belt; 12x6 drive, 288" (6.60 m) wheel-base, 11' 10" (3.61 m) wide.

Counterweights:

"A" Upper - 30,000 lbs. (13 608 kg)
 "AB" Upper - 55,200 lbs. (25 039 kg)
 "ABC" Upper - 76,700 lbs. (34 791 kg)
 "ABCD" Upper - 98,200 lbs. (44 544 kg)
 "A" Bumper - 11,400 lbs. (5 171 kg)
 "AB" Bumper - 26,700 lbs. (12 111 kg)

Maximum boom or boom + jib machine on outriggers can lift off ground unassisted - without load

Standard HC-278H must be equipped with the counterweights listed below when the indicated boom or boom + jib lengths are used.	Boom or boom + jib lengths allowed	On Outriggers							
		Over Rear				Over Side			
		Boom		Boom + Jib		Boom		Boom + Jib	
		Feet	meters	Feet	meters	Feet	meters	Feet	meters
Ctwt. 0 + 0	Minimum	60	18.29	n/a	n/a	60	18.29	n/a	n/a
	Maximum	210	64.01	n/a	n/a	190	57.91	n/a	n/a
Ctwt. A + 0	Minimum	60	18.29	n/a	n/a	60	18.29	n/a	n/a
	Maximum	240	73.15	n/a	n/a	230	70.10	n/a	n/a
Ctwt. AB + 0	Minimum	60	18.29	n/a	n/a	60	18.29	n/a	n/a
	Maximum	270	82.30	n/a	n/a	250	76.20	n/a	n/a
Ctwt. ABCD + 0	Minimum	60	18.29	60 + 30	18.29 + 9.14	60	18.29	60 + 30	18.29 + 9.14
	Maximum	310	94.49	270 + 100	82.30 + 30.48	300	91.44	260 + 100	79.25 + 30.48
Ctwt. ABCD + A	Minimum	100	30.48	n/a	n/a	100	30.48	n/a	n/a
	Maximum	320	97.54	n/a	n/a	300	91.44	n/a	n/a
Ctwt. ABCD + AB	Minimum	140	42.67	140 + 30	42.67 + 9.14	140	42.67	140 + 30	42.67 + 9.14
	Maximum	330	100.58	300 + 100	91.44 + 30.48	310	94.49	270 + 100	82.30 + 30.48

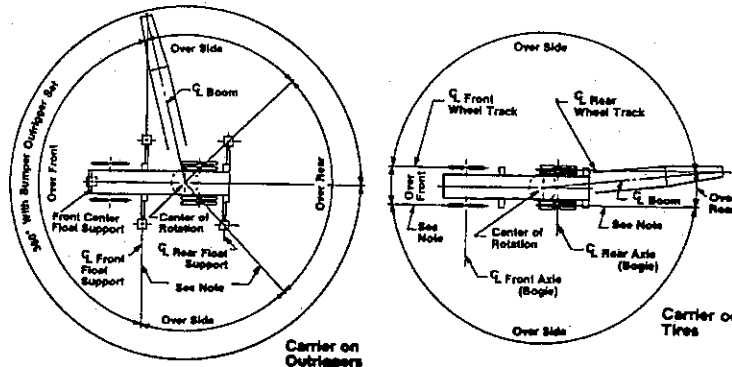
Maximum boom or boom + jib machine on tires can lift off ground unassisted - without load (Refer to Operator's Manual for Travel Restrictions)

Standard HC-278H must be equipped with the counterweights listed below when the indicated boom lengths are used.	Boom lengths allowed	On Outriggers			
		Over Rear			
		Boom		Boom + Jib	
		Feet	meters	Feet	meters
Ctwt. 0 + 0	Minimum	60	18.29	n/a	n/a
	Maximum	110	33.53	n/a	n/a
Ctwt. A + 0	Minimum	60	18.29	n/a	n/a
	Maximum	150	45.72	n/a	n/a
Ctwt. AB + 0	Minimum	60	18.29	n/a	n/a
	Maximum	180	54.86	n/a	n/a
Ctwt. ABCD + 0	Minimum	60	18.29	n/a	n/a
	Maximum	210	64.01	n/a	n/a
Ctwt. ABCD + A	Minimum	100	30.48	n/a	n/a
	Maximum	230	70.10	n/a	n/a
Ctwt. ABCD + AB	Minimum	140	42.67	n/a	n/a
	Maximum	230	70.10	n/a	n/a

Working Areas

- These lines determine the limiting position of any load for operation within working areas indicated.

Caution: This material is for reference only. Operator must refer to in-cab Crane Rating Manual to determine allowable machine lifting capacities and operating procedures.



HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation						
			Over Rear						360 Degree Rotation						
			0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"A" ctwt.	"ABCD" + "AB" ctwt.	0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"A" ctwt.	"ABCD" + "AB" ctwt.	
60' (18.29 m)	10.4	--	--	--	--	600,000* ①	600,000*	--	--	--	--	--	--	--	--
	12.0	81.5	384,100*	424,100*	441,600*	500,000*	441,600*	384,100*	400,300*	411,600*	445,100*	445,100*	445,100*	445,100*	445,100*
	13.0	80.6	354,900*	391,900*	421,200*	437,200*	391,900*	354,900*	381,700*	392,600*	437,200*	437,200*	437,200*	437,200*	437,200*
	14.0	79.6	329,700*	364,200*	395,800*	417,900*	364,200*	329,700*	339,900*	375,100*	417,900*	417,900*	417,900*	417,900*	417,900*
	15.0	78.6	307,700*	339,900*	369,600*	400,300*	339,900*	307,700*	339,900*	359,300*	400,300*	400,300*	400,300*	400,300*	400,300*
	16.0	77.6	288,500*	318,700*	346,500*	383,900*	318,700*	288,500*	318,700*	344,600*	383,900*	383,900*	383,900*	383,900*	383,900*
	17.0	76.7	271,300*	299,800*	326,200*	367,900*	299,800*	271,300*	299,800*	326,200*	367,900*	367,900*	367,900*	367,900*	367,900*
	18.0	75.7	256,200*	283,100*	307,900*	347,300*	307,900*	256,200*	283,100*	307,900*	347,300*	347,300*	347,300*	347,300*	347,300*
	19.0	74.7	242,400*	268,000*	291,700*	329,100*	268,000*	242,400*	268,000*	291,700*	329,100*	329,100*	329,100*	329,100*	329,100*
	20.0	73.7	230,100*	254,600*	276,900*	312,500*	254,600*	230,100*	254,600*	276,900*	312,500*	312,500*	312,500*	312,500*	312,500*
	25.0	68.7	183,100*	202,700*	220,700*	249,300*	202,700*	183,100*	202,700*	220,700*	249,300*	249,300*	249,300*	249,300*	249,300*
	30.0	63.4	130,100	167,900*	183,000*	206,800*	167,900*	130,100	155,600	176,400*	206,800*	206,800*	206,800*	206,800*	206,800*
	35.0	58.0	99,900	132,400	155,800*	176,400*	132,400	99,900	117,000	144,500	176,400*	176,400*	176,400*	176,400*	176,400*
	40.0	52.1	80,500	107,300	130,800	153,400*	107,300	80,500	93,400	117,000	153,400*	153,400*	153,400*	153,400*	153,400*
50.0	38.7	57,200	76,700	94,200	121,200*	76,700	57,200	66,700	84,000	112,500	112,500	112,500	112,500	112,500	
60.0	18.7	43,500	59,000	72,800	93,100*	59,000	43,500	51,000	64,800	87,300	87,300	87,300	87,300	87,300	
70' (21.34 m)	12.9	82.0	356,700*	366,400*	366,400*	366,400*	366,400*	356,700*	366,400*	366,400*	366,400*	366,400*	366,400*	366,400*	366,400*
	13.0	81.9	354,200*	366,400*	366,400*	366,400*	366,400*	354,200*	366,400*	366,400*	366,400*	366,400*	366,400*	366,400*	366,400*
	14.0	81.1	329,100*	358,400*	358,400*	358,400*	358,400*	329,100*	358,400*	358,400*	358,400*	358,400*	358,400*	358,400*	358,400*
	15.0	80.3	307,200*	339,300*	351,700*	351,700*	339,300*	307,200*	339,300*	351,700*	351,700*	351,700*	351,700*	351,700*	351,700*
	16.0	79.4	288,000*	318,200*	344,000*	344,000*	318,200*	288,000*	318,200*	343,800*	344,000*	344,000*	344,000*	344,000*	344,000*
	17.0	78.6	270,900*	299,500*	325,600*	337,500*	299,500*	270,900*	299,500*	325,600*	337,500*	337,500*	337,500*	337,500*	337,500*
	18.0	77.8	255,800*	282,700*	307,400*	329,100*	282,700*	255,800*	282,700*	307,400*	329,100*	329,100*	329,100*	329,100*	329,100*
	19.0	76.9	242,100*	267,700*	291,300*	322,900*	267,700*	242,100*	267,700*	291,300*	322,900*	322,900*	322,900*	322,900*	322,900*
	20.0	76.1	229,800*	254,200*	276,500*	312,000*	254,200*	229,800*	254,200*	276,500*	312,000*	312,000*	312,000*	312,000*	312,000*
	25.0	71.8	183,000*	202,400*	220,500*	249,000*	202,400*	183,000*	202,400*	220,500*	249,000*	249,000*	249,000*	249,000*	249,000*
	30.0	67.5	130,600	167,700*	182,800*	206,600*	167,700*	130,600	150,600	182,800*	206,600*	206,600*	206,600*	206,600*	206,600*
	35.0	63.0	100,300	132,800	155,600*	176,200*	132,800	100,300	115,900	144,800	176,200*	176,200*	176,200*	176,200*	176,200*
	40.0	58.3	80,800	107,600	131,100	153,200*	107,600	80,800	93,700	117,300	153,200*	153,200*	153,200*	153,200*	153,200*
	50.0	48.0	57,400	77,000	94,400	120,900*	77,000	57,400	66,900	84,200	112,600	112,600	112,600	112,600	112,600
60.0	35.7	43,700	59,300	73,100	95,500	59,300	43,700	51,200	65,000	87,500	87,500	87,500	87,500	87,500	
70.0	17.3	34,800	47,600	59,000	77,500*	47,600	34,800	40,900	52,300	71,000	71,000	71,000	71,000	71,000	
80' (24.38 m)	14.3	82.0	321,400*	331,700*	331,700*	331,700*	331,700*	321,400*	331,700*	331,700*	331,700*	331,700*	331,700*	331,700*	331,700*
	15.0	81.5	306,400*	327,600*	327,600*	327,600*	327,600*	306,400*	327,600*	327,600*	327,600*	327,600*	327,600*	327,600*	327,600*
	16.0	80.8	287,400*	317,500*	321,400*	321,400*	317,500*	287,400*	317,500*	321,400*	321,400*	321,400*	321,400*	321,400*	321,400*
	17.0	80.0	270,300*	298,900*	314,400*	314,400*	298,900*	270,300*	298,900*	314,400*	314,400*	314,400*	314,400*	314,400*	314,400*
	18.0	79.3	255,300*	282,200*	306,800*	308,500*	282,200*	255,300*	282,200*	306,800*	308,500*	308,500*	308,500*	308,500*	308,500*
	19.0	78.6	241,700*	267,100*	290,700*	302,700*	267,100*	241,700*	267,100*	290,700*	302,700*	302,700*	302,700*	302,700*	302,700*
	20.0	77.9	229,400*	253,800*	276,000*	295,100*	253,800*	229,400*	253,800*	276,000*	295,100*	295,100*	295,100*	295,100*	295,100*
	25.0	74.2	182,600*	202,100*	220,100*	248,500*	202,100*	182,600*	202,100*	220,100*	248,500*	248,500*	248,500*	248,500*	248,500*
	30.0	70.4	130,900	167,400*	182,500*	206,200*	167,400*	130,900	150,900	182,500*	206,200*	206,200*	206,200*	206,200*	206,200*
	35.0	66.6	100,500	133,000	155,300*	175,900*	133,000	100,500	116,100	145,000	175,900*	175,900*	175,900*	175,900*	175,900*
	40.0	62.6	80,900	107,700	131,200	152,400*	107,700	80,900	93,900	117,400	152,400*	152,400*	152,400*	152,400*	152,400*
	50.0	54.2	57,500	77,000	94,400	117,400*	77,000	57,500	67,000	84,300	112,600	112,600	112,600	112,600	112,600
	60.0	44.7	43,800	59,300	73,100	94,500*	59,300	43,800	51,300	65,100	87,500	87,500	87,500	87,500	87,500
	70.0	33.3	34,900	47,600	59,000	77,300*	47,600	34,900	41,000	52,400	71,000	71,000	71,000	71,000	71,000
80.0	16.2	28,500	39,400	49,100	63,900*	39,400	28,500	33,800	43,400	59,300	59,300	59,300	59,300	59,300	

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation					
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"A" ctwt.	"ABCD" + "AB" ctwt.	0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
90' (27.43 m)	15.7	82.0	293,800*	316,400*	316,400*	316,400*	--	←	293,800*	316,400*	316,400*	316,400*	--	←
	16.0	81.8	288,100*	315,400*	315,400*	315,400*	--		288,100*	315,400*	315,400*	315,400*	--	
	17.0	81.2	271,100*	299,300*	310,500*	310,500*	--		271,100*	299,300*	310,500*	310,500*	--	
	18.0	80.5	256,100*	305,600*	305,600*	305,600*	--		256,000*	305,600*	305,600*	305,600*	--	
	19.0	79.9	242,400*	291,200*	300,800*	300,800*	--		242,400*	291,200*	300,800*	300,800*	--	
	20.0	79.2	230,000*	276,500*	293,300*	293,300*	--		230,000*	276,500*	293,300*	293,300*	--	
	25.0	76.0	183,200*	202,600*	249,000*	249,000*	--		157,200	202,600*	220,600*	249,000*	--	
	30.0	72.7	132,300	167,800*	182,900*	206,600*	--		110,900	152,400	182,900*	206,600*	--	
	35.0	69.3	101,600	134,000	155,700*	176,200*	--		84,700	117,200	146,100	176,200*	--	
	40.0	65.8	81,800	108,600	132,000	153,200*	--		68,200	94,700	118,200	153,200*	--	
100' (30.48 m)	50.0	58.6	58,100	77,600	95,000	121,000*	--		47,900	67,600	84,800	113,200	--	
	60.0	50.8	44,200	59,800	73,500	95,900	--		36,300	51,700	65,500	87,900	--	
	70.0	42.0	35,200	48,000	59,300	77,800	--		28,600	41,300	52,700	71,300	--	
	80.0	31.4	28,800	49,300	65,200	85,200	--		23,100	34,100	43,700	59,600	--	
	90.0	15.2	23,900	33,400	55,700		--		18,900	28,500	37,000	50,700	--	
	17.1	82.0	268,900*	289,600*	289,600*	289,600*	289,600*	←	268,900*	289,600*	289,600*	289,600*	289,600*	←
	18.0	81.5	255,400*	282,000*	285,100*	285,100*	285,100*		255,400*	282,000*	285,100*	285,100*	285,100*	
	19.0	80.9	241,700*	267,000*	281,500*	281,500*	281,500*		241,700*	267,000*	281,500*	281,500*	281,500*	
	20.0	80.3	229,400*	253,700*	277,100*	277,100*	277,100*		229,400*	253,700*	277,100*	277,100*	277,100*	
	25.0	77.4	182,700*	202,100*	220,000*	248,300*	248,300*		157,500	202,100*	220,000*	248,300*	248,300*	
110' (33.53 m)	30.0	74.4	132,400	167,400*	182,400*	206,100*	206,100*	←	111,100	152,500	182,400*	206,100*	206,100*	←
	35.0	71.4	101,600	134,100	155,200*	175,800*	175,800*		84,800	117,200	146,100	175,800*	175,800*	
	40.0	68.4	81,800	108,500	132,000	152,700*	152,700*		68,200	94,700	118,200	152,800*	152,800*	
	50.0	62.1	58,000	77,500	94,900	120,600*	120,600*		47,900	67,600	84,800	113,100	116,200	
	60.0	55.4	44,100	59,700	73,400	95,800	99,200*		36,300	51,600	65,400	87,700	90,200	
	70.0	48.1	35,200	47,800	59,200	77,700	83,600*		28,500	41,200	52,600	71,200	73,300	
	80.0	39.8	28,700	39,500	49,200	65,100	71,200		23,000	34,000	43,500	59,400	61,200	
	90.0	29.7	23,900	33,400	41,800	55,600	60,900		18,900	28,500	37,000	50,700	52,200	
	100.0	14.5	20,100	28,500	36,000	48,200	52,900		15,700	24,200	31,700	43,900	45,200	
	18.5	82.0	247,900*	267,600*	267,600*	267,600*	267,600*	←	247,900*	267,600*	267,600*	267,600*	267,600*	←
110' (33.53 m)	19.0	81.7	241,000*	265,100*	265,100*	265,100*	265,100*		241,000*	265,100*	265,100*	265,100*	265,100*	
	20.0	81.2	228,700*	252,900*	261,800*	261,800*	261,800*		228,700*	252,900*	261,800*	261,800*	261,800*	
	25.0	78.6	182,200*	201,500*	219,400*	243,000*	243,000*		157,700	201,500*	219,400*	243,000*	243,000*	
	30.0	75.9	132,500	166,900*	181,900*	205,500*	205,500*		111,100	152,500	181,900*	205,500*	205,500*	
	35.0	73.2	101,600	134,000	154,700*	175,300*	175,300*		84,800	117,200	146,100	175,300*	175,300*	
	40.0	70.4	81,700	108,500	131,900	152,300*	152,300*		68,100	94,600	118,100	152,300*	152,300*	
	50.0	64.8	57,900	77,400	94,800	120,200*	120,200*		47,800	67,400	84,600	112,900	116,000	
	60.0	58.9	43,900	59,500	73,300	95,600	98,800*		36,100	51,500	65,200	87,600	90,000	
	70.0	52.6	35,000	47,700	59,100	77,500	83,200*		28,400	41,000	52,400	71,100	73,100	
	80.0	45.7	28,600	39,300	49,000	64,900	71,000		22,900	33,900	43,400	59,300	61,000	
110.0	90.0	37.9	23,700	33,300	41,600	55,400	60,700	→	18,800	28,400	36,800	50,500	52,000	→
	100.0	28.3	20,000	28,500	36,000	48,100	52,800		15,600	24,100	31,600	43,700	45,100	
	110.0	13.8	17,000	24,600	31,300	42,200	46,400		13,000	20,600	27,400	38,300	39,500	

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation						"ABCD" + "AB" cwt.	"ABCD" + "A" cwt.	"ABCD" + "A" cwt.	"ABCD" + "A" cwt.
			0 + 0 cwt.	"A" + 0 cwt.	"AB" + 0 cwt.	"ABCD" + 0 cwt.	"ABCD" + "A" cwt.	"ABCD" + "AB" cwt.	0 + 0 cwt.	"A" + 0 cwt.	"AB" + 0 cwt.	"ABCD" + 0 cwt.	"ABCD" + "A" cwt.	"ABCD" + "A" cwt.				
120' (36.58 m)	19.9	82.0	229,500*	245,100*	245,100*	245,100*	245,100*	245,100*	229,500*	245,100*	245,100*	245,100*	245,100*	245,100*	←	N/A	→	208,800*
	20.0	81.9	228,000*	245,100*	245,100*	245,100*	245,100*	245,100*	228,000*	245,100*	245,100*	245,100*	245,100*	245,100*				
	25.0	79.5	181,600*	200,800*	218,800*	229,800*	229,800*	229,800*	157,800*	200,800*	218,800*	229,800*	229,800*	229,800*				
	30.0	77.1	132,500	166,300*	181,300*	204,900*	204,900*	204,900*	111,200	152,500	181,300*	204,900*	204,900*	204,900*				
	35.0	74.6	101,600	133,900	154,200*	174,700*	174,700*	174,700*	84,700	117,100	146,000	174,700*	174,700*	174,700*				
	40.0	72.1	81,600	108,300	131,800	151,800*	151,800*	151,800*	68,000	94,500	117,900	151,800*	151,800*	151,800*				
	50.0	67.0	57,800	77,200	94,600	119,700*	119,700*	119,700*	47,600	67,300	84,400	112,700	112,700	112,700				
	60.0	61.7	43,800	59,300	73,100	95,400	95,400	95,400	36,000	51,300	65,100	87,300	87,300	87,300				
	70.0	56.2	34,800	47,500	58,800	77,200	77,200	77,200	28,200	40,800	52,200	70,900	70,900	70,900				
	80.0	50.2	28,400	39,100	48,800	64,700	64,700	64,700	22,700	33,700	43,100	59,000	59,000	59,000				
130' (39.62 m)	90.0	43.6	23,500	33,100	41,300	55,200	55,200	55,200	18,600	28,200	36,600	50,300	50,300	50,300	←	N/A	→	208,800*
	100.0	36.2	19,800	28,300	35,800	47,900	47,900	47,900	15,400	23,900	31,400	43,500	43,500	43,500				
	110.0	27.1	16,800	24,400	31,100	42,000	42,000	42,000	12,900	20,500	27,200	38,100	38,100	38,100				
	120.0	13.2	14,300	21,200	27,300	37,300	41,100	41,100	10,800	17,700	23,800	33,800	33,800	33,800				
	21.3	82.0	213,700*	227,100*	227,100*	227,100*	227,100*	227,100*	213,700*	227,100*	227,100*	227,100*	227,100*	227,100*				
	25.0	80.3	181,000*	200,200*	215,000*	215,000*	215,000*	215,000*	157,900	200,200*	215,000*	215,000*	215,000*	215,000*				
	30.0	78.1	132,500	165,800*	180,800*	203,600*	203,600*	203,600*	111,200	152,400	180,700*	203,600*	203,600*	203,600*				
	35.0	75.8	101,500	133,800	153,700*	174,100*	174,100*	174,100*	84,600	117,000	145,900	174,100*	174,100*	174,100*				
	40.0	73.5	81,400	108,200	131,600	151,200*	151,200*	151,200*	67,900	94,400	117,800	151,200*	151,200*	151,200*				
	50.0	68.9	57,600	77,000	91,500	119,200*	119,200*	119,200*	47,400	67,100	84,200	112,400	112,400	112,400				
140' (42.67 m)	60.0	64.1	43,500	59,100	72,900	95,100	97,900*	97,900*	35,800	51,100	64,800	87,100	87,100	87,100	←	N/A	→	208,800*
	70.0	59.1	34,600	47,200	58,600	77,000	82,400*	82,400*	28,000	40,600	52,000	70,600	70,600	70,600				
	80.0	53.8	28,100	38,800	48,600	64,400	70,500	70,500	22,500	33,400	42,900	58,800	58,800	58,800				
	90.0	48.1	23,300	32,900	41,100	54,900	60,200	60,200	18,400	27,900	36,400	50,000	50,000	50,000				
	100.0	41.9	19,600	28,000	35,500	47,600	52,300	52,300	15,200	23,700	31,200	43,200	43,200	43,200				
	110.0	34.7	16,600	24,200	30,900	41,800	46,000	46,000	12,700	20,300	27,000	37,800	37,800	37,800				
	120.0	26.0	14,200	21,100	27,200	37,200	40,800	40,800	10,600	17,500	23,600	33,600	33,600	33,600				
	130.0	12.7	12,100	18,400	24,000	33,100	36,600	36,600	8,800	15,100	20,700	29,900	29,900	29,900				
	22.7	82.0	199,500*	208,800*	208,800*	208,800*	208,800*	208,800*	195,800	208,800*	208,800*	208,800*	208,800*	208,800*				
	25.0	81.0	180,400*	199,500*	203,600*	203,600*	203,600*	203,600*	158,000	199,500*	203,600*	203,600*	203,600*	203,600*				
140' (42.67 m)	30.0	79.0	132,400	165,200*	180,100*	192,800*	192,800*	192,800*	111,100	152,300	180,100*	192,800*	192,800*	192,800*	←	N/A	→	208,800*
	35.0	76.9	101,400	133,700	153,100*	173,600*	173,600*	173,600*	84,500	116,800	145,700	173,600*	173,600*	173,600*				
	40.0	74.7	81,300	108,000	131,400	150,600*	150,600*	150,600*	67,800	94,200	117,600	150,600*	150,600*	150,600*				
	50.0	70.5	57,400	76,700	94,200	118,700*	118,700*	118,700*	47,200	66,900	84,000	112,200	112,200	112,200				
	60.0	66.0	43,300	58,900	72,600	94,900	97,400*	97,400*	35,600	50,800	64,600	86,800	86,800	86,800				
	70.0	61.5	34,400	47,000	58,300	76,700	81,900*	81,900*	27,800	40,300	51,700	70,400	70,400	70,400				
	80.0	56.7	27,900	38,600	48,300	64,200	70,300	70,300	22,200	33,200	42,600	58,500	58,500	58,500				
	90.0	51.7	23,100	32,600	40,800	54,700	60,000	60,000	18,100	27,700	36,100	49,700	49,700	49,700				
	100.0	46.2	19,300	27,800	35,300	47,300	52,000	52,000	15,000	23,400	30,900	42,900	42,900	42,900				
	110.0	40.3	16,300	23,900	30,700	41,500	45,700	45,700	12,400	20,000	26,700	37,500	37,500	37,500				
120.0	120.0	33.4	13,900	20,800	26,900	36,900	40,500	40,500	10,400	17,200	23,400	33,300	33,300	33,300	←	N/A	→	208,800*
	130.0	25.0	11,900	18,200	23,800	32,900	36,400	36,400	8,600	14,900	20,500	29,700	29,700	29,700				
	140.0	12.2	10,100	16,000	21,100	29,500	32,800	32,800	7,100	13,000	18,100	26,500	26,500	26,500				
	140.0	12.2	10,100	16,000	21,100	29,500	32,800	32,800	7,100	13,000	18,100	26,500	26,500	26,500				

HC-278H Lift Crane Capacities - On Outriggers

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear					Capacities - On Outriggers 360 Degree Rotation				
			"0 + 0"	"A" + 0	"AB" + 0	"ABCD" + 0	"A" cwt.	"ABCD" + 0	"AB" + 0	"A" cwt.	"ABCD" + 0	"AB" + 0
			ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.
150' (45.72 m)	24.0	82.0	186,800*	193,700*	193,700*	193,700*	193,700*	193,700*	193,700*	193,700*	193,700*	193,700*
	25.0	81.6	179,700*	191,900*	191,900*	191,900*	191,900*	191,900*	191,900*	191,900*	191,900*	191,900*
	30.0	79.7	132,300	164,500*	179,500*	180,500*	180,500*	180,500*	179,500*	180,500*	180,500*	180,500*
	35.0	77.7	101,200	133,500	152,500*	172,000*	172,000*	172,000*	145,600	172,000*	172,000*	172,000*
	40.0	75.8	81,100	107,900	131,200	150,100*	150,100*	150,100*	94,000	117,400	150,100*	150,100*
	50.0	71.8	57,200	76,500	93,900	118,200*	118,200*	118,200*	66,700	83,800	111,900	118,200*
	60.0	67.7	43,000	58,600	72,400	94,600	96,900*	96,900*	35,400	64,300	86,600	92,400
	70.0	63.5	34,100	46,700	58,100	76,400	81,400*	81,400*	27,500	51,400	70,100	74,600
	80.0	59.2	27,600	38,300	48,000	63,900	70,000	70,100*	22,000	42,300	58,200	62,300
	90.0	54.6	22,800	32,300	40,500	54,300	59,700	61,000*	17,900	35,900	49,400	53,000
160' (48.77 m)	100.0	49.8	19,000	27,500	35,000	47,000	51,700	53,800*	14,700	30,600	42,600	45,800
	110.0	44.6	16,100	23,700	30,400	41,100	45,400	47,800*	12,100	26,500	37,200	40,100
	120.0	38.8	13,600	20,500	26,600	36,600	40,200	42,900*	10,100	23,100	33,100	35,600
	130.0	32.3	11,600	17,900	23,500	32,600	36,200	38,700*	8,400	20,200	29,400	31,800
	140.0	24.2	9,900	15,700	20,900	29,300	32,500	35,300*	6,900	17,900	26,300	28,500
	150.0	11.8	8,400	13,800	18,600	26,400	29,400	32,100*	5,600	15,800	23,600	25,600
	25.4	82.0	175,800*	177,700*	177,700*	177,700*	177,700*	177,700*	177,700*	177,700*	177,700*	177,700*
	30.0	80.3	132,300	163,900*	170,500*	170,500*	170,500*	170,500*	152,100	170,500*	170,500*	170,500*
	35.0	78.5	101,100	133,400	151,900*	163,000*	163,000*	163,000*	84,200	145,400	163,000*	163,000*
	40.0	76.7	80,900	107,700	131,000	149,500*	149,500*	149,500*	67,400	117,200	149,500*	149,500*
170' (51.82 m)	50.0	73.0	56,900	76,200	93,700	117,600*	117,600*	117,600*	46,800	83,500	111,600	117,600*
	60.0	69.2	42,800	58,300	72,100	94,300	96,400*	96,400*	35,100	64,100	86,300	92,100
	70.0	65.3	33,900	46,400	57,800	76,100	80,900*	81,000*	27,200	51,100	69,800	74,200
	80.0	61.3	27,400	38,000	47,700	63,600	69,700*	69,700*	21,700	42,000	57,900	62,000
	90.0	57.1	22,500	32,100	40,200	54,000	59,300	60,600*	17,600	35,600	49,100	52,700
	100.0	52.8	18,800	27,200	34,700	46,700	51,400	53,300*	14,400	30,300	42,300	45,500
	110.0	48.1	15,800	23,400	30,100	40,800	45,000	47,400*	11,800	26,200	37,200	39,700
	120.0	43.1	13,300	20,200	26,300	36,300	39,900	42,400*	9,800	22,800	32,800	35,300
	130.0	37.6	11,300	17,600	23,200	32,400	35,900	38,200*	8,100	19,900	29,100	31,500
	140.0	31.2	9,600	15,400	20,600	29,000	32,200	34,900*	6,600	17,600	26,000	28,200
170' (51.82 m)	150.0	23.4	8,100	13,500	18,300	26,100	29,100	31,700*	5,300	15,500	23,300	25,400
	160.0	11.4	6,800	11,900	16,300	23,600	26,400	28,900*	4,300	13,700	21,000	22,900
	26.8	82.0	163,100	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*
	30.0	80.9	132,100	159,700*	159,700*	159,700*	159,700*	159,700*	111,000	159,700*	159,700*	159,700*
	35.0	79.2	100,900	133,200	151,300*	162,700*	162,700*	162,700*	84,100	145,200	162,700*	162,700*
	40.0	77.5	80,700	107,500	130,700	144,100*	144,100*	144,100*	67,300	116,900	144,100*	144,100*
	50.0	74.0	56,700	76,000	93,400	117,100*	117,100*	117,100*	46,500	83,200	111,400	117,100*
	60.0	70.5	42,500	58,100	71,800	94,000	95,900*	95,900*	34,900	63,800	86,000	91,800
	70.0	66.9	33,600	46,100	57,500	75,700	80,400*	80,400*	27,000	50,800	69,500	74,300
	80.0	63.1	27,100	37,700	47,400	63,300	69,200*	69,200*	21,400	41,700	57,600	61,700
	90.0	59.3	22,200	31,800	39,900	53,700	59,000	62,100*	17,300	35,300	48,800	52,400
170' (51.82 m)	100.0	55.3	18,400	26,900	34,400	46,300	51,000	52,900*	14,100	30,000	42,000	45,100
	110.0	51.1	15,500	23,100	29,800	40,500	44,700	46,900*	11,500	25,900	36,900	39,400
	120.0	46.6	13,000	19,900	26,000	36,000	39,500	42,000*	9,500	22,500	32,500	35,000
	130.0	41.7	11,000	17,300	22,900	32,000	35,500	37,800*	7,700	19,600	28,800	31,100
	140.0	36.4	9,300	15,100	20,300	28,700	31,900	34,400*	6,300	17,200	25,700	27,900
	26.8	82.0	163,100	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*	163,800*
	30.0	80.9	132,100	159,700*	159,700*	159,700*	159,700*	159,700*	111,000	159,700*	159,700*	159,700*
	35.0	79.2	100,900	133,200	151,300*	162,700*	162,700*	162,700*	84,100	145,200	162,700*	162,700*
	40.0	77.5	80,700	107,500	130,700	144,100*	144,100*	144,100*	67,300	116,900	144,100*	144,100*
	50.0	74.0	56,700	76,000	93,400	117,100*	117,100*	117,100*	46,500	83,200	111,400	117,100*
	60.0	70.5	42,500	58,100	71,800	94,000	95,900*	95,900*	34,900	63,800	86,000	91,800

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear					Capacities - On Outriggers 360 Degree Rotation						
			Over Rear					360 Degree Rotation						
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.	0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
170' (51.82 m)	150.0	30.3	7,800	13,200	18,000	25,800	28,800	31,300*	5,000	10,400	15,200	23,000	23,900	25,000
	160.0	22.7	6,600	11,600	16,000	23,300	26,100	28,500*	4,000	9,000	13,400	20,700	21,500	22,600
	170.0	11.1	5,400	10,100	14,300	21,100	23,800	26,100*	3,000	7,700	11,900	18,700	19,500	20,500
180' (54.86 m)	28.2	82.0	148,100	152,500*	152,500*	152,500*	152,500*	152,500*	124,100	152,500*	152,500*	152,500*	152,500*	152,500*
	30.0	81.4	132,000	150,200*	150,200*	150,200*	150,200*	150,200*	110,900	150,200*	150,200*	150,200*	150,200*	150,200*
	35.0	79.8	100,700	133,000	142,200*	142,200*	142,200*	142,200*	83,900	116,100	142,200*	142,200*	142,200*	142,200*
	40.0	78.2	80,500	107,200	130,500	136,400*	136,400*	136,400*	67,100	93,400	116,700	136,400*	136,400*	136,400*
	50.0	74.9	56,400	75,700	93,100	116,500*	116,500*	116,500*	46,300	66,000	82,900	111,500	114,200	116,500*
	60.0	71.6	42,200	57,800	71,500	93,700	95,400*	95,400*	34,600	49,700	63,500	85,600	88,100	91,500
	70.0	68.2	33,300	45,800	57,200	75,400	79,900*	79,900*	26,700	39,100	50,500	69,200	71,200	74,000
	80.0	64.7	26,800	37,300	47,000	62,900	68,700*	68,700*	21,100	32,100	41,400	57,300	59,000	61,400
	90.0	61.2	21,900	31,500	39,500	53,400	58,700	59,600*	17,000	26,500	35,000	48,400	50,000	52,000
	100.0	57.5	18,100	26,600	34,100	46,000	50,700	52,400*	13,800	22,200	29,700	41,600	43,000	44,800
190' (57.91 m)	110.0	53.6	15,100	22,700	29,500	40,100	44,300	46,400*	11,200	18,800	25,500	36,600	37,400	39,000
	120.0	49.5	12,700	19,600	25,700	35,700	39,200	41,500*	9,100	16,000	22,100	32,100	33,200	34,700
	130.0	45.2	10,700	17,000	22,600	31,700	35,200	37,300*	7,400	13,700	19,300	28,500	29,500	30,800
	140.0	40.5	9,000	14,800	19,900	28,400	31,600	34,000*	6,000	11,800	16,900	25,400	26,300	27,500
	150.0	35.3	7,500	12,900	17,700	25,500	28,500	30,900*	4,700	10,100	14,900	22,700	23,600	24,700
	160.0	29.4	6,200	11,300	15,700	23,000	25,800	28,100*	3,600	8,700	13,100	20,400	21,200	22,300
	170.0	22.1	5,100	9,800	14,000	20,800	23,400	25,700*	2,700	7,400	11,600	18,400	19,200	20,200
	180.0	10.8	4,100	8,600	12,500	18,900	21,400	23,400*	--	6,300	10,200	16,600	17,300	18,300
	29.6	82.0	135,200	139,300*	139,300*	139,300*	139,300*	139,300*	113,100	139,300*	139,300*	139,300*	139,300*	139,300*
	30.0	81.9	131,900	138,900*	138,900*	138,900*	138,900*	138,900*	110,800	138,900*	138,900*	138,900*	138,900*	138,900*
200' (60.96 m)	35.0	80.4	100,600	132,800	134,100*	134,100*	134,100*	134,100*	83,700	115,900	134,100*	134,100*	134,100*	134,100*
	40.0	78.8	80,200	107,000	128,700*	128,700*	128,700*	128,700*	66,900	93,200	116,400	128,700*	128,700*	128,700*
	50.0	75.7	56,200	75,400	92,800	116,000*	116,000*	116,000*	46,000	65,700	82,700	111,200	113,900	116,000*
	60.0	72.6	41,900	57,500	71,200	93,400	94,900*	94,900*	34,300	49,400	63,200	85,300	87,800	91,200
	70.0	69.4	33,000	45,500	56,900	75,100	79,400*	79,400*	26,400	38,800	50,200	68,900	70,900	73,700
	80.0	66.1	26,500	37,000	46,700	62,600	68,200*	68,200*	20,800	31,800	41,100	56,900	58,700	61,100
	90.0	62.8	21,600	31,100	39,200	53,000	58,300	59,200*	16,600	26,200	34,700	48,100	49,600	51,700
	100.0	59.4	17,800	26,300	33,800	45,600	50,300	51,900*	13,400	21,900	29,400	41,300	42,600	44,400
	110.0	55.8	14,800	22,400	29,100	39,800	44,000	46,000*	10,900	18,500	25,200	36,200	37,100	38,700
	120.0	52.1	12,400	19,300	25,400	35,400	38,800	41,000*	8,800	15,700	21,800	31,800	32,900	34,400

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation						
			Over Rear						360 Degree Rotation						
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"A" ctwt.	"ABCD" + "AB" ctwt.	0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.	
200' (60.96 m)	70.0	70.5	32,700	45,100	56,500	74,700	78,900*	78,900*	78,900*	26,100	38,500	49,900	68,500	70,600	73,400
	80.0	67.4	26,200	37,100	46,400	62,300	67,700*	67,700*	67,700*	20,500	31,500	40,700	56,600	58,400	60,700
	90.0	64.3	21,300	30,800	38,800	52,700	58,000	58,000	58,000	16,300	25,900	34,300	47,800	49,300	51,300
	100.0	61.0	17,500	25,900	33,400	45,300	50,000	50,000	51,400*	13,100	21,600	29,100	40,900	42,300	44,100
	110.0	57.7	14,500	22,100	28,800	39,400	43,600	45,500*	45,500*	10,500	18,200	24,900	35,900	37,100	38,300
	120.0	54.3	12,000	18,900	25,000	35,000	38,400	40,500*	40,500*	8,500	15,400	21,500	31,500	32,600	34,000
	130.0	50.6	10,000	16,300	21,900	31,000	34,500	36,700*	36,700*	6,700	13,000	18,600	27,800	28,800	30,100
	140.0	46.8	8,300	14,100	19,200	27,700	30,900	33,100*	33,100*	5,300	11,100	16,200	24,700	25,600	26,800
	150.0	42.8	6,800	12,200	17,000	24,800	27,800	30,000*	30,000*	4,000	9,400	14,200	22,000	22,900	24,000
	160.0	38.4	5,500	10,600	15,000	22,300	25,100	27,200*	27,200*	3,000	8,000	12,400	19,700	20,500	21,600
210' (64.01 m)	170.0	33.5	4,400	9,200	13,300	20,100	22,800	24,800*	24,800*	--	6,700	10,900	17,700	18,500	19,500
	180.0	27.9	3,500	7,900	11,800	18,200	20,700	22,700*	22,700*	--	5,600	9,500	16,000	16,700	17,600
	190.0	20.9	2,600	6,800	10,500	16,500	18,900	20,700*	20,700*	--	4,600	8,300	14,400	15,100	16,000
	200.0	10.2	--	5,800	9,300	15,000	17,200	18,700*	18,700*	--	3,700	7,300	13,000	13,600	14,500
	32.4	82.0	114,400	120,000*	120,000*	120,000*	120,000*	120,000*	120,000*	95,800	120,000*	120,000*	120,000*	120,000*	120,000*
	35.0	81.3	100,200	118,500*	118,500*	118,500*	118,500*	118,500*	118,500*	83,300	115,500	118,500*	118,500*	118,500*	118,500*
	40.0	79.9	79,800	106,500	113,300*	113,300*	113,300*	113,300*	113,300*	66,400	92,700	103,300*	113,300*	113,300*	113,300*
	50.0	77.1	55,600	74,800	92,200	100,600*	100,600*	100,600*	100,600*	45,500	65,200	82,100	100,600*	100,600*	100,600*
	60.0	74.3	41,300	56,900	70,600	91,500*	91,500*	91,500*	91,500*	33,800	48,800	62,600	84,700	87,200	90,500
	70.0	71.4	32,400	44,800	56,200	74,400	78,400*	78,400*	78,400*	25,800	38,200	49,600	68,200	70,300	73,000
220' (67.06 m)	80.0	68.5	25,800	36,800	46,000	61,900	67,200*	67,200*	67,200*	20,200	31,100	40,400	56,300	58,000	60,400
	90.0	65.6	20,900	30,500	38,500	52,300	57,600	58,200*	58,200*	16,000	25,600	34,000	47,400	48,900	51,000
	100.0	62.5	17,100	25,600	33,100	44,900	49,600	50,900*	50,900*	12,800	21,200	28,700	40,600	41,900	43,700
	110.0	59.4	14,100	21,700	28,500	39,000	43,300	45,000*	45,000*	10,200	17,800	24,500	35,600	36,800	38,000
	120.0	56.2	11,700	18,600	24,700	34,700	38,100	40,000*	40,000*	8,100	15,000	21,100	31,100	32,200	33,700
	130.0	52.8	9,600	16,000	21,500	30,700	34,200	36,200*	36,200*	6,400	12,700	18,300	27,400	28,400	29,800
	140.0	49.3	7,900	13,700	18,900	27,300	30,500	32,500*	32,500*	4,900	10,700	15,900	24,300	25,200	26,500
	150.0	45.6	6,500	11,900	16,600	24,400	27,400	29,500*	29,500*	3,700	9,100	13,800	21,700	22,500	23,700
	160.0	41.7	5,200	10,200	14,700	22,000	24,800	26,800*	26,800*	2,600	7,600	12,100	19,400	20,200	21,200
	170.0	37.4	4,100	8,800	13,000	19,800	22,400	24,400*	24,400*	--	6,400	10,500	17,400	18,100	19,100
220' (67.06 m)	180.0	32.6	3,100	7,500	11,500	17,900	20,300	22,300*	22,300*	--	5,300	9,200	15,600	16,300	17,300
	190.0	27.2	2,300	6,400	10,100	16,200	18,500	20,300*	20,300*	--	4,300	8,000	14,000	14,700	15,600
	200.0	20.4	--	5,400	8,900	14,700	16,900	18,500*	18,500*	--	3,400	6,900	12,600	13,300	14,100
	210.0	10.0	--	4,500	7,900	13,300	15,400	16,600*	16,600*	--	2,600	5,900	11,400	12,000	12,800
	33.8	82.0	--	105,600*	105,600*	105,600*	105,600*	105,600*	105,600*	--	105,600*	105,600*	105,600*	105,600*	105,600*
	35.0	81.7	--	105,600*	105,600*	105,600*	105,600*	105,600*	105,600*	--	105,600*	105,600*	105,600*	105,600*	105,600*
	40.0	80.4	--	103,700*	103,700*	103,700*	103,700*	103,700*	103,700*	--	92,500	103,700*	103,700*	103,700*	103,700*
	50.0	77.7	--	74,500	91,900	94,600*	94,600*	94,600*	94,600*	--	64,900	81,800	94,600*	94,600*	94,600*
	60.0	75.0	--	56,600	70,300	86,000*	86,000*	86,000*	86,000*	--	48,500	62,300	84,300	86,000*	86,000*
	70.0	72.3	--	44,500	55,900	73,100*	73,100*	73,100*	73,100*	--	37,900	49,200	67,900	69,900	72,700
220' (67.06 m)	80.0	69.6	--	36,500	45,700	61,600	64,900*	64,900*	64,900*	--	30,800	40,000	55,900	57,700	60,000
	90.0	66.8	--	30,200	38,100	52,000	57,300	57,600*	57,600*	--	25,200	33,700	47,000	48,600	50,600
	100.0	63.9	--	25,300	32,800	44,600	49,300	50,400*	50,400*	--	20,900	28,400	40,200	41,500	43,400
	110.0	60.9	--	21,400	28,100	38,700	42,900	44,500*	44,500*	--	17,500	24,200	35,200	36,400	37,600
	120.0	57.9	--	18,200	24,300	34,300	37,700	39,500*	39,500*	--	14,700	20,800	30,800	31,900	33,300
	130.0	54.8	--	15,600	21,200	30,300	33,800	34,600*	34,600*	--	12,300	17,900	27,100	28,100	29,400
	33.8	82.0	--	105,600*	105,600*	105,600*	105,600*	105,600*	105,600*	--	105,600*	105,600*	105,600*	105,600*	105,600*
	35.0	81.7	--	105,600*	105,600*	105,600*	105,600*	105,600*	105,600*	--	105,600*	105,600*	105,600*	105,600*	105,600*
	40.0	80.4	--	103,700*	103,700*	103,700*	103,700*	103,700*	103,700*	--	92,500	103,700*	103,700*	103,700*	103,700*
	50.0	77.7	--	74,500	91,900	94,600*	94,600*	94,600*	94,600*	--	64,900	81,800	94,600*	94,600*	94,600*

GENERAL INFORMATION ONLY

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation								
			0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"A" ctwt.	"ABCD" + "A" ctwt.	0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"A" ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.	"AB" ctwt.	
			ctwt.	ctwt.	ctwt.	ctwt.			ctwt.	ctwt.	ctwt.	ctwt.					
220' (67.06 m)	140.0	51.5	←	13,400	18,500	27,000	30,200	31,200*			←	10,400	15,500	24,000	24,900	26,100	
	150.0	48.1		11,500	16,300	24,100	27,100	28,200*				8,700	13,500	21,300	22,200	23,300	
	160.0	44.5		9,900	14,300	21,600	24,400	25,500*				7,300	11,700	19,000	19,800	20,900	
	170.0	40.7		8,400	12,600	19,400	22,000	23,100*				6,000	10,200	17,000	17,700	18,800	
	180.0	36.5		7,200	11,100	17,500	20,000	20,900*				4,900	8,800	15,200	15,900	16,900	
	190.0	31.9		6,100	9,800	15,800	18,100	19,000*				3,900	7,600	13,700	14,300	15,200	
	200.0	26.5		5,100	8,600	14,300	16,500	17,200*				3,000	6,500	12,300	12,900	13,800	
	210.0	19.9		4,200	7,500	13,000	15,000	15,600*				2,200	5,600	11,000	11,600	12,400	
230' (70.10 m)	220.0	9.7		3,400	6,600	11,700	13,700	14,200*				--	4,700	9,900	10,500	11,200	
	35.2	82.0		95,300*	95,300*	95,300*	95,300*	95,300*				95,300*	95,300*	95,300*	95,300*	95,300*	
	40.0	80.8		94,700*	94,700*	94,700*	94,700*	94,700*				92,200	94,700*	94,700*	94,700*	94,700*	
	50.0	78.3		74,200	88,800*	88,800*	88,800*	88,800*				64,600	81,500	88,800*	88,800*	88,800*	
	60.0	75.7		56,300	70,000	81,000*	81,000*	81,000*				48,200	62,000	81,000*	81,000*	81,000*	
	70.0	73.1		44,200	55,500	68,900*	68,900*	68,900*				37,500	48,900	67,600	68,900*	68,900*	
	80.0	70.5		36,200	45,300	60,900*	60,900*	60,900*				30,500	39,700	55,600	57,300	59,700	
	90.0	67.8		29,800	37,800	51,600	54,100*	54,100*				24,900	33,400	46,700	48,200	50,300	
240' (73.15 m)	100.0	65.1		24,900	32,400	44,200	48,100*	48,100*				20,600	28,100	39,800	41,200	43,000	
	110.0	62.3		21,000	27,800	38,300	42,500	42,900*				17,100	23,800	34,900	36,100	37,200	
	120.0	59.5		17,900	24,000	34,000	35,800*	35,800*				14,300	20,400	30,400	31,500	33,000	
	130.0	56.5		15,200	20,800	30,000	32,200*	32,200*				12,000	17,600	26,700	27,700	29,100	
	140.0	53.5		13,000	18,200	26,600	29,000*	29,000*				10,000	15,200	23,600	24,500	25,800	
	150.0	50.3		11,100	15,900	23,700	26,100*	26,100*				8,300	13,100	20,900	21,800	23,000	
	160.0	47.0		9,500	13,900	21,200	23,400*	23,400*				6,900	11,300	18,600	19,400	20,500	
	170.0	43.5		8,100	12,200	19,100	21,100*	21,100*				5,600	9,800	16,600	17,400	18,400	
240' (73.15 m)	180.0	39.8		6,800	10,700	17,100	19,000*	19,000*				4,500	8,400	14,900	15,600	16,500	
	190.0	35.7		5,700	9,400	15,500	17,100*	17,100*				3,500	7,200	13,300	14,000	14,900	
	200.0	31.2		4,700	8,200	13,900	15,300*	15,300*				2,700	6,200	11,900	12,500	13,400	
	210.0	25.9		3,800	7,100	12,600	13,600*	13,600*				--	5,200	10,600	11,200	12,100	
	220.0	19.5		3,000	6,200	11,400	12,200*	12,200*				--	4,300	9,500	10,100	10,900	
	230.0	9.5		2,300	5,300	10,300	10,900*	10,900*				--	3,600	8,500	9,000	9,800	
	36.6	82.0		86,600*	86,600*	86,600*	86,600*	86,600*				86,600*	86,600*	86,600*	86,600*	86,600*	
	40.0	81.2		86,000*	86,000*	86,000*	86,000*	86,000*				86,000*	86,000*	86,000*	86,000*	86,000*	
240' (73.15 m)	50.0	78.7		73,900	83,300*	83,300*	83,300*	83,300*				64,300	81,200	83,300*	83,300*	83,300*	
	60.0	76.3		55,900	69,700	76,100*	76,100*	76,100*				47,900	61,700	76,100*	76,100*	76,100*	
	70.0	73.8		43,800	55,200	64,600*	64,600*	64,600*				37,200	48,600	64,600*	64,600*	64,600*	
	80.0	71.3		35,800	45,000	57,200*	57,200*	57,200*				30,200	38,300	55,200	57,000	57,200*	
	90.0	68.8		29,500	37,400	50,700*	50,700*	50,700*				24,600	33,000	46,300	47,800	49,900	
	100.0	66.2		24,600	32,100	43,800	45,000*	45,000*				20,200	27,700	39,500	40,800	42,600	
	110.0	63.6		20,700	27,400	37,900	39,800*	39,800*				16,800	23,500	34,500	35,700	36,800	
	120.0	60.9		17,500	23,600	33,100*	33,100*	33,100*				14,000	20,100	30,100	31,200	32,600	
240' (73.15 m)	130.0	58.1		14,900	20,500	29,500*	29,500*	29,500*				11,600	17,200	26,400	27,400	28,700	
	140.0	55.2		12,700	17,800	26,200	26,300*	26,300*				9,700	14,800	23,200	24,200	25,400	
	150.0	52.3		10,800	15,500	23,400	23,500*	23,500*				8,000	12,800	20,600	21,400	22,600	
	160.0	49.2		9,100	13,600	20,900	21,000*	21,000*				6,500	11,000	18,300	19,100	20,100	
	170.0	46.0		7,700	11,900	18,700	18,700*	18,700*				5,300	9,400	16,300	17,000	18,000	
	180.0	42.5		6,400	10,400	16,700*	16,700*	16,700*				4,100	8,100	14,500	15,200	16,100	

HC-278H Lift Crane Capacities - On Outriggers

GENERAL INFORMATION ONLY

Boom Length (ft.)		Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
				0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "A" ctwt.	"AB" ctwt.	"ABCD" + "AB" ctwt.	0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
240' (73.15 m)	190.0	38.9		←	5,300	9,000	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800*	14,800

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear					Capacities - On Outriggers 360 Degree Rotation				
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "AB" ctwt.	0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	"ABCD" + "AB" ctwt.
260' (79.25 m)	200.0	40.8	←	←	7,000	12,700	14,900	16,100*	←	4,900	10,700	11,300
	210.0	37.3			5,900	11,400	13,400	14,500*		4,000	9,400	10,000
	220.0	33.5			4,900	10,100	12,100	13,100*		3,100	8,300	8,800
	230.0	29.3			4,100	9,000	10,900	11,800*		2,300	7,200	7,800
	240.0	24.4			3,300	8,000	9,800	10,600*		--	6,300	6,800
	250.0	18.3			2,500	7,100	8,800	9,500*		--	5,500	6,000
	260.0	9.0			--	6,200	7,900	8,600*		--	4,700	5,200
	40.7	82.0			63,200*	63,200*	63,200*	63,200*		63,200*	63,200*	63,200*
	50.0	80.0			62,100*	62,100*	62,100*	62,100*		62,100*	62,100*	62,100*
	60.0	77.8			61,300*	61,300*	61,300*	61,300*		60,800	61,300*	61,300*
270' (82.30 m)	70.0	75.7			54,200	56,700*	56,700*	56,700*		47,600	56,700*	56,700*
	80.0	73.5			43,900	52,400*	52,400*	52,400*		38,300	52,400*	52,400*
	90.0	71.2			36,900	48,200*	48,200*	48,200*		32,000	48,200*	48,200*
	100.0	69.0			31,000	42,700	44,500*	44,500*		26,600	38,300	39,600
	110.0	66.7			26,300	36,700	40,900*	40,900*		22,400	33,400	34,600
	120.0	64.4			22,500	32,500	35,300*	35,300*		18,900	28,900	30,000
	130.0	62.0			19,300	28,500	32,000	32,600*		16,100	25,200	26,200
	140.0	59.5			16,600	25,100	28,300	29,700*		13,600	22,100	23,000
	150.0	57.1			14,400	22,200	25,200	26,600*		11,600	19,400	20,200
	160.0	54.5			12,400	19,700	22,500	23,800*		9,800	17,100	17,900
280' (85.34 m)	170.0	51.8	N/A	N/A	10,700	17,500	20,100	21,400*		8,200	15,100	15,800
	180.0	49.1			9,100	15,600	18,000	19,300*		6,900	13,300	14,000
	190.0	46.2			7,800	13,900	16,200	17,300*		5,600	11,700	12,400
	200.0	43.2			6,600	12,300	14,500	15,600*		4,600	10,300	10,900
	210.0	40.0			5,500	11,000	13,100	14,000*		3,600	9,000	9,600
	220.0	36.6			4,600	9,700	11,700	12,600*		2,700	7,900	8,500
	230.0	32.8			3,700	8,600	10,500	11,300*		--	6,900	7,400
	240.0	28.7			2,900	7,600	9,400	10,200*		--	5,900	6,400
	250.0	23.9			2,200	6,700	8,400	9,100*		--	5,100	5,600
	260.0	18.0			--	5,800	7,500	8,100*		--	4,300	4,800
280' (85.34 m)	270.0	8.8			--	5,100	6,700	7,200*		--	3,600	4,000
	42.1	82.0			57,800*	57,800*	57,800*	57,800*		--	57,800*	57,800*
	50.0	80.4			57,100*	57,100*	57,100*	57,100*		--	57,100*	57,100*
	60.0	78.3			56,000*	56,000*	56,000*	56,000*		--	56,000*	56,000*
	70.0	76.2			52,000*	52,000*	52,000*	52,000*		--	52,000*	52,000*
	80.0	74.1			48,100*	48,100*	48,100*	48,100*		--	48,100*	48,100*
	90.0	71.9			44,200*	44,200*	44,200*	44,200*		--	44,200*	44,200*
	100.0	69.8			40,600*	40,600*	40,600*	40,600*		--	37,900	39,300
	110.0	67.6			35,000*	35,000*	35,000*	35,000*		--	33,000	34,300
	120.0	65.3			32,100	32,100	32,400*	32,400*		--	29,700	31,100
	130.0	63.1			28,100	28,100	29,900*	29,900*		--	24,800	25,800
	140.0	60.7			24,700	24,700	27,700*	27,700*		--	21,700	22,600
	150.0	58.4			21,800	21,800	24,800	25,600*		--	19,000	19,900
	160.0	55.9			19,300	19,300	22,100	23,300*		--	16,700	17,500
	170.0	53.4			17,100	17,100	19,700	20,900*		--	14,700	15,400
	180.0	50.8			15,200	15,200	17,600	18,800*		--	12,900	13,600

HC-278H Lift Crane Capacities - On Outriggers

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear					Capacities - On Outriggers 360 Degree Rotation				
			0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"ABCD" + "A" cwt.	"ABCD" + "AB" cwt.	0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0
			cwt.	cwt.	cwt.	cwt.			cwt.	cwt.	cwt.	cwt.
280' (85.34 m)	190.0	48.1	←	←	←	13,500	15,800	16,900*	←	←	←	11,300
	200.0	45.3				11,900	14,100	15,100*				9,900
	210.0	42.4				10,600	12,700	13,600*				8,600
	220.0	39.2				9,300	11,300	12,100*				7,500
	230.0	35.9				8,200	10,100	10,900*				6,500
	240.0	32.2				7,200	9,000	9,700*				5,500
	250.0	28.2				6,300	8,000	8,600*				4,700
	260.0	23.5				5,400	7,100	7,600*				3,900
	270.0	17.6				4,700	6,300	6,700*				3,200
	280.0	8.6				4,000	5,500	5,800*				2,500
290' (88.39 m)	43.5	82.0	←	←	←	53,200*	53,200*	53,200*	←	←	←	53,200*
	50.0	80.7				52,500*	52,500*	52,500*				52,500*
	60.0	78.7				51,500*	51,500*	51,500*				51,500*
	70.0	76.7				47,700*	47,700*	47,700*				47,700*
	80.0	74.6				44,100*	44,100*	44,100*				44,100*
	90.0	72.6				40,500*	40,500*	40,500*				40,500*
	100.0	70.5				34,700*	34,700*	34,700*				34,700*
	110.0	68.4				32,100*	32,100*	32,100*				32,100*
	120.0	66.2				29,700*	29,700*	29,700*				29,700*
	130.0	64.1				27,400*	27,400*	27,400*				27,400*
290' (88.39 m)	140.0	61.8	←	←	←	24,300	25,400*	25,400*	←	←	←	21,300
	150.0	59.6				21,400	23,500*	23,500*				19,500
	160.0	57.3				18,900	21,700	21,800*				17,100
	170.0	54.9				16,700	19,300	20,200*				15,000
	180.0	52.4				14,800	17,300	18,300*				13,200
	190.0	49.9				13,100	15,400	16,400*				11,600
	200.0	47.3				11,600	13,800	14,600*				10,200
	210.0	44.5				10,200	12,300	13,100*				8,900
	220.0	41.6				9,000	10,900	11,700*				7,700
	230.0	38.5				7,800	9,700	10,400*				6,600
300' (91.44 m)	240.0	35.2				6,800	8,600	9,200*				5,700
	250.0	31.7				5,900	7,600	8,100*				4,800
	260.0	27.7				5,000	6,700	7,100*				4,000
	270.0	23.1				4,300	5,900	6,200*				3,500
	280.0	17.3				3,600	5,100	5,300*				2,800
	290.0	8.5				2,900	4,400	4,600*				2,100
	44.9	82.0	←	←	←	49,000*	49,000*	49,000*	←	←	←	49,000*
	50.0	81.0				48,400*	48,400*	48,400*				48,400*
	60.0	79.1				47,500*	47,500*	47,500*				47,500*
	70.0	77.1				43,900*	43,900*	43,900*				43,900*
300' (91.44 m)	80.0	75.2				40,300*	40,300*	40,300*				40,300*
	90.0	73.2				34,300*	34,300*	34,300*				34,300*
	100.0	71.2				31,700*	31,700*	31,700*				29,300*
	110.0	69.1				29,300*	29,300*	29,300*				27,100*
	120.0	67.1				27,100*	27,100*	27,100*				25,100*
	130.0	65.0				25,100*	25,100*	25,100*				23,100*
	44.9	82.0	←	←	←	49,000*	49,000*	49,000*	←	←	←	49,000*
	50.0	81.0				48,400*	48,400*	48,400*				48,400*
	60.0	79.1				47,500*	47,500*	47,500*				47,500*
	70.0	77.1				43,900*	43,900*	43,900*				43,900*

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear					Capacities - On Outriggers 360 Degree Rotation				
			0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"A" ctwt.	"ABCD" + 0	"A" ctwt.	"AB" + 0	"ABCD" + 0	"A" ctwt.
			ctwt.	ctwt.	ctwt.	ctwt.	"AB" ctwt.	ctwt.	"AB" ctwt.	ctwt.	ctwt.	"AB" ctwt.
300' (91.44 m)	140.0	62.9	←	←	←	23,200*	23,200*	←	←	←	21,000	21,000
	150.0	60.7	←	←	←	21,000	21,500*	←	←	←	18,300	19,100
	160.0	58.5	←	←	←	18,500	19,800*	←	←	←	15,900	16,700
	170.0	56.2	←	←	←	16,300	18,500*	←	←	←	13,900	14,700
	180.0	53.9	←	←	←	14,400	16,900	←	←	←	12,100	12,800
	190.0	51.5	←	←	←	12,700	15,000	←	←	←	10,500	11,200
	200.0	49.0	←	←	←	11,200	13,400	←	←	←	9,100	9,800
	210.0	46.4	←	←	←	9,800	11,900	←	←	←	7,900	8,500
	220.0	43.7	←	←	←	8,600	10,600	←	←	←	6,700	7,300
	230.0	40.9	←	←	←	7,400	9,300	←	←	←	5,700	6,200
	240.0	37.9	←	←	←	6,400	8,200	←	←	←	4,700	5,300
	250.0	34.6	←	←	←	5,500	7,200	←	←	←	3,900	4,400
	260.0	31.1	←	←	←	4,600	6,300	←	←	←	3,100	3,600
	270.0	27.2	←	←	←	3,900	5,500	←	←	←	2,400	2,800
	280.0	22.7	←	←	←	3,100	4,700	←	←	←	--	--
	290.0	17.0	←	←	←	2,500	4,000	←	←	←	--	--
	300.0	8.3	←	←	←	--	3,300	←	←	←	--	--
310' (94.49 m)	46.3	82.0	N/A	N/A	N/A	45,100*	45,100*	←	←	←	45,100*	45,100*
	50.0	81.3	←	←	←	44,800*	44,800*	←	←	←	44,800*	44,800*
	60.0	79.4	←	←	←	43,700*	43,700*	←	←	←	43,700*	43,700*
	70.0	77.5	←	←	←	40,400*	40,400*	←	←	←	40,400*	40,400*
	80.0	75.6	←	←	←	34,400*	34,400*	←	←	←	34,400*	34,400*
	90.0	73.7	←	←	←	31,600*	31,600*	←	←	←	31,600*	31,600*
	100.0	71.8	←	←	←	29,200*	29,200*	←	←	←	29,200*	29,200*
	110.0	69.8	←	←	←	27,000*	27,000*	←	←	←	27,000*	27,000*
	120.0	67.9	←	←	←	25,000*	25,000*	←	←	←	25,000*	25,000*
	130.0	65.8	←	←	←	22,900*	22,900*	←	←	←	22,900*	22,900*
	140.0	63.8	←	←	←	21,200*	21,200*	←	←	←	21,200*	21,200*
	150.0	61.7	←	←	←	19,600*	19,600*	←	←	←	19,600*	19,600*
	160.0	59.6	←	←	←	18,100*	18,100*	←	←	←	18,100*	18,100*
	170.0	57.4	←	←	←	16,900*	16,900*	←	←	←	16,900*	16,900*
	180.0	55.2	←	←	←	15,600*	15,600*	←	←	←	15,600*	15,600*
	190.0	52.9	←	←	←	14,300	14,300	←	←	←	14,300	14,300
	200.0	50.6	←	←	←	13,000	13,000	←	←	←	13,000	13,000
	210.0	48.1	←	←	←	11,500	11,500	←	←	←	11,500	11,500
	220.0	45.6	←	←	←	10,200	10,200	←	←	←	10,200	10,200
	230.0	43.0	←	←	←	8,900	8,900	←	←	←	8,900	8,900
	240.0	40.2	←	←	←	7,800	7,800	←	←	←	7,800	7,800
	250.0	37.2	←	←	←	6,800	6,800	←	←	←	6,800	6,800
	260.0	34.1	←	←	←	5,900	5,900	←	←	←	5,900	5,900
	270.0	30.6	←	←	←	5,100	5,100	←	←	←	5,100	5,100
	280.0	26.7	←	←	←	4,300	4,300	←	←	←	4,300	4,300
	290.0	22.3	←	←	←	3,600	3,600	←	←	←	3,600	3,600
	300.0	16.8	←	←	←	2,800*	2,800*	←	←	←	2,800*	2,800*
	310.0	8.2	←	←	←	--	2,200*	←	←	←	--	--

GENERAL INFORMATION ONLY

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear				Capacities - On Outriggers 360 Degree Rotation			
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.	0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + 0 ctwt.
320' (97.54 m)	47.7	82.0	←	←	←	←	←	←	←	←
	50.0	81.6	←	←	←	←	←	←	←	←
	60.0	79.8	←	←	←	←	←	←	←	←
	70.0	77.9	←	←	←	←	←	←	←	←
	80.0	76.1	←	←	←	←	←	←	←	←
	90.0	74.3	←	←	←	←	←	←	←	←
	100.0	72.4	←	←	←	←	←	←	←	←
	110.0	70.5	←	←	←	←	←	←	←	←
	120.0	68.6	←	←	←	←	←	←	←	←
	130.0	66.6	←	←	←	←	←	←	←	←
	140.0	64.7	←	←	←	←	←	←	←	←
	150.0	62.7	←	←	←	←	←	←	←	←
	160.0	60.7	←	←	←	←	←	←	←	←
	170.0	58.6	←	←	←	←	←	←	←	←
	180.0	56.5	←	←	←	←	←	←	←	←
	190.0	54.3	←	←	←	←	←	←	←	←
330' (100.58 m)	200.0	52.0	←	←	←	←	←	←	←	←
	210.0	49.7	←	←	←	←	←	←	←	←
	220.0	47.3	←	←	←	←	←	←	←	←
	230.0	44.9	←	←	←	←	←	←	←	←
	240.0	42.3	←	←	←	←	←	←	←	←
	250.0	39.5	←	←	←	←	←	←	←	←
	260.0	36.6	←	←	←	←	←	←	←	←
	270.0	33.5	←	←	←	←	←	←	←	←
	280.0	30.1	←	←	←	←	←	←	←	←
	290.0	26.3	←	←	←	←	←	←	←	←
	300.0	21.9	←	←	←	←	←	←	←	←
	310.0	16.5	←	←	←	←	←	←	←	←
	320.0	8.1	←	←	←	←	←	←	←	←
	49.1	82.0	←	←	←	←	←	←	←	←
	50.0	81.8	←	←	←	←	←	←	←	←
	60.0	80.1	←	←	←	←	←	←	←	←
	70.0	78.3	←	←	←	←	←	←	←	←
	80.0	76.5	←	←	←	←	←	←	←	←
	90.0	74.7	←	←	←	←	←	←	←	←
	100.0	72.9	←	←	←	←	←	←	←	←
	110.0	71.1	←	←	←	←	←	←	←	←
	120.0	69.3	←	←	←	←	←	←	←	←
	130.0	67.4	←	←	←	←	←	←	←	←
	140.0	65.5	←	←	←	←	←	←	←	←
	150.0	63.6	←	←	←	←	←	←	←	←
	160.0	61.6	←	←	←	←	←	←	←	←
	170.0	59.6	←	←	←	←	←	←	←	←
	180.0	57.6	←	←	←	←	←	←	←	←
	190.0	55.5	←	←	←	←	←	←	←	←
	200.0	53.4	←	←	←	←	←	←	←	←
	210.0	51.2	←	←	←	←	←	←	←	←

HC-278H Lift Crane Capacities - On Outriggers

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Outriggers Over Rear						Capacities - On Outriggers 360 Degree Rotation					
			0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.	0 + 0	"A" + 0	"AB" + 0	"ABCD" + 0	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
			ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.	ctwt.
330' (100.58 m)	220.0	48.9	--	--	--	--	--	9,700*	--	--	--	--	--	6,900
	230.0	46.6	--	--	--	--	--	8,400*	--	--	--	--	--	5,800
	240.0	44.1	--	--	--	--	--	7,200*	--	--	--	--	--	4,800
	250.0	41.6	--	--	--	--	--	6,100*	--	--	--	--	--	3,900
	260.0	38.9	--	--	--	--	--	5,100*	--	--	--	--	--	3,000
	270.0	36.0	--	--	--	--	--	4,200*	--	--	--	--	--	2,200
	280.0	33.0	--	--	--	--	--	3,400*	--	--	--	--	--	--
	290.0	29.6	--	--	--	--	--	2,600*	--	--	--	--	--	--
	300.0	25.9	--	--	--	--	--	--	--	--	--	--	--	--
	310.0	21.6	--	--	--	--	--	--	--	--	--	--	--	--
	320.0	16.2	--	--	--	--	--	--	--	--	--	--	--	--

HC-278H Pick & Carry Capacities

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Tires					
			Straight Over Rear - 1 mph					
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + "0" ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
60' (18.29 m)	12	81.5	92,300	138,000	142,300*	147,900*	↑	↑
	13	80.6	82,800	124,200	137,900*	143,400*		
	14	79.6	75,000	112,800	133,800*	139,100*		
	15	78.6	68,700	103,400	129,900*	135,000*		
	16	77.6	63,100	95,200	124,400	131,200*		
	17	76.7	58,300	88,200	115,400	127,500*		
	18	75.7	54,100	82,100	107,600	124,100*		
	19	74.7	50,400	76,700	100,700	120,800*		
	20	73.7	47,200	72,100	94,600	117,700*		
	25	68.7	35,300	54,600	72,200	100,300		
	30	63.4	27,700	43,400	57,800	80,800		
	35	58.0	22,400	35,900	47,900	67,500		
	40	52.1	18,500	30,200	40,600	57,600		
	50	38.7	13,200	22,400	30,700	44,000		
	60	18.7	9,600	17,200	24,100	35,200		
70' (21.34 m)	12.9	82.0	83,800	125,600	137,700*	143,100*	↑	↑
	13	81.9	83,000	124,400	137,300*	142,700*		
	14	81.1	75,200	113,000	133,200*	138,400*		
	15	80.3	68,800	103,600	129,300*	134,400*		
	16	79.4	63,300	95,400	124,500	130,600*		
	17	78.6	58,400	88,300	115,500	126,900*		
	18	77.8	54,200	82,200	107,700	123,500*		
	19	76.9	50,500	76,800	100,800	120,200*		
	20	76.1	47,300	72,200	94,600	117,100*		
	25	71.8	35,400	54,600	72,200	100,300		
	30	67.5	27,800	43,500	57,900	80,800		
	35	63.0	22,500	35,900	47,900	67,500		
	40	58.3	18,600	30,200	40,600	57,600		
	50	48.0	13,200	22,400	30,700	44,000		
	60	35.7	9,700	17,300	24,200	35,200		
	70	17.3	7,200	13,600	19,500	28,900		
80' (24.38 m)	14.3	82.0	73,400	110,100	131,300*	136,500*	↑	↑
	15	81.5	68,900	103,600	128,600*	133,700*		
	16	80.8	63,300	95,400	124,500	129,900*		
	17	80.0	58,400	88,300	115,400	126,300*		
	18	79.3	54,200	82,200	107,700	122,800*		
	19	78.6	50,500	76,800	100,800	119,600*		
	20	77.9	47,200	72,200	94,600	116,500*		
	25	74.2	35,400	54,600	72,200	100,200		
	30	70.4	27,700	43,400	57,800	80,700		
	35	66.6	22,400	35,800	47,800	67,400		
	40	62.6	18,500	30,100	40,500	57,500		
	50	54.2	13,200	22,300	30,700	43,900		
	60	44.7	9,600	17,200	24,100	35,200		
	70	33.3	7,100	13,600	19,500	28,900		
	80	16.2	5,300	10,900	16,000	24,200		
90' (27.43 m)	15.7	82.0	66,300	99,100	125,900*	130,900*	↑	↑
	16	81.8	64,600	96,700	124,800*	129,800*		
	17	81.2	59,700	89,500	116,600	126,200*		
	18	80.5	55,400	83,300	108,800	122,700*		
	19	79.9	51,600	77,800	101,800	119,500*		
	20	79.2	48,200	73,100	95,600	116,300*		
	25	76.0	36,100	55,300	72,900	100,900		
	30	72.7	28,300	44,000	58,400	81,300		
	35	69.3	22,900	36,300	48,300	67,800		
	40	65.8	18,900	30,500	40,900	57,800		
	50	58.6	13,400	22,600	30,900	44,100		
	60	50.8	9,800	17,400	24,300	35,400		
	70	42.0	7,300	13,700	19,600	29,000		
	80	31.4	5,400	11,000	16,100	24,300		
	90	15.2	3,800	8,800	13,300	20,600		
100' (30.48 m)	17.1	82.0	59,200	88,800	115,700	125,100*	↑	↑
	18	81.5	55,200	83,100	108,700	122,000*		

HC-278H Pick & Carry Capacities

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Tires					
			Straight Over Rear - 1 mph					
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + "0" ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
100' (30.48 m)	19	80.9	51,400	77,600	101,600	118,700*	112,000*	↑
	20	80.3	48,100	73,000	95,400	115,600*	109,300*	
	25	77.4	36,000	55,100	72,700	100,800	96,500*	
	30	74.4	28,200	43,800	58,200	81,000	86,200*	
	35	71.4	22,700	36,100	48,100	67,600	76,000	
	40	68.4	18,700	30,300	40,700	57,600	65,100	
	50	62.1	13,200	22,400	30,800	43,900	49,800	
	60	55.4	9,600	17,200	24,100	35,200	39,800	
	70	48.1	7,100	13,600	19,400	28,900	33,000	
	80	39.8	5,200	10,800	16,000	24,200	27,800	
	90	29.7	3,700	8,700	13,200	20,500	23,700	
	100	14.5	2,500	7,000	11,000	17,600	20,400	
110' (33.53 m)	18.5	82.0	53,200	80,200	105,000	119,700*	112,900*	N/A
	19	81.7	51,300	77,400	101,400	118,000*	111,600*	
	20	81.2	47,900	72,800	95,200	114,900*	108,600*	
	25	78.6	35,800	54,900	72,500	100,500	95,900*	
	30	75.9	28,000	43,600	58,000	80,800	85,500*	
	35	73.2	22,500	35,900	47,800	67,400	75,800	
	40	70.4	18,500	30,100	40,400	57,400	64,900	
	50	64.8	13,000	22,200	30,500	43,700	49,600	
	60	58.9	9,400	17,000	23,900	35,000	39,600	
	70	52.6	6,900	13,400	19,200	28,600	32,800	
	80	45.7	5,000	10,600	15,700	23,900	27,600	
	90	37.9	3,500	8,500	13,000	20,300	23,500	
	100	28.3	2,300	6,800	10,900	17,400	20,300	
	110	13.8	--	5,400	9,100	15,000	17,600	
120' (36.58 m)	19.9	82.0	↑	73,200	95,800	114,600*	108,300*	N/A
	20	81.9		72,600	95,000	114,200*	107,900*	
	25	79.5		54,700	72,300	100,300	95,200*	
	30	77.1		43,300	57,700	80,500	84,900*	
	35	74.6		35,700	47,600	67,200	75,500	
	40	72.1		29,900	40,200	57,100	64,600	
	50	67.0		22,000	30,300	43,400	49,300	
	60	61.7		16,800	23,700	34,700	39,300	
	70	56.2		13,100	19,000	28,400	32,500	
	80	50.2		10,400	15,500	23,700	27,300	
	90	43.6		8,300	12,800	20,100	23,300	
	100	36.2		6,600	10,700	17,200	20,100	
130' (39.62 m)	110	27.1	N/A	5,200	8,900	14,800	17,400	↓
	120	13.2		4,000	7,400	12,800	15,200	
	21.3	82.0		67,000	87,800	110,100*	103,700*	
	25	80.3		54,500	72,100	100,000	94,500*	
	30	78.1		43,000	57,400	80,200	84,200*	
	35	75.8		35,400	47,300	66,900	75,200	
	40	73.5		29,600	39,900	56,800	64,300	
	50	68.9		21,700	30,000	43,100	49,000	
	60	64.1		16,500	23,400	34,400	39,000	
	70	59.1		12,800	18,700	28,100	32,300	
	80	53.8		10,100	15,200	23,400	27,000	
	90	48.1		8,000	12,500	19,800	23,000	
140' (42.67 m)	100	41.9		6,300	10,400	16,900	19,800	
	110	34.7		5,000	8,600	14,600	17,200	
	120	26.0		3,800	7,200	12,600	15,000	
	130	12.7		2,800	5,900	10,900	13,100	
	22.7	82.0		61,500	80,800	105,500*	99,400*	102,800*
	25	81.0		54,200	71,800	99,600*	93,800*	
	30	79.0		42,800	57,200	79,900	83,500*	
	35	76.9		35,200	47,000	66,600	74,900	
	40	74.7		29,400	39,600	56,500	64,000	
	50	70.5		21,400	29,700	42,800	48,700	
	60	66.0		16,200	23,100	34,200	38,700	
	70	61.5		12,500	18,400	27,800	32,000	
	80	56.7		9,800	14,900	23,100	26,800	
	90	51.7		7,700	12,300	19,500	22,700	

HC-278H Pick & Carry Capacities

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Tires					
			Straight Over Rear - 1 mph					
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + "0" ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
140' (42.67 m)	100	46.2		6,100	10,100	16,600	19,500	23,500
	110	40.3		4,700	8,400	14,300	16,900	20,500
	120	33.4		3,500	6,900	12,300	14,700	18,000
	130	25.0		2,600	5,700	10,700	12,900	15,900
	140	12.2		--	4,600	9,200	11,300	14,100
150' (45.72 m)	24.0	82.0		56,700	74,700	101,200*	95,300*	98,500*
	25	81.6		53,900	71,500	98,900*	93,000*	96,300*
	30	79.7		42,500	56,900	79,600	82,800*	85,700*
	35	77.7		34,900	46,700	66,300	74,400*	77,100*
	40	75.8		29,100	39,300	56,200	63,700	70,200*
	50	71.8		21,100	29,400	42,500	48,400	56,600
	60	67.7		15,900	22,800	33,900	38,400	45,100
	70	63.5		12,200	18,100	27,500	31,700	37,100
	80	59.2		9,500	14,600	22,800	26,500	31,500
	90	54.6		7,400	11,900	19,200	22,400	26,900
	100	49.8		5,800	9,800	16,300	19,200	23,200
	110	44.6		4,400	8,100	14,000	16,600	20,200
	120	38.8		3,300	6,600	12,000	14,400	17,700
	130	32.3		2,300	5,400	10,400	12,600	15,600
	140	24.2		--	4,400	9,000	11,000	13,800
	150	11.8		--	3,400	7,700	9,600	12,300
160' (48.77 m)	25.4	82.0	N/A	--	69,700	97,000	91,300*	94,500*
	30	80.3		--	56,600	79,300	82,100*	85,000*
	35	78.5		--	46,400	66,000	74,100*	76,400*
	40	76.7		--	39,000	55,900	63,400	69,500*
	50	73.0		--	29,100	42,200	48,100	56,200
	60	69.2		--	22,500	33,500	38,100	44,800
	70	65.3		--	17,800	27,200	31,400	37,100
	80	61.3		--	14,300	22,500	26,100	31,200
	90	57.1		--	11,600	18,900	22,100	26,500
	100	52.8		--	9,500	16,000	18,900	22,900
	110	48.1		--	7,800	13,700	16,300	19,900
	120	43.1		--	6,300	11,700	14,100	17,400
	130	37.6		--	5,100	10,100	12,300	15,300
	140	31.2		--	4,100	8,700	10,700	13,500
	150	23.4		--	3,200	7,500	9,400	12,000
	160	11.4		--	2,400	6,400	8,200	10,600
170' (51.82 m)	26.8	82.0		--	64,900	90,600	87,600*	90,700*
	30	80.9		--	56,300	79,000	81,400*	84,300*
	35	79.2		--	46,100	65,700	73,500*	75,700*
	40	77.5		--	38,600	55,600	63,100	68,900*
	50	74.0		--	28,800	41,800	47,700	55,900
	60	70.5		--	22,200	33,200	37,700	44,500
	70	66.9		--	17,500	26,900	31,100	36,800
	80	63.1		--	14,000	22,200	25,800	30,800
	90	59.3		--	11,300	18,600	21,800	26,200
	100	55.3		--	9,200	15,700	18,600	22,600
	110	51.1		--	7,400	13,400	16,000	19,600
	120	46.6		--	6,000	11,400	13,800	17,100
	130	41.7		--	4,800	9,800	12,000	15,000
	140	36.4		--	3,700	8,400	10,400	13,200
	150	30.3		--	2,800	7,200	9,100	11,700
	160	22.7		--	2,100	6,100	7,900	10,300
	170	11.1		--	--	5,200	6,800	9,100
180' (54.86 m)	28.2	82.0		--	60,500	84,800	84,100*	87,100*
	30	81.4		--	55,900	78,600	80,700*	83,600*
	35	79.8		--	45,800	65,300	72,800*	75,000*
	40	78.2		--	38,300	55,300	62,700	68,200*
	50	74.9		--	28,500	41,500	47,400	55,600
	60	71.6		--	21,900	32,900	37,400	44,100
	70	68.2		--	17,200	26,600	30,700	36,500
	80	64.7		--	13,700	21,900	25,500	30,500
	90	61.2		--	11,000	18,300	21,500	25,900
	100	57.5		--	8,900	15,400	18,300	22,200

HC-278H Pick & Carry Capacities

GENERAL INFORMATION ONLY

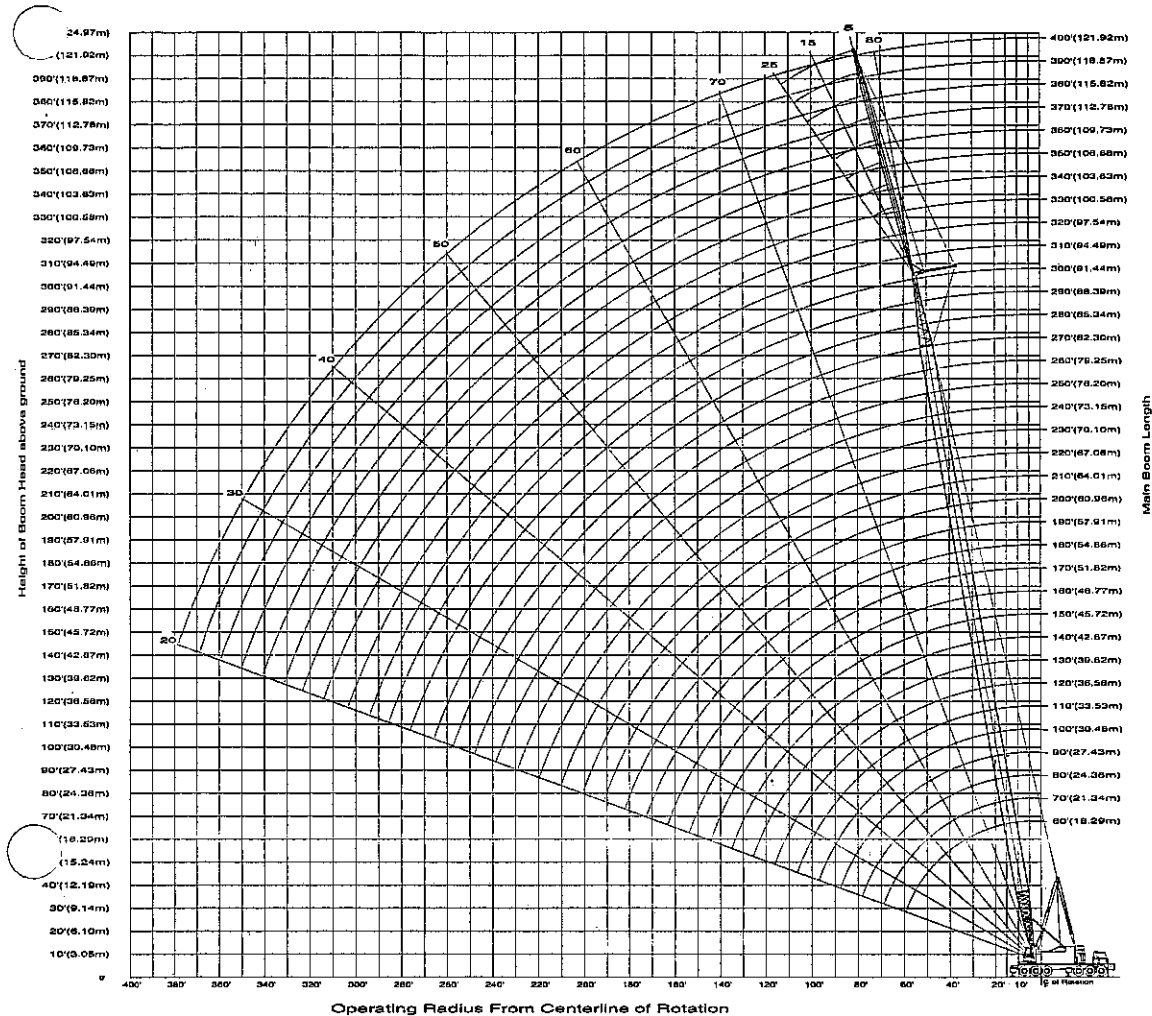
Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Tires Straight Over Rear - 1 mph					
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"*ABCD" + "0" ctwt.	"* "ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.
180' (54.86 m)	110	53.6	↑	↑	7,100	13,000	15,600	19,200
	120	49.5			5,700	11,100	13,500	16,800
	130	45.2			4,500	9,400	11,600	14,700
	140	40.5			3,400	8,000	10,100	12,900
	150	35.3			2,500	6,800	8,700	11,400
	160	29.4			--	5,800	7,600	10,000
	170	22.1			--	4,800	6,500	8,800
	180	10.8			--	4,000	5,600	7,800
190' (57.91 m)	29.6	82.0	↑	↑	↑	79,600	80,700*	83,600*
	30	81.9				78,300	80,000*	82,900*
	35	80.4				65,000	72,100*	74,300*
	40	78.8				54,900	62,400	67,600*
	50	75.7				41,100	47,000	55,200
	60	72.6				32,600	37,000	43,800
	70	69.4				26,200	30,400	36,200
	80	66.1				21,500	25,200	30,200
	90	62.8				17,900	21,100	25,600
	100	59.4				15,000	17,900	21,900
	110	55.8				12,700	15,300	18,900
	120	52.1				10,700	13,100	16,400
	130	48.1				9,100	11,300	14,300
	140	43.9				7,700	9,700	12,600
	150	39.4				6,500	8,400	11,000
	160	34.4				5,400	7,200	9,700
	170	28.6				4,500	6,200	8,500
	180	21.5				3,700	5,300	7,500
	190	10.5				3,000	4,500	6,500
200' (60.96 m)	31	82.0	N/A	N/A	N/A	74,800	77,500*	80,300*
	35	80.8				64,700	71,400*	74,100*
	40	79.4				54,600	62,100	66,900*
	50	76.5				40,800	46,700	54,900
	60	73.5				32,300	37,100	43,400
	70	70.5				25,900	30,100	35,800
	80	67.4				21,200	24,800	29,800
	90	64.3				17,600	20,800	25,200
	100	61.0				14,700	17,600	21,600
	110	57.7				12,400	15,000	18,600
	120	54.3				10,400	12,800	16,100
	130	50.6				8,800	11,000	14,000
	140	46.8				7,400	9,400	12,200
	150	42.8				6,200	8,100	10,700
	160	38.4				5,100	6,900	9,300
	170	33.5				4,200	5,800	8,200
	180	27.9				3,300	4,900	7,100
	190	20.9				2,600	4,100	6,200
	200	10.2				--	3,400	5,400
210' (64.01 m)	32.4	82.0	↓	↓	↓	70,900	74,400*	77,200*
	35	81.3				64,300	70,800*	73,400*
	40	79.9				54,200	61,700	66,200*
	50	77.1				40,400	46,300	54,500
	60	74.3				31,900	36,800	43,100
	70	71.4				25,600	29,700	35,500
	80	68.5				20,900	24,500	29,500
	90	65.6				17,200	20,400	24,900
	100	62.5				14,400	17,200	21,200
	110	59.4				12,000	14,600	18,200
	120	56.2				10,100	12,400	15,700
	130	52.8				8,400	10,600	13,700
	140	49.3				7,000	9,100	11,900
	150	45.6				5,800	7,700	10,300
	160	41.7				4,800	6,500	9,000
	170	37.4				3,800	5,500	7,800
	180	32.6				3,000	4,600	6,800
	190	27.2				2,300	3,800	5,800

HC-278H Pick & Carry Capacities

GENERAL INFORMATION ONLY

Boom Length (ft.)	Load Radius (ft.)	Boom Angle (degree)	Capacities - On Tires Straight Over Rear - 1 mph									
			0 + 0 ctwt.	"A" + 0 ctwt.	"AB" + 0 ctwt.	"ABCD" + "0" ctwt.	"ABCD" + "A" ctwt.	"ABCD" + "AB" ctwt.				
210' (64.01 m)	200	20.4	--	--	--	--	3,000	5,000				
	210	10.0	--	--	--	--	2,400	4,300				
220' (67.06 m)	33.8	82.0	↑	↑	↑	↑	71,900*	74,100*				
	35	81.7					70,100*	72,700*				
	40	80.4					61,400	65,600*				
	50	77.7					46,000	54,200				
	60	75.0					36,500	42,700				
	70	72.3					29,400	35,100				
	80	69.6					24,100	29,200				
	90	66.8					20,100	24,500				
	100	63.9					16,900	20,900				
	110	60.9					14,300	17,900				
	120	57.9					12,100	15,400				
	130	54.8					10,300	13,300				
	140	51.5					8,700	11,500				
	150	48.1					7,400	10,000				
	160	44.5					6,200	8,600				
	170	40.7					5,100	7,500				
	180	36.5					4,200	6,400				
	190	31.9					3,400	5,500				
	230' (70.10 m)	200					26.5	↓	↓	↓	↓	2,700
210		19.9	--	3,900								
220		9.7	--	3,200								
35.2		82.0	↓	↓	↓	↓	69,100*					71,800*
40		80.8					61,000					64,900*
50		78.3					45,600					53,600*
60		75.7					36,100					42,300
70		73.1					29,100					34,800
80		70.5					23,800					28,800
90		67.8					19,800					24,200
100		65.1					16,500					20,500
110		62.3					13,900					17,500
120		59.5					11,700					15,000
130		56.5					9,900					13,000
140		53.5					8,400					11,200
150		50.3					7,000					9,600
160		47.0					5,800					8,300
170		43.5					4,800					7,100
180		39.8					3,900					6,100
190	35.7	3,100					5,100					
230' (70.10 m)	200	31.2					↓	↓	↓	↓	2,300	4,300
	210	25.9									--	3,600
	220	19.5	--	2,900								
	230	9.5	--	2,300								

HC-278H Working Range and Lift Crane Notes



GENERAL INFORMATION ONLY

General:

1. This load represents the 10.4' (3.17 m) radius duty equivalent of the maximum available load moment.
2. 625,000 lb. (283 500 kg) at 12' (3.66 m) radius was the maximum static overload test performed per SAE J987.
3. Rated lifting capacities in pounds as shown on lift charts pertain to the crane as originally manufactured and normally equipped. Modifications to the crane or use of optional equipment other than that specified can result in a reduction of capacity.
4. Construction equipment can be dangerous if improperly operated or maintained. Operation and maintenance of the crane must be in compliance with the information in the Operator's, Parts and Safety Manuals supplied with the crane. If these manuals are missing, order replacements through the distributor.
5. The operator and other personnel associated with the crane shall read and fully understand the latest applicable American National Standards Institute (ANSI) safety standards for cranes.
6. The maximum allowable lifting capacities are based on crane standing level on firm supporting surface.

Set-Up:

1. The crane 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 pontoons to spread the load to a larger bearing surface.
2. For required parts of line, see wire rope strength and winch performance tables in Crane Rating Manual.

Lift Crane Operation:

1. Capacities shown are in pounds and are not more than 85% of the tipping loads on outriggers or 75% of the tipping loads on tires with the crane standing level on firm supporting surface. A deduction must be made from these capacities for weight of hook block, hook, sling, grapple, load weighing device, etc. When using main hook while jib is attached, reduce capacities by values shown in Crane Rating Manual. See Operator's Manual for all limitations when raising or lowering attachment.
2. The capacities marked with an asterisk (*) are based on factors other than those which would cause a tipping condition.

3. For recommended reeving, parts of line, wire rope type and wire rope inspection, see wire rope strength chart, Operator's Manual and Parts Manual.
4. Load ratings are based on freely suspended loads and make no allowances for such factors as the effect of the wind, ground conditions, and operating speeds. The operator shall therefore reduce load ratings in order to take these conditions into account.
5. The 35' (10.67 m) live mast must be used for all capacities listed.
6. The least stable rated condition is over the side.
7. The jib cannot be used on a boom longer than 300' (91.44 m).
8. Maximum main boom length without jib is 330' (100.58 m).
9. Do not operate at radii and boom lengths where the Crane Rating Manual lists no capacity. Do not use longer booms or jibs than those listed in the Crane Rating Manual. Any of the above can cause a tipping condition, or boom and jib failure.
10. These capacities apply only to the crane as originally manufactured and normally equipped by Link-Belt Construction Equipment Company.

Link-Belt Construction Equipment Company Lexington, Kentucky

A unit of Sumitomo Construction Machinery Co., Ltd.

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