



# CONVENTIONAL CRANE 100 TONS

LINK-BELT HC-218A

**BOOM LENGTHS:**  
40 TO 180 FT

**JIB LENGTHS:**  
30 TO 60 FT

**JIB OFFSETS:**  
0 - 15 - 30



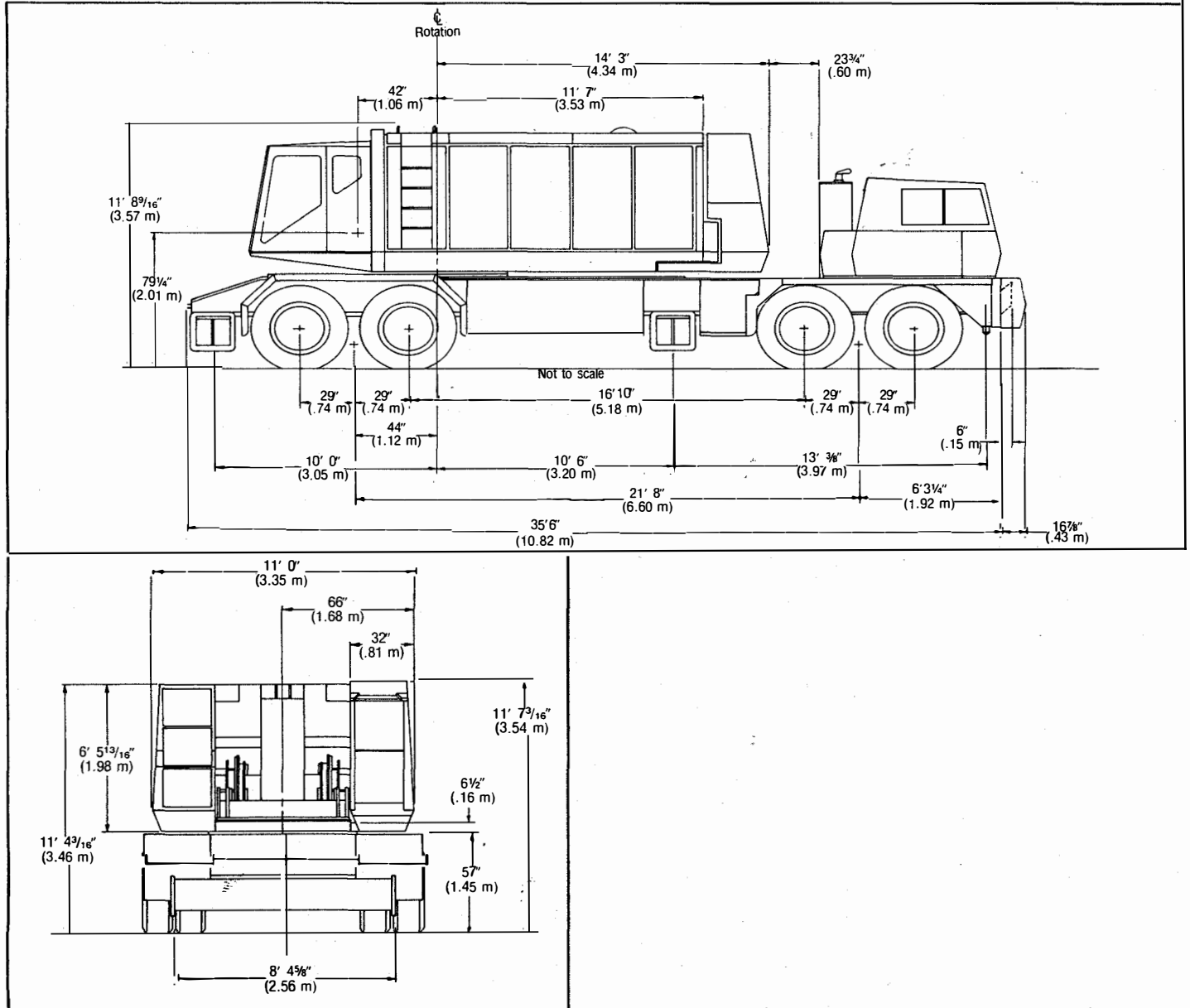
# NOTES:

# General Specifications

Link-Belt® 100-ton (90.70 metric ton)

Wire rope truck crane

## HC-218A



PORTLAND OFFICE: 503.283.3111  
SEATTLE OFFICE: 206.784.1054  
[WWW.NESSCAMPBELL.COM](http://WWW.NESSCAMPBELL.COM)

General dimensions	Feet	meters
Overall width, outriggers extended, (over floats)	22' 6"	6.86
Overall width, outriggers extended, (centerline of jacks)	20' 0"	6.10
Overall width, outriggers retracted, (floats removed)	11' 0"	3.35
Minimum ground clearance	8½"	.21
Ground clearance under upper counterweight with machine on tires	58¾"	1.48
Counterweight tailswing, across corners of counterweight	15' ¾"	4.65
Upper cab overall width	11' 0"	3.35
Basic boom length — open throat	40' 0"	12.19
— hammerhead	30' 0"	9.14
— tapered tip	90' 0"	27.43
Radius of boomfoot pin	42"	1.07
Height of boomfoot pin	79¼"	2.02

General dimensions	Feet	meters
Overall length with basic length boom in travel position over rear of carrier with bumper counterweight — open throat boom	71' 1"	21.67
— hammerhead boom	59' 10½"	18.24
— tapered tip boom	See note	
Overall length with basic length boom in travel position over front of carrier — open throat boom	59' ¾"	18.07
— hammerhead boom	48' 2"	14.68
— tapered tip boom	See note	
Height over boom live mast with basic length boom in travel position over rear of carrier	—	—
— open throat boom	11' 10"	3.61
— hammerhead boom	11' 8½"	3.57
— tapered tip boom	See note	
Height over boom live mast with basic length boom in travel position over front of carrier	—	—
— open throat boom	14' 8"	4.47
— hammerhead boom	14' 6"	4.42
— tapered tip boom	See note	

Note: Boom with tapered tip top section cannot be traveled over the road.

## Axle loadings — approximate

Based on HC-218A crane upper equipped with 21,000# (9 526 kg) counterweight "A", boom lowering planetary, rear drum load lowering clutch, GM 6-71N diesel with single stage torque converter*, mounted on FMC 8x4, 11' 0" (3.35 m) wide, 260" (6.60 m) wheelbase carrier with GM 6V92-TA diesel, 14:00x24 J (18-ply rating) transport type tires, hydraulic outriggers front and rear, 4 floats in storage racks, fenders, and 13,500# (6 124 kg) front bumper counterweight.	Basic machine gross weight		Upper facing front				Upper facing rear				
	**	Lbs.	kg	Front		Rear		Front		Rear	
		Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg
A	56,630	25 687	- 9,580	- 4 346	66,210	30 033	28,750	13 041	27,880	12 646	
B	62,130	28 182	+ 37,650	+ 17 078	24,480	11 104	37,650	17 078	24,480	11 104	
C	118,760	53 870	+ 28,070	+ 12 733	90,690	41 137	66,400	30 119	52,360	23 751	
Component weights			Front		Rear		Front		Rear		
Adjust axle loadings accordingly for the following components:	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	Lbs.	kg	
Upper machinery —											
Boom lowering clutch (high speed)	+ 400	+ 181	- 50	- 23	+ 450	+ 204	+ 180	+ 81	+ 220	+ 100	
Boomhoist wire rope — 530' (161.54 m), ¾" (19.05 mm) diameter, Type "T"	+ 550	+ 249	- 70	- 32	+ 620	+ 281	+ 250	+ 113	+ 300	+ 136	
Front drum load lowering clutch	+ 400	+ 181	+ 40	+ 18	+ 360	+ 163	+ 90	+ 40	+ 310	+ 141	
Front drum planetary — load hoist	+ 450	+ 204	+ 50	+ 23	+ 400	+ 181	+ 100	+ 45	+ 350	+ 159	
Front drum planetary — load lowering	+ 450	+ 204	+ 50	+ 23	+ 400	+ 181	+ 100	+ 45	+ 350	+ 159	
Front drum wire rope — 890' (271.27 m), 7/8" (22.23 mm) diameter, Type "N"	+ 1,260	+ 572	+ 140	+ 64	+ 1,120	+ 508	+ 290	+ 132	+ 970	+ 440	
Rear drum planetary — load hoist	+ 450	+ 204	- 10	- 5	+ 460	+ 209	+ 160	+ 73	+ 290	+ 131	
Rear drum planetary — load lowering	+ 450	+ 204	- 10	- 5	+ 460	+ 209	+ 160	+ 73	+ 290	+ 131	
Rear drum wire rope — 890' (271.27 m), 7/8" (22.23 mm) diameter, Type "N"	+ 1,260	+ 572	- 30	- 13	+ 1,290	+ 585	+ 460	+ 209	+ 800	+ 363	
Third drum (with front drum lowering clutch and gear to power third drum)	+ 2,100	+ 953	+ 410	+ 186	+ 1,690	+ 767	+ 300	+ 136	+ 1,800	+ 817	
Third drum — as above, but with third drum load lowering clutch	+ 400	+ 181	+ 90	+ 40	+ 310	+ 141	+ 50	+ 22	+ 350	+ 159	
Third drum wire rope — 505' (153.92 m), ¾" (19.05 mm) diameter, Type "N"	+ 530	+ 240	+ 110	+ 50	+ 420	+ 191	+ 70	+ 32	+ 460	+ 209	
Upper counterweight "A"	- 21,000	- 9 526	+ 9,170	+ 4 159	- 30,170	- 13 685	- 16,280	- 7 385	- 4,720	- 2 141	
Upper counterweight "B"	+ 12,000	+ 5 443	- 5,240	- 2 377	+ 17,240	+ 7,820	+ 9,300	+ 4 218	+ 2,700	+ 1 225	
Optional Cummins N855-P220 diesel with three-stage torque converter	+ 1,060	+ 481	- 300	- 136	+ 1,360	+ 617	+ 660	+ 299	+ 400	+ 181	
Crane booms and auxiliary equipment —											
40' (12.19 m) basic open throat boom with accessories	+ 5,200	+ 2 359	+ 8,330	+ 3 779	- 3,130	- 1 420	- 6,570	- 2 980	+ 11,770	+ 5 339	
20' (6.10 m) open throat boom top section only	+ 3,380	+ 1 533	+ 6,670	+ 3 066	+ 3,380	+ 1 737	+ 5,610	+ 2 545	- 8,990	- 4 078	
30' (9.14 m) basic hammerhead boom with accessories	+ 4,730	+ 2 146	+ 6,140	+ 2 785	- 1,410	- 639	- 4,540	- 2 059	+ 9,270	+ 4 205	
5' (1.52 m) hammerhead boom top section only											
Boom stops	+ 770	+ 349	+ 230	+ 104	+ 540	+ 245	+ 40	+ 18	+ 730	331	
Boom live mast (extended and horizontal), bridle and spreader bar	+ 3,600	+ 1 633	+ 3,860	+ 1 751	- 260	- 118	- 2,640	- 1 198	+ 6,240	+ 2 831	
Carrier —											
Front outrigger box, beams and jacks	- 5,100	- 2 313	- 3,220	- 1 460	- 1,880	- 853	- 3,220	- 1 460	- 1,880	- 853	
Rear outrigger box, beams and jacks	- 5,100	- 2 313	+ 1,490	+ 676	- 6,590	- 2 989	+ 1,490	+ 676	- 6,590	- 2 989	
Front and rear outrigger floats (4)	- 500	- 227	- 140	- 64	- 360	- 163	- 140	- 64	- 360	- 163	
Front center hydraulic jack	+ 130	+ 59	+ 170	+ 77	- 40	- 18	+ 170	+ 77	- 40	- 18	
Front center hydraulic jack float (1)	+ 130	+ 59	+ 60	+ 27	+ 70	+ 32	+ 60	+ 27	+ 70	+ 32	
Bumper counterweight "A"	- 13,500	- 6 124	- 17,780	- 8 065	+ 4,280	+ 1 941	- 17,780	- 8 065	+ 4,280	+ 1 941	
Optional Cummins NTC-290 diesel	+ 740	+ 336	+ 800	+ 363	- 60	- 27	+ 800	+ 363	- 60	- 27	
Optional 14:00x24L (20-ply rating) HCT highway type tires	+ 970	+ 440	+ 320	+ 145	+ 650	+ 295	+ 320	+ 145	+ 650	+ 295	
Optional 14:00x24 J (18-ply rating) Goodyear SRL-1 tires	+ 1,330	+ 603	+ 440	+ 200	+ 890	+ 403	+ 440	+ 200	+ 890	+ 403	

\*GM6-71N diesel with three-stage converter — weight approximately same as GM 6-71N with single stage converter.

\*\*A — upper, B — carrier, C — total weight of upper and carrier.

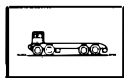


PORTLAND OFFICE: 503.283.3111  
SEATTLE OFFICE: 206.784.1054

WWW.NESSCAMPBELL.COM

# General specifications

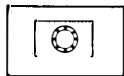
## Carrier —



### Type —

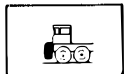
FMC; 8 x 4 drive, 260" (6.60 m) wheelbase, 11'0" (3.35 m) wide.

**Frame** — Main members heat treated alloy steel; machined surface for mounting outer race of turntable bearing.



### Turntable bearing —

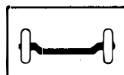
Outer race, with integral external tooth swing (ring) gear, bolted to machined surface on carrier deck.



### Bumper counterweight —

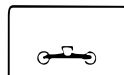
Mounts on front bumper counterweight hooks; easily removable. Refer to lifting capacity charts for counterweight requirements.

*Bumper counterweight "A"* — 13,500# (6 124 kg).



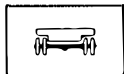
### Front axles —

Shuler FTCA-34L; bogie beam mounted tandem axles, single wheels. Track—104" (2.64 m).



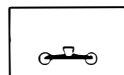
### Bogie —

Hendrickson; rubber mounted equalizer beams, rubber bushed torque rods.



### Rear axles —

Clark Planetary BD-65200, bogie mounted tandem axles, dual wheels. Track — 100-5/8" (2.56 m).



### Bogie —

Hendrickson; bronze bushed equalizer beams, rubber bushed torque rods.

**Tag axle** — Optional; Transport Trailer, equipped with air brakes, 10:00 x 20F (12-ply rating) dual tires.

**Wheels and rims** — Front; cast spoke type. Rear; integral with planetary hubs.

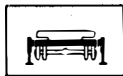


### Tires —

Single tires front; dual tires rear.

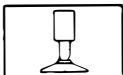
*Standard* — 14:00 x 24J (18-ply rating), transport type tread.

*Optional* — 14:00 x 24L (20-ply rating). General HCT Nygen; 14:00 x 24J (18-ply rating) Goodyear SRL-1.



### Outriggers —

Full width, double box, front and rear; pin connected to carrier frame. Hydraulically operated beams and jack cylinders individually controlled from each side of carrier. Hydraulic power supplied by PTO-driven hydraulic pump. Check valve at each jack cylinder. Optional — outrigger beam/jack controls in crane upper cab.



### Front center hydraulic jack —

Optional; jack with float available — **required** for handling 360° swing rated capacities.

*Floats* — Low profile, alloy steel, lightweight; 30" (.76 m) square base.

**Trailer hitch** — Optional; includes air and electric connections at rear of carrier for trailer lights and air brakes.

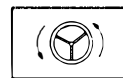
**Brakes** — 8-wheel air brakes.

*Service* — Dual diaphragm air chambers on four rear wheels, single diaphragm air chambers on four front wheels.

*Size and area* — Rear wheels; 20" x 7" (.51 x .18 m); total effective lining area, 574 square inches (3 073 cm<sup>2</sup>) per axle. Front wheels; 17¼" x 4" (.44 x .10 m); total effective lining area, 248 square inches (1 601 cm<sup>2</sup>) per axle.

*Parking* — Brakes on four rear wheels applied and air chamber push rods automatically and mechanically locked with air control valve on dash.

*Emergency* — Bendix-Westinghouse DD-3 air brakes on four rear wheels apply and mechanically lock automatically if air pressure drops to 40 p.s.i. (275.80 kPa) in system. Emergency brake may be manually applied any time by hand control of dash-mounted air control valve.



### Steering —

Power hydraulic assist. Ross HPS70; 18" (.46 m) diameter steering wheel.



### Engines —

Diesel; 12-volt alternator, starter, pressure lubrication, hydraulic pump, dry type air cleaner, and 14.5 c.f.m. (.41 m<sup>3</sup>/min) air compressor.

*Standard* — GM 6V-92TA diesel, 6 cylinder, 2 cycle, 4.84" (.12 m) bore, 5" (.13 m) stroke, 552 cu. in. (9 047 cm<sup>3</sup>) displacement, 318 brake horsepower at 2,100 r.p.m. governed load speed. Peak torque 914 ft. lbs. (126.41 kgm) at 1,400 r.p.m. Electric shutdown.

*Optional* — Cummins NTC-290 diesel, 6 cylinder, 4 cycle, 5½" (.14 m) bore, 6" (.15 m) stroke, 855 cu. in. (14 013 cm<sup>3</sup>) displacement, 290 brake horsepower at 2,100 r.p.m. governed load speed. Peak torque 930 ft. lbs. (128.62 kgm) at 1,300 r.p.m. Electric shutdown.

**Clutch** — Lipe-Rollway, 14" (.36 m), 2-plate, dry disc.

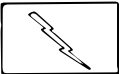
### Transmissions —

*Main* — Eaton RTO-915; 15 speeds forward, 3 reverse.

*Auxiliary* — Eaton AT-1202; 2-speed, midship mounting.

**Universals** — Mechanics type drive tubes; needle bearings.

**Cab** — One-man, offset, fully enclosed. Rubber suspension mounted bucket seat with seat belt. Noise absorbing insulation with vinyl covering, sound reduction headliner, carpet floor mat; isolated from engine compartment, rubber mounted for sound level reduction. Instrument panel and dash includes speedometer, odometer, voltmeter, and gauges for fuel, engine temperature, air and oil pressures. Low air pressure warning buzzer, key locking switch, pushbutton starter, throttle control, tachometer, fire extinguisher, heater and defroster, 2-speed electric windshield wiper, and windshield washer.



### Electrical system —

12-volt; including dual sealed beam headlights, directional signals with 4-way flashing system, stop and tail lights, clearance lights, horn, lighting of instrument panel, dome light, headlight dimmer switch, and two 12-volt, 225 ampere hour batteries. Individual switches provide circuit control for hydraulic outrigger solenoid valves; one control station on each side of carrier.

**Standard auxiliary equipment** — West Coast rear view mirrors, boom guide, lug wrench, 2-way reading bubble levels at 4 positions on carrier frame, tire gauge and tire inflation hose. High pressure lube fittings at all bearing points. Two 45 gallon (170.31 liter) capacity fuel tanks, hand grab rails, carrier deck access ladder, back-up alarm, skid-resistant finish on carrier deck.

### Carrier speeds —

Based on GM 6V-92TA or Cummins NTC-290 engines running at 2,100 r.p.m. governed full load speed.						
Gear		Main-Eaton RTD-915	Auxiliary — Eaton AT-1202			
			1.00:1.00		2.036:1.00	
			M.p.h.	km/hr	M.p.h.	km/hr
High	10th	.81	43.6	70.15	21.4	34.43
	9th	1.00	35.3	56.80	17.4	28.00
	8th	1.26	28.0	45.05	13.8	22.20
	7th	1.59	22.2	35.72	10.9	17.54
	6th	2.04	17.3	27.84	8.5	13.68
	Reverse	2.21	16.0	25.74	7.9	12.71
Low	5th	2.59	13.6	21.88	6.7	10.78
	4th	3.20	11.0	17.70	5.4	8.69
	3rd	4.04	8.7	14.00	4.3	6.92
	2nd	5.10	6.9	11.10	3.4	5.47
	1st	6.51	5.4	8.69	2.6	4.18
	Reverse	7.06	5.0	8.05	2.5	4.02
Deep Reduction	5th	3.87	9.1	14.64	4.5	7.24
	4th	4.78	7.4	11.91	3.6	5.79
	3rd	6.03	5.9	9.49	2.9	4.67
	2nd	7.62	4.6	7.40	2.3	3.70
	1st	9.73	3.6	5.79	1.8	2.90
	Reverse	10.55	3.3	5.31	1.6	2.57

Creep speed in deep reduction low (1st), based on GM 6V-92TA peak engine torque of 1,400 r.p.m. — 1.2 m.p.h. (1.93 km/hr.); based on Cummins NTC-290 peak engine torque of 1,300 r.p.m. — 1.1 m.p.h. (1.77 km/hr.)  
 Note: Rear axle ratio — 8.667 to 1.0.

### Turning ability —

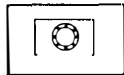
Turning circle diameter	Curb clearance circle diameter	Vehicle clearance circle diameter	
		Over outside of front bumper	Over outside of front bumper counterweight "A"
Centerline of outer front tire	Outside of outer front tire		
111' 0" (33.83 m)	112' 0" (34.14 m)	117' 0" (35.66 m)	118' 0" (35.97 m)

### Revolving upperstructure —



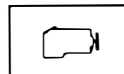
#### Frame —

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



#### Turntable bearing —

Inner race of bearing bolted to machined surface on underneath side of frame.



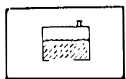
#### Engines —

Diesel; full pressure lubrication, oil filter, air cleaner, hour meter, foot and optional hand throttles. Manual control shutdown cable for GM engine, electrical shutdown for Cummins engine.

Engine specifications	GM 6-71N with single stage torque converter ①	GM 6-71N with three stage torque converter ②	Cummins N855-P220 with three stage torque converter ②
Number cylinders	6	6	6
Bore and stroke	4¼" x 5" (.108 x .13 mm)	4¼" x 5" (.108 x .13 mm)	5½" x 6" (.13 x .152 m)
Piston displacement (cu. in.)	425.6 (6 975.6 cm³)	425.6 (6 975.6 cm³)	855 (14 013.5 cm³)
High idle speed r.p.m.	1950	1940	1980
Engine r.p.m. at full load speed	1800	1800	1800
Net engine horsepower at full load speed	165	165	168
Peak torque (foot pounds)	1,400 (1898 joule)	2,360 (3200 joule)	2,402 (3257 joule)
Peak torque r.p.m.	Output shaft stall	Output shaft stall	Output shaft stall
Electrical system	12-volt	12-volt	12-volt
Batteries	One/12-volt	One/12-volt	Two/12-volt
Clutch or power take-off	Disconnect between engine and converter	Disconnect between engine and converter	Disconnect between engine and converter
Transmission —	—	—	—
Number chain wheel teeth	161	161	161
Number engine pinion teeth	28	28	28

① Allison #TCDO 475 torque converter

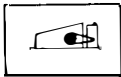
② Twin Disc #CO-10066 TCI torque converter



### Fuel tank —

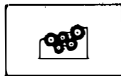
75-gallon (284 liters) capacity fuel tank equipped with fuel gauge and fill pipe with flame arrester unit.

### Power train —



### Transmission —

Quadruple roller chain enclosed in oil tight chain case with integral lubrication system.



### Machinery gear train —

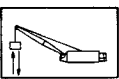
"Full Function" design, two-directional power available to all operating shafts; shafts mounted on anti-friction bearings in precision bored machinery side housings. All load hoist, swing, and boomhoist functions independent of one another. Components such as gears, pinions, chain wheels, brake drums and clutch spiders involute splined to shafts. Drum gear/clutch drum assemblies bolted together and mounted on shafts on anti-friction bearings. Machine-cut teeth on drum gears, pinions, spur gears, and chain wheel. Chain wheel and pinion fully enclosed and running in oil.

### Principal operating functions —



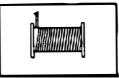
### Control system —

Speed-o-Matic® power hydraulic control system; a variable pressure system requiring no bleeding. Operating pressure transmitted through oil to all 2-shoe clutch cylinders, and other hydraulic cylinders as required. System includes constant displacement, engine driven, vane type hydraulic pump to provide constant flow of oil, accumulator to maintain system operating pressure, unloader valve to control pressure in accumulator, relief valve to protect pressure buildup in system, full-flow filter with 40 micron disposable filter element, and variable pressure control valves to control drum clutches.



### Load hoisting and lowering —

Wire rope drum gear train (front and rear main, and optional third, operating drums) powered by chain transmission from engine. Tandem design drums.



### Load hoist drums —

**Front and rear main operating drums —** One-piece, 17¼" (.44 m) root diameter smooth drums; involute splined to shafts. Extended length shafts permit installation of power load lowering clutches; special length shaft required for, and furnished with, optional planetary drive units for either or both drums.

**Third operating drum —** Optional; mounts forward of front main operating drum. One-piece, 11¼" (.29 m) root diameter smooth drum; involute splined to shaft. Note: Installation of optional third operating drum includes required installation of power load lowering clutch/gear unit on front main operating drum shaft.



### Drum clutches —

Speed-o-Matic power hydraulic 2-shoe clutches. Internal expanding, lined aluminum alloy shoes; clutch spiders splined to shafts, clutch drums bolted to drum spur gears and mounted on shafts on anti-friction bearings. Front, rear, and optional third, main operating drum clutches, swing clutches, and boom hoist clutch are fully interchangeable.

**Load hoist clutches —** Front and rear main, and optional third, operating drums — 20" (.51 m) diameter, 5" (.13 m) face width.

**Load lowering clutches —** Standard on rear main drum; optional on front main, and optional third, operating drums. Clutches 20" (.51 m) diameter, 5" (.13 m) face width.

**Drum planetary drive units —** Optional; available for load hoist or lowering on either or both front and rear main operating drums. Planetary units mount (on extended drum shafts) between drum spur gears and 2-shoe clutch drums. Available for either increase or decrease of standard load hoist or lowering line speeds — choice of increased or decreased line speeds predetermined by customer at time of order. Two-shoe clutches control standard line speeds. Planetary drive units controlled by external contracting band brakes through push button located on appropriate control lever.

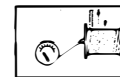


### Drum brakes —

Two-piece, external contracting band; mechanically foot pedal operated. Foot pedals equipped with latch to permit locking brakes in applied position.

**Front and rear main drums —** brakes 34" (.86 m) diameter, 5" (.13 m) face width.

**Optional third drum —** brake 28" (.71 m) diameter, 5" (.13 m) face width.



### Drum rotation indicators —

Standard for front and rear main operating drums. Two solenoid operated indicator buttons, recessed in drum clutch control lever handles; one button pulsates when rope drums rotate in one direction, the other button pulsates when drums rotate in opposite direction. Operator can adjust pulsations to determine either rope speed off drum or hook block speed based on specific number of parts of load hoist rope.



### Swing system —

Spur gear driven; single bevel gears (enclosed and running in oil) on horizontal and vertical swing shafts. Swing pinion, involute splined to vertical swing shaft, meshes with external teeth of swing gear integral with outer race of turntable bearing.



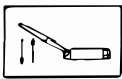
### Swing clutches —

20" (.51 m) diameter, 5" (.13 m) face width; aluminum alloy shoes.

**Swing brake —** External contracting band; spring applied, hydraulically released by operator controlled lever. Brake drum involute splined to vertical swing shaft; brake 20" (.51 m) diameter, 3¼" (82.6 mm) face width.

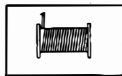
**Swing lock —** Mechanically controlled pawl engages external teeth of turntable bearing swing (ring) gear.

**Maximum swing speed —** 3.0 r.p.m.



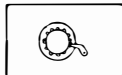
## Boom hoist/ lowering system —

Independent, spur gear driven. Precision control — hoisting through power hydraulic 2-shoe clutch; lowering through low speed planetary drive unit.



## Boomhoist drum —

12¼" (.31 m) root diameter, smooth; involute splined to shaft.



## Boomhoist drum locking pawl —

Operator controlled; spring applied, mechanically released.



## Boom hoist clutch —

20" (.51 m) diameter, 5" (.13 m) face width.

**Boom lowering planetary** — Mounts on outer end of shaft; planetary external contracting band brake hydraulically controlled by boom hoist/lowering control lever.



## Boom lowering clutch —

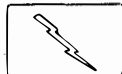
Optional; in addition to planetary boom lowering. Two-shoe clutch permits higher speed boom lowering mounted on shaft outside planetary unit, clutch drum bolted to outer face of planetary housing. Clutch power hydraulically controlled by depressing solenoid push button located on boom hoist/lowering control lever.



## Boom hoist/lowering brake —

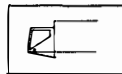
External contracting band; spring applied, hydraulically released as hoist clutch or lowering planetary are engaged. Brake drum involute splined to shaft; brake 28" (.71 m) diameter, 5" (.13 m) face width.

**Boomhoist limiting device** — Provided to restrict hoisting boom beyond recommended minimum radius; located on exterior right-hand side of operator's cab.



## Electrical system —

Battery, 12-volt, 225 ampere hour, either one or two batteries depending on engine. *Optional* — battery lighting system, including two sealed beam automotive type adjustable headlights located on cab front roof, one interior cab light and automotive type wiring. *Optional* — additional 50 watt sealed beam automotive type headlight mounted on boom. (Three maximum quantity recommended.) *Optional* — Onan independent light plant with single cylinder four cycle, air cooled diesel engine with remote electric starting, 3,000 watt, 120-volt, single-phase, 60 cycles A.C. including wiring in conduit, three interior cablights, trouble lamp with cord and two 300 watt adjustable floodlights on cab front roof. *Optional* — additional 300 watt floodlights available for mounting on cab and boom.



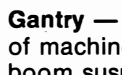
## Operator's cab —

Environmental cab, modular type isolated from upper machinery cab. Tinted tempered glass panels in all windows, hand grab rail, adjustable, cushioned seat with head rest, arm rests on control consoles, dry chemical fire extinguisher. Cab heater/defroster and windshield wiper optional.



## Machinery cab —

Equipped with warning horn, hinged doors on two sides, rear, and top. Removable panels for machinery access, roof-top access ladder, and skid resistant finish on roof.

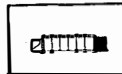


## Gantry — low type, mounted at top rear of machinery side housings supports boom suspension system.



## Gantry bail —

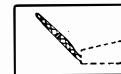
Contains eight 12" (.30 m) root diameter sheaves, mounted on anti-friction bearings for 16-part boomhoist wire rope reeving.



## Counterweight —

"A" counterweight — 21,000# (9 526 kg); "B" counterweight — 12,000# (5 443 kg). (Refer counterweight requirement instructions with lifting capacity chart.)

## Booms and jibs



## Boom —

Tubular; basic boom two-piece 40' (12.19 m) long with open throat, three-piece 30' (9.14 m) long with hammerhead, and 90' (27.43 m) long with tapered tip top sections. Boom 60" (1.52 m) wide, 50" (1.27 m) deep at centerline of connections. Alloy steel, round tubular chords 3" (76.20 mm) outside diameter on 60" (1.52 m) centers.

**Base section** — 20' (6.10 m) long. Boom feet 2½" (63.5 mm) thick on 60" (1.52 m) centers.

**Boom extensions** — one of two types required. Type "H" **must be used** for first 60' (1.52 m) of extensions beyond base section — available in 10' (3.05 m), 20' (6.10 m) and 30' (9.14 m) lengths. Type "F" **must be used** at point 80' (24.38 m) from boom feet and beyond — available in 10' (3.05 m), 15' (4.57 m), 20' (6.10 m), 30' (9.14 m) and 40' (12.19 m) lengths. Extended hub on female connections serves as anchor for link used to attach jib staylines, boom suspension pendants for boom assembly, and boom midpoint suspension pendants.

**Boom connections** — In-line, tapered pins.

**Boom folding section** — Available for folding boom with open throat top section only; 10' (3.05 m) long. Includes lifting hubs for boom folding shaft; construction similar to type "H" boom extension.

**Boom top section** — Open throat; 20' (6.10 m) long.

— **Boompont machinery**. Five 21" (.53 m) root diameter head sheaves mounted on anti-friction bearings.

**Boom top section** — Hammerhead; 5' (1.52 m) long; requires use also of 5' (1.52 m) long tapered extension immediately below the hammerhead top section.

— Tapered extension. 5' (1.52 m) long; tapered from 60" (1.52 m) wide, 50" (1.27 m) deep to 54" (1.37 m) wide, 44" (1.12 m) deep at centerline of connections. (For use with hammerhead boomtop section only).

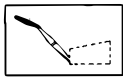
— **Boompont machinery**. Five head sheaves (seven available for International) plus one or two (optional) idler sheaves to guide load hoist wire rope on to head sheaves. All sheaves 18½" (.47 m) root diameter, mounted on anti-friction bearings.



**Boom top section** – Tapered tip; 40' (12.19 m) long, tapered from 60" (1.52 m) wide, 50" (1.27 m) deep at lower end to 32" (.81 m) wide 12¾" (.32 m) deep at top end. Requires use of 30' (9.14 m) of **type "H"** extensions, immediately below the tapered tip top section to obtain basic 90' (27.43 m) length boom.

— **Pendant spreader bar.** Prevents jib back stayline interference with boom suspension pendants. Required for tapered tip booms 150' (45.72 m) through 210' (64.01 m) long when equipped with jib. Optional for use with tapered tip booms 150' (45.72 m) through 230' (70.10 m) long **without** jib. Spreader bar **must not** be used with tapered tip booms 90' (27.43 m) through 140' (42.67 m) with or without jib.

— **Boompoint machinery.** Two 25" root diameter head sheaves, mounted on anti-friction bearings.



**Jib** —

Tubular; basic jib two-piece 30' (9.14 m) long; 32" (.81 m) wide, 24" (.61 m) deep at connections. Alloy steel tubular chords 2" (50.80 mm) outside diameter.

**Base section** – 15'0" (4.57 m) long.

**Jib extensions** – Available in 15' (4.57 m) length with appropriate length pendants. Maximum boom/jib lengths permitted — open throat boom; 200' (60.96 m) boom plus 60' (18.29 m) jib — hammerhead boom; 200' (60.96 m) boom plus 60' (18.29 m) jib — tapered tip boom; 210' (64.01 m) boom plus 60' (18.29 m) jib.

**Connections** – In-line, tapered pins.

**Tip section** – 15'0" (4.57 m) long; single peak sheave 15¼" (.39 m) diameter, mounted on anti-friction bearings. Anchors at jib peak shaft for 2-part load hoist wire rope (whipline). Jib frontstay line anchors suspended from peak shaft.



**Jib mast** —

12'1" (3.69 m) high, 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 rear staylines vary in length depending on degree of jib offset from boom centerline; back staylines attached at bottom end of boom top section on open throat and tapered tip booms, and at a point 20' (6.10 m) or 30' (9.14 m) below peak of hammerhead top section.

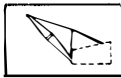
— **Jib stops.** Telescoping type; pinned from jib mast to boom top section and from jib mast to jib base section.

## Items applicable to all booms and jibs —



**Boom stops** —

Dual lever-type; pinned to low gantry head shaft and top of boom base section; spring-loaded bumper ends.

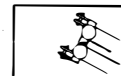


**Boom live mast** —

Supports boomhoist bridle, boom pendants, and boom midpoint suspension pendants. Hydraulically extends to maximum 24'0" (7.32 m) — required operating position for **all** capacities when using booms with open throat and tapered tip top sections, and for all hammerhead boom capacities with exception of 30' (9.14 m) long hammerhead boom. Mechanically retracts to minimum 20'6" (6.25 m) height — required operating position for **maximum** capacity when using basic 30' (9.14 m) boom with hammerhead top section, and to reduce overall height for travel.

**Note:** Boom live mast, in extended 24'0" (7.32 m) height, may be used as short boom in machine/boom assembly or dismantling, but is not intended for general crane service. Refer to lifting crane capacity chart for boom live mast lifting capacities.

— **Mast stops.** Incorporated with boom stops; manually positioned when using live mast as short boom.



**Boomhoist bridle and spreader bar** —

Serves as connection for boom suspension system. Bridle contains eight 12" (.30 m) root diameter sheaves, mounted on anti-friction bearings, for 16-part boomhoist wire rope reeving. Bracket attached to bridle contains two 15¾" (.40 m) root diameter, bronze bushed sheaves, to permit reeving wire rope suspension for use of boom live mast as short boom. Spreader bar provides attachment point for boom main pendants and boom midpoint suspension pendants.



**Boom angle indicator** —

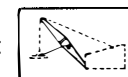
Pendulum type; mounted on boom base section.

**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, two with open throat boom top section and three with tapered tip boom top section.

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

**Boom midpoint suspension pendants** — Assist in lifting long booms off ground. Required for all boom lengths exceeding 150' (45.72 m); pendants must connect on boom at point 80' (24.38 m) from boom feet.

## Auxiliary equipment —



**Tagline** —

**Optional.** Spring wound drum type, mounted on crane boom. Rud-O-Matic® model 648, single barrel; cable pull off drum, 60' (18.29 m) to 75' (22.76 m) from neutral.

**Load hoist wire ropes** — Main load hoist wire rope standard, jib load hoist wire rope (whipline) furnished with machine **only** if jib is ordered.

**Hook blocks** — Blocks, or weighted ball with swivel hook, optional — refer to price list.

## GENERAL INFORMATION ONLY

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



PORTLAND OFFICE: 503.283.3111  
SEATTLE OFFICE: 206.784.1054

WWW.NESSCAMPBELL.COM

HC-218A open throat boom				"A" upper & "A" bumper counterweights						"AB" upper & "A" bumper counterweights					
Length	Radius		Boom point height	On outriggers			On lites (static)			On outriggers only			On outriggers only		
	Feet	Meters		Over rear	Over side and 360° swing	Over rear	Over side	Over rear	Over side	Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
70' (21.34 m)	25	7.62	74' 0"	90,000	40,823	53,400	24,221	31,700	14,378	104,500	47,400	101,000	45,812		
	30	9.14	72' 2"	68,200	30,027	42,300	19,186	24,600	11,158	81,900	39,870	77,900	35,334		
	35	10.67	69' 10"	51,900	23,941	34,700	15,739	19,900	9,028	75,600	34,291	61,300	27,905		
	40	12.19	66' 7"	42,400	19,232	29,200	13,244	16,400	7,438	66,200	30,027	50,200	22,770		
	50	15.24	59' 8"	30,300	13,834	21,800	9,888	11,700	5,307	48,800	22,135	36,400	16,510		
	60	18.29	48' 8"	23,300	10,568	17,000	7,711	8,600	3,900	38,000	17,238	28,000	12,700		
	70	21.34	38' 2"	18,500	8,391	13,500	6,123	6,400	2,902	30,700	13,925	22,400	10,160		
	17	5.18	86' 2"	135,700	61,552	74,100	33,611	48,400	21,953	141,600	84,228	141,600	64,228		
	18	5.49	79.6	128,300	58,195	72,100	32,704	45,900	20,819	138,800	82,958	137,000	62,142		
	19	5.79	78.8	126,500	56,202	70,200	31,842	43,800	19,867	133,900	80,736	130,200	59,057		
80' (24.38 m)	20	6.10	85' 8"	115,900	52,571	68,500	31,071	41,700	18,914	127,800	57,969	123,900	56,200		
	25	7.62	84' 5"	90,000	40,823	53,200	24,131	31,500	14,288	104,000	47,173	100,600	45,631		
	30	9.14	82' 10"	66,200	30,027	42,100	19,098	24,400	11,067	87,500	39,689	77,800	35,289		
	35	10.67	80' 11"	51,800	23,498	34,500	15,648	19,700	8,935	74,900	33,974	61,200	27,759		
	40	12.19	78' 6"	42,300	19,186	29,000	13,154	16,200	7,348	64,400	29,211	50,100	22,724		
	50	15.24	64' 0"	30,300	13,743	21,600	9,797	11,500	5,218	48,600	22,044	36,200	16,420		
	60	18.29	54' 5"	23,300	10,477	16,800	7,820	8,400	3,810	37,800	17,145	27,900	12,655		
	70	21.34	45.1	18,400	8,346	13,400	6,078	6,300	2,867	30,600	13,879	22,300	10,115		
	80	24.38	33.8	14,900	6,123	10,900	4,944	4,700	2,131	25,400	11,521	18,300	8,300		
	18	5.49	80.7	127,000	57,923	71,500	32,431	45,400	20,593	127,000	57,923	127,000	57,923		
90' (27.43 m)	19	5.79	96' 0"	121,200	64,975	69,700	31,815	43,400	19,685	125,500	56,925	125,500	58,925		
	20	6.10	95' 10"	115,400	52,344	67,900	30,798	41,200	18,688	123,300	55,927	123,300	55,927		
	25	7.62	94' 9"	85,000	40,777	53,000	24,040	31,300	14,197	103,500	46,946	100,100	45,404		
	30	9.14	93' 4"	66,100	29,982	41,900	19,005	24,200	10,876	87,000	39,462	77,700	35,244		
	35	10.67	91' 8"	51,700	23,450	34,300	15,558	19,500	8,845	73,100	33,157	61,100	27,714		
	40	12.19	89' 7"	42,200	19,141	28,800	13,058	16,000	7,257	62,900	28,485	49,900	22,634		
	50	15.24	84' 5"	30,200	13,698	21,400	9,708	11,300	5,125	47,900	21,727	36,100	16,374		
	60	18.29	77' 5"	23,300	10,432	16,600	7,529	8,200	3,719	37,700	17,100	27,700	12,564		
	70	21.34	68' 0"	18,200	8,255	13,200	5,987	6,100	2,768	30,400	13,789	22,200	10,069		
	80	24.38	54' 9"	14,800	6,173	10,700	4,853	4,500	2,041	25,200	11,430	18,100	8,210		
100' (30.48 m)	90	27.43	32' 2"	12,100	5,488	8,700	3,948	3,300	1,498	21,300	9,861	15,100	6,849		
	20	6.10	106' 0"	114,900	52,117	67,600	30,662	40,800	18,508	114,900	52,117	114,900	52,117		
	25	7.62	105' 0"	89,900	40,777	52,700	23,904	31,100	14,106	103,000	48,720	99,700	45,223		
	30	9.14	103' 9"	65,900	29,891	41,700	18,914	23,900	10,840	86,800	39,281	77,600	35,198		
	35	10.67	102' 3"	51,500	23,360	34,000	15,422	19,200	8,708	71,700	32,822	60,900	27,823		
	40	12.19	100' 5"	42,000	19,050	28,500	12,927	15,700	7,121	61,500	27,995	49,700	22,843		
	50	15.24	95' 11"	30,000	13,607	21,200	9,618	11,000	4,989	46,700	21,882	35,900	16,283		
	60	18.29	89' 10"	22,700	10,296	16,300	7,393	8,000	3,828	37,400	18,964	27,500	12,473		
	70	21.34	82' 0"	16,000	8,184	12,900	5,851	5,800	2,830	30,200	13,698	22,000	9,979		
	80	24.38	71' 9"	14,600	6,622	10,400	4,717	4,300	1,950	25,000	11,339	17,900	8,119		
110' (33.53 m)	90	27.43	30' 1"	12,000	5,443	8,500	3,855	3,000	1,362	21,200	9,618	14,900	6,758		
	100	30.48	23' 7"	9,900	4,490	7,000	3,175	2,100	952	16,100	8,210	12,500	5,669		
	25	7.62	115' 3"	89,900	40,777	52,600	23,858	30,900	14,016	97,700	44,315	97,700	44,315		
	30	9.14	114' 1"	65,900	29,891	41,500	18,924	23,800	10,795	85,600	38,627	77,500	35,153		
	35	10.67	112' 9"	51,400	23,314	33,900	15,376	19,100	8,663	70,600	32,023	60,900	27,623		
	40	12.19	111' 1"	41,900	19,005	28,300	12,836	15,600	7,076	60,500	27,442	49,600	22,498		
	50	15.24	107' 0"	29,900	13,562	21,000	9,525	10,900	4,944	45,900	20,819	35,800	16,238		
	60	18.29	101' 9"	22,600	10,178	16,200	7,448	7,800	3,590	37,000	18,782	27,300	12,383		
	70	21.34	95' 0"	17,900	8,119	12,800	5,805	5,700	2,585	30,000	13,607	21,900	9,933		
	80	24.38	86' 5"	14,500	6,577	10,300	4,672	4,100	1,859	24,800	11,249	17,800	8,073		
110' (33.53 m)	90	27.43	75' 4"	11,900	5,397	8,400	3,810	2,900	1,315	21,100	9,570	14,800	6,713		
	100	30.48	60' 2"	9,800	4,445	6,800	3,084	2,100	952	18,000	8,164	12,500	5,669		
	110	33.53	34' 11"	8,200	3,719	5,600	2,540	1,500	669	15,500	7,030	10,500	4,762		

Ⓢ Ⓣ — Refer to page 7. (continued)



PORTLAND OFFICE: 503.283.3111  
 SEATTLE OFFICE: 206.784.1054  
 WWW.NESSCAMPBELL.COM



Length	HC-218A open throat boom				"A" upper & "A" bumper counterweights								"AB" upper & "A" bumper counterweights									
	Radius		Angle	Boom point height	On outriggers				On lires (static)				On outriggers only				On outriggers only					
	Feet	meters	Degrees	Feet	Pounds	kilograms	Over rear	Over side and 360° swing	Pounds	kilograms	Over rear	Over side	Pounds	kilograms	Pounds	kilograms	Over rear	Over side and 360° swing	Pounds	kilograms	Pounds	kilograms
160' (48.77 m)	30	9.14	80.5	165' 2"	50.33	26 399*	24 267*	56,200*	26 399*	18 415	22,800	10 341	58,200*	26 399*	26 399*	26 399*	26 399*	56,200*	26 399*	26 399*	56,200*	26 399*
	35	10.67	76.6	164' 3"	50.05	24 267*	21 953*	53,500*	23 042	14 923	18,200	8 255	53,500*	24 267*	24 267*	24 267*	24 267*	53,500*	24 267*	24 267*	53,500*	24 267*
	40	12.19	78.8	163' 2"	49.72	48 400*	17 953*	41,300	18 733	12 983	14,700	6 667	48,400*	48 400*	48 400*	48 400*	48 400*	48,400*	48 400*	48 400*	48,400*	48 400*
	50	15.24	73.1	160' 5"	48.90	38 100*	17 281*	29,100	13 195	9 071	9,900	4 490	38,100*	38 100*	38 100*	38 100*	38 100*	38,100*	38 100*	38 100*	38,100*	38 100*
	60	18.29	69.3	157' 1"	47.87	31 700*	14 378*	22,000	9 979	8 894	6,800	3 084	31,700*	31 700*	31 700*	31 700*	31 700*	31,700*	31 700*	31 700*	31,700*	31 700*
	70	21.34	65.4	152' 11"	46.60	25 200	11 430	17,100	7 756	5 952	4,700	2 131	25,200	25 200	25 200	25 200	25 200	25,200	25 200	25 200	25,200	25 200
	80	24.38	61.4	147' 11"	45.07	20 700	9 369	13,600	6 168	4 218	3,100	1 408	20,700	20 700	20 700	20 700	20 700	20,700	20 700	20 700	20,700	20 700
	90	27.43	57.3	141' 1"	43.27	17 200	7 801	11,000	4 989	3 311	2,300	—	17,200	17 200	17 200	17 200	17 200	17,200	17 200	17 200	17,200	17 200
	100	30.48	52.9	135' 0"	41.14	14 500	6 577	8,900	4 038	2 830	1,800	—	14,500	14 500	14 500	14 500	14 500	14,500	14 500	14 500	14,500	14 500
	110	33.53	48.3	126' 9"	38.64	12 300	5 579	7,300	3 311	2 086	1,200	—	12,300	12 300	12 300	12 300	12 300	12,300	12 300	12 300	12,300	12 300
	120	36.58	43.3	117' 0"	35.87	10 500	4 782	6,000	2 721	1 632	800	—	10,500	10 500	10 500	10 500	10 500	10,500	10 500	10 500	10,500	10 500
	130	39.62	37.8	105' 4"	32.10	9 000	4 082	4,900	2 222	1 224	600	—	9,000	9 000	9 000	9 000	9 000	9,000	9 000	9 000	9,000	9 000
	140	42.67	31.4	90' 10"	27.68	7 800	3 538	3,900	1 769	9 07	400	—	7,800	7 800	7 800	7 800	7 800	7,800	7 800	7 800	7,800	7 800
	150	45.72	23.7	71' 8"	21.85	6 700	3 039	3,100	1 406	—	—	—	6,700	6 700	6 700	6 700	6 700	6,700	6 700	6 700	6,700	6 700
	160	48.77	12.0	40' 8"	12.38	5,800	2 630	2,400	1 088	—	—	—	5,800	5 800	5 800	5 800	5 800	5,800	5 800	5 800	5,800	5 800
	170' (51.82 m)	35	10.67	79.3	174' 5"	53.18	22 226*	19 459*	49,000*	22 226*	18 415	22,800	10 341	49,000*	22 226*	22 226*	22 226*	22 226*	49,000*	22 226*	22 226*	49,000*
40		12.19	77.6	173' 5"	52.85	19 232*	17 735*	42,400*	19 232*	14 923	18,200	8 255	42,400*	19 232*	19 232*	19 232*	42,400*	19 232*	19 232*	42,400*	19 232*	
50		15.24	74.1	170' 10"	52.08	15 630*	13 108	28,900	15 630*	10 432*	13,700	6 214	34,900*	15 630*	15 630*	15 630*	34,900*	15 630*	15 630*	34,900*	15 630*	
60		18.29	70.6	167' 8"	51.11	13 380*	9 888	21,800	9 888	7 665	9,900	4 490	29,500*	13 380*	13 380*	13 380*	29,500*	13 380*	13 380*	29,500*	13 380*	
70		21.34	67.0	163' 10"	49.93	10 432*	7 665	16,900	7 665	5 800	6,800	3 084	23,000*	10 432*	10 432*	10 432*	23,000*	10 432*	10 432*	23,000*	10 432*	
80		24.38	63.3	159' 2"	48.51	8 890*	6 078	13,400	6 078	4 600	5,200	2 131	19,600*	8 890*	8 890*	8 890*	19,600*	8 890*	8 890*	19,600*	8 890*	
90		27.43	59.4	153' 8"	46.85	7 711	4 988	10,800	4 988	3 600	4,000	1 408	17,400*	7 711	7 711	7 711	17,400*	7 711	7 711	17,400*	7 711	
100		30.48	55.4	147' 4"	44.90	6 486	4 686	8,700	4 686	3 220	3,200	—	15,600*	6 486	6 486	6 486	15,600*	6 486	6 486	15,600*	6 486	
110		33.53	51.2	139' 10"	42.83	5 488	4 688	7,100	4 688	2 630	2,600	—	14,000*	5 488	5 488	5 488	14,000*	5 488	5 488	14,000*	5 488	
120		36.58	46.7	131' 2"	39.98	4 672	3 991	5,800	3 991	2 131	2,100	—	12,500	4 672	4 672	4 672	12,500	4 672	4 672	12,500	4 672	
130		39.62	41.9	120' 11"	36.88	3 991	3 447	4,700	3 447	1 678	1,600	—	10,800	3 991	3 991	3 991	10,800	3 991	3 991	10,800	3 991	
140		42.67	36.6	108' 8"	33.13	3 447	2 948	3,700	2 948	1 315	1,300	—	9,400	3 447	3 447	3 447	9,400	3 447	3 447	9,400	3 447	
150		45.72	30.5	93' 7"	28.53	2 948	2 498	2,900	2 498	997	900	—	8,200	2 948	2 948	2 948	8,200	2 948	2 948	8,200	2 948	
160		48.77	23.0	73' 9"	22.48	2 540	2 540	2,200	2 540	997	900	—	7,100	2 540	2 540	2 540	7,100	2 540	2 540	7,100	2 540	
170		51.82	11.8	41' 8"	12.70	2 131	2 131	—	2 131	—	—	—	6,200	2 131	2 131	2 131	6,200	2 131	2 131	6,200	2 131	
160' (54.86 m)		35	10.67	79.9	184' 7"	56.28	19 459*	17 735*	42,900*	19 459*	18 415	22,800	10 341	42,900*	19 459*	19 459*	19 459*	42,900*	19 459*	19 459*	42,900*	19 459*
	40	12.19	78.3	183' 7"	55.96	17 735*	16 018	39,100*	17 735*	14 923	18,200	8 255	39,100*	17 735*	17 735*	17 735*	39,100*	17 735*	17 735*	39,100*	17 735*	
	50	15.24	75.0	181' 3"	55.24	15 630*	12 428*	28,700	15 630*	10 432*	13,700	6 214	32,300*	15 630*	15 630*	15 630*	32,300*	15 630*	15 630*	32,300*	15 630*	
	60	18.29	71.7	178' 3"	54.33	13 380*	9 298*	21,600	9 298*	7 665	9,900	4 490	27,400*	13 380*	13 380*	13 380*	27,400*	13 380*	13 380*	27,400*	13 380*	
	70	21.34	68.3	174' 7"	53.22	10 432*	7 574	16,700	7 574	5 800	6,800	3 084	20,500*	10 432*	10 432*	10 432*	20,500*	10 432*	10 432*	20,500*	10 432*	
	80	24.38	64.8	170' 3"	51.90	8 073*	6 073*	13,200	6 073*	4 600	5,200	2 131	17,800*	8 073*	8 073*	8 073*	17,800*	8 073*	8 073*	17,800*	8 073*	
	90	27.43	61.3	165' 2"	50.35	7 302*	5 887	10,600	5 887	3 600	4,000	1 408	16,100*	7 302*	7 302*	7 302*	16,100*	7 302*	7 302*	16,100*	7 302*	
	100	30.48	57.6	159' 4"	48.55	6 395	5 397	8,500	5 397	2 630	2,600	—	14,800*	6 395	6 395	6 395	14,800*	6 395	6 395	14,800*	6 395	
	110	33.53	53.7	152' 6"	46.47	5 397	4 581	6,900	4 581	2 131	2,100	—	13,600*	5 397	5 397	5 397	13,600*	5 397	5 397	13,600*	5 397	
	120	36.58	49.7	144' 7"	44.06	4 581	3 900	5,600	3 900	1 678	1,600	—	12,300	4 581	4 581	4 581	12,300	4 581	4 581	12,300	4 581	
	130	39.62	45.3	135' 5"	41.27	3 900	3 358	4,500	3 358	1 315	1,300	—	10,600	3 900	3 900	3 900	10,600	3 900	3 900	10,600	3 900	
	140	42.67	40.7	124' 8"	38.00	3 358	2 804	3,500	2 804	907	900	—	9,200	3 358	3 358	3 358	9,200	3 358	3 358	9,200	3 358	
	150	45.72	35.5	111' 11"	34.12	2 804	2 404	2,700	2 404	700	700	—	8,000	2 804	2 804	2 804	8,000	2 804	2 804	8,000	2 804	
	160	48.77	29.6	96' 3"	29.34	2 404	2 041	2,000	2 041	500	500	—	6,900	2 404	2 404	2 404	6,900	2 404	2 404	6,900	2 404	
	170	51.82	22.3	75' 9"	23.09	2 041	2 041	—	2 041	—	—	—	6,000	2 041	2 041	2 041	6,000	2 041	2 041	6,000	2 041	
	180	54.86	11.3	42' 8"	13.01	1 723	1 723	—	1 723	—	—	—	5,200	1 723	1 723	1 723	5,200	1 723	1 723	5,200	1 723	
35	10.67	80.5	194' 9"	59.35	19 459*	17 735*	42,900*	19 459*	18 415	22,800	10 341	42,900*	19 459*	19 459*	19 459*	42,900*	19 459*	19 459*	42,900*	19 459*		
40	12.19	78.3	193' 10"	59.07	17 735*	16 018	39,100*	17 735*	14 923	18,200	8 255	39,100*	17 735*	17 735*	17 735*	39,100*	17 735*	17 735*	39,100*	17 735*		
50	15.24	75.0	191' 3"	58.37	15 630*	12 428*	28,700	15 630*	10 432*	13,700	6 214	32,300*	15 630*	15 630*	15 630*	32,300*	15 630*	15 630*	32,300*	15 630*		
60																						

# HC-218A jib capacities — open throat boom (U.S. units)

Refer to Notes page 5.

**Boom** — tubular; 60" wide, 50" deep with open throat top section, 1 1/2" diameter boom pendants, boom live mast and boom midpoint suspension pendants as required.

**Jib** — tubular; 32" wide, 24" deep.

**Mounting** — rubber tire mobile base; FMC, 8 x 4 drive, 260" wheelbase, 11' 0" wide.

**Counterweights** — Upper counterweight "AB" — 33,000 lbs.; bumper counterweight "A" — 13,500 lbs.

Boom length Feet	Load radius Feet	Capacities on outriggers — over side and 360° swing <sup>ⓐ</sup>								
		30' jib			45' jib			60' jib		
		Jib angles to boom (jib offset degrees)								
		0°	15°	30°	0°	15°	30°	0°	15°	30°
Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
40	16	23,900*								
	17	23,500*								
	18	23,100*								
	19	22,800*				16,500*				
	20	22,400*				16,300*				
	25	20,400*	16,900*			15,400*		13,200*		
	30	18,500*	15,800*			14,500*	12,900*	12,400*		
	35	16,700*	14,600*	12,600*		13,600*	11,700*	11,600*		
	40	15,400*	13,400*	12,100*		12,500*	10,500*	7,900*	10,800*	9,500*
	50	12,900*	12,100*	11,000*		10,000*	8,000*	7,400*	9,200*	7,800*
60	11,700*	10,900*			7,800*	7,400*	6,600*	7,400*	6,100*	
70	10,100*				7,200*	6,600*	5,300*	5,800*	5,500*	
80					5,900*			5,300*	5,000*	
90								4,400*	3,700*	
60	20	23,700*								
	25	22,300*				16,200*			13,700*	
	30	20,700*	16,800*			15,400*			13,100*	
	35	19,200*	15,900*	12,900*		14,700*	12,600*		12,400*	
	40	17,600*	15,000*	12,500*		13,900*	11,700*		11,800*	10,100*
	50	15,500*	13,100*	11,800*		12,200*	9,700*	7,600*	10,400*	8,700*
	60	13,500*	12,200*	11,000*		10,200*	7,900*	7,200*	9,000*	7,300*
	70	12,300*	11,400*	10,100*		8,000*	7,400*	6,500*	7,600*	5,900*
	80	11,300*	10,400*			7,500*	7,000*	5,500*	6,000*	5,500*
	90					6,900*	5,800*		5,500*	5,100*
100					5,500*			5,100*	4,300*	
110								4,000*	3,100*	
80	25	23,400*								
	30	22,200*				16,000*			13,500*	
	35	20,900*	16,600*			15,400*			13,000*	
	40	19,700*	15,900*	12,800*		14,800*	12,400*		12,400*	
	50	17,100*	14,400*	12,300*		13,500*	10,800*	7,800*	11,300*	9,300*
	60	15,500*	12,900*	11,700*		12,000*	9,200*	7,400*	10,100*	8,100*
	70	13,900*	12,300*	11,000*		10,300*	7,800*	7,100*	9,000*	6,900*
	80	12,600*	11,600*	10,300*		8,500*	7,500*	6,500*	7,700*	5,900*
	90	11,900*	10,900*			7,700*	7,100*	5,600*	6,400*	5,500*
	100	11,000*				7,200*	6,300*		5,700*	5,200*
110					6,500*	5,300*		5,300*	4,700*	
120					5,200*			4,800*	3,700*	
130								3,800*		
100	30	23,200*								
	35	22,100*	17,300*			16,000*			13,400*	
	40	21,100*	16,500*			15,400*			12,900*	
	50	18,900*	15,300*	12,600*		14,300*	11,600*		12,000*	9,800*
	60	16,800*	14,000*	12,100*		13,200*	10,200*	7,600*	11,000*	8,800*
	70	15,500*	12,900*	11,600*		11,900*	8,800*	7,300*	9,900*	7,700*
	80	14,100*	12,300*	11,000*		10,400*	7,800*	7,000*	8,900*	7,000*
	90	12,800*	11,800*	10,400*		8,800*	7,500*	6,400*	7,800*	5,900*
	100	12,200*	11,200*			7,800*	7,200*	5,700*	6,600*	5,600*
	110	11,300	10,500*			7,400*	6,600*		5,800*	5,300*
120					7,000*	5,800*		5,500*	4,900*	
130					6,200*			5,100*	4,200*	
140					5,000*			4,500*	3,300*	
150								3,500*		
120	30	23,900*								
	35	23,300*				16,400*			13,300*	
	40	22,100*	17,100*			15,900*			12,500*	
	50	20,300*	16,000*	12,800*		14,900*	12,200*		12,500*	10,100*
	60	18,400*	14,900*	12,300*		14,000*	11,000*	7,700*	11,600*	9,200*
	70	16,700*	13,800*	11,900*		13,000*	9,700*	7,500*	10,700*	8,300*
	80	15,500*	12,800*	11,500*		11,700*	8,500*	7,200*	9,800*	7,400*
	90	14,300*	12,400*	11,000*		10,400*	7,800*	7,000*	8,800*	6,400*
	100	12,800	11,900*	10,500*		9,000*	7,500*	6,400*	7,900*	5,800*
	110	10,900	11,100	10,000*		7,900*	7,200*	5,800*	6,800*	5,600*
120		9,300			7,600*	6,900*		5,900*	5,300*	
130		8,000	8,200		7,200*	6,200*		5,600*	5,000*	
140		6,900			6,800*	5,400*		5,300*	4,500*	
150					5,900*			5,000*	3,800*	
160								4,300*	3,000*	

(continued)



PORTLAND OFFICE: 503.283.3111  
 SEATTLE OFFICE: 206.784.1054  
[WWW.NESSCAMPBELL.COM](http://WWW.NESSCAMPBELL.COM)

# HC-218A jib capacities — open throat boom (U.S. units)

Refer to Notes page 5.

Boom length Feet	Load radius Feet	Capacities on outriggers — over side and 360° swing <sup>Ⓢ</sup>								
		30° jib			45° jib			60° jib		
		Jib angles to boom (jib offset degrees)								
		0°	15°	30°	0°	15°	30°	0°	15°	30°
Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	
140	35	23,700*			16,300*					
	40	22,900*			15,400*					
	50	21,310*	16,400*	12,900*	14,600*	12,600*		13,600*		
	60	19,600*	15,500*	12,600*	14,600*	11,600*	7,800*	12,100*	9,600*	
	70	18,000*	14,500*	12,200*	13,700*	10,500*	7,600*	11,300*	8,800*	5,900*
	80	16,500*	13,600*	11,800*	12,800*	9,400*	7,400*	10,500*	8,000*	5,700*
	90	14,700*	12,800*	11,400*	11,600*	8,200*	7,200*	9,600*	7,100*	5,400*
	100	12,300*	12,400*	11,000*	10,500*	7,800*	6,900*	8,800*	6,300*	5,200*
	110	10,400*	10,700*	10,600*	9,200*	7,500*	6,400*	7,900*	5,800*	5,000*
	120	8,900*	9,100*	9,300*	8,000*	7,300*	5,800*	7,000*	5,600*	4,600*
	130	7,600*	7,800*		7,700*	7,000*	5,300*	6,100*	5,300*	3,900*
	140	6,500*	6,600*		6,700*	6,400*		5,700*	5,100*	3,400*
	150	5,500*			5,700*	5,800*		5,500*	4,700*	3,000*
	160	4,700*			4,900*	5,100*		5,100*	4,100*	
170				4,200*			4,300*	3,500*		
180							3,700*			
190							3,200*			
160	40	23,500*			16,500*					
	50	22,000*	16,800*		15,800*			13,200*		
	60	20,600*	16,000*	12,700*	15,000*	12,000*		12,500*	9,900*	
	70	19,100*	15,100*	12,400*	14,300*	11,100*	7,700*	11,800*	9,200*	
	80	17,200*	14,300*	12,100*	13,500*	10,100*	7,500*	11,000*	8,400*	5,800*
	90	14,200*	13,400*	11,700*	12,600*	9,100*	7,300*	10,300*	7,700*	5,600*
	100	11,900*	12,300*	11,400*	11,600*	8,000*	7,100*	9,500*	6,900*	5,400*
	110	10,000*	10,300*	10,700*	10,100*	7,800*	7,000*	8,800*	6,100*	4,700*
	120	8,400*	8,700*	9,000*	8,600*	7,500*	6,000*	8,000*	5,800*	4,100*
	130	7,100*	7,400*	7,600*	7,300*	7,300*	5,200*	7,100*	5,600*	3,500*
	140	6,000*	6,200*		6,200*	6,600*	4,500*	6,300*	5,400*	3,100*
	150	5,000*	5,200*		5,200*	5,600*		5,400*	5,100*	2,700*
	160	4,200*	4,400*		4,400*	4,700*		4,500*	4,600*	2,400*
	170	3,500*			3,700*	3,900*		3,800*	4,100*	
180	2,900*			3,100*	3,100*		3,200*	3,500*		
190				2,500*			2,600*	2,900*		
200							2,100*			
210							1,700*			
180	50	22,700*	17,300*	12,800*	16,100*	12,400*		13,500*		
	60	21,400*	16,400*	12,600*	15,400*	12,000*		12,800*		
	70	20,000*	15,600*	12,600*	14,700*	11,600*	7,800*	12,200*	9,500*	
	80	16,700*	14,800*	12,300*	14,000*	10,700*	7,600*	11,500*	8,800*	5,800*
	90	13,800*	14,100*	11,800*	13,300*	9,800*	7,400*	10,800*	8,100*	5,700*
	100	11,400*	11,900*	10,200*	11,600*	8,800*	7,100*	10,100*	7,400*	4,900*
	110	9,500*	9,900*	8,800*	9,700*	7,900*	6,000*	9,300*	6,700*	4,200*
	120	7,900*	8,300*	7,700*	8,100*	7,700*	5,200*	8,200*	6,000*	3,600*
	130	6,600*	7,000*	6,800*	6,800*	7,100*	4,500*	6,900*	5,500*	3,100*
	140	5,500*	5,800*	6,000*	5,700*	6,100*	4,000*	5,800*	4,900*	2,700*
	150	4,600*	4,800*		4,700*	5,100*	3,500*	4,900*	4,300*	2,300*
	160	3,800*	4,000*		3,900*	4,300*	3,000*	4,000*	3,800*	2,100*
	170	3,000*	3,200*		3,200*	3,500*		3,300*	3,400*	1,800*
	180	2,400*	2,600*		2,600*	2,800*		2,700*	3,100*	
190	1,800*			2,000*	2,200*		2,100*	2,500*		
200				1,500*			1,600*	1,900*		
190	70	23,100*	16,700*	12,900*	16,400*	12,800*		13,700*		
	80	21,900*	15,400*	12,700*	15,700*	12,000*	7,900*	13,100*		
	90	20,400*	14,800*	12,600*	14,700*	11,600*	7,700*	12,500*	9,100*	5,900*
	100	18,500*	14,400*	12,400*	14,000*	10,700*	7,500*	11,900*	8,000*	5,300*
	110	16,500*	14,000*	12,200*	13,300*	9,700*	7,300*	11,300*	7,000*	4,400*
	120	14,500*	13,600*	12,000*	12,600*	8,900*	7,100*	10,700*	6,000*	3,700*
	130	12,500*	13,200*	11,800*	11,600*	8,000*	6,900*	10,100*	5,200*	3,200*
	140	11,000*	12,800*	11,600*	11,000*	7,500*	6,700*	9,500*	4,500*	2,700*
	150	9,000*	12,400*	11,400*	10,500*	7,100*	6,500*	8,900*	3,900*	2,300*
	160	7,500*	12,000*	11,200*	9,700*	6,700*	6,300*	8,300*	3,500*	2,100*
	170	6,200*	11,600*	11,000*	8,800*	6,300*	6,100*	7,700*	3,100*	1,800*
	180	5,100*	11,200*	10,800*	8,000*	6,000*	5,900*	7,100*	2,800*	1,600*
	190	4,100*	10,800*	10,600*	7,200*	5,700*	5,800*	6,500*	2,400*	
	200	3,500*	10,400*	10,400*	6,400*	5,500*	5,700*	5,900*	2,100*	
210	2,800*	10,000*	10,200*	5,600*	5,300*	5,500*	5,300*	1,800*		
220	1,900*	9,600*	10,000*	4,800*	5,100*	5,300*	4,900*	1,500*		



PORTLAND OFFICE: 503.283.3111  
 SEATTLE OFFICE: 206.784.1054  
[WWW.NESSCAMPBELL.COM](http://WWW.NESSCAMPBELL.COM)