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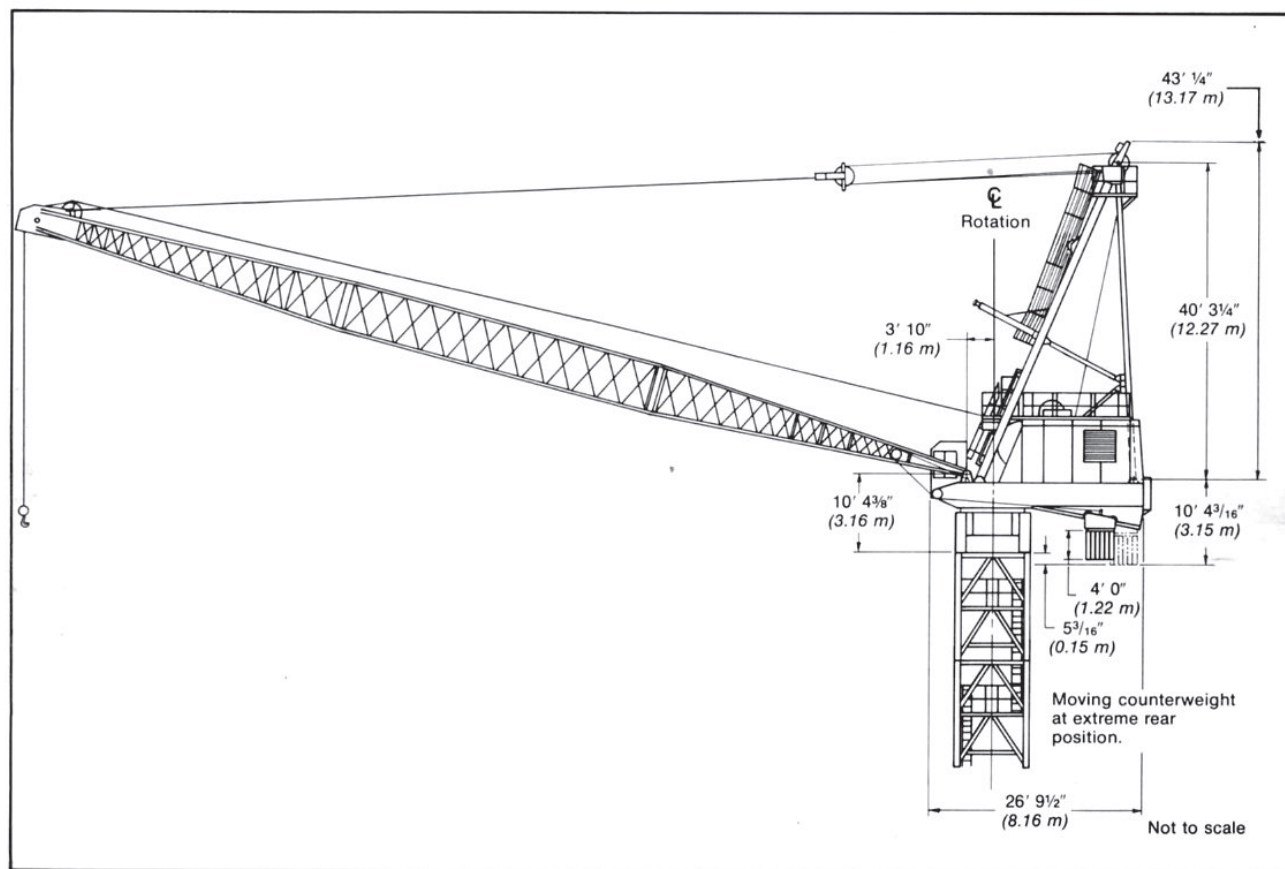


General Specifications

Link-Belt® 230-ton (208.61 metric ton)

Tower/gantry crane

TG-2300B



General dimensions	Feet	meters
Basic boom length	80' 0"	24.38
Maximum boom length	240' 0"	73.15
Tailswing	20' 10"	6.35
Overall width, revolving upperstructure	13' 5 1/8"	4.09

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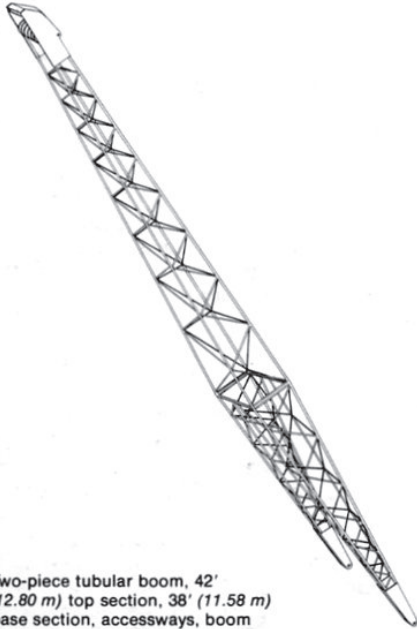
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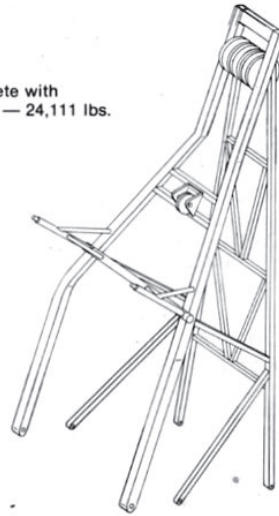
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Weights for transporting — approximate

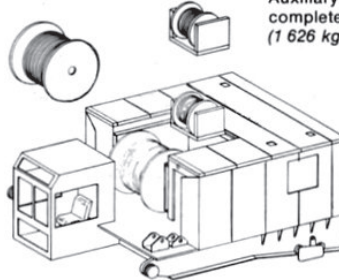


Two-piece tubular boom, 42'
(12.80 m) top section, 38' (11.58 m)
base section, accessways, boom
head machinery — heavy duty
boom 19,515 lbs. (8 852 kg)
— minimum radius boom
21,075 lbs. (9 560 kg)

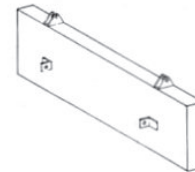


Mast assembly complete with
platforms and ladders — 24,111 lbs.
(10 940 kg)

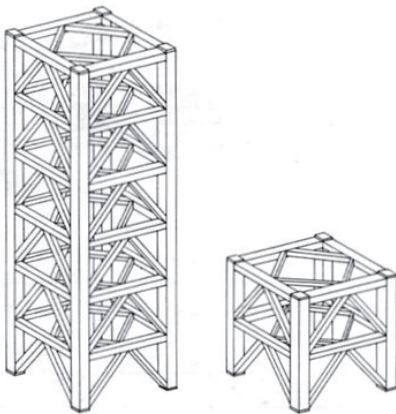
Main load hoist drum and shaft —
11,240 lbs. (5 098 kg)



Auxiliary load hoist, including
complete winch assembly — 3,585 lbs.
(1 626 kg)

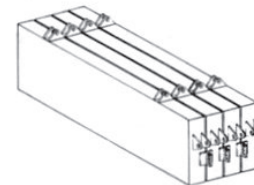


Fixed counterweight and linkage —
23,600 lbs. (10 705 kg)

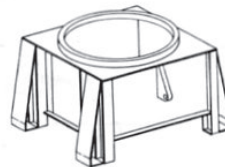


2300B tower weights — 40' (12.19 m)
tower assembly complete — 47,530 lbs.
(21 560 kg), 13' 7 1/2' (4.15 m) tower
assembly complete — 17,825 lbs.
(8 085 kg)

Basic upper including machine
deck, swing system, turntable
bearing, counterweight trolley, main
and auxiliary load hoist winches
(including drum assemblies),
boomhoist cable, machinery cab,
and operators cab — 95,300 lbs.
(43 228 kg)



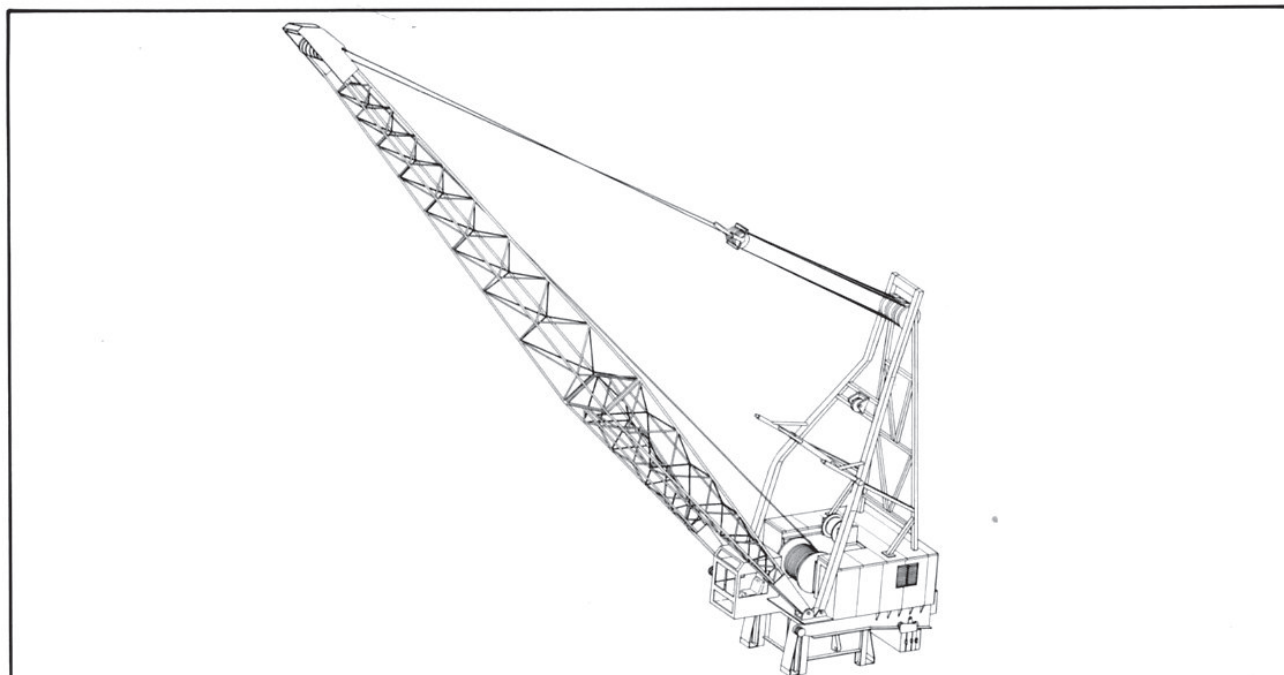
Moving counterweights (4 @
23,600 lbs. — 10 705 kg) — 94,500 lbs.
(42 865 kg)



Turntable bearing mounting base
and bolts — 23,500 lbs. (10 660 kg)



Machine working weights — approximate



Machine with all necessary operating equipment, including counterweights, but no tower

- with 80' (24.38 m) heavy duty boom
- with 80' (24.38 m) minimum radius boom

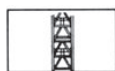
Pounds	kilograms
298,010	135 177
299,570	135 885

General specifications

Foundation

Foundation requirements and foundation reaction charts — consult sales office.

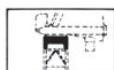
Tower



Free standing tower

Welded, high strength, low alloy steel, wide flange beam construction. Sections 13' 7½" (4.15 m) or 40' (12.19 m) tall, 12' x 12' (3.66 x 3.66 m) outside dimensions; bolted together on machined pads at each corner.

Climbing tower — Consult sales office.



Turntable bearing mounting base

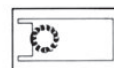
Welded, high-strength, low-alloy steel, wide-flange beam construction. The circular turntable bearing mounting pad, along with the tower connecting pads, are machined to assure squareness, proper fit and a flat surface to uniformly transfer loads. Overall dimensions for the mounting base are 12' 0" x 14' 7½" x 5' 3½" (3.66 x 4.46 x 1.62 m) high.

Revolving upperstructure



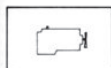
Frame

All-welded, high strength, low alloy steel; machined to accommodate boom, mast, swing-system, main hoist drum mounting frame and drum, power unit and operator's cab. *Optional*; auxiliary hoist drum mounting frame and drum mounted on top of main hoist drum frame.

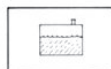


Turntable bearing

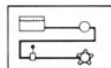
Double row ball bearing type; inner race with integral swing gear bolted to turntable bearing mounting base, which is bolted to top of tower; outer race bolted to revolving upperstructure frame. Swing gear teeth machine cut.

**Engine**

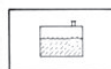
Diesel; turbocharged, full pressure lubrication, oil filter, air cleaner, hour meter, hand throttle and complete set of engine gauges. *Optional*; electric motor drive — consult sales office.

**Fuel tank**

750 gallon (2 839 L) capacity — sufficient for approximately 80 hours of lifting crane operation. Fuel tank integral with revolving frame. Fuel level gauge on top of tank and flame arrester unit included.

**Hydraulic system**

Swing, boomhoist, main and auxiliary load hoist drums — all hydraulically operated. Hydraulic power is supplied by reversible flow, variable displacement piston-type pumps, flange mounted to gear box, which is mounted to output shaft of engine. Hydraulic pumps are connected through a closed loop hydraulic circuit to radial piston hydraulic motors which power operating functions. Normal braking of operational functions accomplished by hydraulic motors when oil flow through motors is reduced by movement of control lever toward neutral position.

**Hydraulic oil reservoir**

Fabricated steel, non-pressurized; baffled for strength and deaeration. Mounted above power unit. Return line filter mounted on internal side of tank, and charge filter mounted in pressurized line between suction pump and charge pumps mounted to power unit. Capacity — 120 gallons (454 L).

Principal operating functions

**Control system**

Air controls; control levers for various functions mounted convenient to operator. "Dead man" type controls return to "zero speed, brake on" position if released. Swing brake control lever manually operated.

Engine specifications	GM12V-71T	Cummins KTA1150-600
Number of cylinders	12	6
Bore and stroke — inches — (mm)	4¼ x 5 (108 x 127)	6¼ x 6¼ (159 x 159)
Piston displacement — cubic inches — (cm ³)	852 (13 964)	1,150 (18 849)
High idle r.p.m.	2,050	2,050
Full load r.p.m.	1,850	1,850
Horsepower at full load speed	493 (367 630 W)	565 (421 321 W)
Peak torque — foot pounds — (J)	1,450 (1 966)	1,650 (2 237)
Electrical system	24 volt	24 volt
Batteries	2 — 12 volt	2 — 12 volt

**Main load hoist drum**

Grooved, 54" (1.37 m) root diameter; mounted on anti-friction bearings on non-turning shaft. Drum driven through spur gear reduction by four two-speed, high torque, radial piston hydraulic motors. Infinitely variable rope drum speed control in three speed ranges — low, medium and high — standard.

Low speed — Four hydraulic motors each set to run at 90 cu. in. (1 475 cm³) displacement per revolution.

Medium speed — Two hydraulic motors each set to run at 25 cu. in. (410 cm³) and two hydraulic motors each set to run at 90 cubic inches (1 475 cm³) displacement per revolution.

High speed — Four hydraulic motors each set to run at 25 cu. in. (410 cm³) displacement per revolution.

Auxiliary load hoist drum — *Optional*. Smooth, 18" (0.46 m) root diameter, 33⅛" (0.84 m) wide between flanges; mounted on anti-friction bearings on non-turning shaft. Drum driven through spur gear reduction by one 2-speed, high torque, radial piston hydraulic motor. Infinitely variable speed control in two speed ranges — low and high — standard.

Low speed — Hydraulic motor set to run at 90 cu. in. (1 475 cm³) displacement per revolution.

High speed — Hydraulic motor set to run at 45 cu. in. (738 cm³) displacement per revolution.

**Load hoist drum brakes**

Main and auxiliary load hoist drums have 18" (0.46 m) diameter external contracting band holding brakes; spring applied, air released. Brake drums involute splined to hydraulic motor counter-shafts at opposite end of shafts from motors. Brakes spring applied when control lever is moved to "brake on" position; air released when control lever is moved to neutral position — at which time hydraulic motor is blocked hydraulically to restrain load.

**Swing system**

Two 2-speed, high torque, radial piston hydraulic motors; each drives one vertical swing shaft. Machine cut swing pinion splined to each vertical swing shaft.

Swing brake — Mechanical twin leading shoe type, brake shoes contract to central brake drum which is splined to swing motor output shaft; spring applied, air released. Drum 7⅞" (0.20 m) diameter, 4⅝" (0.13 m) wide.

Swing speed (low) — .68 r.p.m. at high idle, no load; .59 r.p.m. at engine full load speed. Hydraulic motor set to run at 90 cu. in. (1 475 m³) displacement per revolution.

Swing speed (high) — 1.36 r.p.m. at high idle, no load; 1.18 r.p.m. at engine full load speed. Hydraulic motor set to run at 45 cu. in. (738 cm³) displacement per revolution.



Independent hydraulic boomhoist

Grooved, wire rope drum, 24" (0.61 m) root diameter, mounted on anti-friction bearings on non-turning shaft. Drum driven through spur gear reduction by one hydraulic motor. Infinitely variable control.



Boomhoist brake

24" (0.61 m) diameter external contracting band brake; operation same as load hoist drum brakes.



Boomhoist drum locking pawl

Mechanical drum locking pawl is standard; pawl air released.



Electrical system

24-volt; two 12-volt batteries.



Operator's cab

Completely enclosed operator's cab is located between boomfeet for greater visibility. Tinted safety glass is used throughout the cab; side windows are sliding; main front windows swing outward for ventilation and ease of cleaning, while the upper and lower front windows are stationary. Rear door slides to right and has provisions for a padlock. To reduce the sound level, cab is trimmed with sound proofing. Instrumentation includes tachometer, air pressure gauge, load gauges, and load indicator. Standard equipment also includes two dome lights, a dry chemical fire extinguisher, defroster fan and hot water heater.



Machinery cab

Fabricated steel cab has two doorways at front of cab to provide inside access. Two doorways provide access to hydraulic oil reservoir for service, while a doorway is also provided for access to hydraulic lines. A ladder and platform is provided to gain access to roof. Handrail is provided around roof of machinery cab and winch package. Three lights inside machinery cab are standard.



Counterweight

Total 118,100 lbs. (53 570 kg). One fixed counterweight — 23,600 lbs. (10 705 kg) — attached to rear of frame. Moving counterweight — 94,500 lbs. (42 865 kg) consisting of four segments weighing 23,600 lbs. (10 705 kg) each — is attached to moving trolley which rides on underneath side of revolving upperstructure frame. Counterweight moves toward rear of frame as boom is lowered — provides rear moment to compensate for that which is imposed by lifting load.

Booms and jibs



Heavy duty boom

Standard: Tubular; basic boom length 80' (24.38 m), maximum boom length 240' (73.15 m). Boom 90" (2.29 m) wide 90" (2.29 m) deep at connections. Main chords T-1 alloy steel, 5 1/4" (0.13 m) outside diameter. Expanded metal walkways provided on top of boom for access to boompoint machinery.

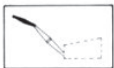
Base section — 38' (11.58 m) long, boomfeet 4 3/4" (0.12 m) wide on 9' 1/4" (2.75 m) boom foot centers.

Boom extensions — Available in 10' (3.05 m), 20' (6.10 m), 30' (9.14 m) and 40' (12.19 m) lengths with appropriate length pendants.

Boom connections — In-line pin connected.

Boom top section — Open throat; 42' (12.80 m) long.

Boompoint machinery — Four 33" (0.84 m) root diameter sheaves mounted on anti-friction bearings.



Jib

Consult sales office.



Minimum radius boom

Optional: Tubular; basic boom length 80' (24.38 m), maximum boom length 240' (73.15 m). Boom 90" (2.29 m) wide, 90" (2.29 m) deep at connections. Main chords T-1 alloy steel, 5 1/4" (0.13 m) outside diameter. Expanded metal walkways provided on top of boom for access to boompoint machinery.

Base section — 38' (11.58 m) long, boomfeet 4 3/4" (0.12 m) wide on 9' 1/4" (2.75 m) boom foot centers.

Boom extensions — Available in 10' (3.05 m), 20' (6.10 m), 30' (9.14 m) and 40' (12.19 m) lengths with appropriate length pendants.

Boom connections — In-line pin connected.

Boom top section — 42' (12.80 m) long.

Boompoint machinery — Four 33" (0.84 m) root diameter sheaves mounted on anti-friction bearings and one horizontal crossover sheave on anti-friction bearings mounted within boom top section.



Boom tip extension

Optional: Tapered; 10' (3.05 m) long, 14,800 lbs. (6 713 kg) rating. Tubular main chords, 100,000 p.s.i. (689.5 mPa) alloy steel; pin-connected to boom top section in fixed position, 18 degrees offset from boom. Equipped with one auxiliary load hoist rope sheave and one hoist rope deflector sheave mounted on anti-friction bearings. Mounts on boom lengths 80' (24.38 m) through 240' (73.15 m).



Jib

Tubular; offset 15 degrees. Basic jib two-piece 28' 3" (8.61 m) long (effective length 30' — 9.14 m); maximum length 70' (21.34 m). Jib 36" (0.91 m) wide, 30" (0.76 m) deep at connections. Alloy steel round tubular chords 2 1/4" (57 mm) outside diameter. Must be used on boom lengths of 120' — 230' (39.62 — 70.10 m) only.

Base section — 13' 3" (4.04 m) long.

Jib extensions — Available in 20' (6.10 m) lengths.

Jib connections — In-line pin connection.

Tip section — 15' (4.57 m) long; equipped with single 21" (0.53 m) root diameter sheave, mounted on anti-friction bearings.

Wear blocks — Deflect jib load hoist wire rope (whipline) off jib to avoid chafing. One mounted on jib tip section, and one mounted on each jib extension.



FMC



Jib mast

Dual, tubular chord sections; 13' 6" (4.11 m) long. Two jib load hoist rope (whipline) deflector sheaves, 15 $\frac{7}{8}$ " (0.40 m) root diameter, mounted on anti-friction bearings.

Jib mast stops — Telescoping type; one pair pinned to boom top section and jib mast, another pair pinned to jib base section and jib mast.

Jib staylines — Front staylines attached to jib peak shaft and are supported by equalizer sheave in jib mast. Pendant ropes are added to front staylines as jib length increases. Rear staylines attached to boom pin connecting lugs at lower end of boom top section and are supported by equalizer sheave in jib mast.

Items applicable to both booms



Mast

Supports boom suspension system. Wide flange beam construction, pin-connected to revolving upperstructure frame. Equipped with three boomhoist sheaves on anti-friction bearings and one fleeting auxiliary load hoist line deflector sheave.

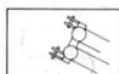
Mast ladders and platforms —

Accessibility to the mast for reeving rope and maintenance is provided by upper and lower platforms. Upper platform is located near top of the mast, while lower platform is located 10 $\frac{1}{2}$ " (3.20 m) above the crane deck. A ladder provides accessibility to both platforms.



Boom stops

Dual, rigid, with spring loaded bumper ends; mounted on mast.



Boomhoist bridle

Connects boomhoist wire rope reeving to boom pendants. Equipped with three sheaves, mounted on anti-friction bearings to accommodate 6-part boomhoist wire rope reeving.

Auxiliary equipment



Boom angle indicator

Standard; pendulum type mounted on boom base section.

Load hoist limit switch — Prevents hoisting load into boom peak.

Engine alarm — Trips warning buzzer if water temperature is too high or if engine oil pressure is too low.

Main air solenoid valve — When properly adjusted, acts to immobilize all systems in the event of an engine failure.

Load indicating and overload warning system — Equipped with a load-moment device for measuring the load and load radius. Incorporated with this device is an overload warning system which warns the operator when an overload condition exists and inhibits certain functions of the machine.

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

5533 (supersedes 5489)-0608-N6



218 HSL Lanes

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**Link-Belt® TG-2300B Performance Specifications****Wire rope and rope drum data****Main load hoist wire rope length — using 1 $\frac{5}{8}$ " (41 mm) diameter wire rope**

Tables below — indicate length of load hoist wire rope required for handling loads between boomfoot level and boom head sheaves.

Parts of line	Heavy duty boom lengths																	
	80' (24.38 m)		90' (27.43 m)		100' (30.48 m)		110' (33.53 m)		120' (36.58 m)		130' (39.62 m)		140' (42.67 m)		150' (45.72 m)		160' (48.77 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	250	76.20	270	82.30	290	88.39	310	94.49	330	100.58	350	106.68	370	112.78	390	118.87	410	124.97
2	330	100.58	360	109.73	390	118.87	420	128.02	450	137.16	480	146.30	510	155.45	540	164.59	570	173.74
3	410	124.97	450	137.16	490	149.35	530	161.54	570	173.74	610	185.93	650	198.12	690	210.31	730	222.50
4	490	149.35	540	164.59	590	179.83	640	195.07	690	210.31	740	225.55	790	240.79	840	256.03	890	271.27
5	570	173.74	630	192.02	690	210.31	750	228.60	810	246.89	870	265.18	930	283.46	990	301.75	1,050	320.04
6	650	198.12	720	219.46	790	240.79	860	262.13	930	283.46	1,000	304.80	1,070	326.14	1,140	347.47	1,210	368.81
7	730	222.50	810	246.89	890	271.27	970	295.66	1,050	320.04	1,130	344.42	1,210	368.81	1,290	393.19	1,370	417.58
8	810	246.88	900	274.32	990	301.75	1,080	329.18	1,170	356.62	1,260	384.05	1,350	411.48	1,440	438.91	1,530	466.34

Parts of line	Heavy duty boom lengths															
	170' (51.82 m)		180' (54.86 m)		190' (57.91 m)		200' (60.96 m)		210' (64.01 m)		220' (67.06 m)		230' (70.10 m)		240' (73.15 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	430	131.06	450	137.16	470	143.26	490	149.35	510	155.45	530	161.54	550	167.64	570	173.74
2	600	182.88	630	192.02	660	201.17	690	210.31	720	219.46	750	228.60	780	237.74	810	246.89
3	770	234.70	810	246.89	850	259.08	890	271.27	930	283.46	970	295.66	1,010	307.85	1,050	320.04
4	940	286.51	990	301.75	1,040	316.99	1,090	332.23	1,140	347.47	1,190	362.71	1,240	377.95	1,290	393.19
5	1,110	338.33	1,170	356.62	1,230	374.90	1,290	393.19	1,350	411.48	1,410	429.77	1,470	448.06	1,530	466.34
6	1,280	390.14	1,350	411.48	1,420	432.82	1,490	454.15	1,568	475.49	1,630	496.82	1,700	518.16	1,770	539.50
7	1,450	441.96	1,530	466.34	1,610	490.73	1,690	515.11	1,770	539.50	1,850	563.88	1,930	588.26	2,010	612.65
8	1,620	493.78	1,710	521.21	1,800	548.64	1,890	576.07	1,980	603.50	2,070	630.94				

Parts of line	Minimum radius boom length																	
	80' (24.38 m)		90' (27.43 m)		100' (30.48 m)		110' (33.53 m)		120' (36.58 m)		130' (39.62 m)		140' (42.67 m)		150' (45.72 m)		160' (48.77 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	220	67.06	240	73.15	260	79.25	280	85.34	300	91.44	320	97.54	340	103.63	360	109.73	380	115.82
2	340	103.63	370	112.78	400	121.92	430	131.06	460	140.21	490	149.35	520	158.50	550	167.64	580	176.78
3	460	140.21	500	152.40	540	164.59	580	176.78	620	188.98	660	201.17	700	213.36	740	225.55	780	237.74
4	580	176.78	630	192.02	680	207.26	730	222.50	780	237.74	830	252.98	880	268.22	930	283.46	980	298.70

Parts of line	Minimum radius boom lengths															
	170' (51.82 m)		180' (54.86 m)		190' (57.91 m)		200' (60.96 m)		210' (64.01 m)		220' (67.06 m)		230' (70.10 m)		240' (73.15 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	400	121.92	420	128.02	440	134.11	460	140.21	480	146.30	500	152.40	520	158.50	540	164.59
2	610	185.93	640	195.07	670	204.22	700	213.36	730	222.50	760	231.65	790	240.79	820	249.94
3	820	249.94	860	262.13	900	274.32	940	286.51	980	298.70	1,020	310.90	1,060	323.09	1,100	335.28
4	1,030	313.94	1,080	329.18	1,130	344.42	1,180	359.66	1,230	374.90	1,280	390.14	1,330	405.38	1,380	420.62

Table below — indicates additional length of load hoist wire rope which must be added to that shown in above tables for handling loads between boomfoot level and ground.

Parts of line	Tower heights ^①							
	40' (12.19 m)		80' (24.38 m)		120' (36.58 m)		160' (48.77 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	50	15.24	90	27.43	130	39.62	170	51.82
2	100	30.48	180	54.86	260	79.25	340	103.63
3	150	45.72	270	82.30	390	118.87	510	155.45
4	200	60.96	360	109.73	520	158.50	680	207.26
5	250	76.20	450	137.16	650	198.12	850	259.08
6	300	91.44	540	164.59	780	237.74	1,020	310.90
7	350	106.68	630	192.02	910	277.37	1,190	362.71
8	400	121.92	720	219.46	1,040	316.99	1,360	414.53

^①For tower heights in excess of 160' (48.77 m), multiply the additional tower height by the number of parts of line to be used, and add that total to the amount required for 160' (48.77 m) of tower.

**TG-2300B performance specifications****Wire rope and rope drum data — (continued)****Auxiliary load hoist wire rope lengths — using 7/8" (22 mm) diameter wire rope****Boom tip extension (minimum radius boom)**

Table below — indicates length of load hoist wire rope required for handling loads between boomfoot level and boom tip extension head sheaves.

Parts of line	Minimum radius boom lengths													
	80' (24.38 m)		90' (27.43 m)		100' (30.48 m)		110' (33.53 m)		120' (36.58 m)		130' (39.62 m)		140' (42.67 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	200	60.96	220	67.06	240	73.15	260	79.25	280	85.34	300	91.44	320	97.54

Parts of line	Minimum radius boom lengths									
	170' (51.82 m)		180' (54.86 m)		190' (57.91 m)		200' (60.96 m)		210' (64.01 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	380	115.82	400	121.92	420	128.02	440	134.11	460	140.21

Jib for heavy duty boom — consult sales office**Jib for minimum radius boom**

Table below — indicates length of load hoist wire rope required for handling loads between boomfoot level and jib head sheaves.

Jib length	Parts of line	Minimum radius boom lengths											
		120' (36.58 m)		130' (39.62 m)		140' (42.67 m)		150' (45.72 m)		160' (48.77 m)		170' (51.82 m)	
		Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
30' (9.14 m)	1	320	97.54	340	103.63	360	109.73	380	115.82	400	121.92	420	128.02
	2	470	143.26	500	152.40	530	161.54	560	170.69	590	179.83	620	188.98
50' (15.24 m)	1	360	109.73	380	115.82	400	121.92	420	128.02	440	134.11	460	140.21
	2	530	161.54	560	170.69	590	179.83	620	188.98	650	198.12	680	207.26
70' (21.34 m)	1	400	121.92	420	128.02	440	134.11	460	140.21	480	146.30	500	152.40
	2	590	179.83	620	188.98	650	198.12	680	207.26	710	216.41	740	225.55

Jib length	Parts of line	Minimum radius boom lengths									
		180' (54.86 m)		190' (57.91 m)		200' (60.96 m)		210' (64.01 m)		220' (67.06 m)	
		Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
30' (9.14 m)	1	440	134.11	460	140.21	480	146.30	500	152.40	520	158.50
	2	650	198.12	680	207.26	710	216.41	740	225.55	770	234.70
50' (15.24 m)	1	480	146.30	500	152.40	520	158.50	540	164.59	560	170.69
	2	710	216.41	740	225.55	770	234.70	800	243.84	830	252.98
70' (21.34 m)	1	520	158.50	540	164.59	560	170.69	580	176.78	600	182.88
	2	770	234.70	800	243.84	830	252.98	860	262.12	890	271.26

Table below — indicates additional length of load hoist wire rope which must be added to that shown in the previous table for handling loads between boomfoot level and ground.

Parts of line	Tower heights ^①							
	40' (12.19 m)		80' (24.38 m)		120' (36.58 m)		160' (48.77 m)	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	50	15.24	90	27.43	130	39.62	170	51.82
2	100	30.48	180	54.86	260	79.24	340	103.63

^①For tower heights in excess of 160' (48.77 m), multiply the additional tower height by the number of parts of line to be used, and add that total to the amount required for 160' (48.77 m) of tower.

**TG-2300B performance specifications****Wire rope and rope drum data — (continued)****Rope size and type**

Wire rope application	Size type used	Wire rope types
Main load hoist (1-3 part)	1½" (41 mm) diameter Type "Y"	Type "Y" — 35 x 7 non-rotating special tensile formset
Main load hoist (4-8 part)	1½" (41 mm) diameter Type "N"	Type "DB" — 6 x 26 (6 x 19 class), Warrington Seale, extra improved plow steel, preformed, independent wire rope center, right lay, regular lay.
Auxiliary load hoist	¾" (22 mm) diameter Type "N"	Type "N" — 6 x 25 (6 x 19 class) filler wire, extra improved plow steel, preformed, independent wire rope center, right lay, regular lay.
Boomhoist	1¼" (32 mm) diameter Type "DB"	
Boom pendants	2" (51 mm) diameter Type "N"	

Drum wire rope capacities —

Wire rope layer	Main load hoist drum — 54" (1.38 m) root diameter grooved drum, 1½" (41 mm) wire rope				Auxiliary load hoist drum — 18" (0.46 m) root diameter smooth drum, ¾" (22 mm) wire rope				Boomhoist drum — 24" (0.61 m) root diameter grooved drum, 1¼" (32 mm) wire rope			
	Rope per layer		Total wire rope		Rope per layer		Total wire rope		Rope per layer		Total wire rope	
	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters	Feet	meters
1	359	109.42	359	109.42	172	52.43	172	52.43	213	64.92	213	64.92
2	412	125.58	771	235.00	199	60.65	371	113.08	248	75.59	461	140.51
3	434	132.28	1,205	367.28	215	65.53	586	178.61	271	82.60	732	223.11
4	457	139.29	1,662	506.58	232	70.71	818	249.32				
5	480	146.30	2,142	652.88								

Permissible line speed and line pull — based on Type "Y" and "N" wire rope strength for main drum and Type "N" wire rope strength for auxiliary drum.

Main load hoist drum											
Root diameter	Wire rope diameter		Rope layer	Number of wraps	Rope drum operating speeds	Rated line pull ①		Line speed at rated line pull		No load line speed	
	Inches	mm				Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min
54" (1.37 m)	1½	41	1	24.7	Low	63,100	28 622	124	37.80	180	54.86
			2	26.7		63,100	28 622	131	39.93	190	57.91
			3	26.7		63,100	28 622	138	42.06	201	61.26
			4	26.7		60,800	27 579	145	44.20	211	64.31
			5	26.7		58,000	26 309	152	46.43	222	67.67
			1	24.7	Medium	40,100	18 189	191	58.22	279	85.04
			2	26.7		37,900	17 191	202	61.57	295	89.92
			3	26.7		35,900	16 284	213	64.92	312	95.10
			4	26.7		34,100	15 468	224	68.28	327	99.67
			5	26.7		32,500	14 742	234	71.32	344	104.85
			1	24.7	High	15,500	7 031	422	128.63	640	195.07
			2	26.7		14,600	6 623	447	136.25	677	206.35
			3	26.7		13,900	6 305	471	143.56	715	217.93
			4	26.7		13,200	5 988	496	151.18	752	229.21
			5	26.7		12,500	5 670	521	158.80	789	240.49

① Permissible line pull based on 1½" (41 mm) diameter wire rope is restricted to 63,100 lbs. (28 622 kg).

Optional auxiliary load hoist drum											
Root diameter	Wire rope diameter		Rope layer	Number of wraps	Rope drum operating speeds	Rated line pull ①		Line speed at rated line pull		No load line speed	
	Inches	mm				Pounds	kilograms	F.p.m.	m/min	F.p.m.	m/min
18" (0.46 m)	7/8"	22	1	34.8	Low	19,200	8 709	216	65.84	252	76.81
			2	36.8		17,600	7 983	236	71.93	276	84.12
			3	36.8		16,200	7 348	256	78.03	299	91.14
			4	36.8		15,000	6 804	276	84.12	322	98.15
			1	34.8	High	5,900	2 676	424	129.24	500	152.40
			2	36.8		5,400	2 449	463	141.12	547	166.73
			3	36.8		5,000	2 268	502	153.01	593	180.75
			4	36.8		4,600	2 087	541	164.90	639	194.77



TG-2300B performance specifications

Wire rope and rope drum data — (continued)

Permissible main hoist loads — based on 1 $\frac{5}{8}$ " (41 mm) Type "Y" (1-3 part hoist line) and Type "N" (4-8 part hoist line) wire rope ①

Main load hoist drum only	Parts of line							
	1		2		3		4	
	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
Maximum load	56,900	25 810	113,700	51 574	170,800	77 475	228,600	103 693

Main load hoist drum only	Parts of line							
	5		6		7		8	
	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
Maximum load	286,400	129 911	344,000	156 038	402,300	182 483	460,200	208 747

① Based on wire rope strength only.

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

FMC Corporation Cable Crane & Excavator Division Cedar Rapids Iowa 52406

Link-Belt® cranes/excavators manufactured in: Cedar Rapids Iowa • Lexington & Bowling Green Kentucky • Ontario Canada • Milan Italy • Queretaro Mexico & Nagoya Japan (under license)

5533 (supersedes 5489)-0608-N6

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sales@reliablecraneservice.com





Link-Belt® TG-2300B lifting crane capabilities - heavy duty boom

Boom - tubular: 90" x 90" (2.29 x 2.29 m) with open throat top section, 2" (51 mm) diameter boom pendants.
Tower - free standing; 12' x 12' (3.66 x 3.66 m) cross section. Tower heights 13' 7½" (4.15 m) through 162' 7½" (49.57 m) - see footnote^a
Counterweights - Total 118,100 lbs. (53 570 kg). Includes one fixed counterweight -23,600 lbs. (10 705 kg) plus one moving counterweight -94,500 lbs. (42 911 kg) consisting of four sections weighing 23,600 lbs. (10 705 kg) each.

Boom						Capacities - main boom only	
Length	Radius ¹		Angle	Boom point height ²		Pounds	kilograms
	Feet	meters	Degree	Feet	meters		
80' (24.38 m)	17	5.18	80.5	89' 4"	27.21	460,200	208 745
	18	5.49	79.8	89' 1"	27.16	460,200	208 745
	19	5.79	79.1	88' 11"	27.10	460,200	208 745
	20	6.10	78.3	88' 10"	27.04	443,700	201 258
	25	7.62	74.7	87' 6"	26.67	369,900	167 783
	30	9.14	70.9	86' 0"	26.20	307,700	139 570
	35	10.67	67.1	84' 1"	25.62	262,600	119 113
	40	12.19	63.1	81' 10"	24.91	228,800	103 781
	50	15.24	54.8	75' 9"	23.07	181,400	82 281
	60	18.29	45.4	67' 5"	20.52	150,000	68 038
	70	21.34	34.2	55' 5"	16.86	125,800	57 061
90' (27.43 m)	80	24.38	17.8	34' 10"	10.61	94,500	42 864
	18	5.49	80.9	99' 3"	30.25	460,200	208 745
	19	5.79	80.3	99' 1"	30.20	458,500	207 972
	20	6.10	79.7	98' 11"	30.15	440,200	199 671
	25	7.62	76.4	97' 10"	29.82	366,800	166 377
	30	9.14	73.1	96' 6"	29.41	306,100	138 844
	35	10.67	69.7	94' 10"	28.89	261,000	118 389
	40	12.19	66.3	92' 9"	28.28	227,000	102 965
	50	15.24	59.1	87' 7"	26.71	179,500	81 419
	60	18.29	51.4	80' 8"	24.59	148,000	67 131
	70	21.34	42.7	71' 4"	21.75	125,700	57 016
100' (30.48 m)	80	24.38	32.2	58' 4"	17.77	107,300	48 670
	90	27.43	16.8	36' 4"	11.08	82,700	37 512
	20	6.10	80.7	109' 1"	33.24	436,800	198 129
	25	7.62	77.8	108' 1"	32.95	363,800	165 016
	30	9.14	74.8	106' 11"	32.58	304,600	138 164
	35	10.67	71.8	105' 5"	32.12	259,400	117 661
	40	12.19	68.8	103' 7"	31.58	225,400	102 285
	50	15.24	62.5	99' 1"	30.20	177,900	80 694
	60	18.29	55.8	93' 1"	28.38	146,200	66 315
	70	21.34	48.6	85' 4"	26.01	123,800	56 154
	80	24.38	40.4	75' 2"	22.91	107,200	48 625
110' (33.53 m)	90	27.43	30.5	61' 1"	18.63	92,500	41 957
	100	30.48	15.9	37' 9"	11.51	72,700	32 976
	25	7.62	78.9	118' 4"	36.06	361,200	163 837
	30	9.14	76.2	117' 3"	35.73	303,600	137 710
	35	10.67	73.5	115' 10"	35.31	258,400	117 208
	40	12.19	70.8	114' 3"	34.82	224,400	101 786
	50	15.24	65.2	110' 3"	33.59	176,700	80 149
	60	18.29	59.3	104' 11"	31.99	145,000	65 770
	70	21.34	53.0	98' 3"	29.94	122,400	55 519
	80	24.38	46.2	89' 9"	27.35	105,600	47 899
	90	27.43	38.4	78' 9"	24.00	92,700	42 048
120' (36.58 m)	100	30.48	29.0	63' 9"	19.44	80,800	36 650
	110	33.53	15.2	39' 2"	11.93	64,400	29 211
	25	7.62	79.8	128' 6"	39.16	357,900	162 340
	30	9.14	77.4	127' 6"	38.86	301,800	136 894
	35	10.67	74.9	126' 3"	38.48	256,700	116 437
	40	12.19	72.5	124' 9"	38.03	222,700	101 015
	50	15.24	67.4	121' 2"	36.92	175,100	79 424
	60	18.29	62.1	116' 5"	35.48	143,300	64 999
	70	21.34	56.5	110' 6"	33.67	120,700	54 748
	80	24.38	50.6	103' 1"	31.42	103,800	47 082
	90	27.43	44.1	93' 11"	28.62	90,800	41 186

^a Consult sales office for tower heights greater than 162' 7½" (49.57 m).

¹ Measured from center of tower base section to center of gravity of freely suspended load.

² Measured vertically from center of boom head sheave to bottom of turntable bearing mounting base.



Link-Belt® TG-2300B lifting crane capabilities - heavy duty boom

Boom						Capacities - main boom only	
Length	Radius¹		Angle	Boom point height²			
	Feet	meters	Degree	Feet	meters	Pounds	kilograms
130' (39.62 m)	25	7.62	80.6	138' 8"	42.26	355,000	161 025
	30	9.14	78.4	137' 8"	41.97	294,200	133 446
	35	10.67	76.1	136' 7"	41.63	251,500	114 078
	40	12.19	73.8	135' 3"	41.22	220,300	99 926
	50	15.24	69.2	131' 11"	40.20	173,700	78 789
	60	18.29	64.4	127' 7"	38.89	141,900	64 364
	70	21.34	59.4	122' 3"	37.27	119,200	54 068
	80	24.38	54.1	115' 9"	35.27	102,300	46 402
	90	27.43	48.5	107' 8"	32.83	89,200	40 460
	100	30.48	42.3	97' 10"	29.82	78,900	35 788
	110	33.53	35.2	85' 5"	26.03	70,700	32 068
	120	36.58	26.7	68' 9"	20.94	62,100	28 168
	130	39.62	13.9	41' 8"	12.71	50,600	22 951
140' (42.67 m)	30	9.14	79.2	147' 11"	45.08	286,400	129 910
	35	10.67	77.1	146' 10"	44.76	246,200	111 674
	40	12.19	75.0	145' 7"	44.38	215,300	97 658
	50	15.24	70.7	142' 7"	43.44	173,000	78 471
	60	18.29	66.3	138' 7"	42.25	141,700	64 274
	70	21.34	61.8	133' 9"	40.76	118,900	53 932
	80	24.38	57.0	127' 10"	38.96	101,900	46 221
	90	27.43	52.0	120' 8"	36.79	88,700	40 233
	100	30.48	46.6	112' 1"	34.17	78,300	35 516
	110	33.53	40.7	101' 8"	30.98	69,800	31 660
	120	36.58	33.9	88' 6"	26.97	62,900	28 530
	130	39.62	25.7	71' 1"	21.65	55,500	25 174
	140	42.67	13.4	42' 11"	13.07	45,300	20 547
150' (45.72 m)	30	9.14	80.0	158' 1"	48.18	277,900	126 055
	35	10.67	78.0	157' 1"	47.88	236,600	107 319
	40	12.19	76.0	155' 11"	47.53	206,800	93 802
	50	15.24	72.1	153' 1"	46.66	166,100	75 341
	60	18.29	68.0	149' 6"	45.55	139,100	63 140
	70	21.34	63.8	145' 0"	44.19	117,600	53 342
	80	24.38	59.5	139' 7"	42.55	100,600	45 631
	90	27.43	54.9	133' 2"	40.58	87,400	39 643
	100	30.48	50.1	125' 6"	38.25	76,800	34 835
	110	33.53	44.9	116' 4"	35.46	68,300	30 980
	120	36.58	39.2	105' 3"	32.08	61,300	27 805
	130	39.62	32.7	91' 6"	27.89	55,500	25 174
	140	42.67	24.8	73' 3"	22.34	48,900	22 180
	150	45.72	13.0	44' 1"	13.43	40,100	18 189
	160' (48.77 m)	30	9.14	80.6	168' 3"	51.27	268,200
35		10.67	78.8	167' 4"	50.99	228,000	103 419
40		12.19	76.9	166' 3"	50.67	199,000	90 264
50		15.24	73.2	163' 7"	49.85	159,600	72 393
60		18.29	69.4	160' 2"	48.82	133,700	60 645
70		21.34	65.6	156' 1"	47.56	115,000	52 163
80		24.38	61.6	151' 1"	46.05	99,100	44 951
90		27.43	57.4	145' 2"	44.25	85,900	38 963
100		30.48	53.1	138' 3"	42.14	75,400	34 200
110		33.53	48.4	130' 1"	39.64	66,800	30 299
120		36.58	43.4	120' 5"	36.69	59,800	27 124
130		39.62	38.0	108' 9"	33.15	53,900	24 448
140		42.67	31.7	94' 5"	28.77	49,000	22 226
150		45.72	24.0	75' 5"	22.99	43,100	19 549
160		48.77	12.6	45' 2"	13.77	35,500	16 102
170' (51.82 m)	30	9.14	81.1	178' 4"	54.36	259,500	117 707
	35	10.67	79.4	177' 6"	54.10	220,200	99 881
	40	12.19	77.7	176' 6"	53.79	191,900	87 044
	50	15.24	74.2	174' 0"	53.03	153,600	69 671
	60	18.29	70.7	170' 10"	52.07	128,500	58 286
	70	21.34	67.1	167' 0"	50.89	110,500	50 121
	80	24.38	63.4	162' 4"	49.48	96,700	43 862
	90	27.43	59.5	156' 11"	47.83	84,600	38 373
	100	30.48	55.5	150' 7"	45.89	74,000	33 565
	110	33.53	51.4	143' 2"	43.63	65,400	29 664
	120	36.58	46.9	134' 6"	40.99	58,400	26 489
	130	39.62	42.1	124' 4"	37.89	52,400	23 768
	140	42.67	36.8	112' 2"	34.18	47,500	21 545
	150	45.72	30.7	97' 2"	29.62	43,300	19 640
	160	48.77	23.3	77' 7"	23.63	38,000	17 236
170	51.82	12.2	46' 3"	14.10	31,200	14 152	

¹ Measured from center of tower base section to center of gravity of freely suspended load.

² Measured vertically from center of boom head sheave to bottom of turntable bearing mounting base.



Link-Belt® TG-2300B lifting crane capabilities - heavy duty boom

Boom						Capacities - main boom only	
Length	Radius ¹		Angle	Boom point height ²			
	Feet	meters	Degree	Feet	meters	Pounds	kilograms
180' (54.86 m)	35	10.67	80.0	187' 8"	57.20	216,900	98 384
	40	12.19	78.4	186' 8"	56.90	188,500	85 502
	50	15.24	75.1	184' 4"	56.19	150,300	68 174
	60	18.29	71.8	181' 5"	55.28	125,400	56 880
	70	21.34	68.4	177' 9"	54.18	107,700	48 851
	80	24.38	65.0	173' 5"	52.87	94,300	42 773
	90	27.43	61.4	168' 5"	51.33	83,600	37 920
	100	30.48	57.7	162' 6"	49.54	73,500	33 339
	110	33.53	53.9	155' 9"	47.46	64,800	29 392
	120	36.58	49.8	147' 10"	45.07	57,600	26 126
	130	39.62	45.5	138' 9"	42.29	51,600	23 405
	140	42.67	40.8	128' 1"	39.04	46,600	21 137
	150	45.72	35.7	115' 5"	35.18	42,200	19 141
	160	48.77	29.8	99' 10"	30.44	38,600	17 508
	170	51.82	22.6	79' 7"	24.25	33,700	15 286
	180	54.86	11.8	47' 4"	14.42	27,500	12 473
190' (57.91 m)	35	10.67	80.6	197' 10"	60.29	210,400	95 435
	40	12.19	79.0	196' 11"	60.01	182,500	82 780
	50	15.24	75.9	194' 8"	59.34	145,100	65 816
	60	18.29	72.8	191' 10"	58.48	120,800	54 795
	70	21.34	69.6	188' 6"	57.45	103,600	46 992
	80	24.38	66.4	184' 5"	56.21	90,600	41 095
	90	27.43	63.0	179' 8"	54.77	80,200	36 378
	100	30.48	59.6	174' 3"	53.11	71,800	32 567
	110	33.53	56.0	167' 11"	51.19	63,500	28 803
	120	36.58	52.3	160' 9"	48.99	56,300	25 537
	130	39.62	48.4	152' 5"	46.46	50,300	22 815
	140	42.67	44.2	142' 10"	43.55	45,200	20 502
	150	45.72	39.7	131' 9"	40.16	40,800	18 506
	160	48.77	34.7	118' 7"	36.14	37,000	16 782
	170	51.82	29.0	102' 6"	31.24	33,900	15 376
	180	54.86	22.0	81' 6"	24.85	29,400	13 335
190	57.91	11.5	48' 4"	14.73	23,900	10 840	
200' (60.96 m)	35	10.67	81.0	207' 11"	63.38	204,500	92 759
	40	12.19	79.6	207' 1"	63.11	177,000	80 285
	50	15.24	76.7	205' 0"	62.47	140,200	63 593
	60	18.29	73.7	202' 4"	61.67	116,500	52 843
	70	21.34	70.7	199' 1"	60.69	99,700	45 223
	80	24.38	67.6	195' 4"	59.53	87,000	39 462
	90	27.43	64.5	190' 10"	58.17	77,000	34 926
	100	30.48	61.3	185' 9"	56.61	68,800	31 207
	110	33.53	57.9	179' 10"	54.82	61,900	28 077
	120	36.58	54.5	173' 2"	52.78	55,000	24 947
	130	39.62	50.9	165' 7"	50.46	49,000	22 226
	140	42.67	47.1	156' 10"	47.81	43,900	19 912
	150	45.72	43.0	146' 11"	44.77	39,500	17 916
	160	48.77	38.7	135' 4"	41.24	35,700	16 193
	170	51.82	33.8	121' 8"	37.08	32,400	14 696
	180	54.86	28.3	105' 1"	32.02	29,600	13 426
190	57.91	21.4	83' 5"	25.43	25,500	11 566	
200	60.96	11.2	49' 4"	15.03	20,600	9 344	
210' (64.01 m)	40	12.19	80.1	217' 3"	66.21	170,800	77 473
	50	15.24	77.3	215' 3"	65.60	138,900	63 003
	60	18.29	74.5	212' 9"	64.84	114,800	52 072
	70	21.34	71.6	209' 8"	63.91	98,000	44 452
	80	24.38	68.7	206' 1"	62.81	85,300	38 691
	90	27.43	65.8	201' 10"	61.53	75,400	34 200
	100	30.48	62.7	197' 1"	60.06	67,400	30 572
	110	33.53	59.6	191' 7"	58.39	60,600	27 487
	120	36.58	56.4	185' 4"	56.48	54,600	24 766
	130	39.62	53.1	178' 3"	54.33	48,500	21 999
	140	42.67	49.6	170' 3"	51.89	43,300	19 640
	150	45.72	45.9	161' 2"	49.12	38,900	17 644
	160	48.77	42.0	150' 9"	45.95	35,000	15 875
	170	51.82	37.7	138' 9"	42.30	31,600	14 333
	180	54.86	33.0	124' 8"	38.00	28,700	13 018
	190	57.91	27.6	107' 6"	32.78	26,100	11 838
200	60.96	20.9	85' 4"	26.00	22,300	10 115	
210	64.01	11.0	50' 3"	15.33	17,700	8 028	

¹ Measured from center of tower base section to center of gravity of freely suspended load.² Measured vertically from center of boom head sheave to bottom of turntable bearing mounting base.



Link-Belt® TG-2300B lifting crane capabilities - heavy duty boom

Boom						Capacities - main boom only	
Length	Radius¹		Angle	Boom point height²			
	Feet	meters	Degree	Feet	meters	Pounds	kilograms
220' (67.06 m)	40	12.19	80.5	227' 4"	69.30	170,800	77 473
	50	15.24	77.9	225' 6"	68.72	134,600	61 053
	60	18.29	75.2	223' 1"	67.99	111,000	50 348
	70	21.34	72.5	220' 2"	67.11	94,400	42 819
	80	24.38	69.7	216' 9"	66.07	82,100	37 239
	90	27.43	66.9	212' 9"	64.86	72,400	32 840
	100	30.48	64.1	208' 3"	63.47	64,500	29 256
	110	33.53	61.1	203' 1"	61.89	58,000	26 308
	120	36.58	58.1	197' 2"	60.11	52,400	23 768
	130	39.62	55.0	190' 7"	58.09	47,400	21 500
	140	42.67	51.8	183' 2"	55.83	42,200	19 141
	150	45.72	48.4	174' 9"	53.28	37,700	17 100
	160	48.77	44.8	165' 4"	50.39	33,800	15 331
	170	51.82	40.9	154' 7"	47.11	30,400	13 789
	180	54.86	36.8	142' 2"	43.32	27,400	12 428
	190	57.91	32.2	127' 7"	38.89	24,800	11 249
	200	60.96	26.9	109' 11"	33.51	22,400	10 160
	210	64.01	20.4	87' 2"	26.56	19,200	8 708
	220	67.06	10.7	51' 3"	15.62	14,700	6 667
230' (70.10 m)	40	12.19	81.0	237' 6"	72.39	167,100	75 795
	50	15.24	78.4	235' 8"	71.84	130,600	59 239
	60	18.29	75.9	233' 5"	71.14	107,300	48 670
	70	21.34	73.3	230' 8"	70.30	91,000	41 276
	80	24.38	70.7	227' 5"	69.31	78,900	35 788
	90	27.43	68.0	223' 7"	68.16	69,400	31 479
	100	30.48	65.3	219' 4"	66.84	61,800	28 032
	110	33.53	62.5	214' 5"	65.35	55,400	25 129
	120	36.58	59.7	208' 10"	63.66	50,000	22 679
	130	39.62	56.7	202' 8"	61.77	45,200	20 502
	140	42.67	53.7	195' 9"	59.66	40,900	18 551
	150	45.72	50.5	187' 11"	57.29	36,400	16 510
	160	48.77	47.2	179' 3"	54.63	32,500	14 741
	170	51.82	43.7	169' 5"	51.63	29,100	13 199
	180	54.86	40.0	158' 3"	48.23	26,100	11 838
	190	57.91	36.0	145' 5"	44.33	23,500	10 659
	200	60.96	31.5	130' 5"	39.76	21,200	9 616
	210	64.01	26.3	112' 4"	34.23	18,900	8 572
	220	67.06	20.0	88' 11"	27.10	16,000	7 257
	230	70.10	10.5	52' 2"	15.90	12,000	5 443
240' (73.15 m)	50	15.24	78.9	245' 11"	74.95	126,800	57 515
	60	18.29	76.5	243' 8"	74.28	103,800	47 082
	70	21.34	74.0	241' 1"	73.48	87,800	39 825
	80	24.38	71.5	238' 0"	72.53	75,900	34 427
	90	27.43	69.0	234' 4"	71.43	66,600	30 209
	100	30.48	66.4	230' 3"	70.18	59,100	26 807
	110	33.53	63.7	225' 7"	68.76	52,900	23 995
	120	36.58	61.1	220' 5"	67.17	47,600	21 591
	130	39.62	58.3	214' 6"	65.39	43,000	19 504
	140	42.67	55.4	208' 0"	63.4	39,000	17 690
	150	45.72	52.5	200' 9"	61.18	35,200	15 966
	160	48.77	49.4	192' 7"	58.71	31,300	14 197
	170	51.82	46.2	183' 6"	55.94	27,900	12 655
	180	54.86	42.8	173' 4"	52.84	24,900	11 294
	190	57.91	39.1	161' 10"	49.33	22,200	10 069
	200	60.96	35.2	148' 8"	45.3	19,900	9 026
	210	64.01	30.8	133' 3"	40.61	17,800	8 073
	220	67.06	25.8	114' 8"	34.94	15,600	7 076
	230	70.10	19.5	90' 8"	27.63	13,000	5 896
	240	73.15	10.3	53' 1"	16.18	9,300	4 218

¹ Measured from center of tower base section to center of gravity of freely suspended load.

² Measured vertically from center of boom head sheave to bottom of turntable bearing mounting base.

**TG-2300B lifting crane capacities – heavy duty boom****Notes – lifting crane capacities****General Notes:**

1. Loads shown are maximum allowable and in all cases are limited by strength capabilities of the machine. Proper design of the substructure to withstand the loadings imposed by the machine shall be the responsibility of the purchaser. A deduction must be made from these capacities for weight of jib, hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.

2. The operator must make the following considerations when operating the crane:

- Make certain the actual load operating radius is the same as the radius specified on the capacity chart. The load radius is measured from the center of the tower base section to the center of gravity of the freely suspended load. The user must make allowances for increases in the load radius caused by stretching of the boom suspension and deflection of the boom and tower.
- Prevent shock or impact loading of the cranes structure especially when operating during low temperatures.
- Effect of wind on loads with large surface areas.

3. For each 10 feet (3.05m) of boom foot height above the lowest hook position, the following deductions must be made from these lifting capacities:

384# (174 kg) when using 8 parts of main hoist line.
336# (153 kg) when using 7 parts of main hoist line.
288# (131 kg) when using 6 parts of main hoist line.
240# (109 kg) when using 5 parts of main hoist line.
192# (87 kg) when using 4 parts of main hoist line.
144# (65 kg) when using 3 parts of main hoist line.
96# (44 kg) when using 2 parts of main hoist line.
48# (22 kg) when using 1 part of main hoist line.

4. For lifting 460,200 lbs. (208 745 kg) 8 parts 1 $\frac{1}{8}$ " (41mm) Type "Y" load hoist line are required. Check parts of line required for all capacities.

5. These capacities are based on a 30 m.p.h. (48.27 km/h) wind in the operating condition, and a hook load reduction must be made when winds exceed 30 m.p.h. (48.27 km/h).

6. If the machine is swung 360° in the non-operating condition, the machine, reeving, and hook blocks must clear any obstacles with the boom stowed at its specified position. This precaution is necessary due to the weathervane rotation of the crane by the wind.

7. These capacities apply only to the machine as originally manufactured and normally equipped by FMC Corporation, Cable Crane and Excavator Division.

Tower mounted with climbing frame:**Notes:**

1. The maximum free standing tower height with a climbing frame is 162' 7 $\frac{1}{2}$ " (49.57 m) for boom lengths 80' (24.38 m) through 240' (73.14 m). For tower heights greater than 162' 7 $\frac{1}{2}$ " (49.57 m), consult sales office for additional requirements for the crane.

2. When the crane is in the non-operating condition, the boom must be stowed to conform to one of the following conditions:

Boom length	Condition
80' – 210' (24.38 – 64.00 m)	Stow boom between a 60° angle and maximum rated radius.
220' – 240' (67.05 – 73.14 m)	Stow boom at maximum rated radius.

Tower mounted without climbing frame:**Notes:**

1. The maximum free standing tower height without climbing frame is 162' 7 $\frac{1}{2}$ " (49.57 m) for boom lengths 80' (24.38 m) through 240' (73.14 m). For tower heights greater than 162' 7 $\frac{1}{2}$ " (49.57 m), consult sales office for additional requirements for the crane.

2. When the crane is in the non-operating condition, the boom must be stowed to conform to one of the following conditions:

Boom length	Condition
80' – 230' (24.38 – 70.10 m)	Stow boom between a 60° angle and maximum rated radius.
240' (73.14 m)	Stow boom at maximum rated radius.

Pedestal, bogie or gantry mounted**Notes:**

1. Lifting capacities shown are not more than 66% of the tipping loads calculated under static conditions with the boom in the least stable direction. The user must take into account the dynamic effects of hoisting, lowering, booming, swinging, and traveling. Additional factors to be considered are freely suspended loads, track, wind or ground conditions, boom length, and proper operating speeds for the existing conditions.

2. The operator must make certain the actual load operating radius is the same as the radius specified on the capacity chart. The load radius is measured from the center of gravity of the freely suspended load. The user must make allowances for increases in the load radius caused by stretching of boom suspension and deflection of the boom and traveling base.

3. For these lifting capacities, the user must make certain that all specified ballast is properly assembled to the traveling base. Ballast may be necessary to meet stability requirements as specified on working areas and ballast requirement plate.

4. Use caution when approaching rail stops with crane bumpers. Excessive rate of contact can result in crane's instability and/or failure of rail stops.

5. When the crane is in the non-operating condition, the rail mounted traveling base must be secured with rail clamps or tie downs to prevent drifting, and the boom must be stowed between a 60° boom angle and maximum rated radius.