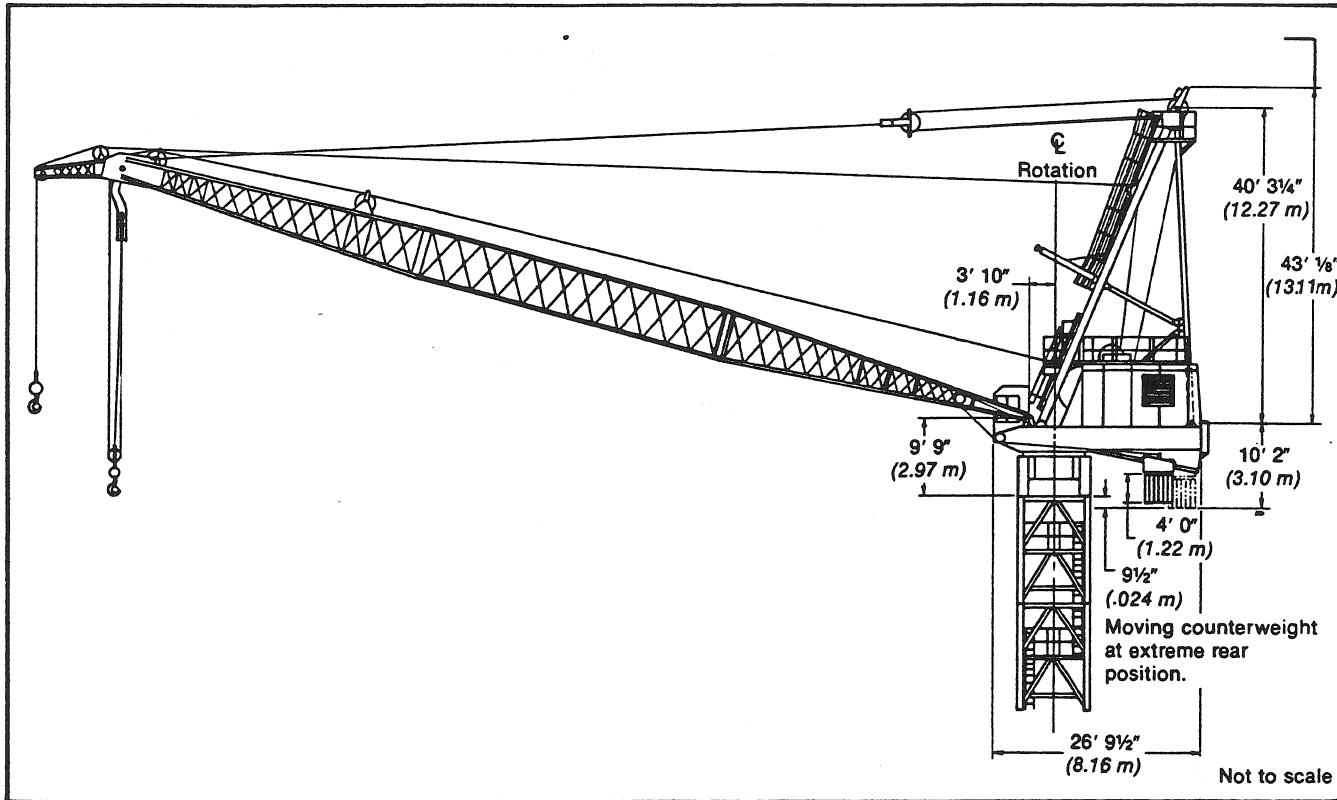


# General Specifications

Link-Belt® 115-ton (104.31 metric ton)

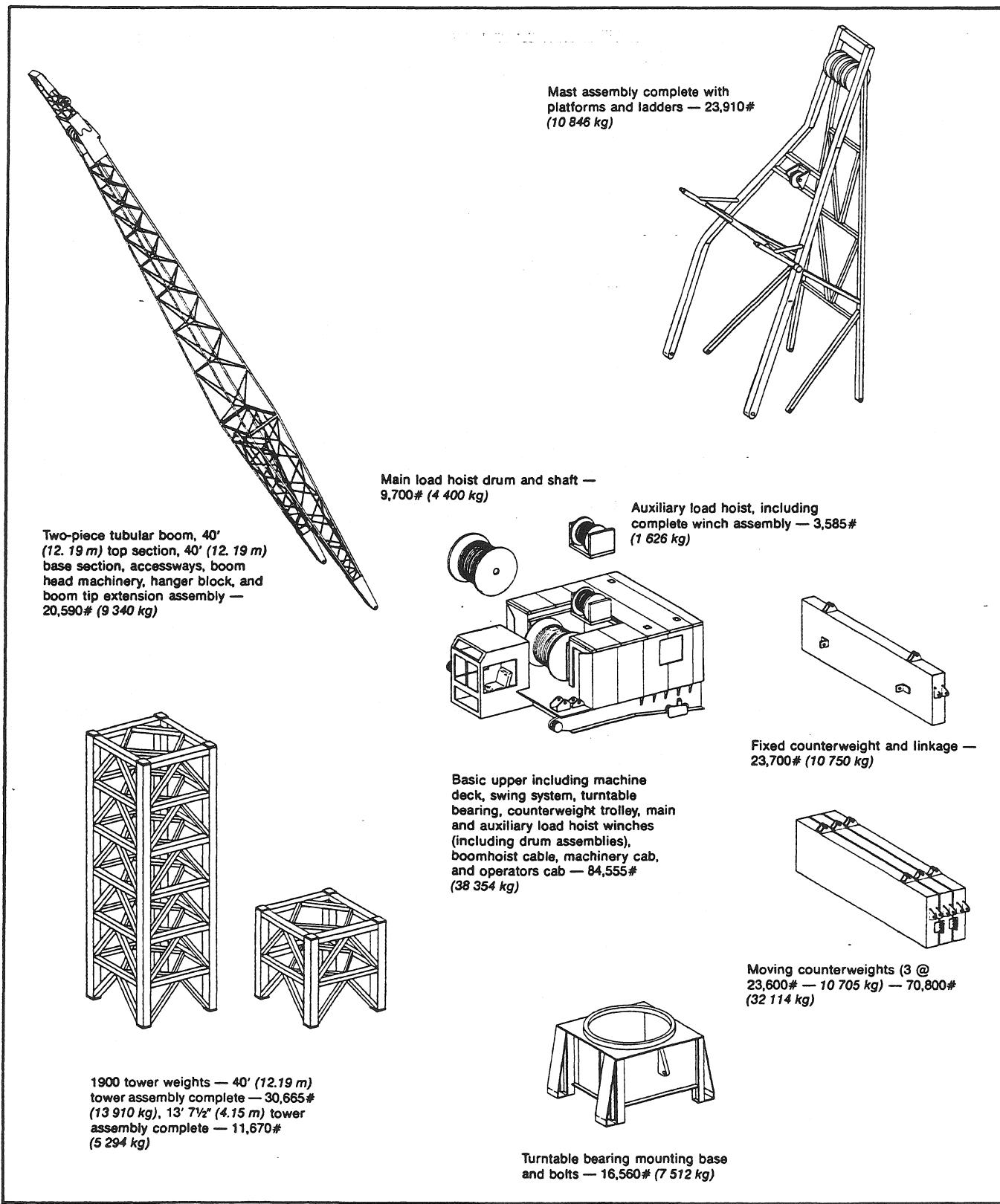
Tower/gantry crane

## TG-1900

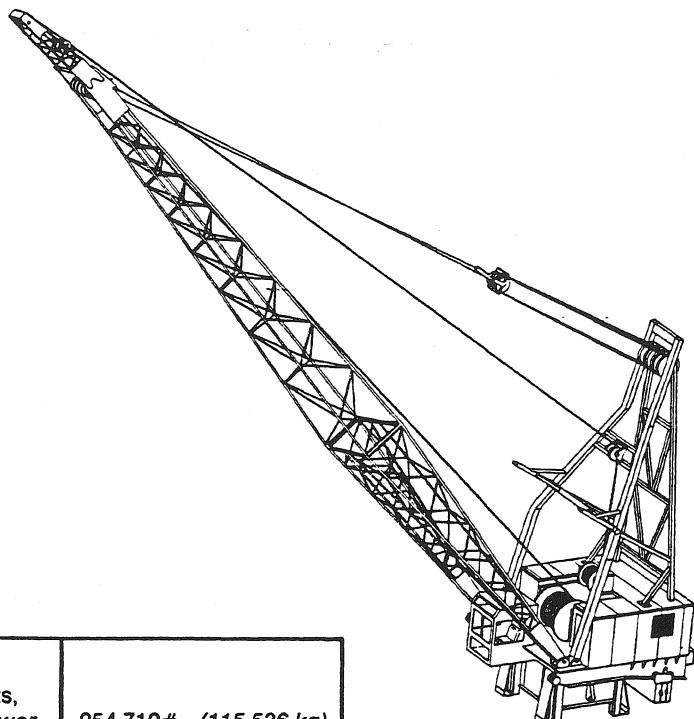


General dimensions	Feet	meters
Basic boom length	80' 0"	24.38
Maximum boom length	200' 0"	60.96
Length, optional boom tip extension	10' 0"	3.05
Tailswing	20' 10"	9.15
Overall width, revolving upperstructure	13' 4"	4.06

## Weights for transporting — approximate



## Machine working weights — approximate

	Machine w/80' (24.38 m) boom, 10' (3.05 m) boom tip extension, including counterweights, all necessary operating equipment, but no tower.	254,710# (115 536 kg)
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## General Specifications

### Foundation

Foundation requirements and foundation reaction charts — consult factory.

### Tower



Free standing tower  
(non-climbing)

Welded, high strength, low alloy steel, wide flange beams. Sections 13' 7½" (4.15 m) or 40' (12.19 m) long, 9' 9" x 9' 9" (2.97 x 2.97 m) outside dimensions; bolted together on machined pads at each corner.

Climbing tower — consult factory.

### Revolving upperstructure



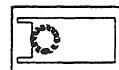
Frame

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.



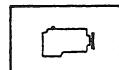
Turntable bearing mounting base

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 9' 9" x 12' 3¾" x 5' 3¾" (2.97 x 3.75 x 1.61 m) high.



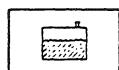
Turntable bearing

Roller bearing type; inner race with integral swing gear bolted to transition section mounted on top of tower section; outer race bolted to revolving upperstructure frame. Swing gear teeth machine-cut.



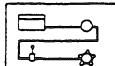
Engine

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



Fuel tank

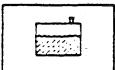
750 gallons (2 839 L) capacity.  
(Sufficient to run crane for approximately 80 hours of average lifting crane operation.)



### Hydraulic system

Swing, boomhoist, main load and auxiliary load hoist drums — all hydraulically operated. Hydraulic power is supplied by reversible flow, variable displacement, piston-type pumps, flange mounted to gear reduction unit, which is mounted on 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.

Engine Specifications		GM 12V-71T
Number of cylinders		12
Bore and stroke — inches — (mm)		4 1/4 x 5 (108 x 127)
Piston displacement — cu. in. — (cm <sup>3</sup> )		852 (13 964)
High idle r.p.m.		2 050
Horsepower @ full load speed — — (W)		493 (367 630)
Peak torque — ft. lbs. — (J)		1450 @ 1850 r.p.m. (1966)
Electrical system		24-volt
Batteries		2 - 12-volt



### Sump tank

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 (454.25 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.



### 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 — is standard.

**Low Speed** — Hydraulic motors each set to run at 90 cu. in. (1 475.10 cm<sup>3</sup>) displacement per revolution.

**Medium Speed** — Two hydraulic motors each set to run at 25 cu. in. (409.75 cm<sup>3</sup>), and two hydraulic motors set to run at 90 cu. in. (1 475.10 cm<sup>3</sup>) displacement per revolution.

**High Speed** — Hydraulic motors each set to run at 25 cu. in. (409.75 cm<sup>3</sup>) displacement per revolution.

**Optional main load hoist drum** — Available is an optional main hoist drum for greater wire rope capacities.

**Auxiliary load hoist drum** — Optional. Smooth, 18" (0.46 m) root diameter, 33 1/8" (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 — is standard.

**Low speed** — Hydraulic motor set to run at 90 cu. in. (1 475.10 cm<sup>3</sup>) displacement per revolution.

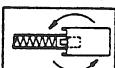
**High speed** — Hydraulic motor set to run at 45 cu. in. (737.55 cm<sup>3</sup>) displacement per revolution.



### Drum brakes

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.

**Load indicating and overload warning system** — Equipped with a load-moment device for measuring the load and the 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.

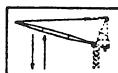


### Swing mechanism

Two fixed displacement, high torque, radial piston hydraulic motors; each drive one vertical swing shaft. Machine-cut swing pinion splined on each vertical swing shaft.

**Swing Brake** — Disc type, mounted on one hydraulic swing motor, spring applied, air released. Holding brake only, not intended for stopping swing.

**Swing Speed** — 1.45 r.p.m. @ high idle no load; 1.14 r.p.m. @ engine full load speed.



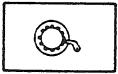
### Independent hydraulic boomhoist

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.



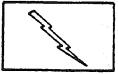
### Boomhoist brake

Arrangement same as for load hoist drum brakes.



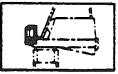
### Drum locking pawl

Mechanical drum locking pawl is standard; pawl is air released.



### Electrical system

24-volt; two 12-volt batteries.



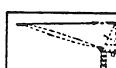
### Operator's cab

Completely enclosed operator's cab is located between boomfeet for greater visibility. Tinted safety glass is used throughout the cab. The 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 the right and has provisions for a padlock. To reduce the sound level, the 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.



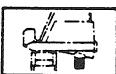
### Machinery cab

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



### Boom tip extension

Optional: Tapered, 10' (3.05 m) long, 14,800# (6 713 kg) rating. Tubular main chords, 100,000 p.s.i. (7 031 kg/cm<sup>2</sup>) alloy steel; pin-connected to boom top section in fixed position, 18 degrees offset from boom. Equipped with one main load hoist rope sheave and one hoist rope deflector sheave mounted on anti-friction bearings. Mounts on boom lengths 80' (24.38 m) through 200' (60.96 m).



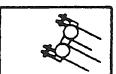
### Counterweight

Total 94,400# (42 819 kg). One fixed counterweight — 23,600# (10 705 kg) — attached to rear of frame. Moving counterweight — 70,800# (32 114 kg) consisting of three segments weighing 23,600# (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.



### 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.



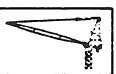
### Mast

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 fleetng 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. The upper platform is located near the top of the mast, while the lower platform is located 10½' (3.20 m) above the crane deck. A ladder provides accessibility to both platforms.

## Boom



### Heavy duty boom

Tubular; basic boom two-piece 80' (24.38 m) long; 75" wide (1.90 m), 75" (1.90 m) deep at connections. Main chords of T-1 alloy steel are 5½" (0.13 m) outside diameter. Maximum boom length is 200' (60.96 m). Expanded metal walkways are provided on top of the boom for access to the boomhead machinery.

**Base section** — 40' (12.19 m) long, boom feet are 4¾" (0.12 m) wide on 96¼" (2.44 m) 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.

**Top section** — 40' (12.19 m) long. Equipped with two head sheaves. Sheaves are mounted on anti-friction bearings. A hanger block equipped with single sheave is supplied as standard equipment for use with 3 or 4 parts of line.

**Boom connections** — In-line pin connected.



## 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 event of an engine failure.

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



**FMC Corporation Cable Crane and 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)

## Link-Belt® TG-1900 Performance Specifications

### Wire rope and rope drum data —

Main load hoist wire rope length — using 1 $\frac{5}{8}$ " (41 mm) diameter wire rope.

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

Parts of line	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)	
	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
2	310	94.49	340	103.63	370	112.78	400	121.92	430	131.06	460	140.21	490	149.35	520	158.50
3	370	112.78	410	124.97	450	137.16	490	149.35	530	161.54	570	173.74	610	185.93	650	198.12
4	450	137.16	500	152.40	550	167.64	600	182.88	650	198.12	700	213.36	750	228.60	800	243.84

Parts of line	Boom lengths									
	160' (48.77 m)		170' (51.82 m)		180' (54.86 m)		190' (57.91 m)		200' (60.96 m)	
	Feet	meters								
1	380	115.82	400	121.92	420	128.82	440	134.11	460	140.21
2	550	167.64	580	176.78	610	185.93	640	195.07	670	204.22
3	690	210.31	730	222.50	770	234.70	810	246.89	850	259.08
4	850	259.08	900	274.32	950	289.56	1,000	304.80	1,050	320.04

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

Parts of line	Tower heights <sup>①</sup>							
	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

<sup>①</sup>For 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.

### Auxiliary load hoist wire rope lengths — using 7/8" (22 mm) diameter wire rope.

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	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)	
	Feet	meters	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	340	103.63

Parts of line	Boom lengths									
	160' (48.77 m)		170' (51.82 m)		180' (54.86 m)		190' (57.91 m)		200' (60.96 m)	
	Feet	meters								
1	360	109.73	380	115.82	400	121.92	420	128.02	440	134.11

## TG-1900 performance specifications

### Wire rope and rope drum data — (continued)

#### Auxiliary load hoist lengths — (continued)

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 heights①							
	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

①For tower heights in excess of 160' (48.77 m), add the additional tower height to the amount of wire rope required for 160' (48.77 m) of tower.

### Drum wire rope capacities —

Wire rope layer	Main load hoist drum — 54" (1.38 m) root diameter grooved drum 1½" (41 mm) wire rope				Optional 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 lagging 7/8" (22 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	368	112.16	368	112.16	359	109.42	359	109.42	172	52.43	172	52.43
2	421	128.32	789	240.48	412	125.58	771	235.00	199	60.65	371	113.08
3	444	135.33	1,233	375.81	434	132.28	1,205	367.28	215	65.53	586	178.61
4					457	139.29	1,662	506.58	232	70.71	818	249.32
5					480	146.30	2,142	652.88				

Wire rope layer	Boomhoist drum — 24" (0.61 m) root diameter grooved drum 1¼" (32 mm)			
	Rope per layer		Total wire rope	
	Feet	meters	Feet	meters
1	213	64.92	213	64.92
2	248	75.59	461	140.51
3	271	82.60	732	223.11

### Rope size and type —

Wire rope application	Size and type used
Boomhoist	1¼" (32 mm) diameter, Type "DB"
Main load hoist	1½" (41 mm) diameter, Type "Y"
Auxiliary load hoist	7/8" (22 mm) diameter, Type "N"
Boom pendants	1¾" (44 mm) diameter, Type "N"

Wire rope types
Type "DB" — 6 x 26 (6 x 19 class), Warrington Seale, extra improved plow steel, preformed, independent wire rope center, right lay, regular lay.
Type "Y" — 35 x 7 non-rotating special tensile formset.
Type "N" — 6 x 25 (6 x 19 class), filler wire, extra improved plow steel, preformed, independent wire rope center, right lay, regular lay.

## TG-1900 performance specifications

### Wire rope and rope drum data — (continued)

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

Root diameter	Wire rope diameter		Rope layer	Number of wraps	Rope drum operating speeds	Rated line pull①		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 41.28		1	25.3	Low	63,100	28 622	136	41.45	180	54.86	
				2	27.3		61,200	27 760	144	43.89	190	57.91	
				3	27.3		58,000	26 309	152	46.33	201	61.26	
		Medium	1	25.3	Medium	40,100	18 189	209	63.70	279	85.04		
			2	27.3		37,900	17 191	222	67.67	295	89.92		
			3	27.3		35,900	16 284	234	71.32	312	95.10		
		High	1	25.3	High	15,500	7 031	477	145.39	640	195.07		
			2	27.3		14,600	6 623	505	153.92	677	206.35		
			3	27.3		13,900	6 305	532	162.15	715	217.93		

Root diameter	Wire rope diameter		Rope layer	Number of wraps	Rope drum operating speeds	Rated line pull①		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 41.28		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	
		Medium	1	24.7	Medium	44,300	20 094	191	58.22	279	85.04		
			2	26.7		41,900	19 006	202	61.57	295	89.92		
			3	26.7		39,700	18 008	213	64.92	312	95.10		
			4	26.7		37,700	17 101	224	66.28	327	99.67		
			5	26.7		35,900	16 284	234	71.32	344	104.85		
		High	1	24.7	High	17,100	7 757	422	128.63	640	195.07		
			2	26.7		16,200	7 348	447	136.25	677	206.35		
			3	26.7		15,300	6 940	471	143.56	715	217.93		
			4	26.7		14,500	6 577	496	151.18	752	229.21		
			5	26.7		13,900	6 305	521	158.80	789	240.49		

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

Root diameter	Wire rope diameter		Rope layer	Number of wraps	Rope drum operating speeds	Rated line pull		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" 22.23		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	
		High	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		

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





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**FMC Corporation**

**Cable Crane & Excavator Division**  
1201 Sixth Street Southwest  
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Cedar Rapids, Iowa 52406

**Link-Belt® cranes & excavators**  
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Lexington & Bowling Green Kentucky  
Ontario Canada • Milan Italy  
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## Link-Belt® TG-1900 lifting crane capacities — without climbing frame

Refer to Notes page 15

**Tower** — free standing, without climbing frame; 9' 9" x 9' 9" (2.97 x 2.97 m) cross section. Tower heights 13' 7 1/2" (4.15 m) through 162' 7 1/2" (49.57 m) — see footnote①.

**Mast** — 43' 0 1/8" (13.11 m) over-all height.

**Boom** — tubular; 75" x 75" (1.91 x 1.91 m) with 40' (12.19 m) base section, 40' (12.19 m) top section, 1 1/4" (44 mm) diameter boom pendants, with or without boom tip extension.

**Boom tip extension** — tubular; 14,800# (6713 kg) rating; 10' (3.05 m) long.

**Counterweights** — Total 94,400# (42,820 kg). Includes one fixed counterweight — 23,600# (10,705 kg) plus one moving counterweight — 70,800# (32,115 kg) consisting of three sections weighing 23,600# (10,705 kg) each.

Length	Boom			Load radius③	Capacities — Main boom only①									
	Angle	Boom point height②			Pounds	kilograms	4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line	
		Degree	Feet	meters			Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
80' (24.38 m)	85.5	89' 6"	27.27	10	3.05						115,200	52 253		
	84.8	89' 5"	27.25	11	3.35									
	84.1	89' 4"	27.22	12	3.66									
	83.4	89' 2"	27.19	13	3.96									
	82.7	89' 1"	27.15	14	4.27									
	81.9	88' 11"	27.11	15	4.57									
	78.3	88' 1"	26.84	20	6.10	230,400	104 507	172,800	78 380					
	74.6	86' 10"	26.48	25	7.62	230,400	104 507							
	70.9	85' 4"	26.00	30	9.14	204,200	92 623							
	67.0	83' 5"	25.42	35	10.67	177,500	80 512	172,800	78 380					
	63.1	81' 1"	24.71	40	12.19	156,800	71 123	157,100	71 259					
	54.7	75' 0"	22.87	50	15.24	126,800	57 515	127,100	57 651					
	45.4	66' 8"	20.31	60	18.29	106,300	48 216	106,600	48 352					
	34.1	54' 8"	16.65	70	21.34	90,200	40 914	90,400	41 004					
	17.7	34' 1"	10.38	80	24.38	69,000	31 297	69,700	31 615					
90' (27.43 m)	85.4	99' 5"	30.31	11	3.35						115,100	52 208		
	84.8	99' 4"	30.28	12	3.66									
	84.1	99' 3"	30.25	13	3.96									
	83.5	99' 2"	30.22	14	4.27									
	82.8	99' 0"	30.18	15	4.57									
	79.6	98' 3"	29.95	20	6.10	230,300	104 462	172,700	78 335					
	76.4	97' 2"	29.62	25	7.62	230,300	104 462							
	73.1	95' 10"	29.21	30	9.14	201,900	91 580							
	69.7	94' 2"	28.69	35	10.67	175,400	79 560	172,700	78 335					
	66.3	92' 1"	28.08	40	12.19	154,700	70 170	155,100	70 352					
	59.1	86' 11"	26.50	50	15.24	124,800	56 608	125,200	56 789					
	51.4	80' 0"	24.39	60	18.29	104,300	47 309	104,600	47 445					
	42.6	70' 8"	21.55	70	21.34	88,600	40 188	88,900	40 324					
	32.1	57' 7"	17.56	80	24.38	76,500	34 699	76,700	34 790					
	16.7	35' 7"	10.84	90	27.43	59,700	27 079	60,300	27 351					
100' (30.48 m)	85.3	109' 5"	33.34	12	3.66						115,000	52 163		
	84.7	109' 4"	33.31	13	3.96									
	84.1	109' 2"	33.28	14	4.27									
	83.6	109' 1"	33.25	15	4.57									
	80.7	108' 5"	33.04	20	6.10									
	77.8	107' 5"	32.75	25	7.62	230,100	104 371	172,500	78 244					
	74.8	106' 3"	32.38	30	9.14	199,700	90 582	172,500	78 244					
	71.8	104' 9"	31.92	35	10.67	173,300	78 607	172,500	78 244					
	68.8	102' 11"	31.38	40	12.19	152,700	69 263	153,200	69 490					
	62.5	98' 5"	29.99	50	15.24	122,900	55 746	123,400	55 973					
	55.8	92' 5"	28.17	60	18.29	102,400	46 447	102,800	46 629					
	48.5	84' 8"	25.81	70	21.34	87,100	39 507	87,500	39 689					
	40.4	74' 6"	22.70	80	24.38	74,900	33 974	75,200	34 110					
	30.4	60' 5"	18.41	90	27.43	65,600	29 755	65,800	29 846					
	15.8	37' 0"	11.28	100	30.48	51,900	23 541	52,400	23 768					
110' (33.53 m)	85.2	119' 4"	36.37	13	3.96						114,900	52 117		
	84.7	119' 3"	36.35	14	4.27									
	84.2	119' 2"	36.32	15	4.57									
	81.5	118' 6"	36.13	20	6.10									
	78.9	117' 8"	35.86	25	7.62	229,900	104 280	172,400	78 199					
	76.2	116' 7"	35.53	30	9.14	197,500	89 584	172,400	78 199					
	73.5	115' 2"	35.11	35	10.67	171,300	77 700	171,800	77 927					
	70.8	113' 7"	34.62	40	12.19	150,800	68 401	151,300	68 628					
	65.2	109' 7"	33.39	50	15.24	121,100	54 930	121,600	55 156					
	59.3	104' 3"	31.78	60	18.29	100,700	45 676	101,100	45 858					
	53.0	97' 7"	29.74	70	21.34	85,800	38 918	86,200	39 099					
	46.1	89' 1"	27.14	80	24.38	73,600	33 384	74,000	33 565					
	38.4	78' 1"	23.79	90	27.43	64,100	29 075	64,400	29 211					
	29.0	63' 1"	19.22	100	30.48	56,700	25 718	56,900	25 809					
	15.1	38' 4"	11.69	110	33.53	45,200	20 502	45,600	20 683					

(continued)

①Consult manufacturer for tower heights greater than 162' 7 1/2" (49.57 m).

②Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

③Measured vertically from center of boom head sheave to base of turntable bearing mounting.

④Measured from center of tower base section to center of gravity of freely suspended load.

# TG-1900 lifting crane capacities — without climbing frame

Refer to Notes page 15.

Boom			Load radius③		Capacities — Main boom only①								
Length	Angle	Boom point height②			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
120' (36.58 m)	85.6	129' 4"	39.43	13	3.96					114,800	52 072		
	85.1	129' 3"	39.41	14	4.27							57,400	26 036
	84.6	129' 2"	39.38	15	4.57								
	82.2	128' 7"	39.20	20	6.10								
	79.8	127' 10"	38.96	25	7.62	229,700	104 190	172,200	78 108				
	77.4	126' 10"	38.66	30	9.14	195,300	88 586	172,200	78 108				
	74.9	125' 7"	38.28	35	10.67	169,200	76 747	169,800	77 019				
	72.4	124' 2"	37.83	40	12.19	148,900	67 539	149,400	67 766				
	67.4	120' 6"	36.72	50	15.24	119,400	54 158	119,900	54 385	114,800	52 072		
	62.1	115' 9"	35.28	60	18.29	99,000	44 905	99,500	45 132	100,000	45 359		
	56.5	109' 10"	33.47	70	21.34	84,100	38 147	84,600	38 373	85,000	38 555		
	50.6	102' 5"	31.22	80	24.38	72,300	32 794	72,800	33 021	73,200	33 202		
	44.1	93' 2"	28.41	90	27.43	62,800	28 485	63,200	28 667	63,600	28 848	57,400	26 036
	36.7	81' 5"	24.82	100	30.48	55,200	25 038	55,600	25 219	55,900	25 355	56,200	25 491
	27.7	65' 7"	19.99	110	33.53	49,200	22 316	49,500	22 452	49,700	22 543	50,000	22 679
	14.4	39' 8"	12.09	120	36.58	39,500	17 916	39,800	18 052	40,400	18 325	42,000	19 050
130' (39.62 m)	85.5	139' 4"	42.47	14	4.27					114,700	52 027		
	85.1	139' 3"	42.44	15	4.57							57,300	25 990
	82.8	138' 9"	42.28	20	6.10								
	80.6	138' 0"	42.06	25	7.62								
	78.4	137' 1"	41.77	30	9.14	193,200	87 634	172,100	78 063				
	76.1	135' 11"	41.43	35	10.67	167,200	75 840	167,800	76 112				
	73.8	134' 7"	41.02	40	12.19	147,000	66 678	147,600	66 950				
	69.2	131' 3"	40.00	50	15.24	117,600	53 342	118,200	53 614	114,700	52 027		
	64.4	126' 11"	38.69	60	18.29	97,300	44 134	97,900	44 406	98,400	44 633		
	59.4	121' 7"	37.06	70	21.34	82,500	37 421	83,000	37 648	83,600	37 920		
	54.1	115' 1"	35.07	80	24.38	71,100	32 250	71,600	32 477	72,200	32 749		
	48.5	107' 0"	32.62	90	27.43	61,500	27 895	62,000	28 122	62,500	28 349	57,300	25 990
	42.3	97' 2"	29.61	100	30.48	53,900	24 448	54,300	24 630	54,800	24 856	55,200	25 038
	35.2	84' 8"	25.81	110	33.53	47,800	21 681	48,100	21 817	48,500	21 999	48,900	22 180
	26.6	68' 0"	20.73	120	36.58	42,800	19 413	43,100	19 549	43,400	19 685	43,700	19 821
	13.9	40' 11"	12.46	130	39.62	34,400	15 603	34,700	15 739	35,300	16 011	36,600	16 601
140' (42.67 m)	85.4	149' 3"	45.50	15	4.57					114,600	51 981		
	83.4	148' 9"	45.35	20	6.10							57,300	25 990
	81.3	148' 1"	45.14	25	7.62								
	79.2	147' 3"	44.88	30	9.14	190,900	86 590	172,000	78 017				
	77.1	146' 2"	44.56	35	10.67	165,200	74 933	165,800	75 205				
	75.0	145' 0"	44.18	40	12.19	145,100	65 816	145,800	66 133				
	70.7	141' 11"	43.24	50	15.24	115,900	52 571	116,500	52 843	114,600	51 981		
	66.3	137' 11"	42.05	60	18.29	95,700	43 408	96,300	43 680	96,900	43 953		
	61.8	133' 1"	40.56	70	21.34	80,900	36 695	81,500	36 967	82,100	37 239		
	57.0	127' 2"	38.76	80	24.38	69,700	31 615	70,200	31 842	70,800	32 114		
	52.0	120' 0"	36.59	90	27.43	60,400	27 396	60,900	27 623	61,400	27 850	57,300	25 990
	46.6	111' 5"	33.96	100	30 48	52,700	23 904	53,200	24 131	53,700	24 357	54,200	24 584
	40.7	100' 11"	30.77	110	33.53	46,500	21 092	46,900	21 273	47,400	21 500	47,800	21 681
	33.9	87' 10"	26.76	120	36.58	41,400	18 778	41,800	18 960	42,200	19 141	42,500	19 277
	25.6	70' 4"	21.43	130	39.62	37,300	16 918	37,600	17 055	37,900	17 191	38,100	17 281
	13.4	42' 1"	12.83	140	42.67	29,900	13 562	30,200	13 698	30,700	13 925	31,800	14 424
150' (45.72 m)	85.7	159' 4"	48.56	15	4.57					114,500	51 936		
	83.8	158' 10"	48.42	20	6.10							57,200	25 945
	81.9	158' 3"	48.22	25	7.62								
	79.9	157' 5"	47.98	30	9.14	188,800	85 638	171,800	77 927				
	78.0	156' 5"	47.68	35	10.67	163,200	74 026	163,900	74 343				
	76.0	155' 3"	47.33	40	12.19	143,200	64 954	143,900	65 271				
	72.1	152' 5"	46.46	50	15.24	114,200	51 800	114,900	52 117	114,500	51 936		
	68.0	148' 10"	45.35	60	18.29	94,100	42 683	94,700	42 955	95,400	43 272		
	63.8	144' 4"	43.99	70	21.34	79,400	36 015	80,000	36 287	80,700	36 604		
	59.5	138' 11"	42.34	80	24.38	68,200	30 935	68,800	31 207	69,400	31 479		
	54.9	132' 6"	40.38	90	27.43	59,300	26 898	59,800	27 124	60,400	27 396	57,200	25 945
	50.1	124' 10"	38.04	100	30.48	51,500	23 360	52,100	23 632	52,700	23 904	53,200	24 131
	44.9	115' 8"	35.25	110	33.53	45,300	20 547	45,800	20 774	46,300	21 001	46,800	21 228
	39.2	104' 7"	31.87	120	36.58	40,100	18 189	40,600	18 415	41,100	18 642	41,500	18 824
	32.7	90' 9"	27.67	130	39.62	35,900	16 283	36,300	16 465	36,700	16 646	37,100	16 828
	24.8	72' 7"	22.11	140	42.67	32,300	14 651	32,600	14 787	32,900	14 923	33,200	15 059
	12.9	43' 3"	13.18	150	45.72	25,900	11 748	26,200	11 884	26,600	12 065	27,500	12 473

(continued)

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from center of tower base section to center of gravity of freely suspended load.

**TG-1900 lifting crane capacities — without climbing frame**

Refer to Notes page 15.

Boom			Load radius②		Capacities — Main boom only①								
Length	Angle	Boom point height③			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
160' (48.77 m)	84.2	168' 11"	51.48	20	6.10					114,400	51 890		
	82.4	168' 4"	51.30	25	7.62							57,200	25 945
	80.6	167' 7"	51.07	30	9.14								
	78.8	166' 8"	50.79	35	10.67	161,100	73 073	161,900	73 436				
	76.9	165' 7"	50.47	40	12.19	141,300	64 092	142,100	64 455	114,400	51 890		
	73.2	162' 11"	49.65	50	15.24	112,400	50 983	113,200	51 346	113,900	51 664		
	69.4	159' 6"	48.62	60	18.29	92,500	41 957	93,200	42 274	93,900	42 592		
	65.6	155' 5"	47.36	70	21.34	77,800	35 289	78,500	35 607	79,200	35 924		
	61.6	150' 5"	45.84	80	24.38	66,700	30 254	67,300	30 526	68,000	30 844		
	57.4	144' 6"	44.05	90	27.43	57,900	26 263	58,600	26 580	59,200	26 852	57,200	25 945
	53.0	137' 7"	41.93	100	30.48	50,400	22 861	51,000	23 133	51,700	23 450	52,300	23 722
	48.4	129' 5"	39.44	110	33.53	44,100	20 003	44,700	20 275	45,300	20 547	45,900	20 819
	43.4	119' 8"	36.49	120	36.58	39,000	17 690	39,500	17 916	40,000	18 143	40,500	18 370
	37.9	108' 1"	32.94	130	39.62	34,600	15 694	35,100	15 921	35,600	16 147	36,100	16 374
	31.6	93' 8"	28.55	140	42.67	30,900	14 016	31,400	14 242	31,800	14 424	32,200	14 605
	24.0	74' 9"	22.77	150	45.72	27,900	12 655	28,200	12 791	28,500	12 927	28,900	13 108
	12.5	44' 4"	13.52	160	48.77	22,300	10 115	22,600	10 251	22,900	10 387	23,700	10 750
170' (51.82 m)	84.5	178' 11"	54.54	20	6.10					114,300	51 845		
	82.8	178' 5"	54.37	25	7.62							57,100	25 900
	81.1	177' 8"	54.16	30	9.14								
	79.4	176' 10"	53.90	35	10.67	159,100	72 166	159,900	72 529				
	77.7	175' 10"	53.59	40	12.19	139,400	63 230	140,200	63 593	114,300	51 845		
	74.2	173' 4"	52.83	50	15.24	110,700	50 212	111,500	50 575	112,300	50 938		
	70.7	170' 2"	51.87	60	18.29	90,900	41 231	91,600	41 549	92,400	41 911		
	67.1	166' 4"	50.69	70	21.34	76,300	34 609	77,000	34 926	77,800	35 289		
	63.4	161' 8"	49.28	80	24.38	65,200	29 574	65,900	29 891	66,700	30 254		
	59.5	156' 3"	47.62	90	27.43	56,500	25 627	57,200	25 945	57,900	26 263	57,100	25 900
	55.5	149' 11"	45.68	100	30.48	49,400	22 407	50,000	22 679	50,700	22 997	51,400	23 314
	51.3	142' 6"	43.42	110	33.53	43,000	19 504	43,700	19 821	44,300	20 094	45,000	20 411
	46.9	133' 10"	40.78	120	36.58	37,800	17 145	38,400	17 417	39,000	17 690	39,600	17 962
	42.1	123' 7"	37.68	130	39.62	33,500	15 195	34,000	15 422	34,600	15 694	35,100	15 921
	36.8	111' 5"	33.97	140	42.67	29,700	13 471	30,200	13 698	30,700	13 925	31,200	14 152
	30.7	96' 6"	29.40	150	45.72	26,600	12 065	27,000	12 246	27,400	12 428	27,800	12 609
	23.2	76' 10"	23.41	160	48.77	24,000	10 886	24,300	11 022	24,600	11 158	25,000	11 339
	12.1	45' 5"	13.85	170	51.82	19,000	8 618	19,200	8 708	19,600	8 890	20,200	9 162
180' (54.86 m)	84.8	189' 0"	57.60	20	6.10					114,200	51 800		
	83.2	188' 6"	57.45	25	7.62							57,100	25 900
	81.6	187' 10"	57.24	30	9.14								
	80.0	187' 0"	57.00	35	10.67	152,500	69 172	153,400	69 581				
	78.4	186' 1"	56.71	40	12.19	137,500	62 368	138,300	62 731	114,200	51 800		
	75.1	183' 8"	55.99	50	15.24	109,000	49 441	109,800	49 804	110,700	50 212		
	71.8	180' 9"	55.08	60	18.29	89,200	40 460	90,100	40 868	90,900	41 231		
	68.4	177' 1"	53.98	70	21.34	74,800	33 928	75,600	34 291	76,400	34 654		
	65.0	172' 10"	52.67	80	24.38	63,700	28 893	64,500	29 256	65,300	29 619		
	61.4	167' 9"	51.13	90	27.43	55,000	24 947	55,800	25 310	56,600	25 673	57,100	25 900
	57.7	161' 10"	49.33	100	30.48	48,100	21 817	48,800	22 135	49,500	22 452	50,300	22 815
	53.8	155' 1"	47.26	110	33.53	42,000	19 050	42,700	19 368	43,400	19 685	44,100	20 003
	49.8	147' 2"	44.86	120	36.58	36,700	16 646	37,400	16 964	38,000	17 236	38,700	17 554
	45.5	138' 1"	42.08	130	39.62	32,300	14 651	32,900	14 923	33,600	15 240	34,200	15 512
	40.8	127' 5"	38.83	140	42.67	28,600	12 972	29,100	13 199	29,700	13 471	30,300	13 743
	35.7	114' 9"	34.96	150	45.72	25,300	11 475	25,800	11 702	26,300	11 929	26,900	12 201
	29.8	99' 2"	30.22	160	48.77	22,600	10 251	23,100	10 477	23,500	10 659	23,900	10 840
	22.6	78' 10"	24.03	170	51.82	20,400	9 253	20,700	9 389	21,100	9 570	21,400	9 706
	11.8	46' 6"	14.17	180	54.86	16,000	7 257	16,200	7 348	16,500	7 484	17,100	7 756

(continued)

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from center of tower base section to center of gravity of freely suspended load

# TG-1900 lifting crane capacities — without climbing frame

Refer to Notes page 15.

Boom			Load radius③		Capacities — Main boom only①								
Length	Angle	Boom point height②			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
190' (57.91 m)	85.1	199' 0"	60.66	20	6.10					114,100	51 754		
	83.6	198' 6"	60.51	25	7.62					136,500	61 915	57,000	25 854
	82.1	197' 11"	60.32	30	9.14	134,200	60 872	140,300	63 639	114,100	51 754		
	80.5	197' 2"	60.09	35	10.67	105,500	47 854	108,000	48 987	109,000	49 441		
	79.0	196' 3"	59.81	40	12.19	86,900	39 417	88,500	40 142	89,400	40 551		
	75.9	194' 0"	59.14	50	15.24	73,200	33 202	74,100	33 611	75,000	34 019		
	72.8	191' 3"	58.28	60	18.29	62,300	28 258	63,100	28 621	63,900	28 984	57,000	25 854
	69.6	187' 10"	57.25	70	21.34	53,600	24 312	54,400	24 675	55,300	25 083	56,100	25 446
	66.4	183' 9"	56.01	80	24.38	46,700	21 182	47,500	21 545	48,300	21 908	49,000	22 226
	63.0	179' 0"	54.57	90	27.43	40,900	18 551	41,700	18 914	42,400	19 232	43,200	19 595
	59.6	173' 7"	52.90	100	30.48	35,700	16 193	36,400	16 510	37,100	16 828	37,800	17 145
	56.0	167' 3"	50.98	110	33.53	31,200	14 152	31,900	14 469	32,600	14 787	33,300	15 104
	52.3	160' 0"	48.78	120	36.58	27,500	12 473	28,100	12 745	28,700	13 018	29,400	13 335
	48.4	151' 9"	46.25	130	39.62	24,200	10 976	24,800	11 249	25,400	11 521	25,900	11 748
	44.2	142' 2"	43.34	140	42.67	19,100	8 663	19,500	8 845	20,000	9 071	20,400	9 253
	39.7	131' 1"	39.95	150	45.72	17,200	7 801	17,500	7 937	17,900	8 119	18,200	8 255
	34.7	117' 11"	35.93	160	48.77	13,200	5 987	13,400	6 078	13,700	6 214	14,200	6 441
200' (60.96 m)	85.4	209' 1"	63.72	20	6.10					114,000	51 709		
	83.9	208' 7"	63.58	25	7.62					126,300	57 288	57,000	25 854
	82.5	208' 0"	63.40	30	9.14	101,600	46 084	104,200	47 264	107,400	48 715		
	81.0	207' 3"	63.18	35	10.67	83,400	37 829	85,500	38 782	87,900	39 870		
	79.6	206' 5"	62.92	40	12.19	70,600	32 023	72,300	32 794	73,500	33 339		
	76.6	204' 4"	62.27	50	15.24	60,800	27 578	61,700	27 986	62,600	28 394	57,000	25 854
	73.7	201' 8"	61.47	60	18.29	52,200	23 677	53,100	24 085	53,900	24 448	54,800	24 856
	70.7	198' 5"	60.49	70	21.34	45,300	20 547	46,100	20 910	47,000	21 318	47,800	21 681
	67.6	194' 8"	59.32	80	24.38	34,600	15 694	35,400	16 057	36,200	16 420	36,900	16 737
	64.5	190' 2"	57.97	90	27.43	30,200	13 698	30,900	14 016	31,700	14 378	32,400	14 696
	61.2	185' 1"	56.41	100	30.48	26,400	11 974	27,100	12 292	27,800	12 609	28,500	12 927
	57.9	179' 2"	54.62	110	33.53	23,100	10 477	23,700	10 750	24,400	11 067	25,000	11 339
	54.5	172' 6"	52.58	120	36.58	17,900	9 207	20,900	9 480	21,500	9 752	22,100	10 024
	50.9	164' 10"	50.25	130	39.62	15,800	7 166	16,300	7 393	16,700	7 574	17,200	7 801
	47.1	156' 2"	47.60	140	42.67	14,200	6 441	14,500	6 577	14,900	6 758	15,200	6 894
	43.0	146' 2"	44.56	150	45.72	10,600	4 808	10,800	4 898	11,100	5 034	11,500	5 216
	38.6	134' 7"	41.03	160	48.77	20,300	9 207	20,900	9 480	21,500	9 752	22,100	10 024
	33.8	121' 0"	36.87	170	51.82	8 119	18,400	8 346	18,900	8 572	19,500	8 845	
	28.2	104' 4"	31.80	180	54.86	6 441	14,500	6 577	14,900	6 758	15,200	6 894	
	21.4	82' 8"	25.21	190	57.91	4 808	10,800	4 898	11,100	5 034	11,500	5 216	
	11.2	48' 6"	14.78	200	60.96								

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from center of tower base section to center of gravity of freely suspended load.

## TG-1900 lifting crane capacities — with climbing frame

Refer to Notes page 15.

**Tower** — free standing, with climbing frame; 9' 9" x 9' 9" (2.97 x 2.97 m) cross section. Tower heights 40' 0" (12.19 m) through 162' 7 1/2" (49.57 m) — see footnote①.

**Mast** — 43' 0 1/8" (13.11 m) over-all height.

**Boom** — tubular; 75" x 75" (1.91 x 1.91 m) with 40' (12.19 m) base section, 40' (12.19 m) top section, 1 1/4" (44 mm) diameter boom pendants, with or without boom tip extension.

**Boom tip extension** — tubular; 14,800# (6 713 kg) rating; 10' (3.05 m) long.

**Counterweights** — Total 94,400# (42 620 kg). Includes one fixed counterweight — 23,600# (10 705 kg) plus one moving counterweight — 70,800# (32 115 kg) consisting of three sections weighing 23,600# (10 705 kg) each.

Length	Boom			Load radius③	Capacities — Main boom only①							
	Angle	Boom point height②			Pounds	4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line
		Degree	Feet	meters		kilograms	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
80' (24.38 m)	85.5	89' 6"	27.27	10	3.05					115,200	52 253	
	84.8	89' 5"	27.25	11	3.35							57,600
	84.1	89' 4"	27.22	12	3.66							26 126
	83.4	89' 2"	27.19	13	3.96							
	82.7	89' 1"	27.15	14	4.27							
	81.9	88' 11"	27.11	15	4.57							
	78.3	88' 1"	26.84	20	6.10	230,400	104 507	172,800	78 380			
	74.6	86' 10"	26.48	25	7.62	230,400	104 507	172,800	78 380			
	70.9	85' 4"	26.00	30	9.14	196,600	89 176	172,800	78 380			
	67.0	83' 5"	25.42	35	10.67	170,800	77 473	171,200	77 655			
	63.1	81' 1"	24.71	40	12.19	150,800	68 401	151,200	68 583			
	54.7	75' 0"	22.87	50	15.24	121,900	55 292	122,200	55 428	115,200	52 253	
	45.4	66' 8"	20.31	60	18.29	102,100	46 311	102,400	46 447	102,700	46 583	
	34.1	54' 8"	16.65	70	21.34	88,000	39 916	88,200	40 006	88,400	40 097	
	17.7	34' 1"	10.38	80	24.38	69,000	31 297	69,700	31 615	71,100	32 250	57,600
90' (27.43 m)	85.4	99' 5"	30.31	11	3.35					115,100	52 208	
	84.8	99' 4"	30.28	12	3.66							57,500
	84.1	99' 3"	30.25	13	3.96							26 081
	83.5	99' 2"	30.22	14	4.27							
	82.8	99' 0"	30.18	15	4.57							
	79.6	98' 3"	29.95	20	6.10	230,300	104 462	172,700	78 335			
	76.4	97' 2"	29.62	25	7.62	228,500	103 645	172,700	78 335			
	73.1	95' 10"	29.21	30	9.14	194,300	88 133	172,700	78 335			
	69.7	94' 2"	28.69	35	10.67	168,700	76 521	169,100	76 702			
	66.3	92' 1"	28.08	40	12.19	148,700	67 449	149,100	67 630			
	59.1	86' 11"	26.50	50	15.24	119,900	54 385	120,300	54 567	115,100	52 208	
	51.4	80' 0"	24.39	60	18.29	100,100	45 404	100,400	45 540	100,800	45 722	
	42.6	70' 8"	21.55	70	21.34	85,800	38 918	86,100	39 054	86,400	39 190	
	32.1	57' 7"	17.56	80	24.38	75,200	34 110	75,400	34 200	75,600	34 291	
	16.7	35' 7"	10.84	90	27.43	59,700	27 079	60,300	27 351	61,400	27 850	57,500
100' (30.48 m)	85.3	109' 5"	33.34	12	3.66					115,000	52 163	
	84.7	109' 4"	33.31	13	3.96							57,500
	84.1	109' 2"	33.28	14	4.27							26 081
	83.6	109' 1"	33.25	15	4.57							
	80.7	108' 5"	33.04	20	6.10							
	77.8	107' 5"	32.75	25	7.62	226,100	102 557	172,500	78 244			
	74.8	106' 3"	32.38	30	9.14	192,100	87 135	172,500	78 244			
	71.8	104' 9"	31.92	35	10.67	166,600	75 568	167,000	75 749			
	62.5	98' 5"	29.99	50	15.24	118,000	53 523	118,400	53 705	115,000	52 163	
	55.8	92' 5"	28.17	60	18.29	98,200	44 542	98,600	44 724	99,000	44 905	
	48.5	84' 8"	25.81	70	21.34	83,900	38 056	84,200	38 192	84,600	38 373	
	40.4	74' 6"	22.70	80	24.38	73,100	33 157	73,400	33 293	73,700	33 429	
	30.4	60' 5"	18.41	90	27.43	64,900	29 438	65,100	29 528	65,400	29 664	57,500
	15.8	37' 0"	11.28	100	30.48	51,900	23 541	52,400	23 768	53,300	24 176	55,800
110' (33.53 m)	85.2	119' 4"	36.37	13	3.96					114,900	52 117	
	84.7	119' 3"	36.35	14	4.27							57,400
	84.2	119' 2"	36.32	15	4.57							26 036
	81.5	118' 6"	36.13	20	6.10							
	78.9	117' 8"	35.86	25	7.62	223,700	101 468	172,400	78 199			
	76.2	116' 7"	35.53	30	9.14	189,900	86 137	172,400	78 199			
	73.5	115' 2"	35.11	35	10.67	164,600	74 661	165,100	74 888			
	70.8	113' 7"	34.62	40	12.19	144,900	65 725	145,400	65 952			
	65.2	109' 7"	33.39	50	15.24	116,200	52 707	116,700	52 934	114,900	52 117	
	59.3	104' 3"	31.78	60	18.29	96,500	43 771	96,900	43 953	97,400	44 179	
	53.0	97' 7"	29.74	70	21.34	82,100	37 239	82,500	37 421	83,000	37 648	
	46.1	89' 1"	27.14	80	24.38	71,300	32 341	71,700	32 522	72,100	32 704	
	38.4	78' 1"	23.79	90	27.43	62,900	28 530	63,300	28 712	63,600	28 848	57,400
	29.0	63' 1"	19.22	100	30.48	56,400	25 582	56,700	25 718	57,000	25 854	57,200
	15.1	38' 4"	11.69	110	33.53	45,200	20 502	45,600	20 683	46,400	21 046	48,400

(continued)

①Consult manufacturer for tower heights greater than 162' 7 1/2" (49.57 m).

②Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

③Measured vertically from center of boom head sheave to base of turntable bearing mounting

④Measured from center of tower base section to center of gravity of freely suspended load.

# TG-1900 lifting crane capacities — with climbing frame

Refer to Notes page 15.

Boom			Load radius①		Capacities — Main boom only②							
Length	Angle	Boom point height③			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line	
			Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
120' (36.58 m)	85.6	129' 4"	39.43	13	3.96					114,800	52 072	
	85.1	129' 3"	39.41	14	4.27							
	84.6	129' 2"	39.38	15	4.57							
	82.2	128' 7"	39.20	20	6.10							
	79.8	127' 10"	38.96	25	7.62	221,300	100 380	172,200	78 108			
	77.4	126' 10"	38.66	30	9.14	187,700	85 139	172,200	78 108			
	74.9	125' 7"	38.28	35	10.67	162,500	73 708	163,100	73 980			
	72.4	124' 2"	37.83	40	12.19	142,900	64 818	143,500	65 090			
	67.4	120' 6"	36.72	50	15.24	114,400	51 890	115,000	52 163	114,800	52 072	
	62.1	115' 9"	35.28	60	18.29	94,800	43 000	95,300	43 227	95,800	43 454	
	56.5	109' 10"	33.47	70	21.34	80,500	36 514	80,900	36 695	81,400	36 922	
	50.6	102' 5"	31.22	80	24.38	69,600	31 570	70,000	31 751	70,500	31 978	
	44.1	93' 2"	28.41	90	27.43	61,200	27 759	61,600	27 941	62,000	28 122	57,400
	36.7	81' 5"	24.82	100	30.48	54,500	24 720	54,900	24 902	55,200	25 038	55,600
	27.7	65' 7"	19.99	110	33.53	49,200	22 316	49,500	22 452	49,700	22 543	50,000
	14.4	39' 8"	12.09	120	36.58	39,500	17 916	39,800	18 052	40,400	18 325	42,000
130' (39.62 m)	85.5	139' 4"	42.47	14	4.27					114,700	52 027	
	85.1	139' 3"	42.44	15	4.57							
	82.8	138' 9"	42.28	20	6.10							
	80.6	138' 0"	42.06	25	7.62							
	78.4	137' 1"	41.77	30	9.14	185,600	84 186	172,100	78 063			
	76.1	135' 11"	41.43	35	10.67	160,500	72 801	161,100	73 073			
	73.8	134' 7"	41.02	40	12.19	141,100	64 001	141,700	64 274	114,700	52 027	
	69.2	131' 3"	40.00	50	15.24	112,700	51 119	113,300	51 392	113,900	51 664	
	64.4	126' 11"	38.69	60	18.29	93,100	42 229	93,700	42 501	94,300	42 773	
	59.4	121' 7"	37.06	70	21.34	78,900	35 788	79,400	36 015	79,900	36 242	
	54.1	115' 1"	35.07	80	24.38	68,000	30 844	68,500	31 071	69,000	31 297	
	48.5	107' 0"	32.62	90	27.43	59,600	27 034	60,000	27 215	60,500	27 442	57,300
	42.3	97' 2"	29.61	100	30.48	52,900	23 995	53,300	24 176	53,700	24 357	54,100
	35.2	84' 8"	25.81	110	33.53	47,500	21 545	47,800	21 681	48,200	21 863	48,600
	26.6	68' 0"	20.73	120	36.58	42,800	19 413	43,100	19 549	43,400	19 685	43,700
	13.9	40' 11"	12.46	130	39.62	34,400	15 603	34,700	15 739	35,300	16 011	36,600
140' (42.67 m)	85.4	149' 3"	45.50	15	4.57					114,600	51 981	
	83.4	148' 9"	45.35	20	6.10							
	81.3	148' 1"	45.14	25	7.62							
	79.2	147' 3"	44.88	30	9.14	183,400	83 188	172,000	78 017			
	77.1	146' 2"	44.56	35	10.67	158,500	71 894	159,200	72 211			
	75.0	145' 0"	44.18	40	12.19	139,200	63 140	139,800	63 412	114,600	51 981	
	70.7	141' 11"	43.24	50	15.24	111,000	50 348	111,600	50 620	112,300	50 938	
	66.3	137' 11"	42.05	60	18.29	91,500	41 503	92,100	41 775	92,700	42 048	
	61.8	133' 1"	40.56	70	21.34	77,300	35 062	77,900	35 334	78,500	35 607	
	57.0	127' 2"	38.76	80	24.38	66,500	30 163	67,000	30 390	67,600	30 662	
	52.0	120' 0"	36.59	90	27.43	58,000	26 308	58,500	26 535	59,100	26 807	57,300
	46.6	111' 5"	33.96	100	30.48	51,300	23 269	51,800	23 496	52,300	23 722	52,700
	40.7	100' 11"	30.77	110	33.53	45,800	20 774	46,300	21 001	46,700	21 182	47,200
	33.9	87' 10"	26.76	120	36.58	41,400	18 778	41,800	18 960	42,200	19 141	42,500
	25.6	70' 4"	21.43	130	39.62	37,300	16 918	37,600	17 055	37,900	17 191	38,100
	13.4	42' 1"	12.83	140	42.67	29,900	13 562	30,200	13 698	30,700	13 925	31,800
150' (45.72 m)	85.7	159' 4"	48.56	15	4.57					114,500	51 936	
	83.8	158' 10"	48.42	20	6.10							
	81.9	158' 3"	48.22	25	7.62							
	79.9	157' 5"	47.98	30	9.14	181,200	82 190	171,800	77 927			
	78.0	156' 5"	47.68	35	10.67	156,500	70 987	157,200	71 304			
	76.0	155' 3"	47.33	40	12.19	137,300	62 278	138,000	62 595	114,500	51 936	
	72.1	152' 5"	46.46	50	15.24	109,300	49 577	110,000	49 895	110,600	50 167	
	68.0	148' 10"	45.35	60	18.29	89,900	40 777	90,600	41 095	91,200	41 367	
	63.8	144' 4"	43.99	70	21.34	75,700	34 336	76,400	34 654	77,000	34 926	
	59.5	138' 11"	42.34	80	24.38	65,000	29 483	65,600	29 755	66,200	30 027	
	54.9	132' 6"	40.38	90	27.43	56,500	25 627	57,100	25 900	57,700	26 172	57,200
	50.1	124' 10"	38.04	100	30.48	49,800	22 588	50,300	22 815	50,900	23 087	51,400
	44.9	115' 8"	35.25	110	33.53	44,300	20 094	44,800	20 320	45,300	20 547	45,800
	39.2	104' 7"	31.87	120	36.58	39,800	18 052	40,300	18 279	40,700	18 461	41,200
	32.7	90' 9"	27.67	130	39.62	35,900	16 283	36,300	16 465	36,700	16 646	37,100
	24.8	72' 7"	22.11	140	42.67	32,300	14 651	32,600	14 787	32,900	14 923	33,200
	12.9	43' 3"	13.18	150	45.72	25,900	11 748	26,200	11 884	26,600	12 065	27,500

(continued)

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from center of tower base section to center of gravity of freely suspended load.

**TG-1900 lifting crane capacities — with climbing frame**

Refer to Notes page 15.

Length	Boom			Load radius③	Capacities — Main boom only①									
	Angle	Boom point height②			4-part hoist line				3-part hoist line		2-part hoist line		1-part hoist line	
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
160' (48.77 m)	84.2	168' 11"	51.48	20	6.10						114,400	51 890		
	82.4	168' 4"	51.30	25	7.62								57,200	25 945
	80.6	167' 7"	51.07	30	9.14									
	78.8	166' 8"	50.79	35	10.67	154,500	70 080	155,200	70 397					
	76.9	165' 7"	50.47	40	12.19	135,400	61 416	136,100	61 733	114,400	51 890			
	73.2	162' 11"	49.65	50	15.24	107,600	48 806	108,300	49 124	109,000	49 441			
	69.4	159' 6"	48.62	60	18.29	88,300	40 052	89,000	40 369	89,700	40 687			
	65.6	155' 5"	47.36	70	21.34	74,200	33 656	74,900	33 974	75,600	34 291			
	61.6	150' 5"	45.84	80	24.38	63,500	28 803	64,100	29 075	64,800	29 392	57,200	25 945	
	57.4	144' 6"	44.05	90	27.43	55,000	24 947	55,700	25 265	56,300	25 537	57,000	25 854	
	53.0	137' 7"	41.93	100	30.48	48,300	21 908	48,900	22 180	49,500	22 452	50,200	22 770	
	48.4	129' 5"	39.44	110	33.53	42,800	19 413	43,400	19 685	44,000	19 958	44,600	20 230	
	43.4	119' 8"	36.49	120	36.58	38,300	17 372	38,800	17 599	39,400	17 871	39,900	18 098	
	37.9	108' 1"	32.94	130	39.62	34,600	15 694	35,100	15 921	35,500	16 102	36,000	16 329	
	31.6	93' 8"	28.55	140	42.67	30,900	14 016	31,400	14 242	31,800	14 424	32,200	14 605	
	24.0	74' 9"	22.77	150	45.72	• 27,900	12 655	28,200	12 791	28,500	12 927	28,900	13 108	
	12.5	44' 4"	13.52	160	48.77	22,300	10 115	22,600	10 251	22,900	10 387	23,700	10 750	
170'© (51.82 m)	84.5	178' 11"	54.54	20	6.10						114,300	51 845		
	82.8	178' 5"	54.37	25	7.62							57,100	25 900	
	81.1	177' 8"	54.16	30	9.14									
	79.4	176' 10"	53.90	35	10.67	152,400	69 127	153,300	69 535					
	77.7	175' 10"	53.59	40	12.19	133,500	60 554	134,300	60 917	114,300	51 845			
	74.2	173' 4"	52.83	50	15.24	105,800	47 990	106,600	48 352	107,400	48 715			
	70.7	170' 2"	51.87	60	18.29	86,700	39 326	87,500	39 689	88,200	40 006			
	67.1	166' 4"	50.69	70	21.34	72,700	32 976	73,400	33 293	74,200	33 656			
	63.4	161' 8"	49.28	80	24.38	62,000	28 122	62,700	28 440	63,400	28 757	57,100	25 900	
	59.5	156' 3"	47.62	90	27.43	53,600	24 312	54,300	24 630	55,000	24 947	55,700	25 265	
	55.5	149' 11"	45.68	100	30.48	46,900	21 273	47,600	21 591	48,200	21 863	48,900	22 180	
	51.3	142' 6"	43.42	110	33.53	41,400	18 778	42,000	19 050	42,700	19 368	43,300	19 640	
	46.9	133' 10"	40.78	120	36.58	36,900	16 737	37,500	17 009	38,100	17 281	38,700	17 554	
	42.1	123' 7"	37.68	130	39.62	33,100	15 013	33,700	15 286	34,200	15 512	34,800	15 785	
	36.8	111' 5"	33.97	140	42.67	29,700	13 471	30,200	13 698	30,700	13 925	31,200	14 152	
	30.7	96' 6"	29.40	150	45.72	26,600	12 065	27,000	12 246	27,400	12 428	27,800	12 609	
	23.2	76' 10"	23.41	160	48.77	24,000	10 886	24,300	11 022	24,600	11 158	25,000	11 339	
	12.1	45' 5"	13.85	170	51.82	19,000	8 618	19,200	8 708	19,600	8 890	20,200	9 162	
180'© (54.86 m)	84.8	189' 0"	57.60	20	6.10						114,200	51 800		
	83.2	188' 6"	57.45	25	7.62							57,100	25 900	
	81.6	187' 10"	57.24	30	9.14									
	80.0	187' 0"	57.00	35	10.67	150,400	68 220	151,200	68 583					
	78.4	186' 1"	56.71	40	12.19	131,600	59 692	132,400	60 055	114,200	51 800			
	75.1	183' 8"	55.99	50	15.24	104,100	47 218	104,900	47 581	105,800	47 990			
	71.8	180' 9"	55.08	60	18.29	85,100	38 600	85,900	38 963	86,700	39 326			
	68.4	177' 1"	53.98	70	21.34	71,100	32 250	71,900	32 613	72,700	32 976			
	65.0	172' 10"	52.67	80	24.38	60,500	27 442	61,300	27 805	62,100	28 168	57,100	25 900	
	61.4	167' 9"	51.13	90	27.43	52,200	23 677	52,900	23 995	53,700	24 357	54,400	24 675	
	57.7	161' 10"	49.33	100	30.48	45,500	20 638	46,200	20 955	46,900	21 273	47,700	21 636	
	53.8	155' 1"	47.26	110	33.53	40,000	18 143	40,700	18 461	41,400	18 778	42,100	19 096	
	49.8	147' 2"	44.86	120	36.58	35,500	16 102	36,100	16 374	36,800	16 692	37,400	16 964	
	45.5	138' 1"	42.08	130	39.62	31,700	14 378	32,300	14 651	32,900	14 923	33,500	15 195	
	40.8	127' 5"	38.83	140	42.67	28,500	12 927	29,100	13 199	29,600	13 426	30,200	13 698	
	35.7	114' 9"	34.96	150	45.72	25,300	11 475	25,800	11 702	26,300	11 929	26,900	12 201	
	29.8	99' 2"	30.22	160	48.77	22,600	10 251	23,100	10 477	23,500	10 659	23,900	10 840	
	22.6	78' 10"	24.03	170	51.82	20,400	9 253	20,700	9 389	21,100	9 570	21,400	9 706	
	11.8	46' 6"	14.17	180	54.86	16,000	7 257	16,200	7 348	16,500	7 484	17,100	7 756	

(continued)

©Consult manufacturer for boom lengths greater than 170' (51.82 m).

©Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

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

# TG-1900 lifting crane capacities — with climbing frame

Refer to Notes page 15.

Boom			Load radius ③		Capacities — Main boom only ①								
Length	Angle	Boom point height ②			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
190' ② (57.91 m)	85.1	199' 0"	60.66	20	6.10					114,100	51 754		
	83.6	198' 6"	60.51	25	7.62							57,000	25 854
	82.1	197' 11"	60.32	30	9.14								
	80.5	197' 2"	60.09	35	10.67	139,400	63 230	140,300	63 639	114,100	51 754		
	79.0	196' 3"	59.81	40	12.19	129,600	58 785	130,500	59 193	114,100	51 754		
	75.9	194' 0"	59.14	50	15.24	102,400	46 447	103,300	46 856	104,100	47 218		
	72.8	191' 3"	58.28	60	18.29	83,500	37 874	84,300	38 237	85,200	38 646		
	69.6	187' 10"	57.25	70	21.34	69,600	31 570	70,500	31 978	71,300	32 341		
	66.4	183' 9"	56.01	80	24.38	59,100	26 807	59,900	27 170	60,700	27 533		
	63.0	179' 0"	54.57	90	27.43	50,800	23 042	51,600	23 405	52,400	23 768		
	59.6	173' 7"	52.90	100	30.48	44,100	20 003	44,900	20 366	45,700	20 729		
	56.0	167' 3"	50.98	110	33.53	38,600	17 508	39,400	17,871	40 100	18 189		
	52.3	160' 0"	48.78	120	36.58	34,100	15 467	34,800	15 785	35,500	16 102		
	48.4	151' 9"	46.25	130	39.62	30,300	13 743	31,000	14 061	31,700	14 378		
	44.2	142' 2"	43.34	140	42.67	27,100	12 292	27,800	12 609	28,400	12 882		
	39.7	131' 1"	39.95	150	45.72	24,200	10 976	24,800	11 249	25,400	11 521		
	34.7	117' 11"	35.93	160	48.77	21,400	9 706	21,900	9 933	22,500	10 205		
	29.0	101' 9"	31.02	170	51.82	19,100	8 663	19,500	8 845	20,000	9 071		
	22.0	80' 9"	24.63	180	54.86	17,200	7 801	17,500	7 937	17,900	8 119		
	11.5	47' 6"	14.48	190	57.91	13,200	5 987	13,400	6 078	13,700	6 214		
200' ② (60.96 m)	85.4	209' 1"	63.72	20	6.10					114,000	51 709		
	83.9	208' 7"	63.58	25	7.62							57,000	25 854
	82.5	208' 0"	63.40	30	9.14								
	81.0	207' 3"	63.18	35	10.67								
	79.6	206' 5"	62.92	40	12.19	125,300	56 835	126,300	57 288	114,000	51,709		
	76.6	204' 4"	62.27	50	15.24	100,600	45 631	101,600	46 084	102,500	46 493		
	73.7	201' 8"	61.47	60	18.29	81,900	37 149	82,800	37 557	83,700	37 965		
	70.7	198' 5"	60.49	70	21.34	68,100	30 889	69,000	31 297	69,900	31 706		
	67.6	194' 8"	59.32	80	24.38	57,600	26 126	58,500	26 535	59,400	26 943		
	64.5	190' 2"	57.97	90	27.43	49,300	22 362	50,200	22 770	51,100	23 178		
	61.2	185' 1"	56.41	100	30.48	42,700	19 368	43,500	19 731	44,400	20 139		
	57.9	179' 2"	54.62	110	33.53	37,300	16 918	38,100	17 281	38,900	17 644		
	54.5	172' 6"	52.58	120	36.58	32,700	14 832	33,500	15 195	34,300	15 558		
	50.9	164' 10"	50.25	130	39.62	29,000	13 154	29,700	13 471	30,400	13 789		
	47.1	156' 2"	47.60	140	42.67	25,800	11 702	26,500	12 020	27,200	12 337		
	43.0	146' 2"	44.56	150	45.72	23,000	10 432	23,700	10 750	24,300	11 022		
	38.6	134' 7"	41.03	160	48.77	20,300	9 207	20,900	9 480	21,500	9 752		
	33.8	121' 0"	36.87	170	51.82	17,900	8 119	18,400	8 346	18,900	8 572		
	28.2	104' 4"	31.80	180	54.86	15,800	7 166	16,300	7 393	16,700	7 574		
	21.4	82' 8"	25.21	190	57.91	14,200	6 441	14,500	6 577	14,900	6 758		
	11.2	48' 6"	14.78	200	60.96	10,600	4 808	11,200	5 080	11,100	5 034		

②Consult manufacturer for boom lengths greater than 170' (51.82 m).

①Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③Measured from center of tower base section to center of gravity of freely suspended load.

# TG-1900 lifting crane capacities — pedestal, bogie or gantry mounted

Refer to Notes page 15.

**Mounting** — pedestal, bogie, or gantry.

**Boom** — tubular; 75" x 75" (1.91 x 1.91 m) with 40' (12.19 m) base section, 40' (12.19 m) top section, 1 1/4" (44 mm) diameter boom pendants, with or without boom tip extension.

**Counterweights** — Total 94,400# (42 820 kg). Includes one fixed counterweight — 23,600# (10 705 kg) plus one moving counterweight — 70,800# (32 115 kg) consisting of three sections weighing 23,600# (10 705 kg) each.

**Mast** — 43' 0 1/8" (13.11 m) over-all height.

**Boom tip extension** — tubular; 14,800# (6 713 kg) rating; 10' (3.05 m) long.

Boom			Load radius③		Capacities — Main boom only①								
Length	Angle	Boom point height②			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
80' (24.38 m)	85.5	89' 6"	27.27	10	3.05					115,200	52 253		
	84.8	89' 5"	27.25	11	3.35							57,600	26 126
	84.1	89' 4"	27.22	12	3.66								
	83.4	89' 2"	27.19	13	3.96								
	82.7	89' 1"	27.15	14	4.27								
	81.9	88' 11"	27.11	15	4.57								
	78.3	88' 1"	26.84	20	6.10	230,400	104 507	172,800	78 380				
	74.6	86' 10"	26.48	25	7.62	230,400	104 507						
	70.9	85' 4"	26.00	30	9.14	217,600	98 701						
	67.0	83' 5"	25.42	35	10.67	186,400	84 549	172,800	78 380				
	63.1	81' 1"	24.71	40	12.19	162,600	73 754	163,000	73 935				
	54.7	75' 0"	22.87	50	15.24	128,900	58 468	129,200	58 604	115,200	52 253		
	45.4	66' 8"	20.31	60	18.29	106,300	48 216	106,600	48 352	106,800	48 443		
	34.1	54' 8"	16.65	70	21.34	90,200	40 914	90,400	41 004	90,700	41 140		
	17.7	34' 1"	10.38	80	24.38	69,000	31 297	69,700	31 615	71,100	32 250	57,600	26 126
90' (27.43 m)	85.4	99' 5"	30.31	11	3.35					115,100	52 208		
	84.8	99' 4"	30.28	12	3.66							57,500	26 081
	84.1	99' 3"	30.25	13	3.96								
	83.5	99' 2"	30.22	14	4.27								
	82.8	99' 0"	30.18	15	4.57								
	79.6	98' 3"	29.95	20	6.10	230,300	104 462	172,700	78 335				
	76.4	97' 2"	29.62	25	7.62	230,300	104 462						
	73.1	95' 10"	29.21	30	9.14	216,400	98 157						
	69.7	94' 2"	28.69	35	10.67	185,100	83 959	172,700	78 335				
	66.3	92' 1"	28.08	40	12.19	161,300	73 164	161,700	73 345				
	59.1	86' 11"	26.50	50	15.24	127,500	57 833	127,900	58 014	115,100	52 208		
	51.4	80' 0"	24.39	60	18.29	104,800	47 536	105,100	47 672	105,500	47 854		
	42.6	70' 8"	21.55	70	21.34	88,600	40 188	88,900	40 324	89,100	40 415		
	32.1	57' 7"	17.56	80	24.38	76,500	34 699	76,700	34 790	77,000	34 926		
	16.7	35' 7"	10.84	90	27.43	59,700	27 079	60,300	27 351	61,400	27 850	57,500	26 081
100' (30.48 m)	85.3	109' 5"	33.34	12	3.66					115,000	52 163		
	84.7	109' 4"	33.31	13	3.96							57,500	26 081
	84.1	109' 2"	33.28	14	4.27								
	83.6	109' 1"	33.25	15	4.57								
	80.7	108' 5"	33.04	20	6.10								
	77.8	107' 5"	32.75	25	7.62	230,100	104 371	172,500	78 244				
	74.8	106' 3"	32.38	30	9.14	215,100	97 567	172,500	78 244				
	71.8	104' 9"	31.92	35	10.67	183,900	83 415	172,500	78 244				
	68.8	102' 11"	31.38	40	12.19	160,100	72 620	160,500	72 801				
	62.5	98' 5"	29.99	50	15.24	126,300	57 288	126,700	57 470	115,000	52 163		
	55.8	92' 5"	28.17	60	18.29	103,500	46 946	103,900	47 128	104,300	47 309		
	48.5	84' 8"	25.81	70	21.34	87,100	39 507	87,500	39 689	87,900	39 870		
	40.4	74' 6"	22.70	80	24.38	74,900	33 974	75,200	34 110	75,600	34 291		
	30.4	60' 5"	18.41	90	27.43	65,600	29 755	65,800	29 846	66,100	29 982	57,500	26 081
	15.8	37' 0"	11.28	100	30.48	51,900	23 541	52,400	23 768	53,300	24 176	55,800	25 310
110' (33.53 m)	85.2	119' 4"	36.37	13	3.96					114,900	52 117		
	84.7	119' 3"	36.35	14	4.27							57,400	26 036
	84.2	119' 2"	36.32	15	4.57								
	81.5	118' 6"	36.13	20	6.10								
	78.9	117' 8"	35.86	25	7.62	229,900	104 280	172,400	78 199				
	76.2	116' 7"	35.53	30	9.14	214,000	97 068	172,400	78 199				
	73.5	115' 2"	35.11	35	10.67	182,700	82 871	172,400	78 199				
	70.8	113' 7"	34.62	40	12.19	158,900	72 075	159,400	72 302				
	65.2	109' 7"	33.39	50	15.24	125,100	56 744	125,600	56 971	114,900	52 117		
	59.3	104' 3"	31.78	60	18.29	102,300	46 402	102,700	46 583	103,200	46 810		
	53.0	97' 7"	29.74	70	21.34	85,900	38 963	86,300	39 145	86,700	39 326		
	46.1	89' 1"	27.14	80	24.38	73,600	33 384	74,000	33 565	74,300	33 701		
	38.4	78' 1"	23.79	90	27.43	64,100	29 075	64,400	29 211	64,800	29 392		
	29.0	63' 1"	19.22	100	30.48	56,700	25 718	56,900	25 809	57,200	25 945	57,400	21 046
	15.1	38' 4"	11.69	110	33.53	45,200	20 502	45,600	20 683	46,400	48,400	48,400	21 953

(continued)

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from centerline of rotation to center of gravity of freely suspended load

# TG-1900 lifting crane capacities — pedestal, bogie, or gantry mounted

Refer to Notes page 15.

Boom				Load radius③		Capacities — Main boom only①							
Length	Angle	Boom point height②				4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line	
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	Pounds
120' (36.58 m)	85.6	129° 4"	39.43	13	3.96					114,800	52 072		
	85.1	129° 3"	39.41	14	4.27							57,400	26 036
	84.6	129° 2"	39.38	15	4.57								
	82.2	128° 7"	39.20	20	6.10								
	79.8	127° 10"	38.96	25	7.62	229,700	104 190	172,200	78 108				
	77.4	126° 10"	38.66	30	9.14	212,900	96 569	172,200	78 108				
	74.9	125° 7"	38.28	35	10.67	181,600	82 372	172,200	78 108				
	72.4	124° 2"	37.83	40	12.19	157,800	71 576	158,300	71 803				
	67.4	120° 6"	36.72	50	15.24	123,900	56 200	124,500	56 472	114,800	52 072		
	62.1	115° 9"	35.28	60	18.29	101,100	45 858	101,600	46 084	102,100	46 311		
	56.5	109° 10"	33.47	70	21.34	84,700	38 419	85,100	38 600	85,600	38 827		
	50.6	102° 5"	31.22	80	24.38	72,300	32 794	72,800	33 021	73,200	33 202		
	44.1	93° 2"	28.41	90	27.43	62,800	28 485	63,200	28 667	63,600	28 848	57,400	26 036
	36.7	81° 5"	24.82	100	30.48	55,200	25 038	55,600	25 219	55,900	25 355	56,200	25 491
	27.7	65° 7"	19.99	110	33.53	49,200	22 316	49,500	22 452	49,700	22 543	50,000	22 679
	14.4	39° 8"	12.09	120	36.58	39,500	17 916	39,800	18 052	40,400	18 325	42,000	19 050
130' (39.62 m)	85.5	139° 4"	42.47	14	4.27					114,700	52 027		
	85.1	139° 3"	42.44	15	4.57							57,300	25 990
	82.8	138° 9"	42.28	20	6.10								
	80.6	138° 0"	42.06	25	7.62								
	78.4	137° 1"	41.77	30	9.14	211,900	96 116	172,100	78 063				
	76.1	135° 11"	41.43	35	10.67	180,600	81 918	172,100	78 063				
	73.8	134° 7"	41.02	40	12.19	156,700	71 077	157,300	71 350				
	69.2	131° 3"	40.00	50	15.24	122,900	55 746	123,400	55 973	114,700	52 027		
	64.4	126° 11"	38.69	60	18.29	100,000	45 359	100,500	45 586	101,100	45 858		
	59.4	121° 7"	37.06	70	21.34	83,500	37 874	84,100	38 147	84,600	38 373		
	54.1	115° 1"	35.07	80	24.38	71,100	32 250	71,600	32 477	72,200	32 749		
	48.5	107° 0"	32.62	90	27.43	61,500	27 895	62,000	28 122	62,500	28 349	57,300	25 990
	42.3	97° 2"	29.61	100	30.48	53,900	24 448	54,300	24 630	54,800	24 856	55,200	25 038
	35.2	84° 8"	25.81	110	33.53	47,800	21 681	48,100	21 817	48,500	21 999	48,900	22 180
	26.6	68° 0"	20.73	120	36.58	42,800	19 413	43,100	19 549	43,400	19 685	43,700	19 821
	13.9	40° 11"	12.46	130	39.62	34,400	15 603	34,700	15 739	35,300	16 011	36,600	16 601
140' (42.67 m)	85.4	149° 3"	45.50	15	4.57					114,600	51 981		
	83.4	148° 9"	45.35	20	6.10							57,300	25 990
	81.3	148° 1"	45.14	25	7.62								
	79.2	147° 3"	44.88	30	9.14	210,800	95 617	172,000	78 017				
	77.1	146° 2"	44.56	35	10.67	179,500	81 419	172,000	78 017				
	75.0	145° 0"	44.18	40	12.19	155,600	70 578	156,300	70 896				
	70.7	141° 11"	43.24	50	15.24	121,800	55 247	122,400	55 519	114,600	51 981		
	66.3	137° 11"	42.05	60	18.29	98,900	44 860	99,500	45 132	100,100	45 404		
	61.8	133° 1"	40.56	70	21.34	82,400	37 376	83,000	37 648	83,600	37 920		
	57.0	127° 2"	38.76	80	24.38	70,000	31 751	70,600	32 023	71,100	32 250		
	52.0	120° 0"	36.59	90	27.43	60,400	27 396	60,900	27 623	61,400	27 850	57,300	25 990
	46.6	111° 5"	33.96	100	30.48	52,700	23 904	53,200	24 131	53,700	24 357	54,200	24 584
	40.7	100° 11"	30.77	110	33.53	46,500	21 092	46,900	21 273	47,400	21 500	47,800	21 681
	33.9	87° 10"	26.76	120	36.58	41,400	18 778	41,800	18 960	42,200	19 141	42,500	19 277
	25.6	70° 4"	21.43	130	39.62	37,300	16 918	37,600	17 055	37,900	17 191	38,100	17 281
	13.4	42° 1"	12.83	140	42.67	29,900	13 562	30,200	13 698	30,700	13 925	31,800	14 424
150' (45.72 m)	85.7	159° 4"	48.56	15	4.57					114,500	51 936		
	83.8	158° 10"	48.42	20	6.10							57,200	25 945
	81.9	158° 3"	48.22	25	7.62								
	79.9	157° 5"	47.98	30	9.14	209,700	95 118	171,800	77 927				
	78.0	156° 5"	47.68	35	10.67	178,400	80 920	171,800	77 927				
	76.0	155° 3"	47.33	40	12.19	154,600	70 125	155,300	70 442				
	72.1	152° 5"	46.46	50	15.24	120,700	54 748	121,400	55 066	114,500	51 936		
	68.0	148° 10"	45.35	60	18.29	97,800	44 361	98,500	44 678	99,200	44 996		
	63.8	144° 4"	43.99	70	21.34	81,300	36 877	82,000	37 194	82,600	37 466		
	59.5	138° 11"	42.34	80	24.38	68,900	31 252	69,500	31 524	70,200	31 842		
	54.9	132° 6"	40.38	90	27.43	59,300	26 898	59,800	27 124	60,400	27 396	57,200	25 945
	50.1	124° 10"	38.04	100	30.48	51,500	23 360	52,100	23 632	52,700	23 904	53,200	24 131
	44.9	115° 8"	35.25	110	33.53	45,300	20 547	45,800	20 774	46,300	21 001	46,800	21 228
	39.2	104° 7"	31.87	120	36.58	40,100	18 189	40,600	18 415	41,100	18 642	41,500	18 824
	32.7	90° 9"	27.67	130	39.62	35,900	16 283	36,300	16 465	36,700	16 646	37,100	16 828
	24.8	72° 7"	22.11	140	42.67	32,300	14 651	32,600	14 787	32,900	14 923	33,200	15 059
	12.9	43° 3"	13.18	150	45.72	25,900	11 748	26,200	11 884	26,600	12 065	27,500	12 473

(continued)

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from centerline of rotation to center of gravity of freely suspended load.

## TG-1900 lifting crane capacities — pedestal, bogie, or gantry mounted

Refer to Notes page 15.

Boom			Load radius③		Capacities — Main boom only①								
Length	Angle	Boom point height③			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
160' (48.77 m)	84.2	168' 11"	51.48	20	6.10					114,400	51 890		
	82.4	168' 4"	51.30	25	7.62							57,200	25 945
	80.6	167' 7"	51.07	30	9.14								
	78.8	166' 8"	50.79	35	10.67	172,400	78 199	171,700	77 881				
	76.9	165' 7"	50.47	40	12.19	149,600	67 857	153,500	69 626	114,400	51 890		
	73.2	162' 11"	49.65	50	15.24	118,800	53 886	120,400	54 612				
	69.4	159' 6"	48.62	60	18.29	96,800	43 907	97,500	44 225	98,200	44 542		
	65.6	155' 5"	47.36	70	21.34	80,300	36 423	81,000	36 740	81,700	37 058		
	61.6	150' 5"	45.84	80	24.38	67,800	30 753	68,500	31 071	69,200	31 388		
	57.4	144' 6"	44.05	90	27.43	58,200	26 399	58,800	26 671	59,500	26 988	57,200	25 945
	53.0	137' 7"	41.93	100	30.48	50,400	22 861	51,000	23 133	51,700	23 450	52,300	23 722
	48.4	129' 5"	39.44	110	33.53	44,100	20 003	44,700	20 275	45,300	20 547	45,900	20 819
	43.4	119' 8"	36.49	120	36.58	39,000	17 690	39,500	17 916	40,000	18 143	40,500	18 370
	37.9	108' 1"	32.94	130	39.62	34,600	15 694	35,100	15 921	35,600	16 147	36,100	16 374
	31.6	93' 8"	28.55	140	42.67	30,900	14 016	31,400	14 242	31,800	14 424	32,200	14 605
	24.0	74' 9"	22.77	150	45.72	27,900	12 655	28,200	12 791	28,500	12 927	28,900	13 108
	12.5	44' 5"	13.52	160	48.77	22,300	10 115	22,600	10 251	22,900	10 387	23,700	10 750
170' (51.82 m)	84.5	178' 11"	54.54	20	6.10					114,300	51 845		
	82.8	178' 5"	54.37	25	7.62							57,100	25 900
	81.1	177' 8"	54.16	30	9.14								
	79.4	176' 10"	53.90	35	10.67	165,600	75 114	166,400	75 477				
	77.7	175' 10"	53.59	40	12.19	144,000	65 317	147,700	66 995				
	74.2	173' 4"	52.83	50	15.24	114,000	51 709	116,600	52 888	114,300	51 845		
	70.7	170' 2"	51.87	60	18.29	94,400	42 819	96,500	43 771	97,300	44 134		
	67.1	166' 4"	50.69	70	21.34	79,200	35 924	80,000	36 287	80,700	36 604		
	63.4	161' 8"	49.28	80	24.38	66,800	30 299	67,500	30 617	68,300	30 980		
	59.5	156' 3"	47.62	90	27.43	57,100	25 900	57,800	26 217	58,500	26 535	57,100	25 900
	55.5	149' 11"	45.68	100	30.48	49,400	22 407	50,000	22 679	50,700	22 997	51,400	23 314
	51.3	142' 6"	43.42	110	33.53	43,000	19 504	43,700	19 821	44,300	20 094	45,000	20 411
	46.9	133' 10"	40.78	120	36.58	37,800	17 145	38,400	17 417	39,000	17 690	39,600	17 962
	42.1	123' 7"	37.68	130	39.62	33,500	15 195	34,000	15 422	34,600	15 694	35,100	15 921
	36.8	111' 5"	33.97	140	42.67	29,700	13 471	30,200	13 698	30,700	13 925	31,200	14 152
	30.7	96' 6"	29.40	150	45.72	26,600	12 065	27,000	12 246	27,400	12 428	27,800	12 609
	23.2	76' 10"	23.41	160	48.77	24,000	10 886	24,300	11 022	24,600	11 158	25,000	11 339
	12.1	45' 5"	13.85	170	51.82	19,000	8 618	19,200	8 708	19,600	8 890	20,200	9 162
180' (54.86 m)	84.8	189' 0"	57.60	20	6.10					114,200	51 800		
	83.2	188' 6"	57.45	25	7.62							57,100	25 900
	81.6	187' 10"	57.24	30	9.14								
	80.0	187' 0"	57.00	35	10.67	152,500	69 172	153,400	69 581				
	78.4	186' 1"	56.71	40	12.19	138,900	63 003	142,500	64 636				
	75.1	183' 8"	55.99	50	15.24	109,600	49 713	112,200	50 893	114,200	51 800		
	71.8	180' 9"	55.08	60	18.29	90,500	41 050	92,600	42 002	96,000	43 544		
	68.4	177' 1"	53.98	70	21.34	76,900	34 881	78,700	35 697	79,800	36 196		
	65.0	172' 10"	52.67	80	24.38	65,800	29 846	66,500	30 163	67,300	30 526		
	61.4	167' 9"	51.13	90	27.43	56,100	25 446	56,800	25 764	57,600	26 126	57,100	25 900
	57.7	161' 10"	49.33	100	30.48	48,300	21 908	49,000	22 226	49,800	22 588	50,500	22 906
	53.8	155' 1"	47.26	110	33.53	42,000	19 050	42,700	19 368	43,400	19 685	44,100	20 003
	49.8	147' 2"	44.86	120	36.58	36,700	16 646	37,400	16 964	38,000	17 236	38,700	17 554
	45.5	138' 1"	42.08	130	39.62	32,300	14 651	32,900	14 923	33,600	15 240	34,200	15 512
	40.8	127' 5"	38.83	140	42.67	28,600	12 972	29,100	13 199	29,700	13 471	30,300	13 743
	35.7	114' 9"	34.96	150	45.72	25,300	11 475	25,800	11 702	26,300	11 929	26,900	12 201
	29.8	99' 2"	30.22	160	48.77	22,600	10 251	23,100	10 477	23,500	10 659	23,900	10 840
	22.6	78' 10"	24.03	170	51.82	20,400	9 253	20,700	9 389	21,100	9 570	21,400	9 706
	11.8	46' 6"	14.17	180	54.86	16,000	7 257	16,200	7 348	16,500	7 484	17,100	7 756

(continued)

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from centerline of rotation to center of gravity of freely suspended load.

# TG-1900 lifting crane capacities — pedestal, bogie, or gantry mounted

Refer to Notes page 15.

Boom			Load radius③		Capacities — Main boom only①								
Length	Angle	Boom point height②			4-part hoist line		3-part hoist line		2-part hoist line		1-part hoist line		
		Degree	Feet	meters	Feet	meters	Pounds	kilograms	Pounds	kilograms	Pounds	kilograms	
190' (57.91 m)	85.1	199' 0"	60.66	20	6.10					114,100	51 754		
	83.6	198' 6"	60.51	25	7.62					↓	↓	57,000	25 854
	82.1	197' 11"	60.32	30	9.14					↑	↑		
	80.5	197' 2"	60.09	35	10.67	139,400	63 230	140,300	63 639	114,100	51 754		
	79.0	196' 3"	59.81	40	12.19	134,200	60 872	137,700	62 459	114,100	51 029		
	75.9	194' 0"	59.14	50	15.24	105,500	47 854	108,000	48 987	112,500	51 029		
	72.8	191' 3"	58.28	60	18.29	86,900	39 417	88,900	40 324	92,200	41 821		
	69.6	187' 10"	57.25	70	21.34	73,700	33 429	75,400	34 200	78,100	35 425		
	66.4	183' 9"	56.01	80	24.38	63,700	28 893	65,200	29 574	66,400	30 118		
	63.0	179' 0"	54.57	90	27.43	55,000	24 947	55,800	25 310	56,700	25 718	57,000	25 854
	59.6	173' 7"	52.90	100	30.48	47,300	21 454	48,000	21 772	48,800	22 135	49,600	22 498
	56.0	167' 3"	50.98	110	33.53	40,900	18 551	41,700	18 914	42,400	19 232	43,200	19 595
	52.3	160' 0"	48.78	120	36.58	35,700	16 193	36,400	16 510	37,100	16 828	37,800	17 145
	48.4	151' 9"	46.25	130	39.62	31,200	14 152	31,900	14 469	32,600	14 787	33,300	15 104
	44.2	142' 2"	43.34	140	42.67	27,500	12 473	28,100	12 745	28,700	13 018	29,400	13 335
	39.7	131' 1"	39.95	150	45.72	24,200	10 976	24,800	11 249	25,400	11 521	25,900	11 748
	34.7	117' 11"	35.93	160	48.77	21,400	9 706	21,900	9 933	22,500	10 205	23,000	10 432
	29.0	101' 9"	31.02	170	51.82	19,100	8 663	19,500	8 845	20,000	9 071	20,400	9 253
	22.0	80' 9"	24.63	180	54.86	17,200	7 801	17,500	7 937	17,900	8 119	18,200	8 255
	11.5	47' 6"	14.48	190	57.91	13,200	5 987	13,400	6 078	13,700	6 214	14,200	6 441
200' (60.96 m)	85.4	209' 1"	63.72	20	6.10					114,000	51 709		
	83.9	208' 7"	63.58	25	7.62					↓	↓	57,000	25 854
	82.5	208' 0"	63.40	30	9.14					↑	↑		
	81.0	207' 3"	63.18	35	10.67					↑	↑		
	79.6	206' 5"	62.92	40	12.19	125,300	56 835	126,300	57 288	114,000	51 709		
	76.6	204' 4"	62.27	50	15.24	101,600	46 084	104,200	47 264	108,600	49 260		
	73.7	201' 8"	61.47	60	18.29	83,400	37 829	85,500	38 782	88,800	40 279		
	70.7	198' 5"	60.49	70	21.34	70,600	32 023	72,300	32 794	74,900	33 974		
	67.6	194' 8"	59.32	80	24.38	60,900	27 623	62,400	28 304	64,600	29 302	57,000	25 854
	64.5	190' 2"	57.97	90	27.43	53,200	24 131	54,600	24 766	55,700	25 265	56,600	25 673
	61.2	185' 1"	56.41	100	30.48	46,200	20 955	47,100	21 364	47,900	21 727	48,800	22 135
	57.9	179' 2"	54.62	110	33.53	39,900	18 098	40,700	18 461	41,500	18 824	42,300	19 186
	54.5	172' 6"	52.58	120	36.58	34,600	15 694	35,400	16 057	36,200	16 420	36,900	16 737
	50.9	164' 10"	50.25	130	39.62	30,200	13 698	30,900	14 016	31,700	14 378	32,400	14 696
	47.1	156' 2"	47.60	140	42.67	26,400	11 974	27,100	12 292	27,800	12 609	28,500	12 927
	43.0	146' 2"	44.56	150	45.72	23,100	10 477	23,700	10 750	24,400	11 067	25,000	11 339
	38.6	134' 7"	41.03	160	48.77	20,300	9 207	20,900	9 480	21,500	9 752	22,100	10 024
	33.8	121' 0"	36.87	170	51.82	17,900	8 119	18,400	8 346	18,900	8 572	19,500	8 845
	28.2	104' 4"	31.80	180	54.86	15,800	7 166	16,300	7 393	16,700	7 574	17,200	7 801
	21.4	82' 8"	25.21	190	57.91	14,200	6 441	14,500	6 577	14,900	6 758	15,200	6 894
	11.2	48' 6"	14.78	200	60.96	10,600	4 808	10,800	4 898	11,100	5 034	11,500	5 216

① Load handled off main boom head sheaves with 10' (3.05 m) boom tip extension mounted on boom.

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

③ Measured from centerline of rotation to center of gravity of freely suspended load.

## TG-1900 lifting crane capacities — off boom tip extension<sup>①</sup> only

Refer to Notes page 15.

**Mounting** — pedestal, bogie, gantry or free standing tower with or without climbing frame.  
**Boom** — tubular; 75" x 75" (1.91 x 1.91 m) with 40' (12.19 m) base section, 40' (12.19 m) top section, 1 3/4" (44 mm) diameter boom pendants, with boom tip extension.

**Mast** — 43' 0 1/8" (13.11 m) over-all height.  
**Boom tip extension** — tubular; 14.800# (6 713 kg) rating; 10' (3.05 m) long.

**Counterweights** — Total 94,400# (42,820 kg). Includes one fixed counterweight — 23,600# (10,705 kg) plus one moving counterweight — 70,800# (32,115 kg) consisting of three sections weighing 23,600# (10,705 kg) each.

Boom <sup>①</sup>		Boom point height <sup>②</sup>		Load radius <sup>③</sup>		Capacities	
Length	Angle Degrees	Feet	meters	Feet	meters	Pounds	Kilograms
75.5	95° 8"	29.17	30	9.14	14,800	6 713	
72.2	94° 0"	28.65	35	10.67			
68.7	92° 0"	28.04	40	12.19			
66.6	87° 0"	26.52	50	15.24			
61.6	80° 2"	24.44	60	18.29			
59.8	71° 0"	21.64	70	21.34			
45.1	71° 2"	17.74	80	24.38			
34.7	58° 2"						
77.0	106° 0"	32.31	30	9.14	14,800	6 713	
74.0	104° 7"	31.88	35	10.67			
71.0	102° 10"	31.33	40	12.19			
64.7	98° 5"	29.99	50	15.24			
58.0	92° 6"	28.19	60	18.29			
50.8	84° 11"	25.88	70	21.34			
42.6	74° 10"	22.80	80	24.38			
32.8	61° 0"	18.59	90	27.43			
75.5	115° 0"	35.05	35	10.67	14,800	6 713	
72.8	113° 5"	34.56	40	12.19			
67.2	109° 6"	33.38	50	15.24			
61.3	104° 4"	31.79	60	18.29			
55.0	97° 8"	29.78	70	21.34			
48.2	89° 4"	27.22	80	24.38			
40.5	78° 6"	23.93	90	27.43			
31.1	63° 8"	19.42	100	30.48			
76.8	125° 5"	38.22	35	10.67	14,800	6 713	
74.3	124° 0"	37.80	40	12.19			
69.2	120° 5"	36.70	50	15.24			
63.9	115° 8"	35.27	60	18.29			
58.4	111° 11"	34.11	70	21.34			
52.4	102° 7"	31.27	80	24.38			
45.9	93° 6"	28.50	90	27.43			
38.6	81° 11"	24.96	100	30.48			
29.7	66° 2"	20.18	110	33.53			

<sup>①</sup>Load handled off peak sheave of 10' (3.05 m) boom tip extension mounted on boom.

<sup>②</sup>Measured vertically from center of boom tip extension peak sheave to base of turntable bearing mounting.

<sup>③</sup>Measured from centerline of rotation to center of gravity of freely suspended load.

Boom <sup>①</sup>		Boom point height <sup>②</sup>		Load radius <sup>③</sup>		Capacities	
Length	Angle Degree	Feet	meters	Feet	meters	Pounds	Kilograms
120'	(36.58 m)	120'	36.58	126' 11"	38.68	60	18.29
				121' 7"	37.06	70	21.34
				115' 1"	35.08	80	24.38
				107' 2"	32.67	90	27.43
				97' 6"	29.72	100	30.48
				85' 2"	25.97	110	33.53
				88' 8"	20.94	120	36.58
				72.3	144' 8"	40	12.19
				67.9	43' 19	50	15.24
				63.4	137' 11"	60	18.29
				58.6	133' 1"	70	21.34
				53.6	127' 2"	80	24.38
				48.2	120' 2"	90	27.43
				42.3	117' 8"	100	30.48
				35.5	101' 4"	110	33.53
				27.4	71' 1"	120	36.58
				73.5	155' 1"	40	12.19
				69.5	152' 4"	50	15.24
				65.3	148' 8"	60	18.29
				45.32	144' 4"	70	21.34
				43.98	60' 9	80	24.38
				42.34	138' 1"	90	27.43
				40.42	132' 7"	100	30.48
				38.10	125' 0"	110	33.53
				46.4	115' 11"	120	36.58
				40.7	104' 11"	130	39.62
				37.7	91' 4"	130	42.67
				34.2	27.83	130	39.62
				26.4	22.37	140	42.67
							6 668

(continued)

**TG-1900 lifting crane capacities — off boom tip extension<sup>①</sup> only**

Refer to Notes page 15.

Boom①		Boom point height②		Load radius③		Capacities	
Length	Angle Degree	Feet	meters	Feet	meters	Pounds	kilograms
190' (57.91 m)	77.8	204' 1"	62.21	50	15.24	14,700	6 668
	74.8	201' 6"	61.42	60	18.29		
	71.8	198' 4"	60.44	70	21.34		
	68.7	194' 6"	59.28	80	24.36		
	65.6	190' 1"	57.94	90	27.43		
	62.3	185' 0"	56.39	100	30.48		
	59.0	179' 2"	54.62	110	33.53		
	55.6	172' 7"	52.61	120	36.58		
	52.0	165' 0"	50.29	130	39.62		
	48.2	156' 4"	47.67	140	42.67		
200' (60.96 m)	44.1	146' 5"	44.65	150	45.72		
	39.8	135' 0"	41.15	160	48.77		
	34.9	121' 6"	37.03	170	51.82		
	29.4	105' 0"	32.00	180	54.86	14,700	6 668
	22.6	83' 8"	25.51	190	57.91	12,600	5 715
	78.4	214' 4"	65.32	50	15.24	14,700	6 668
	75.5	211' 10"	64.56	60	18.29		
	72.7	208' 10"	63.64	70	21.34		
	69.8	205' 4"	62.58	80	24.36		
	66.8	201' 1"	61.30	90	27.43		
200' (60.96 m)	63.8	196' 4"	59.83	100	30.48		
	60.7	190' 11"	58.19	110	33.53		
	57.4	184' 8"	56.30	120	36.58		
	54.1	177' 8"	54.16	130	39.62		
	50.6	169' 8"	51.72	140	42.67		
	46.9	160' 8"	48.98	150	45.72		
	43.0	150' 5"	45.84	160	48.77		
	38.7	138' 6"	42.21	170	51.82		
	34.0	124' 6"	37.95	180	54.86		
	28.7	107' 6"	32.77	190	57.91		
22.1	85' 7"	26.09	200	60.96			
				60.96			

Boom①		Boom point height②		Load radius③		Capacities 1-part hoist line	
Length	Angle Degree	Foot	meters	Foot	meters	Pounds	kilograms
150' (45.72 m)	78.3	165' 4"	50.38	40	12.19	14,700	6 668
	74.6	162' 8"	49.59	50	15.24	14	6 668
	70.8	159' 5"	48.59	60	18.29		
	66.9	155' 4"	47.34	70	21.34	14	6 668
	62.9	150' 5"	45.84	80	24.38		
	58.8	144' 6"	44.04	90	27.43	14	6 668
	54.4	137' 8"	41.97	100	30.48		
	49.8	129' 7"	39.50	110	33.53	14	6 668
	44.8	120' 0"	36.58	120	36.58		
	39.3	108' 6"	33.07	130	39.62	14	6 668
160' (48.77 m)	33.1	94' 2"	28.71	140	42.67		
	25.5	75' 7"	23.04	150	45.72	14,700	6 668
	75.5	173' 1"	52.76	50	15.24	14	6 668
	72.0	170' 0"	51.82	60	18.29		
	68.4	166' 2"	50.86	70	21.34	14	6 668
	64.7	161' 7"	49.26	80	24.38		
	60.8	156' 2"	47.61	90	27.43	14	6 668
	56.8	149' 11"	45.69	100	30.48		
	52.6	142' 7"	43.46	110	33.53	14	6 668
	48.2	134' 0"	40.84	120	36.58		
170' (51.82 m)	43.4	123' 11"	37.76	130	39.62	14	6 668
	38.1	111' 11"	34.11	140	42.67		
	32.0	97' 1"	29.60	150	45.72	14	6 668
	24.7	77' 8"	23.68	160	48.77		
	76.4	183' 6"	55.93	50	15.24	14,700	6 668
	73.0	180' 6"	55.02	60	18.29	14	6 668
	69.6	177' 0"	53.95	70	21.34		
	66.2	172' 8"	52.64	80	24.38	14	6 668
	62.6	167' 8"	51.11	90	27.43		
180' (54.86 m)	58.9	161' 11"	49.35	100	30.48	14	6 668
	55.1	155' 1"	47.27	110	33.53		
	51.0	147' 4"	44.90	120	36.58	14	6 668
	46.7	138' 4"	42.15	130	39.62		
	42.1	127' 8"	38.92	140	42.67	14	6 668
	36.9	115' 2"	35.11	150	45.72		
	31.1	99' 10"	30.42	160	48.77	14	6 668
	23.9	79' 8"	24.29	170	51.82		
	77.1	193' 10"	59.07	50	15.24	14,700	6 668
	74.0	191' 0"	58.22	60	18.29	14	6 668

① Load handled off peak sheave of 10' (3.05 m) boom tip extension mounted on boom.  
② Measured vertically from center of boom tip extension peak sheave to base of turntable bearing mounting.

## TG-1900 lifting crane notes for crane mounted on a 9' 9" x 9' 9" (2.97 x 2.97 m) tower with or without climbing frame, pedestal, or on a bogie or gantry.

### General notes:

1. Loads shown are in pounds 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 load handling equipment such as hook block, hook, sling, grapple, load weighing devices, etc.
2. The operator must make the following considerations when operating the crane:
  - a. 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.
  - b. Prevent shock or impact loading of the crane's structure especially when operating during low temperatures.
  - c. Effect of wind on loads with large surface areas.
3. Do not lift a load with a single part of main hoist line at boom angles greater than 84.0°.
4. Do not lift a load on the 10' (3.05 m) boom tip extension when the main hook is in use.
5. For each 10 feet (3.05 m) of boom foot height above the lowest hook position, the following deductions must be made from these lifting capacities:
 

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
6. If the 10' (3.05 m) boom tip extension is not attached to the boom, 2,400 pounds (1,089 kg) may be added to the main hoist lifting capacities but must not exceed the maximum rated capacity for the number of parts of line being used.
7. The boom hanger block is not required when using one part or two parts of main hoist line. If the hanger block is removed when using one part or two parts of main hoist line, 1,800 pounds (816 kg) may be added to these main hoist capacities but must not exceed the maximum rated capacity for the number of parts of line being used.

8. 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).
9. If the machine is swung 360° in the nonoperating condition, the machine, reeling, 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.
10. These capacities apply only to the machine as originally manufactured and normally equipped by FMC Corporation, Cable Crane and Excavator Division.

### 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 the traveling base 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 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 requirement 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.

### Tower mounted with climbing frame

#### Notes:

1. The maximum free standing tower height with a climbing frame is 162' 7½" (49.57 m) for boom lengths 80' (24.38 m) through 170' (51.82 m). For boom lengths greater than 170' (51.82 m) and for tower heights greater than 162' 7½" (49.57 m), consult manufacturer 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' - 160' (24.38 - 48.77 m)	Stow boom at maximum rated radius
170' (51.82 m)	Stow boom at horizontal position

### Tower mounted without climbing frame

#### Notes:

1. The maximum free standing tower height without a climbing frame is 162' 7½" (49.57 m) for boom lengths 80' (24.38 m) through 200' (60.96 m). For tower heights greater than 162' 7½" (49.57 m), consult manufacturer 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' - 160' (24.38 - 48.77 m)	Stow boom between a 60° boom angle and maximum rated radius
170' - 190' (51.82 - 57.91 m)	Stow boom at maximum rated radius
200' (60.96 m)	Stow boom at horizontal position

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





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**FMC Corporation**

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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)





## **Link-Belt® .TG-1900 jib capacities**

Refer to Notes page 5.

**Counterweights** — Total 94,400 lbs. (42,820 kg). Includes one fixed counterweight — 23,600 lbs. (10,705 kg) plus one three-section moving counterweight — 70,800 lbs. (32,115 kg).

**Boom** — tubular:  $75'' \times 75''$  ( $1.91 \times 1.91\text{ m}$ ) with  $40'$  ( $12.19\text{ m}$ ) base section,  $40'$  ( $12.19\text{ m}$ ) open throat top section and  $1\frac{3}{4}''$  ( $44\text{ mm}$ ) diameter boom pendants.

		Jib offset 15°							
Boom length	Jib length	Load radius		Boom angle		2-part load hoist line		1-part load hoist line	
		ft.	m	Degrees		Pounds	Kilograms	Pounds	Kilograms
30' (9.14 m)	30' (9.14 m)	35	10.67	80.4		29,600	13,426	14,800	6,713
		40	12.19	78.5		29,600	13,426		
		50	15.24	74.5		29,600	13,426		
		60	18.29	70.4		28,300	12,637		
		70	21.34	66.2		25,400	11,521		
	50' (15.24 m)	70	24.38	61.9		23,100	10,478		
		80	27.43	57.3		21,200	9,616		
		100	30.48	52.5		19,700	8,936		
		110	33.53	47.3		18,400	8,346		
		120	36.58	41.5		17,300	7,847		
50' (15.24 m)	50' (15.24 m)	130	39.62	35.0		16,500	7,484		
		140	42.67	26.9		15,900	7,212	14,800	6,713
		50	15.24	78.1		20,400	9,253	14,700	6,668
		60	18.29	74.5		18,100	8,210		
		70	21.34	70.9		16,200	7,348		
	70' (21.34 m)	80	24.38	67.2		14,700	6,668		
		90	27.43	63.3		13,500	6,124	14,600	6,623
		100	30.48	59.3		12,500	5,600	13,400	6,078
		110	33.53	55.1		11,600	5,262	12,500	5,670
		120	36.58	50.6		10,900	4,944	11,600	5,262
70' (21.34 m)	70' (21.34 m)	130	39.62	45.7		10,300	4,672	10,900	4,944
		140	42.67	40.3		9,700	4,400	10,400	4,717
		150	45.72	34.1		9,300	4,218	9,900	4,491
		160	48.77	26.5		9,000	4,082	9,500	4,309
		60	18.29	77.7		13,100	5,942	14,300	6,486
	30' (9.14 m)	70	21.34	74.5		11,700	5,307	12,700	5,761
		80	24.38	71.3		10,800	4,808	11,400	5,171
		90	27.43	67.9		9,800	4,355	10,400	4,717
		100	30.48	64.5		8,800	3,992	9,500	4,309
		110	33.53	60.9		8,200	3,720	8,800	3,992
130' (39.62 m)	70' (21.34 m)	120	36.58	57.1		7,800	3,447	8,100	3,674
		130	39.62	53.2		7,100	3,221	7,600	3,447
		140	42.67	48.9		6,700	3,039	7,100	3,221
		150	45.72	44.4		6,300	2,858	6,700	3,039
		160	48.77	39.3		6,000	2,722	6,400	2,903
	30' (9.14 m)	170	51.82	33.4		5,800	2,631	6,100	2,767
		180	54.86	26.2		5,600	2,540	5,900	2,676
		40	12.19	79.2		29,500	13,381	14,700	6,659
		50	15.24	75.5		29,500	13,381		
		60	18.29	71.7		29,300	13,290		
50' (15.24 m)	50' (15.24 m)	70	21.34	67.8		26,400	11,975		
		80	24.38	63.8		24,000	10,886		
		90	27.43	59.6		22,100	10,025		
		100	30.48	55.3		20,500	9,299		
		110	33.53	50.6		19,200	8,709		
	30' (9.14 m)	120	36.58	45.6		18,000	8,165		
		130	39.62	40.1		17,100	7,757		
		140	42.67	33.7		16,400	7,439		
		150	45.72	25.9		15,800	7,167	14,700	6,658

Jib offset 15°									
Boom length	Jib length	Load radius		Boom angle Degrees	2-part load hoist line		1-part load hoist line		Kilograms Pounds
		Fl.	m		Pounds	Kilograms	Pounds	Kilograms	
50' (15.24 m)	50' (15.24 m)	90	27.43	65.0	14,000	6,350	14,700	6,668	
		100	30.48	61.2	12,900	5,851	14,000	6,350	
		110	33.53	57.4	12,000	5,443	13,000	5,897	
		120	36.58	53.3	11,300	5,121	12,100	5,489	
		130	39.62	48.9	10,600	4,808	11,400	5,171	
	70' (21.34 m)	140	42.67	44.2	10,100	4,581	10,800	4,899	
		150	45.72	39.0	9,600	4,355	10,200	4,627	
		160	48.77	33.0	9,300	4,218	9,800	4,445	
		170	51.82	25.6	9,000	4,092	9,500	4,309	
		60	18.29	78.4	13,400	6,078	14,700	6,668	
130' (39.62 m)	70' (21.34 m)	70	21.34	75.4	12,000	5,443	13,100	5,942	
		80	24.38	72.3	10,900	4,944	11,800	5,352	
		90	27.43	69.1	9,900	4,491	10,700	4,854	
		100	30.48	65.9	9,100	4,128	9,800	4,445	
		110	33.53	62.5	8,400	3,870	9,100	4,128	
		120	36.58	59.1	7,900	3,583	8,400	3,810	
		130	39.62	55.4	7,400	3,357	7,900	3,583	
		140	42.67	51.6	6,900	3,130	7,400	3,357	
		150	45.72	47.5	6,500	2,948	7,000	3,175	
		160	48.77	43.1	6,200	2,812	6,600	2,994	
30' (9.14 m)	30' (9.14 m)	170	51.82	38.1	6,000	2,722	6,300	2,858	
		180	54.86	32.4	5,700	2,586	6,100	2,767	
		190	57.91	25.3	5,600	2,540	5,900	2,676	
		40	12.19	79.9	29,500	13,381	14,700	6,668	
		50	15.24	76.4	29,500	13,381	14,700	6,668	
		60	18.29	72.8	28,500	13,381	14,700	6,668	
		70	21.34	69.2	27,300	12,383	14,700	6,668	
		80	24.38	65.6	24,900	11,295	14,700	6,668	
		90	27.43	61.6	22,900	10,387	14,700	6,668	
		100	30.48	57.6	21,300	9,662	14,700	6,668	
140' (42.67 m)	50' (15.24 m)	110	33.53	53.4	19,900	9,027	14,700	6,668	
		120	36.58	48.9	18,700	8,482	14,700	6,668	
		130	39.62	44.1	17,700	8,029	14,700	6,668	
		140	42.67	38.6	16,900	7,666	14,700	6,668	
		150	45.72	32.6	16,300	7,394	14,700	6,668	
		160	48.77	25.1	15,800	7,167	14,700	6,668	
		50	15.24	79.4	21,400	9,707	14,700	6,668	
		60	18.29	76.2	19,100	8,664	14,700	6,668	
		70	21.34	73.0	17,200	7,802	14,700	6,668	
		80	24.38	69.8	15,700	7,122	14,700	6,668	
70' (21.34 m)	50' (15.24 m)	90	27.43	66.4	14,400	6,552	14,700	6,668	
		100	30.48	63.0	13,300	6,038	14,500	6,577	
		110	33.53	59.4	12,400	5,625	13,400	6,078	
		120	36.58	55.6	11,700	5,307	12,600	5,715	
		130	39.62	51.7	11,000	4,907	11,800	5,352	
		140	42.67	47.5	10,400	4,717	11,200	5,080	
		150	45.72	42.9	9,900	4,491	10,600	4,808	
		160	48.77	37.8	9,500	4,309	10,100	4,581	
		170	51.82	32.0	9,200	4,173	9,700	4,400	
		180	54.86	24.8	9,000	4,002	9,500	4,309	

(continued)

# TG-1900 jib capacities

Refer to Notes page 5.

Boom length	Jib length	Load radius Ft. m	Boom angle Degrees	Jib offset 15°			Jib offset 15°		
				2-part load hoist line		1-part load hoist line	2-part load hoist line		1-part load hoist line
				Pounds	Kilograms	Pounds	Kilograms	Pounds	Kilograms
140' (42.67 m)	70' (21.34 m)	80	24.38	73.2	11,100	5,035	12,100	5,489	14,700
		90	27.43	70.2	10,200	4,627	11,100	5,035	14,700
		100	30.48	67.2	9,400	4,264	10,200	4,627	14,700
		110	33.53	64.0	9,496	4,264	9,400	4,264	14,700
		120	36.58	60.8	8,100	3,674	8,700	3,946	14,700
		130	39.62	57.4	7,600	3,447	8,200	3,720	14,700
		140	42.67	53.9	7,100	3,221	7,700	3,493	14,700
		150	45.72	50.2	6,800	3,084	7,200	3,266	14,700
		160	48.77	46.2	6,400	2,903	6,900	3,130	14,700
		170	51.82	41.9	6,100	2,767	6,500	2,948	14,700
150' (45.72 m)	50' (15.24 m)	80	24.38	54.86	37.0	5,900	2,676	6,300	2,858
		90	27.43	51.5	5,700	2,586	6,000	2,722	14,700
		100	30.48	48.77	56.00	2,540	5,900	2,676	14,700
		110	33.53	44.6	56.00	2,540	5,900	2,676	14,700
		120	36.58	41.82	56.00	2,540	5,900	2,676	14,700
		130	39.62	37.0	56.00	2,540	5,900	2,676	14,700
		140	42.67	42.7	56.00	2,540	5,900	2,676	14,700
		150	45.72	37.6	56.00	2,540	5,900	2,676	14,700
		160	48.77	31.6	56.00	2,540	5,900	2,676	14,700
		170	51.82	24.3	56.00	2,540	5,900	2,676	14,700
170' (21.34 m)	70' (21.34 m)	80	12.19	80.4	29,500	13,381	14,700	6,668	14,700
		90	15.24	77.2	29,500	13,381	14,700	6,668	14,700
		100	18.29	73.8	29,500	13,381	14,700	6,668	14,700
		110	21.34	70.4	28,200	12,792	14,700	6,668	14,700
		120	24.38	67.0	25,800	11,703	14,700	6,668	14,700
		130	27.43	63.4	23,800	10,796	14,700	6,668	14,700
		140	30.48	59.7	22,100	10,025	14,700	6,668	14,700
		150	33.53	55.8	20,600	9,344	14,700	6,668	14,700
		160	36.58	51.8	19,400	8,800	14,700	6,668	14,700
		170	40.72	47.4	18,400	8,346	14,700	6,668	14,700
180'	50' (15.24 m)	80	24.38	42.7	17,500	7,936	14,700	6,668	14,700
		90	27.43	37.6	16,700	7,575	14,700	6,668	14,700
		100	30.48	34.8	16,200	7,348	14,700	6,668	14,700
		110	33.53	31.6	16,200	7,122	14,700	6,668	14,700
		120	36.58	28.8	16,100	7,030	14,700	6,668	14,700
		130	39.62	26.0	17,700	8,029	14,700	6,668	14,700
		140	42.67	23.2	19,500	8,845	14,700	6,668	14,700
		150	45.72	20.4	21,800	9,888	14,700	6,668	14,700
		160	48.77	17.6	21,800	9,888	14,700	6,668	14,700
		170	51.82	14.8	21,800	9,888	14,700	6,668	14,700
190'	50' (15.24 m)	80	15.24	79.9	21,800	9,888	14,700	6,668	14,700
		90	18.29	76.9	19,500	8,845	14,700	6,668	14,700
		100	21.34	73.9	17,700	8,029	14,700	6,668	14,700
		110	24.38	70.8	16,100	7,303	14,700	6,668	14,700
		120	27.43	67.7	14,900	6,759	14,700	6,668	14,700
		130	30.48	64.5	13,800	6,260	14,700	6,668	14,700
		140	33.53	61.1	12,800	5,806	13,900	6,305	14,700
		150	36.58	57.6	12,000	5,443	13,000	5,897	14,700
		160	39.62	54.0	11,400	5,171	12,200	5,534	14,700
		170	42.67	50.2	10,800	4,899	11,500	5,216	14,700
200'	50' (15.24 m)	80	24.38	46.1	10,200	4,627	11,000	4,990	14,700
		90	27.43	41.7	9,800	4,445	10,500	4,763	14,700
		100	30.48	38.8	9,400	4,264	10,000	4,536	14,700
		110	33.53	35.1	9,100	4,128	9,700	4,309	14,700
		120	36.58	31.1	9,100	4,082	9,500	4,309	14,700
		130	39.62	27.9	9,500	4,082	9,700	4,400	14,700
		140	42.67	24.8	10,000	4,804	14,700	6,668	14,700
		150	45.72	21.7	12,600	5,715	13,700	6,214	14,700
		160	48.77	18.6	11,400	5,171	12,500	5,670	14,700
		170	51.82	15.5	10,500	4,763	11,400	5,171	14,700
210'	50' (15.24 m)	80	24.38	40.7	12,600	5,715	13,700	6,214	14,700
		90	27.43	37.4	11,400	5,171	12,500	5,670	14,700
		100	30.48	34.2	10,500	4,763	10,500	4,763	14,700
		110	33.53	30.9	9,700	4,082	9,500	4,309	14,700
		120	36.58	27.8	8,400	3,810	9,000	4,082	14,700
		130	39.62	24.6	7,800	3,538	8,400	3,810	14,700
		140	42.67	21.4	7,400	3,357	7,900	3,583	14,700
		150	45.72	18.2	7,000	3,175	7,500	3,402	14,700
		160	48.77	15.0	6,600	2,994	7,100	3,221	14,700
		170	51.82	11.8	6,300	2,858	6,800	3,084	14,700
220'	50' (15.24 m)	80	24.38	40.7	6,100	2,767	6,500	2,948	14,700
		90	27.43	37.4	5,700	2,631	6,200	2,631	14,700
		100	30.48	34.2	5,100	4,763	5,600	4,601	14,700
		110	33.53	30.9	4,900	4,082	5,700	4,309	14,700
		120	36.58	27.8	4,400	3,810	5,200	4,082	14,700
		130	39.62	24.6	3,800	3,538	4,700	3,810	14,700
		140	42.67	21.4	3,400	3,357	4,200	3,583	14,700
		150	45.72	18.2	3,000	3,175	3,700	3,402	14,700
		160	48.77	15.0	2,600	2,994	3,200	3,221	14,700
		170	51.82	11.8	2,300	2,858	2,800	3,084	14,700
230'	50' (15.24 m)	80	24.38	40.7	2,100	2,631	2,600	2,631	14,700
		90	27.43	37.4	1,700	4,763	1,600	4,601	14,700
		100	30.48	34.2	1,500	4,082	1,400	3,810	14,700
		110	33.53	30.9	1,300	3,810	1,200	3,538	14,700
		120	36.58	27.8	1,100	3,538	1,000	3,357	14,700
		130	39.62	24.6	900	3,357	800	3,175	14,700
		140	42.67	21.4	700	3,175	600	3,084	14,700
		150	45.72	18.2	500	2,994	400	3,084	14,700
		160	48.77	15.0	300	2,858	200	3,084	14,700
		170	51.82	11.8	200	2,631	100	2,631	14,700
240'	50' (15.24 m)	80	24.38	40.7	180	4,763	160	4,601	14,700
		90	27.43	37.4	140	4,082	120	3,810	14,700
		100	30.48	34.2	120	3,810	80	3,538	14,700
		110	33.53	30.9	100	3,538	60	3,357	14,700
		120	36.58	27.8	80	3,357	40	3,175	14,700
		130	39.62	24.6	60	3,175	20	3,084	14,700
		140	42.67	21.4	40	2,994	10	2,812	14,700
		150	45.72	18.2	20	2,858	0	2,631	14,700
		160	48.77	15.0	10	2,631	0	2,631	14,700
		170	51.82	11.8	0	2,631	0	2,631	14,700
250'	50' (15.24 m)	80	24.38	40.7	180	4,763	160	4,601	14,700
		90	27.43	37.4	140	4,082	120	3,810	14,700
		100	30.48	34.2	120	3,810	80	3,538	14,700
		110	33.53	30.9	100	3,538	60	3,357	14,70

# TG-1900 jib capacities

Refer to Notes page 5.

Jib offset 15°									
Boom length	Jib length	Load radius	Boom angle	2-part load hoist line		1-part load hoist line		Jib offset 15° hoist line	
				Pounds	kilograms	Pounds	kilograms	Pounds	kilograms
50' (15.24 m)	30' (9.14 m)	160	48.77	40.4	17,100	7,757	14,700	6,668	6,623
		170	51.82	35.5	16,500	7,484		6,350	6,623
		180	54.86	29.9	16,000	7,258		6,24	6,486
		190	57.91	22.9	15,700	7,122	14,700	6,668	6,078
		60	16.29	78.2	20,400	9,253	14,700	6,668	5,761
	50' (15.24 m)	70	21.34	75.5	18,500	8,392		50'	5,443
		80	24.38	72.7	17,000	7,771		(15.24 m)	5,216
		90	27.43	69.9	15,700	7,122			4,990
		100	30.48	67.0	14,600	6,623			4,763
		110	33.53	64.1	13,600	6,169	14,700	6,668	4,627
60' (18.82 m)	30' (9.14 m)	120	36.58	61.0	12,800	5,806	13,900	6,305	10,200
		130	39.62	57.9	12,000	5,443	13,000	5,897	9,800
		140	42.67	54.6	11,400	5,171	12,300	5,579	9,600
		150	45.72	51.2	10,900	4,944	11,700	5,305	9,400
		160	48.77	47.6	10,400	4,717	11,100	5,035	9,000
	60' (18.82 m)	170	51.82	43.7	10,000	4,536	10,700	4,854	8,500
		180	54.86	39.5	9,600	4,355	10,200	4,627	8,000
		190	57.91	34.8	9,300	4,218	9,900	4,491	7,500
		200	60.96	29.5	9,100	4,128	9,600	4,355	7,000
		210	64.01	22.8	8,900	4,037	9,400	4,264	6,500
70' (21.34 m)	30' (9.14 m)	60	16.29	80.4	14,400	6,532	14,600	6,623	6,623
		70	21.34	77.9	13,100	5,942	14,400	6,532	6,033
		80	24.38	75.4	11,900	5,398	13,100	5,942	5,579
		90	27.43	72.9	11,000	4,990	12,000	5,443	5,126
		100	30.48	70.3	10,100	4,581	11,100	5,035	4,763
	70' (21.34 m)	110	33.53	67.6	9,400	4,264	10,300	4,672	4,445
		120	36.58	64.9	8,800	3,992	9,600	4,355	4,173
		130	39.62	62.1	8,300	3,765	9,000	4,082	3,946
		140	42.67	59.2	7,800	3,568	8,400	3,810	3,720
		150	45.72	56.3	7,400	3,357	8,000	3,626	3,538
80' (18.86 m)	30' (9.14 m)	160	48.77	53.2	7,000	3,175	7,600	3,447	7,400
		170	51.82	49.9	6,700	3,039	7,200	3,266	7,000
		180	54.86	46.5	6,400	2,903	6,900	3,130	6,500
		190	57.91	42.8	6,100	2,767	6,600	2,994	6,000
		200	60.96	38.7	5,900	2,676	6,300	2,858	5,500
	80' (18.86 m)	210	64.01	34.3	5,700	2,586	6,100	2,767	5,000
		220	67.06	29.1	5,600	2,540	5,900	2,676	4,500
		230	70.10	22.6	5,500	2,495	5,800	2,631	4,000
		50	15.24	79.0	29,400	13,336	14,700	6,668	3,500
		60	18.29	76.2	29,400	13,336			3,000
90' (24.38 m)	30' (9.14 m)	70	21.34	73.4	29,400	13,336			2,500
		80	24.38	70.5	28,000	12,792			2,000
		90	27.43	67.5	26,000	11,793			1,500
		100	30.48	64.5	24,200	10,977			1,000
		110	33.53	61.3	22,700	10,297			500
	90' (24.38 m)	120	36.58	58.1	21,400	9,707			500
		130	39.62	54.8	20,200	9,163			500
		140	42.67	51.2	19,200	8,709			500
		150	45.72	47.5	18,300	8,301			500
		160	48.77	43.6	17,600	7,983			500
100' (27.43 m)	30' (9.14 m)	170	51.82	39.3	16,900	7,666			500
		180	54.86	34.5	16,400	7,439			500
		190	57.91	29.1	15,900	7,212			500
		200	60.96	22.3	14,600	6,623			500
	100' (27.43 m)	50	18.29	78.7	20,800	9,435	14,600	6,623	6,668
		60	21.34	76.1	18,900	8,573	16,900	6,623	6,623
		70	24.38	73.5	17,400	7,693	14,600	6,623	6,260
		80	27.43	70.8	16,000	7,258	14,600	6,623	5,942

(continued)

## TG-1900 jib capacities

Refer to Notes page 5.

Boom length	Jib length	Jib offset 15°						Jib offset 15°					
		2-part load hoist line			1-part load hoist line			2-part load hoist line			1-part load hoist line		
		Load radius Ft. <i>m</i>	Boom angle Degrees	Pounds Kilograms	Pounds Kilograms	Boom length	Jib length 30' (9.14 m)	Load radius Ft. <i>m</i>	Boom angle Degrees	Pounds Kilograms	Pounds Kilograms	Load radius Ft. <i>m</i>	Boom angle Degrees
50' (15.24 m)	190	150	45.72	55.1	11,500	5,216	12,400	5,625	200	60.96	32.9	14,400	6,532
		160	48.77	52.0	10,900	4,944	11,800	5,352	210	64.01	27.7	11,700	5,307
		170	51.82	48.8	10,500	4,763	11,300	5,126	220	67.06	21.2	8,700	3,946
		180	54.86	45.3	10,100	5,581	10,800	4,699				19,600	8,891
		190	57.91	41.6	9,700	4,400	10,400	4,717	70	21.34	77.3	18,100	8,210
	210	200	60.96	37.6	9,400	4,264	10,100	4,581	80	24.38	74.9	16,800	7,620
		210	64.01	33.2	9,200	4,173	9,800	4,445	90	27.43	72.4		
		220	67.06	28.0	9,000	4,082	9,500	4,309	100	30.48	70.0	15,600	7,076
		230	70.10	21.7	8,900	4,037	9,400	4,264	110	33.53	67.4	14,600	6,623
		70	21.34	78.9	13,500	6,124	14,600	6,623	120	36.58	64.9	13,800	6,260
190' (57.91 m)	120	80	24.38	76.6	12,400	5,625	13,600	6,169	130	39.62	62.2	13,000	5,897
		90	27.43	74.3	11,400	5,171	12,500	5,670	140	42.67	59.5	12,300	5,579
		100	30.48	71.9	10,600	4,808	11,600	5,262	150	45.72	56.7	11,700	5,307
		110	33.53	69.5	9,900	4,491	10,800	4,899	160	48.77	53.8	11,200	5,080
		120	36.58	67.0	9,200	4,173	10,100	4,581	170	51.82	50.8	10,700	4,854
	140	130	39.62	64.5	8,700	3,946	9,500	4,309	180	54.86	47.7	10,300	4,672
		140	42.67	61.9	8,200	3,720	8,900	4,037	190	57.91	44.3	10,000	4,536
		150	45.72	59.3	7,900	3,538	8,400	3,810	200	60.96	40.7	9,600	4,355
		160	48.77	56.6	7,400	3,357	8,000	3,629	210	64.01	36.8	9,400	4,264
		170	51.82	53.7	7,000	3,175	7,600	3,447	220	67.06	32.4	9,100	4,128
70' (21.34 m)	180	180	54.86	50.8	6,700	3,039	7,300	3,311	230	70.10	27.4	9,000	4,082
		190	57.91	47.7	6,400	2,903	7,000	3,175	240	73.15	21.1	7,300	3,311
		200	60.96	44.4	6,200	2,812	6,700	3,039				8,000	3,629
		210	64.01	40.9	6,000	2,712	6,400	2,903					
		220	67.06	37.0	5,800	2,631	6,200	2,812					
	230	230	70.10	32.7	5,700	2,586	6,000	2,721					
		240	73.15	27.8	5,600	2,540	5,900	2,676					
		250	76.20	21.6	5,500	2,495	5,800	2,631					
		50	15.24	80.0	29,300	13,290	14,600	6,623					
		60	18.29	77.5	72.2	29,300	13,290						
200' (60.96 m)	70	70	21.34	74.9	74.9	29,300	13,290						
		80	24.38	72.2	72.2	29,300	13,290						
		90	27.43	69.6	69.6	27,400	12,429						
		100	30.48	66.9	66.9	25,600	11,612						
		110	33.53	64.1	24,000	10,886							
	120	120	36.58	61.2	22,600	10,251							
		130	39.62	58.3	21,400	9,707							
		140	42.67	55.2	20,300	9,208							
		150	45.72	52.1	19,400	8,800							
		160	48.77	48.7	18,600	8,437							
30' (9.14 m)	170	170	51.82	45.2	17,800	8,074							
		180	54.86	41.5	17,200	7,802							
		190	57.91	37.4	16,700	7,575							
		200	60.96	30.0	14,600	6,623							
		210	64.01	27.0	14,600	6,623							
(21.34 m)													

## TG-1900 jib capacities

Refer to Notes below.

### Notes — jib capacities

1. Loads shown are maximum permissible 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 the weight of the load handling equipment such as the hook, block, hook, slings, grapple, load weighing devices, etc.
  2. The operator must make the following considerations when operating the crane:
    - a. Make certain the actual load radius is not greater than the radius specified on the capacity chart for the load to be lifted. The load radius is measured from the center of the tower's base section to the center of gravity of the freely suspended load. The operator must make allowances for increases in the load radius caused by stretching of the boom suspension and deflection of the boom and tower.
    - b. Prevent shock or impact loading of the crane's structure especially when operating during low temperatures.
    - c. Effect of wind, especially on loads with large surface areas.
    3. Do not lift a load with the main hoist and a load with the auxiliary hoist at the same time.
    4. For each 10 feet boom foot height above the lowest hook position, the following deductions must be made from these capacities:
  5. 30 lbs. (13.67 kg) when using 1 part of auxiliary hoist line  
20 lbs. (9.07 m) when using 2 parts of auxiliary hoist line  
If the 30" (.076 m) x 36" (.091 m) jib is attached to the boom, the following deductions must be made from the main hoist lifting capacities:
- | Jib Length    | Deduction           |
|---------------|---------------------|
| 30' (9.14 m)  | —                   |
| 50' (15.24 m) | 2500 lbs. (1134 kg) |
| 70' (21.34 m) | 4000 lbs. (1814 kg) |

<u>Tower Height</u>	<u>Boom Position</u>
80'-160' (24.38-48.77 m)	Stow boom between a 60° boom angle and maximum rated radius Stow boom at horizontal position
170'-190' (51.82 m-57.91 m)	maximum rated radius Stow boom at horizontal position
200' (60.96 m)	

**RAIL MOUNTED WITH TRAVELING BASE**

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 operator 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, ground conditions, boom length, and proper operating speeds for the existing conditions.
2. The operator must make certain the actual load radius is not greater than the radius specified on the capacity chart for the load to be lifted. The load radius is measured from the center of the traveling base to the center of gravity of the freely suspended load. The operator must make allowances for increases in the load radius caused by stretching of the boom suspension and deflection of the boom and traveling base. The operator must make certain that all specified ballast is properly assembled to the traveling base. Ballast may be necessary to meet the stability requirement as specified on the working areas and ballast requirement plate.
3. For these lifting capacities, the operator must make certain that all specified ballast is properly assembled to the traveling base. Ballast may be necessary to meet the stability requirement as specified on the working areas and ballast requirement plate.
4. Use caution when approaching the rail stops with the crane bumpers. Excessive speed at contact may result in crane instability and/or failure of the rail stops.
5. When the crane is in the nonoperating condition, the boom must be stowed as listed in the following chart based on tower height:

<u>Tower Height</u>	<u>Boom Position</u>
80'-160' (24.38-48.77 m)	Stow boom at maximum rated radius Stow boom at horizontal position
170' (51.80 m)	

**TOWER MOUNTED WITH CLIMBING FRAME**

1. The maximum free standing tower height with a climbing frame and 170' (51.82 m) boom is 162'-7½" (49.56 m). For tower heights greater than 162'-7½" (49.56 m), consult manufacturer for additional requirements for the crane.
2. When the crane is in the nonoperating condition, the boom must be stowed as listed in the following chart based on tower height:





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