

# STERLING CRANE



LIFTING CHARTS - Hydraulic Truck Cranes

GROVE MODEL TMS875C - 75 TON CAPACITY

## Working Range



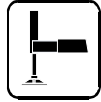
36-110 ft.  
(10.9-33.5 m)



31-56 ft.  
(9.4-17 m)



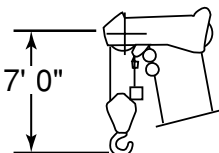
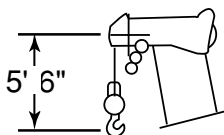
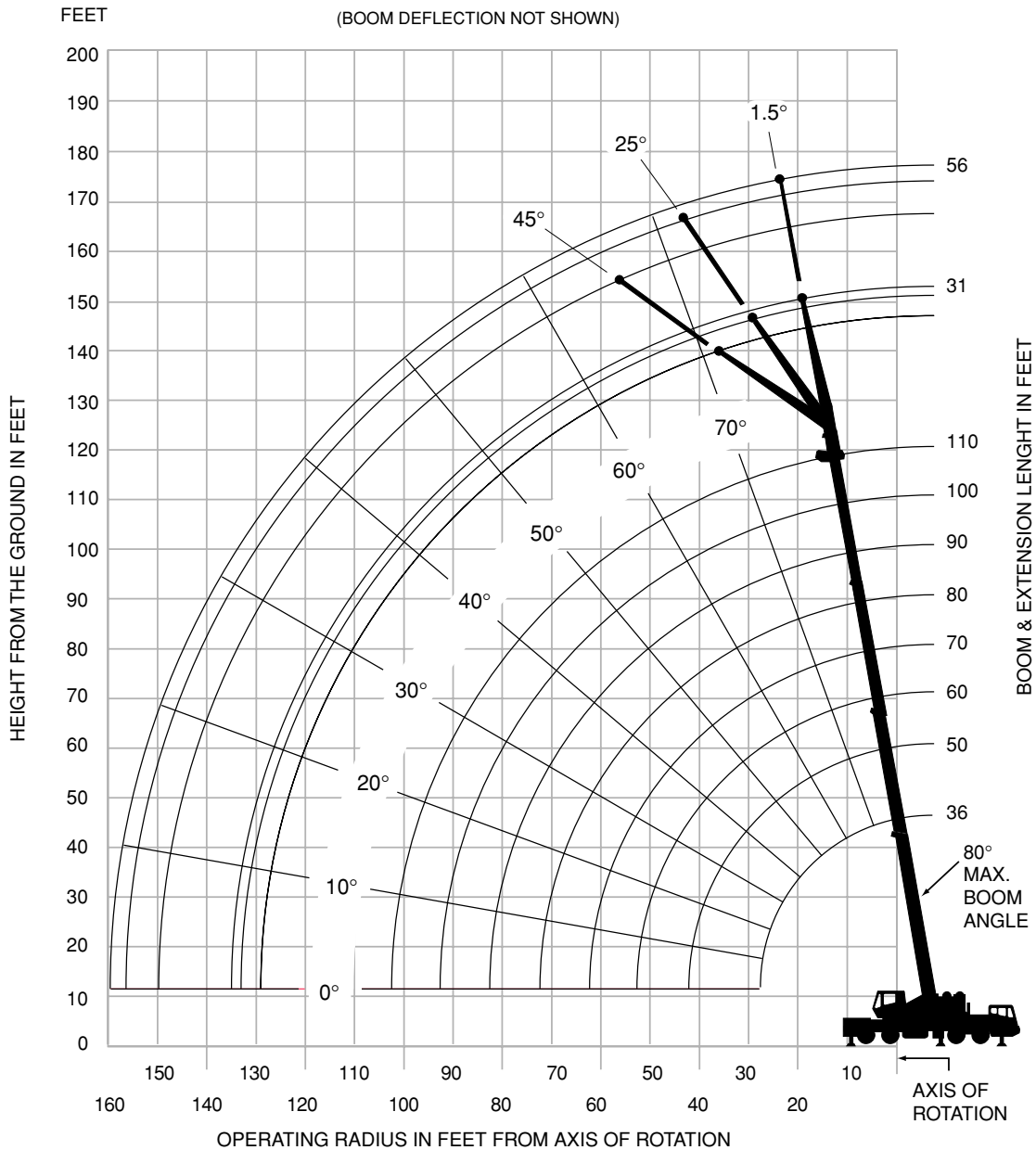
18,000 lbs.  
(8165 kg)



100%



360°



DIMENSIONS ARE FOR LARGEST GROVE FURNISHED HOOK BLOCK AND HEADACHE BALL, WITH ANTI-TWO BLOCK ACTIVATED.

# STERLING CRANE

## RATED LIFTING CAPACITIES IN POUNDS WITH 18,000 LB. COUNTERWEIGHT 36 FT. - 110 FT. BOOM

### ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Feet	#0501							
	Main Boom Length in Feet							
	36	50	*60	70	80	90	100	110
10	150,000+ (68)	109,500 (75)	84,200 (78)	**56,450 (80)				
12	110,500 (64)	104,500 (72.5)	79,850 (76)	56,450 (78.5)				
15	96,800 (58.5)	91,400 (69)	73,900 (73)	56,450 (76)	56,500 (78.5)	**47,850 (80)		
20	78,750 (47)	75,300 (62)	59,600 (67.5)	56,450 (71.5)	50,950 (74.5)	41,000 (77)	40,350 (79)	**27,350 (80)
25	59,800 (32.5)	59,750 (55)	50,000 (62.5)	48,900 (67)	43,800 (71)	35,250 (73.5)	34,750 (76)	27,350 (78.5)
30		47,300 (47)	42,300 (56.5)	41,900 (62.5)	38,300 (67)	31,050 (70.5)	30,450 (73)	27,350 (75.5)
35		38,550 (37.5)	36,950 (50)	36,400 (57.5)	33,900 (63)	27,650 (67)	27,000 (70)	25,300 (72.5)
40		28,450 (24.5)	28,450 (43)	29,700 (52)	30,300 (58.5)	24,350 (63)	24,250 (67)	22,900 (70)
45			23,400 (34.5)	24,650 (46.5)	25,550 (54)	22,050 (59.5)	21,900 (63.5)	20,850 (67)
50			19,450 (23)	20,700 (39.5)	21,600 (49)	20,050 (55.5)	19,950 (60)	19,100 (64)
55				17,500 (32)	18,450 (43.5)	18,350 (51)	18,300 (56.5)	17,550 (61)
60				14,900 (21)	15,850 (37.5)	16,550 (46.5)	16,850 (53)	16,200 (57.5)
65					13,650 (30)	14,350 (41.5)	14,900 (49)	15,050 (54.5)
70					11,650 (20)	12,500 (35.5)	13,050 (44.5)	13,500 (50.5)
75						10,900 (29)	11,450 (39.5)	11,900 (47)
80						9,480 (19)	10,000 (34.5)	10,500 (43)
85							8,790 (28)	9,260 (38.5)
90							7,690 (18.5)	8,150 (33)
95								7,170 (27)
100								6,280 (18.5)
Minimum boom angle (deg.) for indicated length (no load)								0
Maximum boom length (ft.) at 0 degree boom angle (no load)								110

NOTE: ( ) Boom angles are in degrees.

#LMI operating code. Refer to LMI manual for instructions.

\*\*This capacity is based on maximum boom angle.

Lifting Capacities On Outriggers Fully Extended - 360° At Zero Degree Boom Angle								
Boom Angle	Main Boom Length in Feet							
	36	50	*60	70	80	90	100	110
0°	27,600 (28.3)	16,200 (42.8)	11,350 (53.1)	9,150 (62.8)	7,410 (72.8)	6,040 (82.8)	4,950 (92.8)	4,060 (102.8)

NOTE: ( ) Reference radii in feet.

A6-829-100857

\*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.

+12 parts line required to lift this capacity (using aux. boom nose). Refer to Operator's and Safety Handbook for reeving diagram.

# STERLING CRANE

## 31 FT. - 56 FT. FOLDING BOOM EXTENSION WITH 18,000 LB. COUNTERWEIGHT

### ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Feet	31 FT. LENGTH			56 FT. LENGTH		
	#0521	#0522	#0523	#0541	#0542	#0543
	1.5° OFFSET	25° OFFSET	45° OFFSET	1.5° OFFSET	25° OFFSET	45° OFFSET
25	*12,900 (80)					
30	12,900 (78.5)					
35	12,900 (76.5)	8,340 (79.5)		8,220 (79.5)		
40	12,750 (74.5)	8,020 (77.5)	*6,370 (80)	8,220 (78)		
45	12,350 (72.5)	7,730 (76)	6,300 (79)	8,220 (76.5)		
50	11,500 (70.5)	7,390 (74)	6,250 (77)	8,220 (75)	*4,780 (80)	
55	10,950 (68.5)	7,130 (72)	6,190 (74.5)	8,220 (74)	4,640 (79.5)	
60	10,400 (66.5)	6,870 (69.5)	6,120 (72)	8,220 (72)	4,490 (78)	
65	9,960 (64)	6,660 (67.5)	6,090 (69.5)	8,220 (70)	4,340 (76)	*3,770 (80)
70	9,480 (61.5)	6,450 (65)	6,050 (67)	8,080 (68)	4,190 (74)	3,740 (78)
75	9,060 (59)	6,280 (62.5)	6,050 (64.5)	7,650 (66)	4,070 (72)	3,720 (76)
80	8,630 (56.5)	6,110 (60)	6,050 (62)	7,220 (64)	3,940 (70)	3,700 (73.5)
85	8,270 (54)	5,970 (57.5)	6,050 (59)	6,870 (62)	3,830 (67.5)	3,700 (71.5)
90	7,900 (51)	5,840 (54.5)	6,050 (56)	6,530 (60)	3,730 (65.5)	3,700 (69)
95	7,580 (48.5)	5,740 (51.5)		6,130 (58)	3,640 (63.5)	3,700 (66.5)
100	7,060 (45.5)	5,650 (48.5)		5,730 (55.5)	3,550 (61)	3,700 (64)
110	5,600 (38.5)	5,510 (41.5)		5,060 (51)	3,420 (56)	3,480 (59)
120	4,400 (30.5)			4,510 (46)	3,320 (51)	
130	3,400 (18.5)			4,050 (40)	3,280 (45)	
140				3,190 (33.5)	2,320 (37.5)	
150				2,460 (24.5)		
<b>No Load Stability Data</b>						
Minimum boom angle (deg.) for indicated length	2	25	45	2	25	45
Maximum boom length (ft.) at 0 deg. boom angle	110			110		

NOTE: ( ) Boom angles are in degrees.

#LMI operating code. Refer to LMI manual for operating instructions.

\*This capacity is based on maximum boom angle.

A6-829-015081

- All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765 NOV93.
- 31 ft. and 56 ft. folding boom extension lengths may be used for single line lifting service only.
- For main boom lengths less than 110 ft., rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is set up. For boom angles not shown, use rating of the next lower boom angle.
- WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.

# STERLING CRANE

## RATED LIFTING CAPACITIES IN POUNDS WITH 8,500 LB. COUNTERWEIGHT 36 FT. - 110 FT. BOOM

### ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Feet	#0001							
	Main Boom Length in Feet							
	36	50	*60	70	80	90	100	110
10	150,000+ (68)	109,500 (75)	84,200 (78)	**56,450 (80)				
12	110,500 (64)	104,500 (72.5)	79,850 (76)	56,450 (78.5)				
15	96,800 (58.5)	91,400 (69)	73,900 (73)	56,450 (76)	56,500 (78.5)	**47,850 (80)		
20	72,000 (47)	71,850 (62)	59,600 (67.5)	56,450 (71.5)	50,950 (74.5)	41,000 (77)	40,350 (79)	**27,350 (80)
25	54,450 (32.5)	54,350 (55)	50,000 (62.5)	48,900 (67)	43,800 (71)	35,250 (73.5)	34,750 (76)	27,350 (78.5)
30		42,900 (47)	42,300 (56.5)	41,900 (62.5)	38,300 (67)	31,050 (70.5)	30,450 (73)	27,350 (75.5)
35		32,300 (37.5)	32,600 (50)	33,900 (57.5)	33,900 (63)	27,650 (67)	27,000 (70)	25,300 (72.5)
40		24,300 (24.5)	25,450 (43)	26,500 (52)	27,450 (58.5)	24,350 (63)	24,250 (67)	22,900 (70)
45			20,350 (34.5)	21,200 (46.5)	22,150 (54)	22,050 (59.5)	21,900 (63.5)	20,850 (67)
50			16,300 (23)	17,250 (39.5)	18,150 (49)	19,100 (55.5)	19,450 (60)	19,100 (64)
55				14,150 (32)	15,050 (43.5)	15,950 (51)	16,300 (56.5)	16,700 (61)
60				11,600 (21)	12,600 (37.5)	13,400 (46.5)	13,800 (53)	14,150 (57.5)
65					10,550 (30)	11,400 (41.5)	11,750 (49)	12,150 (54.5)
70					8,830 (20)	9,720 (35.5)	10,050 (44.5)	10,450 (50.5)
75						8,300 (29)	8,670 (39.5)	9,060 (47)
80						7,070 (19)	7,460 (34.5)	7,850 (43)
85							6,420 (28)	6,810 (38.5)
90							5,510 (18.5)	5,900 (33)
95								5,100 (27)
100								4,390 (18.5)
Minimum boom angle (deg.) for indicated length (no load)								0
Maximum boom length (ft.) at 0 degree boom angle (no load)								110

NOTE: ( ) Boom angles are in degrees.

#LMI operating code. Refer to LMI manual for instructions.

\*\*This capacity is based on maximum boom angle.

Lifting Capacities On Outriggers Fully Extended - 360° At Zero Degree Boom Angle								
Boom Angle	Main Boom Length in Feet							
	36	50	*60	70	80	90	100	110
0°	27,600 (28.3)	16,200 (42.8)	11,350 (53.1)	9,150 (62.8)	7,410 (72.8)	6,040 (82.8)	4,950 (92.8)	4,010 (102.8)

NOTE: ( ) Reference radii in feet.

A6-829-100859

\*60 ft. boom length is with inner-mid extended and outer-mid & fly retracted.

+12 parts line required to lift this capacity (using aux. boom nose). Refer to Operator's and Safety Handbook for reeving diagram.

# STERLING CRANE

## 31 FT. - 56 FT. FOLDING BOOM EXTENSION WITH 8,500 LB. COUNTERWEIGHT

### ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Feet	31 FT. LENGTH			56 FT. LENGTH		
	#0021	#0022	#0023	#0041	#0042	#0043
	1.5° OFFSET	25° OFFSET	45° OFFSET	1.5° OFFSET	25° OFFSET	45° OFFSET
25	*12,900 (80)					
30	12,900 (78.5)					
35	12,900 (76.5)	8,340 (79.5)		8,220 (79.5)		
40	12,750 (74.5)	8,020 (77.5)	*6,370 (80)	8,220 (78)		
45	12,350 (72.5)	7,730 (76)	6,300 (79)	8,220 (76.5)		
50	11,500 (70.5)	7,390 (74)	6,250 (77)	8,220 (75)	*4,780 (80)	
55	10,950 (68.5)	7,130 (72)	6,190 (74.5)	8,220 (74)	4,640 (79.5)	
60	10,400 (66.5)	6,870 (69.5)	6,120 (72)	8,220 (72)	4,490 (78)	
65	9,960 (64)	6,660 (67.5)	6,090 (69.5)	8,220 (70)	4,340 (76)	*3,770 (80)
70	9,480 (61.5)	6,450 (65)	6,050 (67)	8,080 (68)	4,190 (74)	3,740 (78)
75	9,060 (59)	6,280 (62.5)	6,050 (64.5)	7,650 (66)	4,070 (72)	3,720 (76)
80	8,630 (56.5)	6,110 (60)	6,050 (62)	7,220 (64)	3,940 (70)	3,700 (73.5)
85	7,910 (54)	5,970 (57.5)	6,050 (59)	6,870 (62)	3,830 (67.5)	3,700 (71.5)
90	6,950 (51)	5,840 (54.5)	6,050 (56)	6,530 (60)	3,730 (65.5)	3,700 (69)
95	6,120 (48.5)	5,740 (51.5)		6,130 (58)	3,640 (63.5)	3,700 (66.5)
100	5,370 (45.5)	5,650 (48.5)		5,730 (55.5)	3,550 (61)	3,700 (64)
110	4,120 (38.5)	4,360 (41.5)		4,820 (51)	3,420 (56)	3,480 (59)
120	3,090 (30.5)			3,780 (46)	3,320 (51)	
130	2,240 (18.5)			2,920 (40)	3,280 (45)	
140				2,200 (33.5)	2,320 (37.5)	
150				1,580 (24.5)		
<b>No Load Stability Data</b>						
Minimum boom angle (deg.) for indicated length	2	25	45	2	25	45
Maximum boom length (ft.) at 0 deg. boom angle	110			110		

NOTE: ( ) Boom angles are in degrees.

#LMI operating code. Refer to LMI manual for operating instructions.

\*This capacity is based on maximum boom angle.

A6-829-015083

- All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765 NOV93.
- 31 ft. and 56 ft. folding boom extension lengths may be used for single line lifting service only.
- For main boom lengths less than 110 ft., rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is set up. For boom angles not shown, use rating of the next lower boom angle.
- WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.

## Superstructure Specifications

### Boom (Standard)

36 ft. - 110 ft. (10.9 m - 33.5 m) four section full power boom. Equipped with remote greasing lines for upper wear pad area. Maximum Tip Height: 118 ft. (35.9 m).

### Folding Lattice Extension

#### 110 ft. (33.5 m) Main boom

31 ft. or 56 ft. (9.4 m or 17 m) folding lattice swingaway extension offsettable at 1.5°, 25° or 45°. Stows alongside base boom section. Maximum Tip Height: 172 ft. (52.4 m).

### \*Boom (Optional)

40 ft. - 125 ft. (12.2 m - 38.1 m) four section full power boom. Equipped with remote greasing lines for upper wear pad area. Maximum Tip Height: 133 ft. (40.5 m).

### \*Lattice Extension

#### 125 ft. (38.1 m) Main boom

35 ft. - 60 ft. (10.7 m - 18.3 m) telescoping lattice swingaway extension offsettable at 2° or 30°. Stows alongside the base boom section. Maximum Tip Height: 191 ft. (58.2 m).

### \*Boom (Optional)

35 ft. - 138 ft. (10.8 m - 42 m) five section full power boom. Equipped with remote greasing lines for upper wear pad area. Maximum Tip Height: 147 ft. (44.8 m).

### \*Folding Lattice Extension

#### 138 ft. (42 m) Main boom

31 ft. or 56 ft. (9.4 m or 17 m) folding lattice swingaway extension offsettable at 1.5°, 25° or 45°. Stows alongside the base boom section. Maximum Tip Height: 202 ft. (61.5 m).

### \*Optional Luffing Lattice Extension

#### 138 ft. (42 m) Main boom.

31 ft. or 56 ft. (9.4 m or 17 m) folding lattice swingaway extension hydraulically offsettable from the superstructure cab. Infinite offsets 1.5° through 45°. Stows alongside the base boom section. Maximum Tip Height: 202 ft. (61.5 m).

### Boom Nose

Five nylatron sheaves (six with 125' boom), mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeving type boom nose. Removable auxiliary boom nose with removable pin rope guard.

### Boom Elevation

One double acting hydraulic cylinder with integral holding valve provides elevation from -3° to 80° (-3° to 78° with 125 ft. boom).

### Load Moment & Anti-Two Block System

Standard load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, boom length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition.

### Cab

High visibility, all steel cab with acoustical lining and tinted safety glass throughout. Deluxe seat with armrest mounted hydraulic single axis controls. Dash panel incorporates gauges for all engine functions. Other standard features include: sliding side and rear windows, hot water heat, electric windshield wash/wipe, circulating air fan, sliding skylight with sunscreen and electric skylight wiper, fire extinguisher, cup holder.

### Swing

Planetary swing with foot applied multi-disc wet brake. Spring applied, hydraulically released parking brake, plunger type mechanical house lock and 360° house lock operated from cab. Maximum speed: 2.0 RPM.

### Counterweight

8,500 lbs. (3856 kg) total consisting of (1) 5,500 lbs. (2495 kg) section and (1) 3,000 lbs. (1361 kg) section. Hydraulic installation/removal. \*Optional 9,500 lbs. (4309 kg) to be used in conjunction with standard counterweight to provide 12,500 lbs. (5670 kg) or 18,000 lbs. (8165 kg) total counterweight.

### Hydraulic System

Four main gear pumps with a combined capacity of 160 GPM (730.5 lpm). Three individual valve banks. Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with beta rating of 5/12/16. 170 gallons (643 L) reservoir. Remote mounted oil cooler with thermostatically controlled hydraulic motor driven fan.

### Hoist specifications

Main and Auxiliary Hoists - Model HO3OG-26G

Planetary reduction with integral automatic brake, electronic hoist drum rotation indicator, hoist drum cable follower and grooved drum.

Maximum Hoist Line Pull: 17,866 lb. (8103 kg)

Maximum Rope Permissible Line Pull: 12,920 lb. (5860 kg)

Maximum Single Line Speed: 504 fpm (154 m/m)

Rope Diameter: 3/4 in. (19 mm)

Rope Length: 620 ft. (189 m)

Maximum Rope Stowage: 1,163 ft. (354 m)

*\*Denotes optional equipment*

# STERLING CRANE

## Carrier Specifications

### Chassis

Triple box section, four-axle carrier fabricated from high-strength, low alloy steel with towing and tie-down lugs.

### Outrigger System

Four hydraulic telescoping, two-stage, double box beam outriggers with inverted jack and integral holding valves. Quick release type outrigger floats 24 in. (610 mm) diameter. Three position setting with fully extended, intermediate (50%) extended and fully retracted capacities. Maximum outrigger pad load: 100,500 lbs. (45 587 kg).

### Outrigger Controls

Located in the superstructure cab on left side (umbilical design) and on either side of carrier with lighted boxes. Requires two hand operation. Crane level indicator (sight bubble) on right side console.

### Engine

Cummins ISM 400 diesel, six cylinders, turbo-charged after cooled, 661 cu. in. (10.8 L), 400 bhp (298 kW) (gross) @ 1500 RPM. Maximum torque 1,450 ft. lbs. (1966 Nm) @ 1200 RPM. Equipped with engine brake and audio-visual engine distress system.

### Fuel Tank Capacity

100 gallons (376 L).

### Transmission

Roadranger 11 speeds forward, 3 reverse.  
Drive 8 x 4 x 4.

### Steering

Front axle, single circuit, mechanical steering with hydraulic power assist. Turning radius: 45' 1".

### Axles

Front: (2) Eaton beam-type steering axles, 84 in. (2.13 m) track.  
Rear: (2) Eaton single reduction drive axles, 74.46 in. (1.89 m) track. Inter-axle differential locks.

### Brakes

S-cam, dual air split system operating on all wheels. Spring-applied, air released parking brake acting on rear axles. Air dryer.

### Suspension

Front: Walking beam with air bags and shock absorbers.  
Rear: Walking beam with air bags and shock absorbers.

### Tires

Front: 445/65R 22.5 Goodyear G286, tubeless, mounted on aluminum disc wheels.  
Rear: 315/80R 22.5 Goodyear G286, tubeless, mounted on aluminum disc wheels.

### \*Optional Tires

Front: 445/65R 22.5 Bridgestone M844F, tubeless.  
445/65R 22.5 Michelin XZY (WB), tubeless.  
Rear: 315/80R 22.5 Bridgestone M843, tubeless.  
315/80R 22.5 Michelin XZY-1 tubeless.

### Lights

Full lighting package including turn indicators, head, tail, brake, and hazard warning lights.

### Cab

One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered seat with air height adjustment. Complete driving controls and engine instrumentation including tilt telescope steering wheel, tachometer, speedometer, voltmeter, water temp., oil pressure, fuel level, air pressure gauge with A/V warning and engine high temp./low oil pressure A/V warning. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt, door lock and electric window.

### Electrical System

Two 12 V - maintenance free batteries. 12 V carrier driving lights, remaining systems 24 V Standard battery disconnect.

### Maximum Speed

65 MPH (104 kph).

### Gradeability (Theoretical)

83%.

### Miscellaneous Standard Equipment

Aluminum fenders with rear storage compartments; dual rear view mirrors; electronic back-up alarm; sling/tool box; pump disconnect; tire inflation kit; air cleaner restriction indicator; block and ball stowage; and chrome package which includes aluminum wheels.

### Optional Equipment

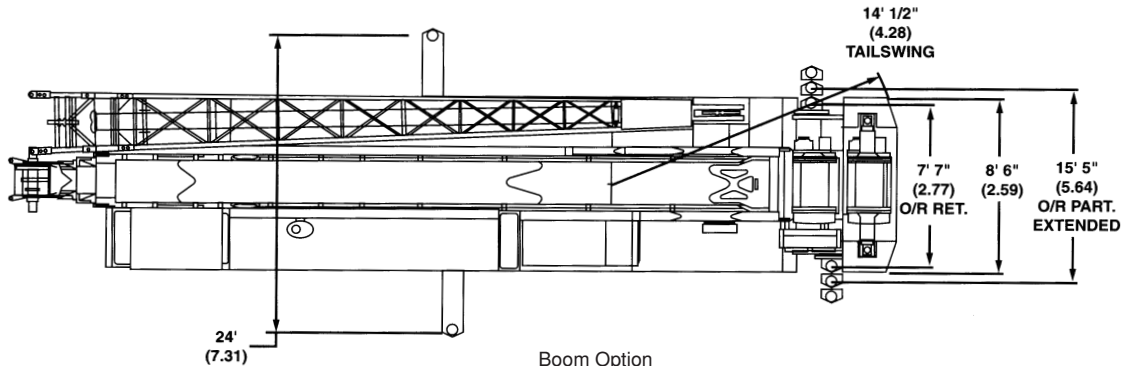
- \*Cold Weather Package (Includes cold weather kit for main and auxiliary hoist, remote controlled heated carrier mirrors).
- \*Auxiliary Lighting Package (Includes cab mounted work lights, boom base mounted floodlights, hoist mounted work light).
- \*Flashing Light Package (Includes amber strobe for superstructure and carrier cabs).
- \*Trailing Boom Package (Includes trailer air and electrical disconnects, and trailing boom kit [less dolly]).
- \*Air conditioning, either cab.
- \*Remote controlled cab mounted work lights.
- \*Hookblocks and headache ball.
- \*Pintle hook (rear).
- \*Cross axle differential locks.
- \*Aluminum outrigger pads.
- \*Air horn.
- \*LMI light bar.
- \*PAT data logger.
- \*Grease system for turntable, air powered.
- \*On rubber load chart, including calibration.

*\*Denotes optional equipment*

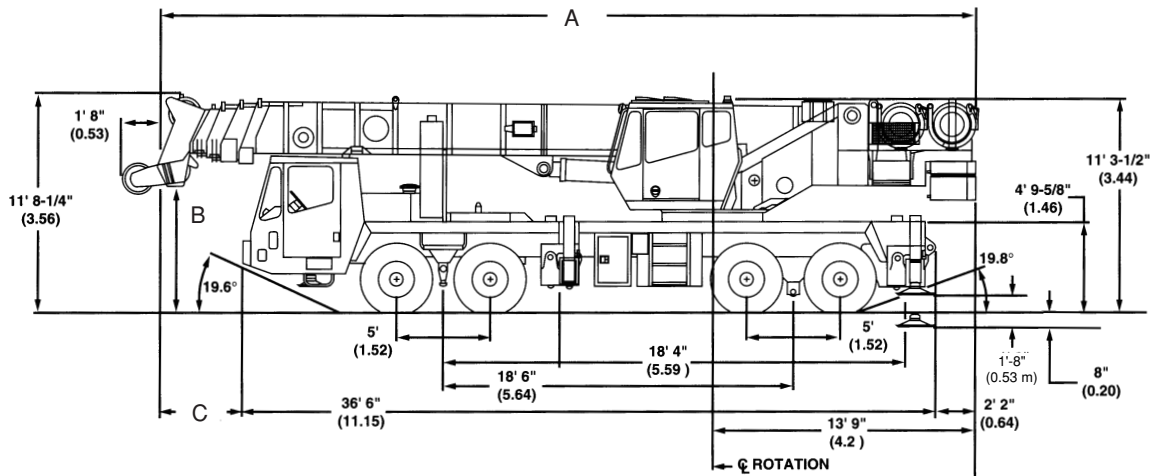


# STERLING CRANE

## Dimensions



Boom Option			
	110'	125'	138'
A	43' 4"	47' 5"	43' 3"
B	5' 11"	6' 0"	7' 0"
C	4' 4"	8' 5"	4' 3"



Axle/Tire Allowable Weights	GVW		Front		Rear	
	lb.	kg	lb.	kg	lb.	kg
	109,200	49,533	49,200	22,317	60,000	27,216
TMS875C Basic Machine with 110 ft. boom, main and auxiliary hoists w/ rope, and no counterweight.	79,961	36,270	34,392	15,600	45,569	20,670
Add: 3,000 lb. counterweight (superstructure)	3,000	1,361	-1,353	-614	4,353	1,975
Add: 5,500 lb. counterweight (superstructure)	5,500	2,495	-2,480	-1,125	7,980	3,620
Add: 9,500 lb. counterweight (superstructure)	9,500	4,309	-4,284	-1,943	13,784	6,252
Add: 3,000 lb. counterweight (carrier)	3,000	1,361	2,704	1,227	296	134
Add: 5,500 lb. counterweight (carrier)	5,500	2,495	4,958	2,249	542	246
Add: 9,500 lb. counterweight (carrier)	9,500	4,309	8,564	3,885	936	425
Add: 75 ton, 6 sheave hookblock (stowed in trough)	1,711	776	2,443	1,108	-732	-332
Add: 45 ton, 3 sheave hookblock (stowed in trough)	830	376	1,185	538	-355	-161
Add: 10 ton headache ball (stowed in trough)	560	254	800	363	-240	-109
Substitute: 125 ft. Boom	3,970	1,801	5,100	2,313	-1,130	-515
Substitute: 138 ft. Boom	4,211	1,910	2,971	1,348	1,240	562
Remove: Auxiliary hoist cable	-775	-352	347	157	-1,122	-509

### 110 ft. and 138 ft. Boom Options

Add: 31 ft. Fixed length extension	1,553	704	1,556	706	-3	-1
Add: 31 ft. - 56 ft. Bi-fold extension	2,240	1,016	1,973	895	267	121
Add: 31 ft. - 56 ft. Luffing bi-fold extension (138 ft. boom only)	3,122	1,416	3,298	1,496	-176	-80
Add: Auxiliary boom nose	127	58	234	106	-107	-49

### 125 ft. Boom Options

Add: 35 ft. Fixed length extension	2,154	977	2,362	1,071	-208	-94
Add: 35 ft. - 60 ft. telescopic extension	2,893	1,312	3,172	1,439	-279	-127
Add: Auxiliary boom nose	116	53	235	107	-119	-54