

National Crane Series NBT40

Product Guide



- 36,3 t (40 USt) rating
- 43,3 m (142 ft) five-section boom
- Self-lubricating Easy Glide wear pads
- 862 kg (1900 lb) tailswing counterweight

Features



National Crane Series NBT40

- 36,3 t (40 USt) maximum capacity
- 45,72 m (150 ft) maximum tip height (main boom)
- 57,91 m (190 ft) maximum tip height (boom with jib)

Five-section boom

At 43,29 m (142 ft), the NBT40 five-section boom is the longest in its size range. The long boom allows the operator to perform more lifts without the use of a jib, reducing setup time and improving efficiency. Also available are optional boom lengths of 31,39 m (103 ft) and 38,71 m (127 ft).



Overload protection

All National Crane boom trucks are equipped with overload protection. A Load Moment Indicator (LMI) is standard on all NBT40 machines. The LCD display is visible in full or low light and displays all crane load lifting values simultaneously. Includes Work Area Definition System (WADS).

Outriggers

Outrigger span of 7,52 m (24.7 ft) when fully extended; 5,33 m (17.5 ft) at mid-span.

Equipped with both ground level and in-cab outrigger controls, the NBT40 outriggers allow quick and easy crane set-up and can be positioned at 0%, 50% and 100%.



Deluxe operator's cab

Rigid galvanealed steel structure, well insulated, with tinted safety glass for operator visibility and comfort. Multi-position seat with arm rest mounted single axis controls, ventilation fans, diesel heater, dual cab mounted worklights and wipers. Optional air conditioning is available.

Features

National Crane is proud to introduce the Series NBT40

- The stronger standard torsion box improves rigidity, reduces truck frame flex and reduces the need for counterweight
- Easy Glide boom wear pads reduce the conditions that cause boom chatter and vibration. The net result is smoother crane operation
- Speedy-reeve boom tip and sheave blocks simplify rigging changes by decreasing the time needed to change line reeving
- Painting crane components before assembly reduces the possibility of rust, improves serviceability and enhances the appearance of the machine
- State of the art control valve provides smoother operation. The new design eliminates parts, reducing repair costs and improving the machine's serviceability
- Bearings on the boom and retract cables can be greased through access holes in the boom side plates
- Boom sections are supported by one hydraulic extend cylinder, minimizing maintenance
- Two-speed grooved drum hoist with cable packer, electronic drum rotation indicator (DRI)



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Specifications

Boom and jib combinations data

Available in three basic models:

NBT40 - 103: Equipped with a 9,45 m - 31,39 m (31 ft - 103 ft) four-section boom. This model can be equipped with a 9,45 m (31 ft) jib, offering a vertical reach of 43,29 m (142 ft) or a 9,45 m - 16,76 m (31 ft- 55 ft) side-stowing foldaway jib, providing a vertical reach of 50,60 m (166 ft).

9,45 m - 31,39 m (31 ft - 103 ft) four-section hydraulic boom

18FJ31OS 9,45 m (31 ft) single-section offsettable manual jib

9,45 m - 31,39 m (31 ft - 103 ft) four-section hydraulic boom

18FJ55M 9,45 m - 16,76 m (31 ft - 55 ft) two-section manual jib

NBT40-127: Equipped with a 9,45 m - 38,71 m (31 ft - 127 ft) five-section boom. This model can be equipped with a 9,45 m - 16,76 m (31 ft - 55 ft) fold-away jib providing a vertical reach of 57,91 m (190 ft).

9,45 m - 38,71 m (31 ft - 127 ft) five-section hydraulic boom

18FJ55M 9,45 m - 16,76 m (31 ft - 55 ft) two-section manual jib

NBT40 - 142: Equipped with a 10,36 m - 43,29 m (34 ft - 142 ft) five-section boom. This model can be equipped with a 7,92 m (26 ft) foldaway jib, offering a vertical reach of 53,64 m (176 ft) or a 9,45 m - 16,76 m (31 ft - 55 ft) side-stowing foldaway jib, providing a vertical reach of 62,48 m (205 ft).

10,36 m - 43,29 m (34 ft - 142 ft) five-section hydraulic boom

18FJ26 7,92 m (26 ft) single-section manual jib

10,36 m - 43,29 m (34 ft - 142 ft) five-section hydraulic boom

8FJ55M 9,45 m - 16,76 m (31 ft - 55 ft) two-section manual jib

Note: Maximum tip is measured with outriggers/stabilizers fully extended.

Specifications

NBT40 winch data

- All winch pulls and speeds are shown on the fourth layer.
- Winch line pulls would increase on the first, second, and third layers.
- Winch line speed would decrease on the first, second, and third layers.
- Winch line pulls may be limited by the winch capacity or the ANSI 5 to 1 cable safety factor.

Cable

supplied

5/8" diameter

rotation

resistant IWRC

5/8" diameter

rotation resistant

IWRC

25 583 kg (56,400 lb)

(205 fpm)

2268 kg (5000 lb)

125 m/min (410 fpm)

Standard

planetary

winch

Low speed

High speed

eeds are								
ayer.	1 part line	2 part line	3 part line	4 part line	5 part line	6 part line	7 part line	8 part line
d econd, Id second, oe apacity e safety								
Average breaking strength	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull
25 583 kg (56,400 lb)	5103 kg (11,250 lb)	10 206 kg (22,500 lb)	15 309 kg (33,750 lb)	20 412 kg (45,000 lb)	25 515 kg (56,250 lb)	30 618 kg (67,500 lb)	35 721 kg (78,750 lb)	40 824 kg (90,000 lb)
	62 m/min	31 m/min	21 m/min	16 m/min	13 m/min	10 m/min	9 m/min	8 m/min

(41 fpm)

11 340 kg (25,000 lb)

25 m/min

(82 fpm)

(34 fpm)

13 608 kg (30,000 lb)

21 m/min

(68 fpm)

(29 fpm)

15 876 kg (35,000 lb)

18 m/min (59 fpm)

(26 fpm)

18 144 kg (40,000 lb)

16 m/min

(51 fpm)

(51 fpm)

9072 kg (20,000 lb)

31 m/min

(103 fpm)

Winch	Fourth layer pull	Allowable cable pull
Standard planetary and auxiliary planetary	2268 kg (5000 lb) high speed 5103 kg (11 250 lb) low speed	5117 kg (11,280 lb) 5117 kg (11,280 lb)

(103 fpm)

4536 kg (10,000 lb)

62 m/min (205 fpm)

(68 fpm)

6804 kg (15,000 lb)

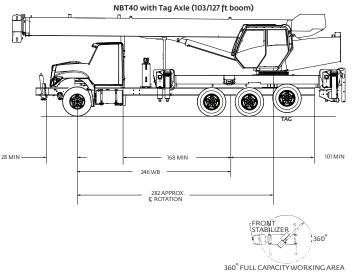
42 m/min

(137 fpm)

Block type	Rating	Weight
Aux boom head		45 kg (100 lb)
Downhaul weight	4,53 USt (7 USt)	78 kg (172 lb)
1-sheave block	13,60 t (20 USt)	149 kg (329 lb)
2-sheave block	22,67 t (30 USt)	290 kg (640 lb)
3-sheave block	31,74 t (40 USt)	272 kg (600 lb)
4-sheave block	32,65 t (50 USt)	361 kg (796 lb)

Mounting configurations

The configurations are based on the NBT40 with an 85% stability factor. The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary.



Configuration 1: 31,39 m (103 ft) or 38,71 m (127 ft) Boom with Tag Axle (Extended front frame rails required for SFO installation.)

Working area: 360°

Gross Axle Weight Rating Front: 9072 kg (20,000 lb)

Gross Axle Weight Rating Rear: 18 144 kg (40,000 lb)

Tag Axle Weight Rating: 5987 kg (13,200 lb)

Wheelbase: 625 cm (246 in)

Cab to Axle/trunnion (CA/CT): 427 cm (168 in)

Frame Section Modulus (SM), front axle to end of AF: 785 MPa

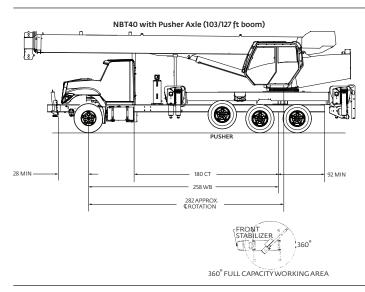
(110,000 PSI): 426 cm³ (30.0 in³)

Stability Weight, Front: 4286 kg (9450 lb) minimum*

Stability Weight, Rear: 4899 kg (10,800 lb) minimum*

This configuration shows the 360° working area that is achieved with the front stabilizer (standard on the NBT40). The front stabilizer is essential when extending the boom and lifting loads over the front of the truck.

*Estimated axle scale weights prior to installation of crane, stabilizers and subbase for 85% stability.



Configuration 2: 31,39 m (103 ft) or 38,71 m (127 ft) Boom with Pusher Axle (Extended front frame rails required for SFO installation)

Working area: 360°

Gross Axle Weight Rating Front: 9072 kg (20,000 lb)

Gross Axle Weight Rating Rear: 18 144 kg (40,000 lb)

Pusher Axle Weight Rating: 5987 kg (13,200 lb)

Wheelbase: 655 cm (258 in)

Cab to Axle/trunnion (CA/CT): 457 cm (180 in)

Frame Section Modulus (SM), front axle to end of AF: 785 MPa

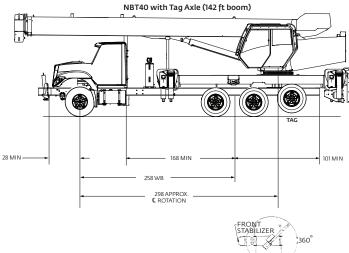
(110,000 PSI): 426 cm3 (30.0 in3)

Stability Weight, Front: 4525 kg (9975 lb) minimum*

Stability Weight, Rear: 4661 kg (10,275 lb) minimum*

This configuration shows the 360° working area that is achieved with the front stabilizer (standard on the NBT40). The front stabilizer is essential when extending the boom and lifting loads over the front of

*Estimated axle scale weights prior to installation of crane, stabilizers and subbase for 85% stability.



360° FULL CAPACITY WORKING AREA

Configuration 3: 43,29 m (142 ft) Boom with Tag Axle (Extended front frame rails required for SFO installation.)

Working area: 360°

Gross Axle Weight Rating Front: 9072 kg (20,000 lb)

Gross Axle Weight Rating Rear: 18 144 kg (40,000 lb)

Tag Axle Weight Rating: 5987 kg (13,200 lb)

Wheelbase: 655 cm (258 in)

Cab to Axle/trunnion (CA/CT): 427 cm (168 in)

Frame Section Modulus (SM), front axle to end of AF: 785 MPa

(110,000 PSI): 426 cm³ (30.0 in³)

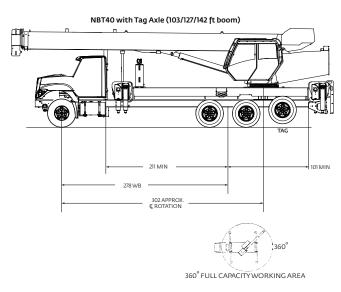
Stability Weight, Front: 4207 kg (9275 lb) minimum*

Stability Weight, Rear: 4797 kg (10,575 lb) minimum*

This configuration shows the 360° working area that is achieved with the front stabilizer (standard on the NBT40). The front stabilizer is essential when extending the boom and lifting loads over the front of

*Estimated axle scale weights prior to installation of crane, stabilizers and subbase for 85% stability.

Mounting configurations



Configuration 4: Extended T-box 31,39 m (103 ft), 38,71 m (127 ft) Boom, or 43,29 m (142 ft) Boom with Tag Axle

Working area: 360°

Gross Axle Weight Rating Front: 9072 kg (20,000 lb) Gross Axle Weight Rating Rear: 18 144 kg (40,000 lb)

Tag Axle Weight Rating: 5987 kg (13,200 lb)

Wheelbase: 686 cm (270 in)

Cab to Axle/trunnion (CA/CT): 516 cm (203 in)

Frame Section Modulus (SM), front axle to end of AF: 785 MPa

(110,000 PSI): 426 cm³ (30.0 in³)

Stability Weight, Front: 4309 kg (9500 lb) maximum*

Stability Weight, Rear: 5103 kg (11,250 lb) minimum*

*Estimated axle scale weights prior to installation of crane, stabilizers

and subbase for 85% stability.

Other configurations are available, please consult the factory for more information.

Mimimum truck requirements

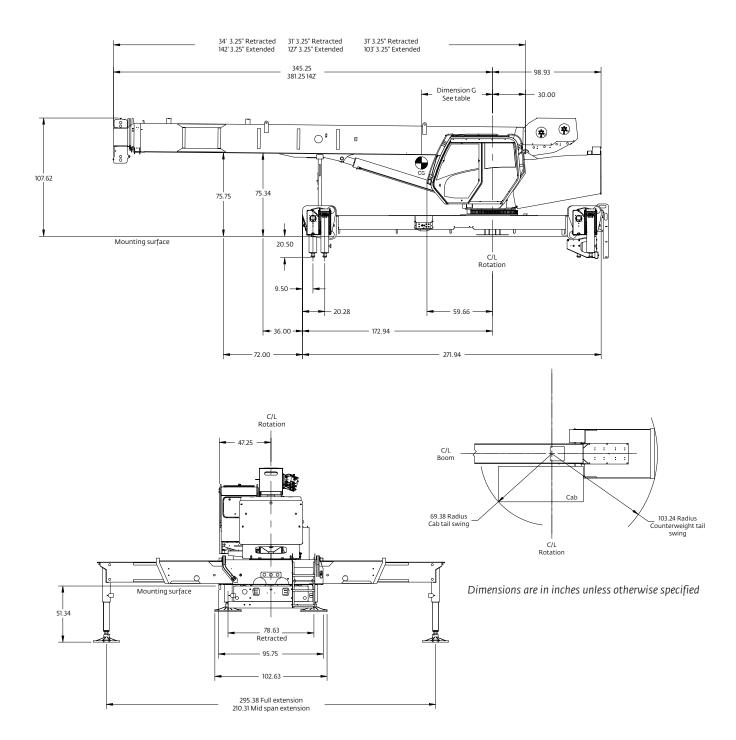
Many factors must be considered in the selection of proper truck for an NBT40 crane. Items which must be considered are:

- **1. Axle Rating.** Axle ratings are determined by the axles, tires, rims, springs, brakes, steering and frame strength of the truck. If any one of these components is below the required rating, the gross axle rating is reduced to its weakest component value.
- 2. Wheelbase (WB), Cab-to-Trunnion (CT) and Bare Chassis Weight. The wheelbase, CT and chassis weights shown are required so the basic NBT40 can be legally driven in most states and meet stability requirements. The dimensions given assume the sub-base is installed properly behind the truck cab. If exhaust stacks, transmission protrusions, etc., do not allow a close installation to the cab, the WB and CT dimensions must be increased. Refer to the Mounting Configuration pages for additional information.
- **3. Truck Frame.** Try to select a truck frame that will minimize or eliminate frame reinforcement or extension of the after frame (AF). Many frames are available that have the necessary after frame (AF) section modulus (SM) and resistance to bending moment (RBM) so
- that reinforcing is not required. The front hydraulic jack is used for a 360° working range around the truck. The frame under the cab through the front suspension must have the minimum S.M. and RBM because reinforcing through the front suspension is often difficult because of engine, radiator mounts and steering mechanics. See "Truck Requirements" and "Frame Strength" pages for the necessary section modulus and resistance to bending moment values. Integral extended front frame rails are required for front center stabilizer installation.
- 4. Additional Equipment. In addition to the axle ratings, wheelbase, cab-to-axle requirements and frame, it is recommended that the truck is equipped with electronic engine control, increased cooling and a transmission with a PTO opening available with an extra heavy duty PTO. A conventional cab truck should be used for standard crane mounts.
- **5. Neutral Start Switch.** The chassis must be equipped with a switch that prevents operation of the engine starter when the transmission is in gear.

Notes:

- Gross Vehicle Weight Rating (GVWR) is dependent on all components of the vehicle (axles, tires, springs, frame, etc.) meeting manufacturers' recommendations; always specify GVWR when purchasing trucks
- Diesel engines require a variable speed governor for smooth crane operation; electronic fuel injection requires EET engine remote throttle
- All mounting data is based on a National Crane NBT40 with an 85% stability factor
- The complete unit must be installed in accordance with factory requirements, and a test performed to determine actual stability and counterweight requirements per SAE J765; contact the factory for details

Dimensions

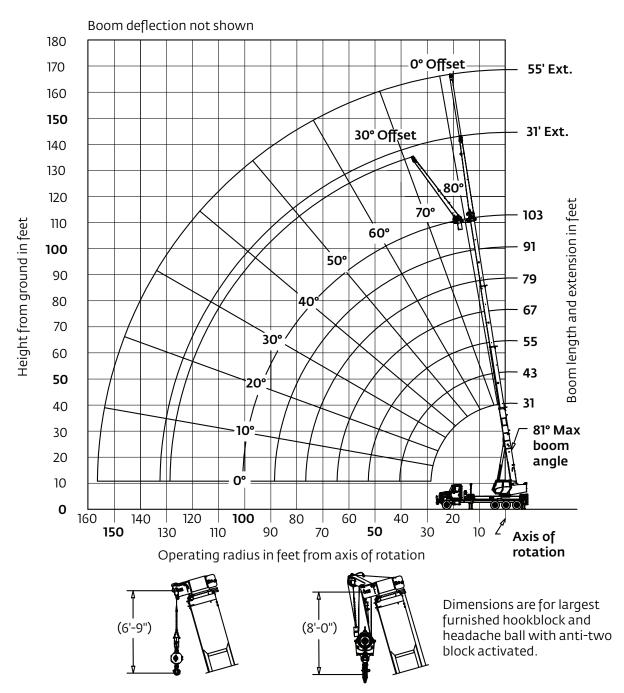


Series	G	Weight with oil
40103	66.5"	36,109 lb
40127	70"	37,419 lb
40142	78"	38,714 lb

No jib, no auxiliary hoist, with 2/3 hookblock.

Working range

103 ft main boom, full span outrigger, with jib



*Drawing is to show the physical reach of the machine. Always refer to load chart to see what portions of this range are structurally and stability limited.

103 ft main boom, full span outrigger, 360°, without stowed jib

Radius		#01					
in		Main boom length in feet					
feet	31	43-A	55-B	67-C	79-D	91-E	103
7	80,000 (73.6)						
8	78,000 (71.6)	51,000 (76.9)					
10	67,700 (67.6)	50,000 (74.1)	50,000 (78)				
12	57,000 (63.4)	48,000 (71.2)	46,000 (75.8)	37,000 (78.7)			
15	44,200 (56.9)	44,500 (66.8)	39,000 (72.5)	36,000 (76.1)	33,000 (78.7)		
20	32,000 (44.5)	32,400 (59.1)	32,550 (66.8)	32,750 (71.6)	29,000 (75.1)	18,500 (77.3)	18,500 (79.4)
25	24,450 (28)	24,900 (50.6)	25,100 (60.8)	25,200 (66.9)	25,400 (71.3)	18,000 (74.2)	17,500 (76.8)
30		19,050 (40.9)	19,300 (54.4)	19,500 (62)	19,650 (67.2)	17,500 (71)	16,500 (74)
35		14,700 (28.6)	14,950 (47.4)	15,100 (56.8)	15,250 (63)	15,350 (67.6)	15,000 (71.1)
40			11,900 (39.5)	12,050 (51.3)	12,200 (58.6)	12,300 (63.9)	12,400 (68.1)
45			9750 (31)	9950 (46)	10,050 (54.5)	10,150 (60.5)	10,250 (65.1)
50			8000 (17.4)	8200 (39.4)	8300 (49.7)	8400 (56.6)	8500 (61.7)
55				6800 (31.7)	6950 (44.6)	7000 (52.6)	7100 (58.3)
60				5700 (21.6)	5800 (38.9)	5900 (48.3)	5950 (54.8)
65					4850 (32.3)	4950 (43.7)	5000 (51.1)
70					4100 (24.2)	4150 (38.6)	4250 (47.2)
75					3400 (11.2)	3500 (32.9)	3550 (43.1)
80						2900 (26.1)	2950 (38.5)
85						2400 (16.7)	2450 (33.5)
90							2000 (27.6)
95							1600 (20)
100							1250 (4.7)
	Minimu	m boom and	gle (°) for inc	licated leng	th (no load)		0
	Maximum	boom lengt	:h (ft) at 0° l	oom angle	(no load)		103

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Lifting capacities at zero degree boom angle							
Boom	Main boom length in feet						
angle	31	43-A	55-B	67-C	79-D	91-E	103
0°	20,350 (28.5)	11,700 (40.5)	7300 (52.5)	4850 (64.5)	3250 (76.5)	2100 (88.5)	1250 (100.5)

NOTE: () Reference radii in feet. 80026961

10 12. () 10 2. (0002030.	
Rated Load Reductions from main boom capacity when lifting over main boom nose with :							
tele. erected (retracted)		2150	2000	1950	1900	1850	1800
31' off. erected at 0° offset	1800	1700	1550	1500	1450	1450	1400

103 ft main boom, full span outrigger, 360°, with stowed jib

Radius	#02						
in		Main boom length in feet					
feet	31	43-A	55-B	67-C	79-D	91-E	103
7	79,200 (73.6)						
8	77,200 (71.6)	50,350 (76.9)					
10	66,900 (67.6)	49,350 (74.1)	49,550 (78)				
12	56,200 (63.4)	47,350 (71.2)	45,550 (75.8)	36,600 (78.7)			
15	43,400 (56.9)	43,850 (66.8)	38,550 (72.5)	35,600 (76.1)	32,650 (78.7)		
20	31,200 (44.5)	31,750 (59.1)	32,100 (66.8)	32,350 (71.6)	28,650 (75.1)	18,200 (77.3)	18,250 (79.4)
25	23,650 (28)	24,250 (50.6)	24,650 (60.8)	24,800 (66.9)	25,050 (71.3)	17,700 (74.2)	17,250 (76.8)
30		18,400 (40.9)	18,850 (54.4)	19,100 (62)	19,300 (67.2)	17,200 (71)	16,250 (74)
35		14,050 (28.6)	14,500 (47.4)	14,700 (56.8)	14,900 (63)	15,050 (67.6)	14,750 (71.1)
40			11,450 (39.5)	11,650 (51.3)	11,850 (58.6)	12,000 (63.9)	12,150 (68.1)
45			9300 (31)	9550 (46)	9700 (54.5)	9850 (60.5)	10,000 (65.1)
50			7550 (17.4)	7800 (39.4)	7950 (49.7)	8100 (56.6)	8250 (61.7)
55				6400 (31.7)	6600 (44.6)	6700 (52.6)	6850 (58.3)
60				5300 (21.6)	5450 (38.9)	5600 (48.3)	5700 (54.8)
65					4500 (32.3)	4650 (43.7)	4750 (51.1)
70					3750 (24.2)	3850 (38.6)	4000 (47.2)
75					3050 (11.2)	3200 (32.9)	3300 (43.1)
80						2600 (26.1)	2700 (38.5)
85						2100 (16.7)	2200 (33.5)
90							1750 (27.6)
95							1350 (20)
100							1000 (4.7)
	Minimu	m boom and	gle (°) for ind	dicated leng	th (no load)		0
	Maximu	m boom len	gth (ft) at 0	° boom ang	le (no load)		103

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Lifting capacities at zero degree boom angle							
Boom		Main boom length in feet					
angle	31	43-A	55-B	67-C	79-D	91-E	103
0°	19,550 (28.5)	11,050 (40.5)	6850 (52.5)	4450 (64.5)	2900 (76.5)	1800 (88.5)	1000 (100.5)

NOTE: () Reference radii in feet. 80027066 Rated Load Reductions from main boom capacity when lifting over main boom nose with tele. erected 2300 2000 1950 1850 1800 (retracted) 31' off. erected at 1800 1700 1550 1500 1450 1450 1400 0° offset

103 ft main boom, full span outrigger, 360°, with fixed jib

Radius	0° OFFSET
in	#06
feet	8800
25	(80)
	8000
38	(75)
40	6500
49	(70)
60	5100
60	(65)
70	4100
70	(60)
79	3300
73	(55)
88	2600
00	(50)
96	1900
	(45)
103	1350
	(40) 950
110	
	(35) 650
115	(30)
Min. boom angle	(50)
for indicated length	19.5°
(no load)	
Max. boom length	
at 0° boom angle (no load)	91 ft
(DBOLOH)	

Radius in	30° OFFSET
feet	#09
39	6400
33	(80)
50	5700
	(75)
60	5000 (70)
	4200
70	(65)
	3600
79	(60)
07	3000
87	(55)
95	2300
93	(50)
102	1700
	(45)
108	1400 (40)
	1100
113	(35)
	900
118	(30)
122	650
IZZ	(25)
124	600
	(21)
Min. boom angle for indicated length	20°
(no load)	20
Max. boom length	
at 0° boom angle	91 ft
(no load)	

80027069

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Boom extension capacity notes:

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 31 ft extension length may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. For boom angles not shown, use the rating of the next lower 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.
- 4. 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.
- 6. When lifting over the main boom nose with 31 ft extension erected, the outriggers must be fully extended or 50% (17.5 ft) spread.

103 ft main boom, full span outrigger, 360°, with telescopic jib

Radius	31 ft LENGTH
in	•
feet	#03
25	8800
23	(80)
38	8000
30	(75)
49	6500
15	(70)
60	5100
	(65)
70	4100
, 0	(60)
79	3200
	(55)
88	2300
	(50)
96	1650 (45)
	1150
103	(40)
	750
110	(35)
	500
115	(30)
Min. boom angle	(30)
for indicated length	34.1°
(no load)	
Max. boom length	C
at 0° boom angle (no load)	79 ft
(IIO IOdu)	

Radius in	55 ft LENGTH
feet	#04
29	4000 (80)
45	3700 (75)
59	3300 (70)
73	3000 (65)
85	2600 (60)
96	2100 (55)
103	1700 (50)
115	1250 (45)
123	850 (40)
130	550 (35)
Min. boom angle for indicated length (no load)	35.5°
Max. boom length at 0° boom angle (no load)	79 ft

80027072

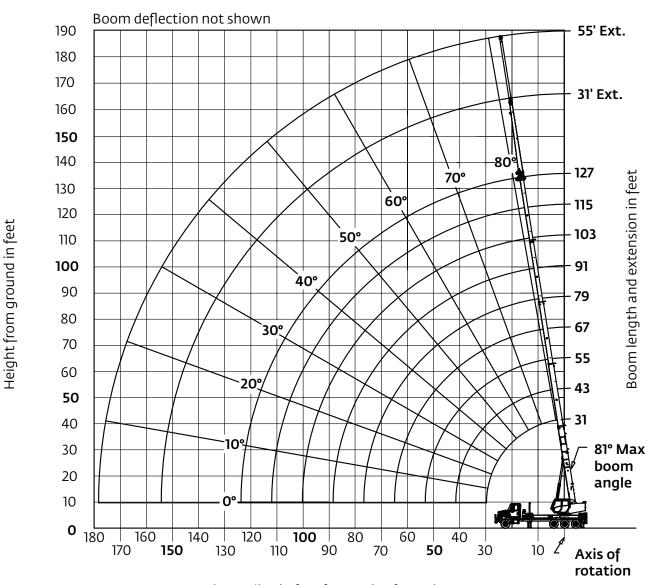
NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Boom extension capacity notes:

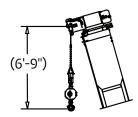
- 1. All capacities above the bold line are based on structural strength of boom
- 2. 31 ft and 55 ft extension lengths may be used for single line lifting service.3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. For boom angles not shown, use the rating of the next lower 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.
- 4. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- 5. Capacities listed are with outriggers properly extended and vertical jacks set.
- 6. When lifting over the main boom nose with 31 ft or 55 ft extension erected, the outriggers must be fully extended or 50% (17.5 ft) spread.

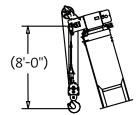
Working range

127 ft main boom, full span outrigger, with jib



Operating radius in feet from axis of rotation





Dimensions are for largest furnished hookblock and headache ball with anti-two block activated.

*Drawing is to show the physical reach of the machine. Always refer to load chart to see what portions of this range are structurally and stability limited.

127 ft main boom, full span outrigger, 360°, without stowed jib

Radius					#01				
in feet			1		oom lengt		1		
1000	31	43-A	55-B	67-C	79-D	91-E	103-F	115-G	127
7	80,000 (73.6)								
8	75,000 (71.6)								
10	67,300 (67.6)	41,000 (71.4)							
12	56,000 (63.4)	41,000 (67)	40,500 (75.8)	40,300 (78.8)					
15	43,750 (56.8)	39,000 (59.4)	40,500 (72.6)	37,300 (76.2)	28,700 (78.6)	21,850 (80.4)			
20	31,500 (44.4)	32,000 (51.0)	32,200 (66.9)	32,600 (71.7)	25,100 (74.9)	19,400 (77.2)	16,300 (79.2)	12,850 (80.7)	
25	23,950 (27.8)	24,500 (41.4)	24,600 (61)	25,100 (67)	22,200 (71.1)	17,250 (74)	14,950 (76.5)	12,600 (78.4)	10,000 (79.9)
30		19,300 (29.4)	19,750 (54.6)	20,000 (62.1)	20,150 (67.2)	15,650 (70.8)	13,700 (73.7)	11,800 (76)	9900 (77.9)
35		14,850 (28.6)	15,250 (47.7)	15,500 (57)	15,700 (63.1)	14,450 (67.4)	12,650 (70.8)	10,950 (73.7)	9500 (75.8)
40			12,150 (40)	12,400 (51.6)	12,550 (58.7)	12,700 (63.9)	11,600 (67.9)	10,300 (71.2)	9000 (73.6)
45			10,100 (31.5)	10,200 (46.2)	10,400 (54.6)	10,500 (60.5)	10,650 (65.1)	9600 (68.6)	8600 (71.3)
50			8500 (18.5)	8400 (39.7)	8800 (49.9)	8700 (56.6)	8850 (61.8)	9000 (65.9)	8100 (69)
55				6950 (32.1)	7500 (44.8)	7250 (52.6)	7500 (58.4)	7500 (63)	7650 (66.6)
60				5800 (22.3)	6400 (39.1)	6100 (48.3)	6500 (54.9)	6350 (59.9)	6450 (63.9)
65					5400 (32.6)	5150 (43.8)	5600 (51.2)	5350 (56.8)	5450 (61.2)
70					4600 (24.7)	4350 (38.8)	4,700 (47.3)	4550 (53.5)	4650 (58.3)
75					3850 (12.3)	3650 (33.1)	3950 (43.2)	3850 (50.2)	3900 (55.4)
80						3050 (26.4)	3350 (38.7)	3250 (46.6)	3400 (52.3)
85						2550 (17.3)	2800 (33.7)	2700 (42.8)	2850 (49.2)
90							2300 (27.9)	2250 (38.7)	2350 (45.9)
95							1850 (20.5)	1850 (34.2)	1900 (42.3)
100							1500 (7)	1450 (29)	1550 (38.5)
105								1150 (22.8)	1200 (34.4)
110								850 (13.7)	900 (29.7)
115									650 (24.2)
		inimum boo						0	24
NOTE: Los		aximum boo		t.) at 0° boo	m angle (no	load)		11.	5

NOTE: Loads displayed in pounds.() Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions

	Lifting capacities at zero degree boom angle										
Boom											
angle	31	43-A	55-B	67-C	79-D	91-E	103-F	115-G			
0°	20,200 (28.5)	11,650 (40.5)	7700 (52.5)	4900 (64.5)	3600 (76.5)	2200 (88.5)	1450 (100.5)	700 (112.5)			

 NOTE: () Reference radii in feet.
 80027108

 Rated Load Reductions from main boom capacity when lifting over main boom nose with ext. erected (retracted) :
 (in lb)
 2300
 2150
 2000
 1950
 1900
 1850
 1800
 1750
 1700

127 ft main boom, full span outrigger, 360°, with stowed jib

Table Tab	Radius					#02				
7 79,200 (73,6)										
10	1000		43-A	55-B	67-C	79-D	91-E	103-F	115-G	127
10	7									
10	8	. ,								
12	10									
15	12									
20	15			. ,		.,				
25	20									
14,200	25	. ,		,	,	,		,	,	
14,200	30									
11,700	35		,	,		. ,		,	10,700	
45 9650 (31.5) 9800 (46.2) 10,050 (54.6) 10,200 (60.5) 10,400 (65.1) 9350 (68.6) 8400 (71.3) 50 8050 (18.5) 8000 (39.7) 8450 (49.9) 8400 (56.6) 8600 (61.8) 8750 (65.9) 7900 (69.5) 55 6550 (32.1) 7150 (44.8) 6950 (52.6) 7250 (58.4) 7250 (63) 7450 (66.6) 60 5400 (22.3) 6050 (32.1) 5800 (48.3) 6250 (51.2) 600 (56.8) 600 (60.9) 6050 (22.3) 7250 (44.8) 600 (59.9) 600 (60.9) 7250 (44.8) 7250 (47.3) 7250 (33.1) 7250 (33.1) 7250 (33.1) 7250 (33.1) 7250 (33.1) 7250 (33.1) 7250 (33.7) 7250 (40.9) 7250 (20.2) 7250 (33.7) 7250 (40.6) 7250 (20.2) 7250 (20.2) 7250 (20.2) 7250 (33.7) 7250 (40.6) 7250 (20.2) 7250 (20.2) 7250 (20.2) 7250 (20.2) <td>40</td> <td></td> <td>(20.0)</td> <td>11,700</td> <td>12,000</td> <td>12,200</td> <td>12,400</td> <td>11,350</td> <td>10,050</td> <td>8800</td>	40		(20.0)	11,700	12,000	12,200	12,400	11,350	10,050	8800
50 8050 (18.5) 8000 (39.7) 8450 (49.9) 8600 (61.8) 8750 (69) 7900 (69) 55 6550 (32.1) 7750 (69.0) 6950 (52.6) 7250 (58.4) 7250 (66.6) 7450 (66.6)	45			9650	9800	10,050	10,200	10,400	9350	8400
55 6550 (32.1) 7150 (52.6) 6950 (52.6) 7250 (58.4) 7450 (66.6) 60 5400 (22.3) 6950 (39.1) 6890 (52.6) 6250 (58.4) 6100 (66.6) 65 5400 (22.3) 6950 (48.3) 6550 (54.9) 69.9) 65.8 70 4250 (43.8) 4850 (51.2) 5550 (56.8) 61.2) 70 4250 (24.7) 438.8) 4450 (47.3) 4450 (53.5) 4300 (48.2) 75 3500 (12.3) 3350 (33.1) 3700 (43.2) 3600 (55.4) 80 2750 (26.4) 3100 (30.0) 3000 (50.2) 3200 (55.4) 85 2250 (25.0) 2550 (42.8) 2650 (49.2) 90 2050 (27.9) 33.7) 42.8) 449.2) 95 1600 (20.5) 1600 (34.2) 1250 (42.3) 100 1250 (22.8) 135.0 1700 (22.8) 33.5) 105 105 100 (22.8) 134.4) 449.2) 29.00 (22.8) 134.4) 100 100 120.0 135.0 100.0 100.0	50			8050	8000	8450	8400	8600	8750	7900
60 5400 (22.3) 6050 (39.1) 5800 (54.9) 609.9 (59.9) 6250 (63.9) 65 5050 (32.6) 4850 (48.3) 5350 (51.2) 5000 (55.8) 5250 (61.2) 70 4250 (24.7) 4250 (43.8) 4450 (47.3) 455.5) 568.3) 75 3500 (12.3) 3350 (33.1) 3700 (33.3) 3600 (33.7) 3700 (33.7) 3600 (33.7) 3700 (46.6) 55.4) 80 2750 (26.4) 33.7) 4250 (46.6) 52.3) 85 2250 (250 (27.9) 2550 (24.8) 2650 (27.9) 2050 (27.9) 2050 (27.9) 2050 (27.9) 2050 (27.9) 2050 (27.9) 2050 (20.0) 2150 (45.9) 100 (20.5) 34.2) 42.3) 100 105 105 (22.8) 1250 (12.8) 1250 (12.8) 135.4 135.0 136.0 100 (22.8) 136.4 137.7 129.7 136.4 129.7 129.7 136.4 129.7 129.7 136.0 120.0 135.0 120.0 135.0 120.0 135.0 120.0 135.0 120.0 13	55			(10.5)	6550	7150	6950	7250	7250	7450
65 5050 (32.6) 4850 (43.8) 5350 (51.2) 5100 (56.8) 5250 (61.2) 70 4250 (24.7) 4250 (38.8) 4450 (47.3) 4300 (53.5) 4450 (58.3) 75 3500 (12.3) 3500 (33.1) 3500 (43.2) 3600 (50.2) 3700 (55.4) 80 2750 (26.4) 3100 (38.7) 3000 (46.6) 3200 (46.6) 5250 (55.4) 85 2250 (17.3) 2550 (33.7) 2450 (42.8) 2650 (49.2) 90 2050 (27.9) 2050 (38.7) 2150 (45.9) 2150 (38.7) 2150 (45.9) 100 1600 (20.5) 1250 (34.2) 1200 (38.5) 1350 (38.5) 105 2000 (22.8) 34.4) 43.4) 100 2000 (22.8) 34.4) 43.4)	60				5400	6050	5800	6250	6100	6250
70 4250 (24.7) 4050 (38.8) 4450 (53.5) 4300 (45.3) 4450 (58.3) 75 3500 (12.3) 3350 (33.1) 3700 (33.1) 3600 (50.2) 3700 (55.4) 80 2750 (26.4) 38.7) 46.6) (52.3) 85 2250 (25.0) 2550 (27.9) 2450 (25.2) 2650 (27.9) 90 2050 (27.9) 38.7) 42.8) 49.2) 95 1600 (20.5) 1600 (34.2) 1700 (38.5) 100 1250 (29) (38.5) 1250 (29) (38.5) 105 2000 (22.8) (34.4) 43.4 110 600 (700 (13.7) 700 (29.7)	65				(22.3)	5050	4850	5350	5100	5250
75 3500 (12.3) 3350 (33.1) 3700 (36.2) 3700 (55.4) 80 2750 (26.4) 3100 (38.7) 3000 (38.7) 3200 (46.6) (52.3) 85 2250 (17.3) 2550 (25.0) 2550 (42.8) 2650 (49.2) 90 2050 (27.9) 38.7) (45.9) 95 1600 (20.5) 1600 (34.2) (42.3) 100 1250 (7) 1200 (29.8) 38.5) 105 900 (22.8) 34.4) 600 (22.8) 700 (34.4) 110 600 (700 (13.7) 700 (29.7) <td< td=""><td>70</td><td></td><td></td><td></td><td></td><td>4250</td><td>4050</td><td>4450</td><td>4300</td><td>4450</td></td<>	70					4250	4050	4450	4300	4450
80 (26.4) (38.7) (46.6) (52.3) 85 2250 2550 2450 2650 (49.2) 90 2050 2000 2150 (45.9) 95 1600 1600 1700 (20.5) (34.2) (42.3) 100 2050 2000 (34.2) (42.3) 105 2050 2000 (38.7) (45.9) 106 2050 1600 1600 1700 (20.5) (34.2) (42.3) 107 (29) (38.5) 108 900 1000 (22.8) (34.4) 110 600 700 (13.7) (29.7)	75					3500	3350	3700	3600	3700
90 (17.3) (33.7) (42.8) (49.2) 90 (27.9) (38.7) (45.9) 95 (27.9) (38.7) (45.9) 1600 (20.5) (34.2) (42.3) 100 (20.5) (29) (38.5) 105 (29) (38.5) 106 (22.8) (34.4) 110 (600 700 (13.7) (29.7)	80									
90 (27.9) (38.7) (45.9) 95 1600 (20.5) (34.2) (42.3) 100 1250 (29) (38.5) 105 200 (22.8) (34.4) 110 600 700 (13.7) (29.7)	85									
95 (20.5) (34.2) (42.3) 100 1250 1200 1350 (7) (29) (38.5) 105 900 1000 (22.8) (34.4) 110 600 700 (13.7) (29.7)	90									
100 1250 (29) 1350 (38.5) 105 900 (22.8) 1000 (34.4) 110 600 (700 (29.7)	95									
105 900 1000 (22.8) (34.4) 110 600 700 (13.7) (29.7)	100								1200	
110 600 700 (13.7) (29.7)	105									
Minimum boom angle (°) for indicated length (no load) 0 24	110									700
Maximum boom length (ft) at 0° boom angle (no load)		М	inimum boo	m angle (°)	for indicate	d length (no	load)		0	24

NOTE: Loads displayed in pounds.() Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions

NOTE: () Reference radii in feet

Rated Load Rec	Juctions from	main boom cap	acity when i	fting över m	ain boom no	ose with ext	. erected (re	etracted) :
(in lb) 2	2300 215	2000	1950	1900	1850	1800	1750	1700

80027111

Radius in	31 ft LENGTH
feet	#03
30	3400 (80)
46	3200 (75)
60	2700 (70)
73	2100 (65)
85	1700 (60)
96	1200 (55)
106	650 (50)
Min. boom angle for indicated length (no load)	35.5°
Max. boom length at 0° boom angle (no load)	79 ft

Radius in	55 ft LENGTH
feet	#04
36	2200 (80)
54	2200 (75)
70	1600 (70)
85	1000 (65)
Min. boom angle for indicated length (no load)	47°
Max. boom length at 0° boom angle (no load)	79 ft

80027114

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

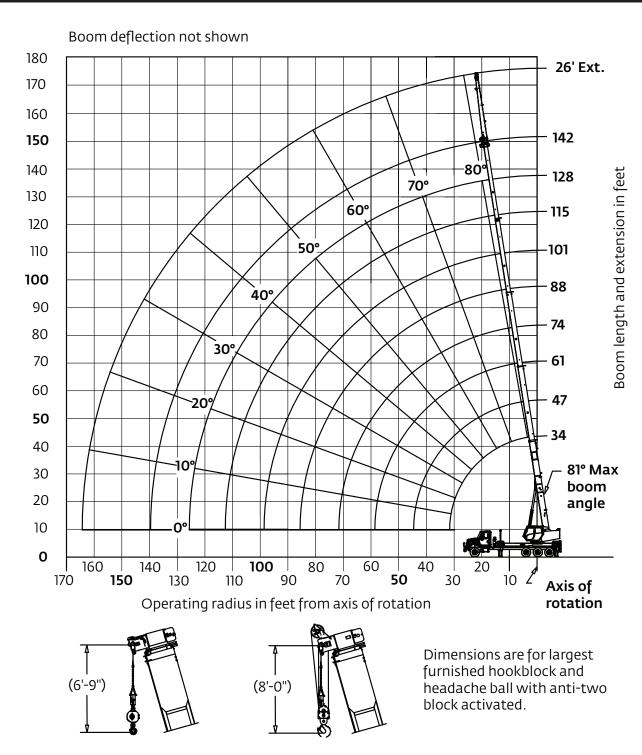
Boom extension capacity notes:

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 31 ft and 55 ft extension lengths may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. For boom angles not shown, use the rating of the next lower 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.
- 4. 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.
- 6. When lifting over the main boom nose with 31 ft or 55 ft extension erected, the outriggers must be fully extended or 50% (17.5 ft) spread.

Working range

142 ft main boom, full span outrigger, with jib



^{*}Drawing is to show the physical reach of the machine. Always refer to load chart to see what portions of this range are structurally and stability limited.

Height from ground in feet

142 ft main boom, full span outrigger 360°, without stowed jib

8 7 (c) 8 7 (c) 10 6 (c) 12 5 (c) 15 4 (c) 20 3 (c) 25 (c) 30 15	34 80,000 (74.9) 75,000 (73.1) 66,500 (69.4) 69.4) 43,000 (59.7) 30,750 (48.9) 23,250 (35.7) 18,000 (13.5)	40,000 (75.6) 40,000 (73.1) 40,000 (69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	40,000 (77.4) 38,000 (74.5) 31,800 (69.5) 24,250 (64.2)	34,000 (77.7) 30,000 (73.7) 24,500	23,050 (76.7)	17,400 (78.8)	115-F	128-G	142
7 8 7 8 7 6 10 10 12 5 15 4 6 10 20 3 6 10 10 10 10 10 10 10 10 10 10 10 10 10	80,000 (74.9) 75,000 (73.1) 66,500 (69.4) 55,000 (65.7) 43,000 (59.7) 43,000 (48.9) 23,250 (35.7)	40,000 (75.6) 40,000 (73.1) 40,000 (69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	40,000 (77.4) 38,000 (74.5) 31,800 (69.5) 24,250 (64.2)	34,000 (77.7) 30,000 (73.7) 24,500	23,050 (76.7)	17,400	115-F	128-G	142
8 7 (c) 8 7 (c) 10 6 (c) 12 5 (c) 15 4 (c) 20 3 (c) 25 (c) 30 16 (c) 35	(74.9) 75,000 (73.1) 66,500 (69.4) 55,000 (65.7) 43,000 (65.7) 30,750 (48.9) 23,250 (35.7)	(75.6) 40,000 (73.1) 40,000 (69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	(77.4) 38,000 (74.5) 31,800 (69.5) 24,250 (64.2)	(77.7) 30,000 (73.7) 24,500	(76.7)				
8 () 10 (6) (12 5) 15 4 (15 4) (20 3) (25 2) (30 1) (35 4)	(73.1) 66,500 (69.4) 55,000 (65.7) 43,000 (59.7) 30,750 (48.9) 23,250 (35.7)	(75.6) 40,000 (73.1) 40,000 (69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	(77.4) 38,000 (74.5) 31,800 (69.5) 24,250 (64.2)	(77.7) 30,000 (73.7) 24,500	(76.7)				
12 5 (c) 15 4 (c) 20 3 (c) 25 2 (c) 30 35	(69.4) 55,000 (65.7) 43,000 (59.7) 30,750 (48.9) 23,250 (35.7)	(75.6) 40,000 (73.1) 40,000 (69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	(77.4) 38,000 (74.5) 31,800 (69.5) 24,250 (64.2)	(77.7) 30,000 (73.7) 24,500	(76.7)				
15 4 15 4 (10 3 (10 25 2 (10 30 1) (10 35 1)	(65.7) 43,000 (59.7) 30,750 (48.9) 23,250 (35.7)	(73.1) 40,000 (69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	(77.4) 38,000 (74.5) 31,800 (69.5) 24,250 (64.2)	(77.7) 30,000 (73.7) 24,500	(76.7)				
20 3 (25 2 30 1; 35	(59.7) 30,750 (48.9) 23,250 (35.7)	(69.2) 31,400 (62.3) 23,850 (55) 18,800 (46.9)	(74.5) 31,800 (69.5) 24,250 (64.2)	(77.7) 30,000 (73.7) 24,500	(76.7)				
20 (25 2 30 1: 35	(48.9) 23,250 (35.7) 18,000	(62.3) 23,850 (55) 18,800 (46.9)	(69.5) 24,250 (64.2)	(73.7) 24,500	(76.7)				
30 11 (35 ((35.7) 18,000	(55) 18,800 (46.9)	(64.2)		20.700				
35		(46.9)	10 200	(69.5)	(73.4)	15,750 (75.9)	13,000 (78.3)		
			19,200 (58.8)	19,450 (65.2)	18,750 (70)	14,300 (73.1)	12,150 (75.8)	10,050 (78)	8000 (79.5)
40	7	15,150 (37.5)	15,550 (52.9)	15,800 (60.7)	16,000 (66.4)	13,200 (70.1)	11,150 (73.5)	9550 (75.8)	7600 (77.7)
		12,200 (25.2)	12,650 (46.6)	12,900 (56)	13,100 (62.6)	12,200 (67.1)	10,400 (71)	9050 (73.7)	7450 (75.9)
45			10,300 (40.1)	10,550 (51.5)	10,750 (59.1)	10,900 (64.2)	9750 (68.4)	8550 (71.4)	7200 (74)
50			8400 (31.8)	8650 (46.2)	8800 (55)	9000 (60.8)	9100 (65.7)	8050 (69.1)	6,800 (72)
55			6850 (20.6)	7150 (40.3)	7300 (50.8)	7450 (57.3)	7600 (62.8)	7600 (66.7)	6550 (70)
60				5900 (33.6)	6050 (46.3)	6200 (53.7)	6350 (59.7)	6500 (64.1)	6200 (67.9)
65				4850 (25.4)	5050 (41.4)	5200 (49.9)	5300 (56.6)	5450 (61.4)	5550 (65.6)
70				4000 (12.6)	4200 (35.9)	4300 (45.9)	4450 (53.3)	4550 (58.6)	4650 (63.1)
75					3450 (29.6)	3550 (41.6)	3700 (49.9)	3800 (55.7)	3900 (60.6)
80					2800 (21.6)	2900 (36.9)	3000 (46.4)	3100 (52.7)	3250 (58)
85					2300 (7.2)	2300 (31.5)	2400 (42.6)	2500 (49.6)	2600 (55.3)
90						1850 (25.1)	1500 (38.5)	2000 (46.3)	2050 (52.6)
95						1450 (16.5)	1100 (34)	1500 (42.8)	1600 (49.7)
100							750 (28.8)	1100 (39.2)	1200 (46.7)
105							650 (22.6)	800 (35.1)	800 (43.6)
110									650 (41.6)
Minin	mum boo	m angle (°)	for indicate	d length (no	load)	0	22.5	35	43.4

NOTE: () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Lifting capacities at zero degree boom angle										
Boom	Main boom length in feet									
angle	34	47-A	61-B	74-C	88-D	101-E				
0°	17,350 (31.5)	9,950 (44.5)	5,900 (58.5)	3,800 (71.5)	2,200 (85.5)	1,100 (98.5)				

NOTE: () Reference radii in feet.

80027132A

	Rated Load Reductions from main boom capacity									
when lifting over main boom nose with extension erected (retracted):										
(in lb) 2300 2150 2000 1950 1900 1850 1800 1750 1700										

142 ft main boom, full span outrigger, 360° with stowed jib

Main	Radius					#02				
7 79,475 (74.9) 8 (74.475 (75.6) 10 (659.4) (75.6) 12 (54.475 (95.2) (77.4) 15 (42.475 (95.2) (76.2) (77.7) 20 (30,225 (31.0) (65.2) (73.1) (76.5) (73.7) (75.7) 21 (48.9) (62.3) (69.5) (73.7) (76.7) (78.8) (79.5) 22 (22,725 (23,450 (23.9) (69.5) (73.7) (76.7) (78.8) (73.1) (75.8) (79.5) 33 (14.75 (46.9) (52.3) (69.5) (73.7) (76.7) (78.8) (73.1) (75.8) (79.5) 34 (14.75 (13.5) (46.9) (52.3) (69.5) (73.7) (76.7) (78.8) (79.5) (79.5) 35 (14.75 (13.5) (46.9) (52.9) (60.7) (66.4) (70.1) (73.5) (75.8) (79.5)					Main b	oom lengt	h in feet			
	leer	34	47-A	61-B	74-C	88-D	101-E	115-F	128-G	142
10	7	(74.9)								
10	8	(73.1)								
12	10	(69.4)	(75.6)							
15	12	(65.7)	(73.1)	(77.4)						
20	15	(59.7)	(69.2)	(74.5)	(77.7)					
17,475	20	(48.9)	(62.3)	(69.5)	(73.7)	(76.7)	(78.8)			
14,750	25	(35.7)	(55)	(64.2)	(69.5)	(73.4)	(75.9)	(78.3)		
135	30		(46.9)	(58.8)	(65.2)	(70)	(73.1)	(75.8)	(78)	(79.5)
40 (25.2) (46.6) (56) (62.6) (67.1) (71) (73.7) (75.9) 45 10,000 10,300 10,550 (64.2) (68.4) (71.4) (74) 50 8100 8400 8600 8800 8950 7900 6675 (69.1) (72) 55 6550 6900 7100 7250 7450 (66.7) (70) 60 5650 (31.8) (40.3) (50.8) (57.3) (62.8) (66.7) (70) 65 (20.6) (40.3) (50.8) (57.3) (62.8) (66.7) (70) 65 (20.6) (40.3) (50.8) (57.3) (62.8) (66.7) (70) 65 (20.6) (40.3) (50.8) (57.3) (62.8) (66.7) (70) 67 (25.4) (41.4) (49.9) (56.6) (61.4) (65.6) 70 (25.4) (41.4) (49.9) (56.6) (61.4) (65.6) 70 (25.4) (41.4) (49.9) (55.3) (58.6) (63.1) 75 (29.6) (41.6) (49.9) (55.7) (60.6) 80 (25.4) (41.6) (49.9) (55.7) (60.6) 81 (26.8) (27.2) (31.5) (42.6) (49.6) (55.3) 82 (21.6) (36.9) (44.6) (49.9) (55.7) (58.8) 85 (20.0) (20.0) (20.0) (2250 (2350 (49.6) (55.3)) 90 (20.0) (20.0) (20.0) (2250 (2350 (49.6) (55.3)) 90 (20.0) (20.0) (20.0) (25.0) (38.5) (46.3) (52.6) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (20.0) (28.8) (39.2) (46.7) 100 (28.8) (39.2) (46.6) (43.6) (43.6)	35		(37.5)	(52.9)	(60.7)	(66.4)	(70.1)	(73.5)	(75.8)	(77.7)
100 100	40			(46.6)	(56)	(62.6)	(67.1)	(71)	(73.7)	(75.9)
50 (31.8) (46.2) (55) (60.8) (65.7) (69.1) (72) 55 6550 6900 7100 7250 7450 6425 60 5650 5850 6000 6200 6350 6075 65 4600 4850 (53.7) (59.7) (64.1) (67.9) 70 3750 4000 4100 4300 4400 4525 75 3250 3350 3550 3550 3775 (66.6) 80 2600 2700 2850 2950 3125 85 2100 2100 2250 2350 2475 90 (21.6) (36.9) (46.4) (52.7) (58) 95 1250 950 1350 1475 100 105 105 1075 (46.7) (46.7)	45			(40.1)	(51.5)	(59.1)	(64.2)	(68.4)	(71.4)	(74)
55 (20.6) (40.3) (50.8) (57.3) (62.8) (66.7) (70) 60 5650 5850 6000 6200 6350 6075 65 4600 4850 5000 5150 5300 5425 70 3750 4000 4400 4500 56.6) (61.4) (65.6) 75 3250 3350 3550 3650 3775 (60.6) 80 2600 2700 2850 2950 3125 85 2100 (21.6) (36.9) (46.4) (52.7) (58) 90 1650 1350 1850 1925 95 1250 950 1350 1475 100 100 28.8) 39.2) 1650 1350 146.3) (52.6) 95 1250 950 1350 1475 (46.7) (46.7) (46.7) 100 100 1500 1500 1650 1350 <	50			(31.8)	(46.2)	(55)	(60.8)	(65.7)	(69.1)	(72)
60 (33.6) (46.3) (53.7) (59.7) (64.1) (67.9) 65 4600 4850 5000 5150 5300 5425 70 3750 4000 4100 4300 4400 4525 (12.6) (35.9) (45.9) (53.3) (58.6) (63.1) 75 3250 3350 3550 3650 3775 80 2600 2700 2850 2950 3125 (29.6) (41.6) (49.9) (55.7) (60.6) 85 2100 2700 2850 2950 3125 (7.2) (31.5) (42.6) (49.6) (55.3) 90 1650 1350 1850 1925 (25.1) (38.5) (46.3) (52.6) 95 1250 950 1350 1475 (100 1250 950 1350 1475 (105 (22.8) (39.2) (46.7) 10	55				(40.3)	(50.8)	(57.3)	(62.8)		(70)
65 (25.4) (41.4) (49.9) (56.6) (61.4) (65.6) 70 3750 4000 4100 4300 4400 4525 (12.6) (35.9) (45.9) (53.3) (58.6) (63.1) 75 3250 3350 3550 3650 3775 80 2600 2700 2950 3125 2600 2700 2950 2350 2475 (58.8) (7.2) (31.5) (42.6) (49.6) (55.3) 90 1650 1350 1850 1925 (25.1) (38.5) (46.3) (52.6) 95 1250 950 1350 1475 100 105 (34) (42.8) (49.7) 105 500 650 675 (43.6) 525 (41.6) (43.6)	60				(33.6)	(46.3)	(53.7)	(59.7)	(64.1)	(67.9)
70 (12.6) (35.9) (45.9) (53.3) (58.6) (63.1) 75 3250 3350 3550 3650 3775 (60.6) 80 2600 2700 2850 2950 3125 (52.7) (58) 85 2100 2100 2250 2350 2475 (49.6) (55.3) 90 1650 1350 1850 1925 (25.1) (38.5) (46.3) (52.6) 95 1250 950 1350 1475 (49.7) 100 600 950 1075 (46.7) (46.7) 105 500 650 675 (43.6) (43.6) 525 110 525 (41.6) (41.6) (41.6) (41.6) (41.6)	65				(25.4)	(41.4)	(49.9)	(56.6)	(61.4)	(65.6)
80 (29.6) (41.6) (49.9) (55.7) (60.6) 80 2600 2700 2850 2950 3125 85 2100 2100 2250 2350 2475 (7.2) (31.5) (42.6) (49.6) (55.3) 90 1650 1350 1850 1925 (25.1) (38.5) (46.3) (52.6) 95 1250 950 1350 1475 (16.5) (34) (42.8) (49.7) 100 600 950 1075 (28.8) (39.2) (46.7) 105 500 650 675 (22.6) (35.1) (43.6)	70					(35.9)	(45.9)	(53.3)	(58.6)	(63.1)
85 (21.6) (36.9) (46.4) (52.7) (58) 85 (2100 2100 2250 2350 2475 (49.6) (55.3) 90 (7.2) (31.5) (42.6) (49.6) (55.3) 95 (25.1) (38.5) (46.3) (52.6) 96 (16.5) (34) (42.8) (49.7) 100 (28.8) (39.2) (46.7) 105 (50 650 675 (22.6) (35.1) (35.1) (43.6) 10 (51.6) (34) (42.8) (49.7) 10 (52.6) (55.3)	75									
90	80					(21.6)	(36.9)	(46.4)	(52.7)	(58)
95 (25.1) (38.5) (46.3) (52.6) 95 (16.5) (34) (42.8) (49.7) 100 (28.8) (39.2) (46.7) 105 (28.6) (39.2) (46.7) 106 (20.6) (35.1) (43.6) 110 (25.1) (38.5) (46.3) (52.6) (147.5) 600 (950 (28.8) (39.2) (46.7) 500 (650 (67.5) (35.1) (43.6) 110 (20.6) (35.1) (43.6)	85						(31.5)	(42.6)	(49.6)	(55.3)
100 (16.5) (34) (42.8) (49.7) 100 (28.8) (39.2) (46.7) 105 (20.6) (35.1) (43.6) 110 (16.5) (34) (42.8) (49.7) 107 (46.7) 108 (20.6) (35.1) (43.6) 110 (16.5) (34) (42.8) (49.7) 107 (46.7) 108 (20.6) (35.1) (43.6) 109 (20.6) (35.1) (43.6)	90						(25.1)	(38.5)	(46.3)	(52.6)
105 (28.8) (39.2) (46.7) 105 500 650 675 (22.6) (35.1) (43.6) 110 525 (41.6)	95							(34)	(42.8)	(49.7)
105 (22.6) (35.1) (43.6) 110 525 (41.6)	100							(28.8)	(39.2)	(46.7)
110 (41.6)	105									(43.6)
Minimum boom angle (°) for indicated length (no load) 0 22 5 35 43 4	110									
2 223 3 2 (7)	М	inimum boo	m angle (°)	for indicate	d length (no	load)	0	22.5	35	43.4

NOTE: Loads displayed in pounds.() Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Lifting capacities at zero degree boom angle									
Boom		Main boom length in feet							
angle	34	47-A	61-B	74-C	88-D	101-E			
0°	16,825 (31.5)	9550 (44.5)	5600 (58.5)	3550 (71.5)	2000 (85.5)	900 (98.5)			
NOTE: () Reference radii in feet. 80027135									

50	3800 (75)					
65	3200 (70)					
78	2450 (65)					
90	1800 (60)					
101	1250 (55)					
112	650 (50)					
Min. boom angle for indicated length (no load)	48°					
Max. boom length at 0° boom angle (no load)	88 ft					
	80027138					
NOTE: Londa dianta	NOTE: Loads displayed in pounds					

#03

4000

(80)

Radius in

feet

33

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Boom extension capacity notes:

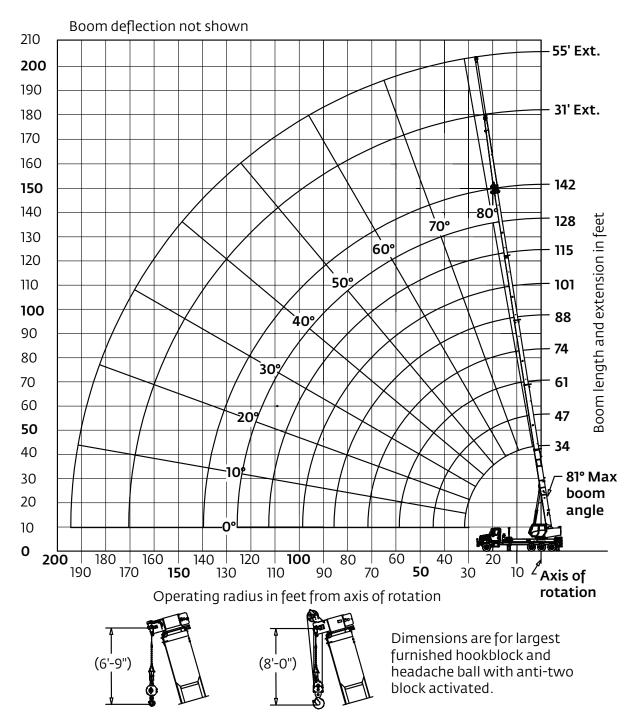
- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 26 ft extension length may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. For boom angles not shown, use the rating of the next lower 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.
- 5. Capacities listed are with outriggers properly extended and vertical jacks set.
- When lifting over the main boom nose with 26 ft extension erected, the outriggers must be fully extended or 50% (17.5 ft) spread.

Working range

142 ft main boom, full span outrigger, with 55 ft jib



*Drawing is to show the physical reach of the machine. Always refer to load chart to see what portions of this range are structurally and stability limited.

Height from ground in feet

142 ft main boom, full span outrigger, 360°, with 55 ft jib

Radius	#02									
in feet	Main boom length in feet									
leer	34	47-A	61-B	74-C	88-D	101-E	115-F	128-G	142	
7	79,200 (74.9)									
8	74,200 (73.1)									
10	65,700 (69.4)	39,350 (75.6)								
12	54,200 (65.7)	39,350 (73.1)	39,550 (77.4)							
15	42,200 (59.7)	39,350 (69.2)	37,550 (74.5)	33,600 (77.7)						
20	29,950 (48.9)	30,750 (62.3)	31,350 (69.5)	29,600 (73.7)	22,650 (76.7)	17,050 (78.8)				
25	22,450 (35.7)	23,200 (55)	23,800 (64.2)	24,100 (69.5)	20,300 (73.4)	15,400 (75.9)	12,700 (78.3)			
30	17,200 (13.5)	18,150 (46.9)	18,750 (58.8)	19,050 (65.2)	18,350 (70)	13,950 (73.1)	11,850 (75.8)	9840 (78)	7800 (79.5)	
35		14,500 (37.5)	15,100 (52.9)	15,400 (60.7)	15,600 (66.4)	12,850 (70.1)	10,850 (73.5)	9300 (75.8)	7400 (77.7)	
40		11,550 (25.2)	12,200 (46.6)	12,500 (56)	12,700 (62.6)	11,850 (67.1)	10,100 (71)	8800 (73.7)	7250 (75.9)	
45			9850 (40.1)	10,150 (51.5)	10,350 (59.1)	10,550 (64.2)	9450 (68.4)	8300 (71.4)	7000 (74)	
50			7950 (31.8)	8250 (46.2)	8400 (55)	8650 (60.8)	8800 (65.7)	7800 (69.1)	6600 (72)	
55			6400 (20.6)	6750 (40.3)	6900 (50.8)	7100 (57.3)	7300 (62.8)	7350 (66.7)	6350 (70)	
60				5500 (33.6)	5650 (46.3)	5850 (53.7)	6050 (59.7)	6250 (64.1)	6000 (67.9)	
65				4450 (25.4)	4650 (41.4)	4850 (49.9)	5000 (56.6)	5200 (61.4)	5350 (65.6)	
70				3600 (12.6)	3800 (35.9)	3950 (45.9)	4150 (53.3)	4300 (58.6)	4450 (63.1)	
75				, ,	3050 (29.6)	3200 (41.6)	3400 (49.9)	3550 (55.7)	3,700 (60.6)	
80					2400 (21.6)	2550 (36.9)	2700 (46.4)	2850 (52.7)	3050 (58)	
85					1900 (7.2)	1950 (31.5)	2100 (42.6)	2250 (49.6)	2400 (55.3)	
90						1500 (25.1)	1200 (38.5)	1750 (46.3)	1850 (52.6)	
95						1100 (16.5)	800 (34)	1250 (42.8)	1400 (49.7)	
100						()	450 (28.8)	850 (39.2)	1000 (46.7)	
105							350 (22.6)	550 (35.1)	600 (43.6)	
110								(=21.7)	450 (41.6)	
М	Minimum boom angle (°) for indicated length (no load)						22.5	35	43.4	
	Minimum boom angle (°) for indicated length (no load) Maximum boom length (ft.) at 0° boom angle (no load)					0	22.5		43.4	

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions

Lifting capacities at zero degree boom angle									
Boom Main boom length in feet									
angle	34	47-A	61-B	74-C	88-D	101-E			
0°	16,550 (31.5)	9300 (44.5)	5450 (58.5)	3400 (71.5)	1800 (85.5)	750 (98.5)			

NOTE: () Reference radii in feet.

Radius in	31 ft LENGTH			
feet	#03			
33	3400 (80)			
50	3200 (75)			
65	1200 (70)			
Min. boom angle for indicated length (no load)	55°			
Max. boom length at 0° boom angle (no load)	61 ft			

Radius in	55 ft LENGTH			
feet	#04			
40	2200 (80)			
59	2200 (75)			
76	800 (70)			
Min. boom angle for indicated length (no load)	60°			
Max. boom length at 0° boom angle (no load)	61 ft			

80030717

NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

Boom extension capacity notes:

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 31 ft and 55 ft extension lengths may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. For boom angles not shown, use the rating of the next lower 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.
- 5. Capacities listed are with outriggers properly extended and vertical jacks set.
 6. When lifting over the main boom nose with 31 ft or 55 ft extension erected, the outriggers must be fully extended or

80030720 50% (17.5 ft) spread.

Accessories

 $\textbf{Radio Remote Controls} - (Ground \ level \ or \ boom \ tip)$

Eliminate the handling and maintenance concerns that accompany cabled remotes. Operate to a range of about 76~m (250 ft), varying with conditions.

Heavy-duty Personnel Basket -

One and two-person baskets for main boom and jibs are available.

Air Conditioning for Crane Cab -

Provides excellent crane cab cooling to overcome the radiant heat

from the sun reflection.

Auxiliary Winch 15,000 lb Line Pull -

Second winch redundant to the main, planetary winch with boom tip "rooster

sheave" to allow reeving of both winch lines.

Spanish-Language Danger Decals, and Function Decals

Spanish-Language Control Knobs, and Operators' Manuals

• NB4R (R4 functions)

• BSA-1

• BSA-R1 (provides rotation)

• BSAY-1 • BSAY-2

• A/C

• NBT40AW

• SDD

• SOM

Series NBT40



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