

## National Crane Series NBT40 Product Guide



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

## Features



**Overload protection** 

System (WADS).

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

### 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).



### 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.

## 10 ft) maximum tip height (boom v

### 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).

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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

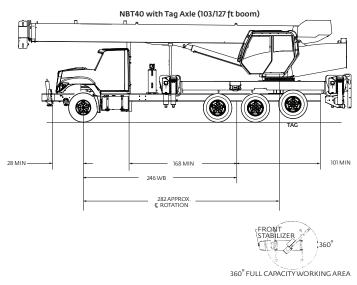
	pulls and sp the fourth		1 part line	2 part line	3 part line	4 part line	5 part line	6 part line	7 part line	8 part line
<ul> <li>increase of and third</li> <li>Winch lin decrease and third</li> <li>Winch lin limited by</li> </ul>	י e speed woı on the first,	second, uld second, be capacity		A Company and the second se		Est and a				
Standard planetary winch	Cable supplied	Average breaking strength	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull	Max. pull
Low speed	5/8" diameter rotation resistant	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)
	IWRC		62 m/min (205 fpm)	31 m/min (103 fpm)	21 m/min (68 fpm)	16 m/min (51 fpm)	13 m/min (41 fpm)	10 m/min (34 fpm)	9 m/min (29 fpm)	8 m/min (26 fpm)
High speed	5/8" diameter rotation resistant	25 583 kg (56,400 lb)	2268 kg (5000 lb)	4536 kg (10,000 lb)	6804 kg (15,000 lb)	9072 kg (20,000 lb)	11 340 kg (25,000 lb)	13 608 kg (30,000 lb)	15 876 kg (35,000 lb)	18 144 kg (40,000 lb)
	IWRC		125 m/min (410 fpm)	62 m/min (205 fpm)	42 m/min (137 fpm)	31 m/min (103 fpm)	25 m/min (82 fpm)	21 m/min (68 fpm)	18 m/min (59 fpm)	16 m/min (51 fpm)

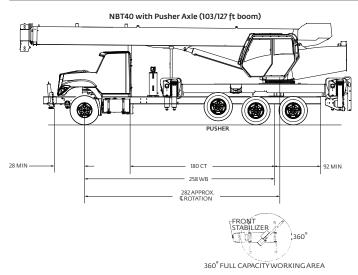
Winch	Fourth layer pull	Allowable cable pull
Standard planetary and auxiliary planetary	2268 kg (5000 lb) high speed 5103 kg (11,250 lb) low speed	5117 kg (11,280 lb) 5117 kg (11,280 lb)

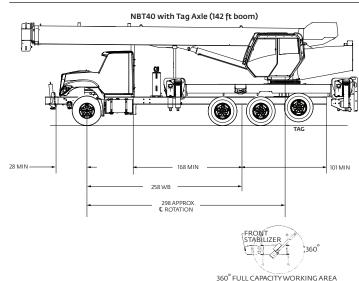
Block type	Rating	Weight
Aux boom head		45 kg (100 lb)
Downhaul weight	4,53 USt (7 USt)	78 kg (172 lb)
1-sheave block	13,60 t (20 USt)	149 kg (329 lb)
2-sheave block	22,67 t (30 USt)	290 kg (640 lb)
3-sheave block	31,74 t (40 USt)	272 kg (600 lb)
4-sheave block	32,65 t (50 USt)	361 kg (796 lb)

# **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: $360^{\circ}$

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 cm<sup>3</sup> (30.0 in<sup>3</sup>) 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

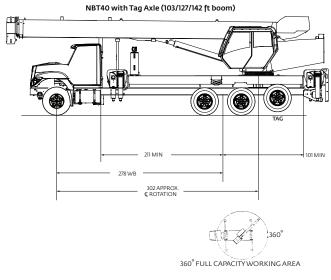
with Pusher Axle (Extended front frame rails required for SFO
installation.)
Working area: 360°
Gross Axle Weight Rating Front: 9072 kg (20,000 lb)
Gross Axle Weight Rating Rear: 18 144 kg (40,000 lb)
Pusher Axle Weight Rating: 5987 kg (13,200 lb)
Wheelbase: 655 cm (258 in)
Cab to Axle/trunnion (CA/CT): 457 cm (180 in)
Frame Section Modulus (SM), front axle to end of AF: 785 MPa
(110,000 PSI): 426 cm <sup>3</sup> (30.0 in <sup>3</sup> )
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
the truck.
*Estimated axle scale weights prior to installation of crane, stabilizers and subbase for 85% stability.

### 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 cm<sup>3</sup> (30.0 in<sup>3</sup>) 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 the truck.

\*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 cm<sup>3</sup> (30.0 in<sup>3</sup>)

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

#### 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

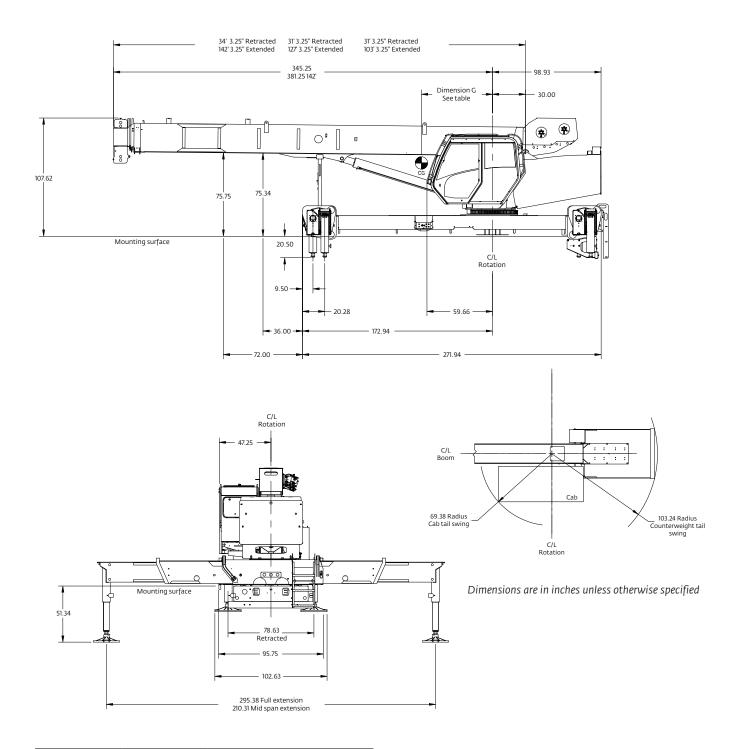
that reinforcing is not required. The front hydraulic jack is used for a 360° working range around the truck. The frame under the cab through the front suspension must have the minimum S.M. and RBM because reinforcing through the front suspension is often difficult because of engine, radiator mounts 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.

• 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

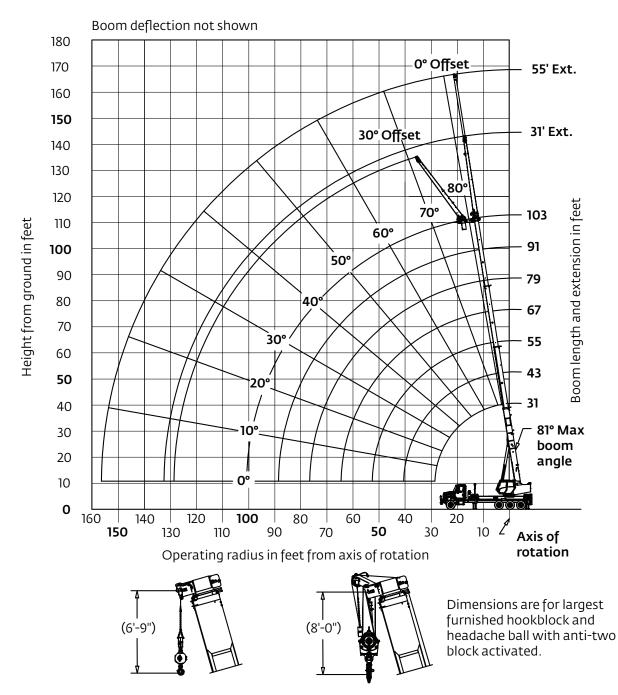


Series	G	Weight with oil
40103	66.5"	36,109 lb
40127	70"	37,419 lb
40142	78"	38,714 lb

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 b	oom lengt	h 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)
	Minimur	m boom ang	gle (°) for inc	licated leng	th (no load)		0
	Maximum ds display	-	h(ft) at 0° l	-			103

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

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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: ( ) F	Reference r	adii in feet					80026961			
	Ra		eductions fr ting over ma		om capacit ose with :	ý				
tele. erected (retracted)	2300	2150	2000	1950	1900	1850	1800			
31' off. erected at 0° offset	1800	1700	1550	1500	1450	1450	1400			

Series NBT40

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

### 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 ang	gle (°) for ind	licated leng	th (no load)		0
	Maximu	m boom ler	igth (ft) at C	° boom ang	le (no load)		103

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

Lifting capacities at zero degree boom angle							
Boom	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
	R		eductions fr ting over ma			ý	
tele. erected (retracted)	2300	2150	2000	1950	1900	1850	1800
31' off. erected at 0° offset	1800	1700	1550	1500	1450	1450	1400

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

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

Radius in	0° OFFSET				
feet	#06				
25	8800				
	(80)				
38	8000 (75)				
	6500				
49	(70)				
60	5100				
00	(65)				
70	4100				
,,,	(60)				
79	3300				
	(55) 2600				
88	(50)				
	1900				
96	(45)				
102	1350				
103	(40)				
110	950				
110	(35)				
115	650				
Min hears anala	(30)				
Min. boom angle for indicated length	19.5°				
(no load)	C.CI				
Max. boom length					
at 0° boom angle	91 ft				
(no load)					

Radius in	30° OFFSET
feet	#09
39	6400
	(80)
50	5700
	(75)
60	5000 (70)
	4200
70	(65)
70	3600
79	(60)
87	3000
67	(55)
95	2300
	(50)
102	1700
	(45) 1400
108	(40)
	1100
113	(35)
118	900
110	(30)
122	650
	(25)
124	600 (21)
Min. boom angle	(21)
for indicated length	20°
(no load)	
Max. boom length at 0° boom angle	01 ft
(no load)	91 ft
(	80027069

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.

NOTE: Loads displayed in pounds. () Boom angles are in degrees.

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

## Load chart

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

Radius in	31 ft LENGTH
feet	#03
25	8800
25	(80)
38	8000
	(75)
49	6500 (70)
	5100
60	(65)
	4100
70	(60)
79	3200
,,,	(55)
88	2300
	(50)
96	1650 (45)
	1150
103	(40)
110	750
liu	(35)
115	500
	(30)
Min. boom angle for indicated length	34.1°
(no load)	51.1
Max. boom length	
at 0° boom angle (no load)	79 ft

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.

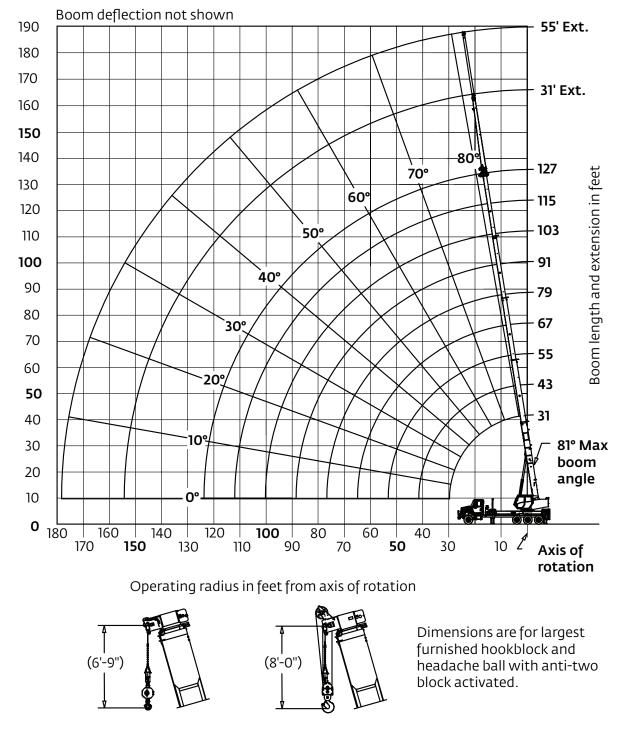
() Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

#### Boom extension capacity notes:

- 1. All capacities above the bold line are based on structural strength of boom 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.
- 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



\*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				Main b	oom lengt	h in feet								
feet	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							V7	1150 (22.8)	1200 (34.4)					
110								850 (13.7)	900 (29.7)					
115								(13.7)	650 (24.2)					
	M	inimum boo	m angle (°)	for indicate	d length (no	load)		0	24					
	Ma	aximum boo /ed in poui	m length (f	t.) at 0° boo	m angle (no	o load)		11	5					
		e. Refer to	LMI manua	al for opera	ating instru	uctions.								
		Lif	ting capa	cities at ze	ro degree	boom ang	gle							

Boom	Main Boom length in feet												
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: ( ) I	Reference	radii in fee	t.						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				

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

# Load chart

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

Radius	#02												
in feet				Main b	oom lengi	th in feet							
leer	31	43-A	55-B	67-C	79-D	91-E	103-F	115-G	127				
7	79,200 (73.6)												
8	74,200 (71.6)												
10	66,500 (67.6)	40,350 (71.4)											
12	55,200 (63.4)	40,350 (67)	40,050 (75.8)	39,900 (78.8)									
15	42,950 (56.8)	38,350 (59.4)	40,050 (72.6)	36,900 (76.2)	28,350 (78.6)	21,550 (80.4)							
20	30,700 (44.4)	31,350 (51.0)	31,750 (66.9)	32,200 (71.7)	24,750 (74.9)	19,100 (77.2)	16,050 (79.2)	12,600 (80.7)					
25	23,150 (27.8)	23,850 (41.4)	24,150 (61)	24,700 (67)	21,850 (71.1)	16,950 (74)	14,700 (76.5)	12,350 (78.4)	9800 (79.9)				
30		18,650 (29.4)	19,300 (54.6)	19,600 (62.1)	19,800 (67.2)	15,350 (70.8)	13,450 (73.7)	11,550 (76)	9700 (77.9)				
35		14,200 (28.6)	14,800 (47.7)	15,100 (57)	15,350 (63.1)	14,150 (67.4)	12,400 (70.8)	10,700 (73.7)	9300 (75.8)				
40			11,700 (40)	12,000 (51.6)	12,200 (58.7)	12,400 (63.9)	11,350 (67.9)	10,050 (71.2)	8800 (73.6)				
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)				
55				6550 (32.1)	7150 (44.8)	6950 (52.6)	7250 (58.4)	7250 (63)	7450 (66.6)				
60				5400 (22.3)	6050 (39.1)	5800 (48.3)	6250 (54.9)	6100 (59.9)	6250 (63.9)				
65					5050 (32.6)	4850 (43.8)	5350 (51.2)	5100 (56.8)	5250 (61.2)				
70					4250 (24.7)	4050 (38.8)	4450 (47.3)	4300 (53.5)	4450 (58.3)				
75					3500 (12.3)	3350 (33.1)	3700 (43.2)	3600 (50.2)	3700 (55.4)				
80						2750 (26.4)	3100 (38.7)	3000 (46.6)	3200 (52.3)				
85						2250 (17.3)	2550 (33.7)	2450 (42.8)	2650 (49.2)				
90							2050 (27.9)	2000 (38.7)	2150 (45.9)				
95							1600 (20.5)	1600 (34.2)	1700 (42.3)				
100							1250 (7)	1200 (29)	1350 (38.5)				
105								900 (22.8)	1000 (34.4)				
110								600 (13.7)	700 (29.7)				
	M	inimum boc	om angle (°)	for indicate	d length (no	load)		0	24				
		aximum boo yed in pou	om length (f nds.( ) Boo	t) at 0° booi om angles a	m angle (no are in degr	load) ees.		11	5				
						boom ang	gle						
Boom	Main boom length in feet												

Boom		Main boom length in feet											
angle	31	43-A	55-B	67-C	79-D	91-E	103-F						
0°	19,400 (28.5)	11,000 (40.5)	7250 (52.5)	4500 (64.5)	3200 (76.5)	1850 (88.5)	1150 (100.5)						
NOTE: ( )	Reference	radii in fee	t.										
Rated Load	d Reduction	s from main	boom capa	city when li	fting over m	ain boom n	ose with ext	. erected (r	etracted) :				
(in lb)	2300	2150	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

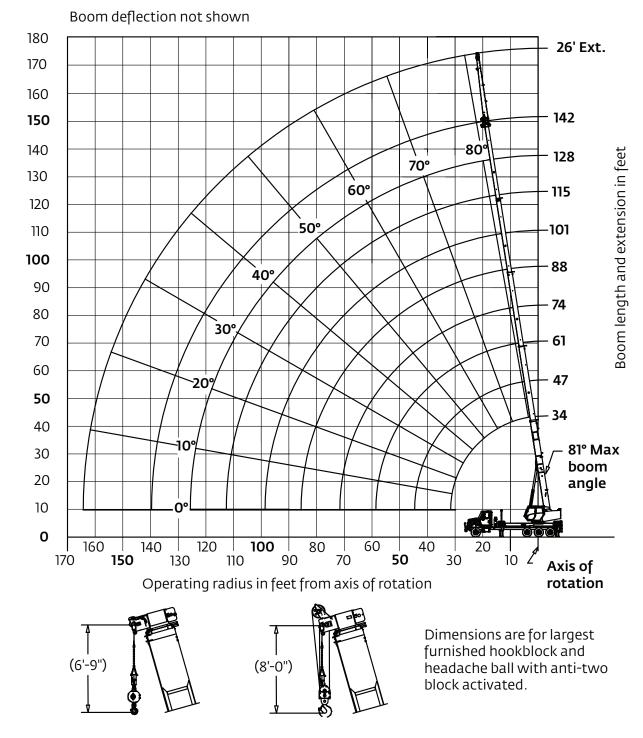
NOTE: Loads displayed in pounds. () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions.

#### 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.
- 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

### 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.

Courtesy of Crane.Market

Height from ground in feet

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

Radius		#01												
in				Main b	oom lengt	th in feet								
feet	34	47-A	61-B	74-C	88-D	101-E	115-F	128-G	142					
7	80,000 (74.9)													
8	75,000 (73.1)													
10	66,500 (69.4)	40,000 (75.6)												
12	55,000 (65.7)	40,000 (73.1)	40,000 (77.4)											
15	43,000 (59.7)	40,000 (69.2)	38,000 (74.5)	34,000 (77.7)										
20	30,750 (48.9)	31,400 (62.3)	31,800 (69.5)	30,000 (73.7)	23,050 (76.7)	17,400 (78.8)								
25	23,250 (35.7)	23,850 (55)	24,250 (64.2)	24,500 (69.5)	20,700 (73.4)	15,750 (75.9)	13,000 (78.3)							
30	18,000 (13.5)	18,800 (46.9)	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)					
35		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)					
40		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							(12.0)	(00)	650 (41.6)					
Mi	inimum boo	om angle (°)	for indicate	d length (no	load)	0	22.5	35	43.4					
		om length (f es are in de		m angle (no	load)		10	01						

#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 I	radii in fee	t.						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				

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. Series NBT40

## Load chart

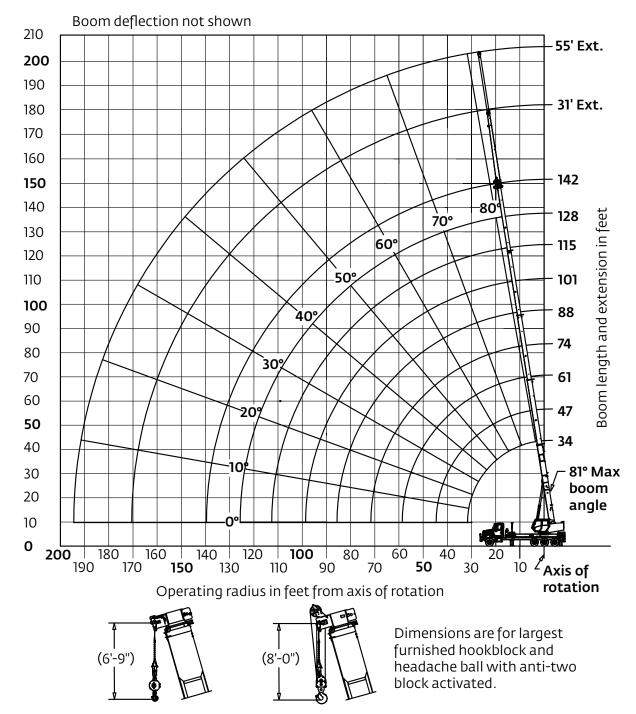
### 142 ft main boom, full span outrigger, 360° with stowed jib

Radius					#02					Radius	
in				Main b	oom lengt	h in feet				in	#03
feet	34	47-A	61-B	74-C	88-D	101-E	115-F	128-G	142	feet	
7	79,475 (74.9) 74,475									. 33	4000 (80)
8	(73.1)	39,600								50	3800
10	(69.4) 54,475	(75.6) 39,600	39,700							65	(75) 3200
12	(65.7) 42,475	(73.1) 39,600	(77.4) 37,700	33,750							(70) 2450
20	(59.7) 30,225	(69.2) 31,000	(74.5) 31,500	(77.7) 29,750	22,850	17,200				78	(65)
25	(48.9) 22,725	(62.3) 23,450	(69.5) 23,950	(73.7) 24,250	(76.7) 20,500	(78.8) 15,550	12,850			90	1800 (60)
30	(35.7) 17,475 (13.5)	(55) 18,400 (46.9)	(64.2) 18,900 (58.8)	(69.5) 19,200 (65.2)	(73.4) 18,550 (70)	(75.9) 14,100 (73.1)	(78.3) 12,000 (75.8)	9900 (78)	7875 (79.5)	101	1250 (55)
35	(15.5)	14,750 (37.5)	15,250	15,550 (60.7)	15,800 (66.4)	13,000	(73.8) 11,000 (73.5)	9400 (75.8)	7475 (77.7)	112	650
40		11,800 (25.2)	12,350 (46.6)	12,650 (56)	12,900 (62.6)	12,000 (67.1)	10,250 (71)	8900 (73.7)	7325 (75.9)	Min. boom angle	(50)
45		(/	10,000 (40.1)	10,300 (51.5)	10,550 (59.1)	10,700 (64.2)	9600 (68.4)	8400 (71.4)	7075 (74)	for indicated length (no load)	48°
50			8100 (31.8)	8400 (46.2)	8600 (55)	8800 (60.8)	8950 (65.7)	7900 (69.1)	6675 (72)	Max. boom length at 0° boom angle	88 ft
55			6550 (20.6)	6900 (40.3)	7100 (50.8)	7250 (57.3)	7450 (62.8)	7450 (66.7)	6425 (70)	(no load)	00   L
60				5650 (33.6)	5850 (46.3)	6000 (53.7)	6200 (59.7)	6350 (64.1)	6075 (67.9)	NOTE: Loads display	80027138 red in pounds
65				4600 (25.4)	4850 (41.4)	5000 (49.9)	5150 (56.6)	5300 (61.4)	5425 (65.6)	() Boom angles are in	
70				3750 (12.6)	4000 (35.9) 3250	4100 (45.9) 3350	4300 (53.3) 3550	4400 (58.6)	4525 (63.1) 3775	operating instruction	
75					(29.6) 2600	(41.6) 2700	(49.9) 2850	3650 (55.7) 2950	(60.6) 3125	<b>Boom extension</b>	<b>capacity notes:</b> pove the bold line are
80					(21.6)	(36.9) 2100	(46.4)	(52.7)	(58)		cural strength of boom
85					(7.2)	(31.5)	(42.6) 1350	(49.6) 1850	(55.3)	2. 26 ft extension single line liftin	length may be used for g service.
90						(25.1)	(38.5)	(46.3) 1350	(52.6) 1475	3. Radii listed are boom with the	for a fully extended boom extension
95		-				(16.5)	(34) 600	(42.8) 950	(49.7) 1075	than fully exter	ain boom lengths less ided, the rated loads are
105							(28.8)	(39.2)	(46.7) 675	angles not show	boom angle. For boom wn, use the rating of the
110						_	(22.6)	(35.1)	(43.6) 525		ation of this machine
-	Linimum bor	om angle (°)	for indicate	d length (pr	load)	0	22.5	35	(41.6) 43.4		ads than the capacities prohibited. Machine
		om length (f		5				01	+J.4	tipping with bo	om extension occurs
NOTE: Lo	ads displa	yed in pou e. Refer to	nds.() Boo	om angles a	are in degr					4. Boom angle is t	hout advance warning. he angle above or below
	. acting cour			<u> </u>	ero degree		ale				e longitudinal axis of the ion after lifting rated

	Lifting capacities at zero degree boom angle												
Boom		Main boom length in feet											
angle	34	34 47-A 61-B 74-C 88-D 101-E											
0°	16,825	9550	5600	3550	2000	900							
	(31.5)	(44.5)	(58.5)	(71.5)	(85.5)	(98.5)							
NOTE: ( )	NOTE: ( ) Reference radii in feet. 8002713												

- 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.

### 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.

## Load chart

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

inffect         34         47-A         61-B         74-C         88-D         101-E         115-F         128-G           7         79,200	Radius	#02										
34         47-A         61-B         74-C         88-D         101-E         115-F         128-G           7         79,200 (73.1)		Main boom length in feet										
/         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (74.9)         (77.9)         (78.3)         (77.9)         (78.3)         (77.9)         (78.3)         (78.3)         (78.9)         (78.3)         (78.9)         (78.3)         (78.9)         (78.9)         (78.3)         (78.9)	Jeer	-	47-A	61-B	74-C	88-D	101-E	115-F	128-G	142		
8         (73.1)	7											
10         65,700 (69,4)         39,350 (75,6)         39,550 (73,1)         1         1         1         1         1           12         54,200 (55,7)         39,350 (73,1)         37,550 (74,1)         33,600 (77,4)         1         1         1         1           15         42,200 (59,7)         30,750 (69,2)         33,500 (69,2)         22,650 (73,7)         17,050 (76,7)         17,050 (78,8)         12,700 (78,8)         12,700         12,700           20         29,950 (35,7)         30,750         31,350         29,600         22,650         17,050 (73,7)         12,700         12,700           30         17,200         18,150         18,750         19,050         18,350         13,950         18,850         9300           35         14,500         15,100         15,400         12,700         17,850         10,850         9300           40         11,550         12,200         12,500         12,700         11,850         10,850         10,100         8800           45         14,500         12,200         12,500         10,550         10,850         10,010         8800           60         11,550         12,200         12,500         10,550         10,850	8											
12         54,200 (65.7)         39,350 (73.1)         39,550 (74.5)         33,600 (77.7)         Image: form of the state	10	65,700										
15         42,200 (59.7)         39,350 (69.2)         37,550 (74.5)         33,600 (77.7)               20         29,950 (48.9)         (62.3)         (69.5)         (73.7)         (76.7)         (78.8)             25         22,450 (35.7)         (55)         (64.2)         (56.2)         (73.7)         (76.7)         (78.8)            30         17,200 (13.5)         18,150         18,750         19,050         18,350         13,950         17,050             35         14,500         15,100         15,400         15,600         12,850         10,850         9300           (37.5)         (52.9)         (50.7)         (66.4)         (70.1)         (73.5)         (75.8)           40         11,550         12,200         12,500         17,050         18,350         (66.4)         (70.1)         (73.5)         (75.8)           45         11,550         12,200         12,500         18,350         (66.7)         (73.7)         (73.7)         (74.4)         8800         7800         (55.5)         (56.0)         (57.1)         (10.100         8800         7800         (55.7)	12	54,200	39,350									
20         29,950 (48.9)         30,750 (52.3)         31,350 (69.5)         29,600 (73.7)         22,650 (76.7)         17,050 (78.8)         Image Image           25         22,450         23,200         23,800         24,100         20,300         15,400         12,700           30         17,200         18,150         18,750         19,050         18,350         13,950         17,850         9840           31         14,500         15,100         15,400         12,850         10,850         9300           35         14,500         15,100         15,400         12,850         10,850         9300           40         11,550         12,200         12,500         12,700         18,850         10,100         8800           45         11,550         12,200         12,500         12,700         18,850         9450         8300           50         10,550         9850         10,150         10,350         10,550         9450         8300           55         10         6400         6750         6900         7100         7300         7350           60         10         10         12         6450         6450         6450         6450         545	15	42,200	39,350	37,550								
(48.9)         (62.3)         (69.5)         (73.7)         (76.7)         (78.8)	20	29,950	30,750	31,350	29,600					_		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		22,450	23,200	23,800	24,100	20,300	15,400					
50         (13.5)         (46.9)         (58.8)         (65.2)         (70)         (73.1)         (75.8)         (78)           35         14,500         15,100         15,400         15,600         12,850         10,850         9300           40         17,550         12,200         12,500         12,700         18,850         10,100         8800           45         16,521         (46.6)         (55)         (59.1)         (67.1)         (71)         (73.7)           50         22.20         (40.1)         (51.5)         (59.1)         (64.2)         (68.4)         (71.4)           50         30         7950         8250         8400         8650         8800         7800           55         6400         6750         6900         700         73.50         (64.1)           60         20.5         (40.3)         (50.8)         (57.3)         (59.7)         (64.1)           65         20.6         4450         4650         4850         5000         5200         (52.6)         (64.1)           65         20.7         (25.4)         (41.4)         (49.9)         (56.6)         (51.1)         (53.7)         (59.7)         (64	25								0040	70.00		
35         14,500 (37.5)         15,100 (52.9)         15,400 (60.7)         15,600 (56.4)         12,850 (70.1)         10,850 (73.5)         9300 (73.5)           40         11,550 (25.2)         12,200 (46.6)         12,500 (56)         12,700 (62.6)         18,850 (77.1)         10,150         10,350         10,150         10,350         9450         8300 (73.7)           45         9850         10,150         10,350         10,550         9450         8300           50         7950         8250         8400         8650         8800         7800           55         6400         6750         6900         7100         7300         7350           60         20.6)         (40.3)         (50.8)         (53.7)         (59.7)         (64.1)           65         640         6750         6900         7100         7300         7350           60         (20.6)         (44.50)         4650         4850         5000         5200           61         (20.6)         (25.4)         (41.4)         (49.9)         (56.6)         (61.4)           70         61         61         3050         3200         3400         3550           75         61	30									7800 (79.5)		
40         13,50         12,200         12,500         12,700         11,850         10,100         8800           45         9850         10,150         12,500         12,700         11,850         10,100         8800           45         9850         10,150         10,350         10,550         9450         8300           50         7950         8250         8400         8650         8800         7800           55         6400         6750         6900         7100         7300         7350           60         6400         6750         6900         7100         7300         7350           60         6400         6750         6900         7100         7300         7350           60         6400         6750         6900         7100         7300         7350           60         6400         6750         6900         7100         7300         7350           61         6400         6750         6900         7100         7300         7350           62         6400         6450         4850         4850         5000         5200           65         650         650         3800	35	(12.2)	14,500	15,100	15,400	15,600	12,850	10,850	9300	7400		
40         (25.2)         (46.6)         (56)         (62.6)         (67.1)         (71)         (73.7)           45         9850         10,150         10,350         10,550         9450         8300           50         7950         8250         8400         8650         8800         7800           51         6400         6750         600         700         7300         (69.1)           55         6400         6750         6500         700         7300         7350           60         (20.6)         (40.3)         (50.8)         (57.3)         (62.8)         (66.7)           60         (20.6)         (40.3)         (50.8)         (53.7)         (59.7)         (64.1)           65         60         60.5         5850         6050         5200         (56.6)         (61.4)           70         65         60         3600         3800         3950         4150         4300           75         6         6         65.9         (46.9)         (55.7)         (59.7)           70         6         6         3600         3800         3950         4150         4300           75         6 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td><u> </u></td> <td></td> <td>(77.7) 7250</td>								<u> </u>		(77.7) 7250		
45         (40.1)         (51.5)         (59.1)         (64.2)         (68.4)         (71.4)           50         7950         8250         8400         8650         8800         7800           55         6400         6750         6900         7100         7300         7350           55         6400         6750         6900         7100         7300         7350           60         6400         6750         5650         5850         6050         6250           60         6400         6750         6600         700         7300         7350           60         660         (40.3)         (50.8)         (57.3)         (62.8)         (66.7)           60         65         5500         5650         5850         6050         5200           65         66         (46.3)         (46.3)         (53.7)         (59.7)         (64.1)           70         65         600         3800         3950         4150         4300           70         (25.4)         (41.4)         (49.9)         (55.6)         (53.3)         (58.6)           75         (3050         3200         3400         3550 <t< td=""><td>40</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>(75.9)</td></t<>	40									(75.9)		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	45									7000		
50         (31.8)         (46.2)         (55)         (60.8)         (65.7)         (69.1)           55         6400         6750         6900         7100         7300         7350           60         (20.6)         (40.3)         (50.8)         (57.3)         (62.8)         (66.7)           60         (60.8)         (57.3)         (50.7)         (50.7)         (64.1)         (50.7)         (64.1)           65         (65.7)         (46.3)         (46.3)         (53.7)         (59.7)         (64.1)           65         (46.3)         (46.3)         (53.7)         (59.7)         (64.1)           65         (46.3)         (46.0)         4850         5000         5200           65         (53.3)         (58.6)         (61.4)         (49.9)         (56.6)         (61.4)           70         (25.4)         (41.4)         (49.9)         (58.6)         (58.6)           75         (35.9)         (45.9)         (53.3)         (58.6)           75         (29.6)         (41.6)         (49.9)         (55.7)           80         (29.6)         (41.6)         (49.9)         (55.7)           80         (29.6)										(74) 6600		
55         (20.6)         (40.3)         (50.8)         (57.3)         (62.8)         (66.7)           60         5500         5650         5850         6050         6250           65         60         (46.3)         (53.7)         (59.7)         (64.1)           65         60         (46.3)         (53.7)         (59.7)         (64.1)           70         64         (450         4850         5000         5200           70         64         (41.4)         (49.9)         (56.6)         (61.4)           70         64         3600         3800         3950         4150         4300           75         66         65         (25.4)         (41.4)         (49.9)         (55.6)         (55.7)           80         60         3800         3950         4150         4300         (25.6)         (46.4)         (52.7)           85         60         60         60         1900         1950         2100         2250           90         61         61         1900         1950         1200         1750           95         61         61         61         61         63         1200	50									(72)		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	55									6350		
60         (33.6)         (46.3)         (53.7)         (59.7)         (64.1)           65         4450         4650         4850         5000         5200           65         (41.4)         (49.9)         (56.6)         (61.4)           70         (41.4)         (49.9)         (56.6)         (61.4)           70         (12.6)         (35.9)         (45.9)         (53.3)         (58.6)           75         (10.6)         (49.9)         (55.7)         (55.7)         (29.6)         (41.6)         (49.9)         (55.7)           80         (21.6)         (20.0)         2550         2700         2850           85         1900         1950         2100         2250           90         1900         1950         1200         1750           91         1900         1950         1200         1750           95         100         100         100         800         1250           100         1100         800         1250         (25.1)         (38.5)         (46.3)           100         1100         800         1250         (25.8)         (25.8)         (25.9)         (25.9)         (25.9)	55			(20.6)				<u> </u>		(70) 6000		
65         4450         4650         4850         5000         5200           70         3600         3800         3950         4150         4300           70         3600         3800         3950         4150         4300           75         3050         3050         3200         3400         3550           75         2         2400         2550         2700         2850           80         2400         2550         2700         2850           85         2         1900         1950         2100         2250           90         2         1900         1950         2100         2250           95         2         2         100         800         1250           100         2         38.5         46.3)         46.3)         46.3)           100         2         38.5         46.3)         46.3)         46.3)           100         2         38.5         46.3)         46.3)         46.3)           100         2         38.5         46.3)         46.3)         450         450           350         48.5         450         450         450	60									(67.9		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	65				4450	4650	4850		5200	5350		
70         (12.6)         (35.9)         (45.9)         (53.3)         (58.6)           75         3050         3200         3400         3550         (29.6)         (41.6)         (49.9)         (55.7)           80         2400         2550         2700         2850         (21.6)         (36.9)         (46.4)         (52.7)           85         100         1900         1950         2100         2250           90         1900         1950         2100         2250           91         1900         1950         2100         2250           92         1900         1950         1200         1750           93         100         1500         1200         1750           95         100         800         1250         (16.5)         (34)         (42.8)           100         100         800         1250         (16.5)         (28.8)         (39.2)           100         100         100         850         (28.8)         (39.2)         (39.2)	00									(65.6		
75         3050         3200         3400         3550           80         2400         2550         2700         2850           80         2400         2550         2700         2850           85         1900         1950         2100         2250           90         1900         1950         2100         2250           91         1900         1950         2100         2250           92         1900         1950         2100         1750           93         1100         1200         1750         (46.3)         (46.3)           95         1100         800         1250         (16.5)         (34)         (42.8)           100         100         800         1250         (25.0)         (28.8)         (39.2)           105         100         850         (28.8)         (39.2)         (39.2)	70									4450 (63.1)		
80         2400         2550         2700         2850           85         1900         1950         2100         2250           90         1900         1950         2100         2250           90         1900         1950         1200         1750           95         100         1200         1250         (46.3)           100         1000         800         1250         (46.3)           100         1000         800         1250         (46.3)           100         100         800         1250         (42.8)           100         100         800         1250         (42.8)           100         100         800         1250         (42.8)           100         100         800         1250         (42.8)           100         100         800         1250         (42.8)           100         100         850         (28.8)         (39.2)	75				(12.0)					3,700		
80         (21.6)         (36.9)         (46.4)         (52.7)           85         1900         1950         2100         2250           90         (31.5)         (42.6)         (49.6)           90         1500         1200         1750           95         1100         800         1250           100         1100         800         1250           100         1100         800         1250           100         1100         800         1250           100         1100         800         1250           100         1100         800         1250           100         1100         800         1250           100         1100         800         1250           100         1100         850         (28.8)           105         100         100         100         850           105         100         100         100         100	/5						(41.6)		(55.7)	(60.6		
85         1900         1950         2100         2250           90         (31.5)         (42.6)         (49.6)           90         1500         1200         1750           95         1500         (25.1)         (38.5)         (46.3)           100         1100         800         1250           100         1100         800         1250           100         1100         800         (42.8)           100         1100         850         (39.2)           105         100         100         550         100	80									3050 (58)		
90     100     100     100     100     100     100       100     100     100     100     100     100       100     100     100     100     100     100       100     100     100     100     100     100       100     100     100     100     100     100       100     100     100     100     100     100       100     100     100     100     100     100       100     100     100     100     100     100	85					1900	1950	2100	2250	2400		
90     (25.1)     (38.5)     (46.3)       95     1100     800     1250       100     (45.3)     (42.8)       100     (25.1)     (38.5)     (46.3)       100     (34.3)     (42.8)       105     (35.5)     (35.5)	05					(7.2)				(55.3)		
95     1100     800     1250       100     450     450     850       105     100     350     550	90									1850 (52.6)		
100         105         100 <td>05</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1400</td>	05									1400		
100 (28.8) (39.2) 105 350 550	95						(16.5)			(49.7		
105 350 550	100									1000 (46.7		
	105							<b>、</b> · · · /	(11)	600		
(	105							(22.6)	(35.1)	(43.6		
110	110									450 (41.6)		
Minimum boom angle (°) for indicated length (no load) 0 22.5 35	Minimum boom angle (°) for indicated length (no load)					0	22.5	35	43.4			
Maximum boom length (ft.) at 0° boom angle (no load) 101												

Lifting capacities at zero degree boom angle

74-C

3400

(71.5)

Main boom length in feet

101-E

750

(98.5)

88-D

1800

(85.5)

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 50% (17.5 ft) spread.

(31.5) NOTE: ( ) Reference radii in feet.

34

16,550

47-A

9300

(44.5)

61-B

5450

(58.5)

Boom

angle

0°

### THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

## Accessories

<b>Radio Remote Controls</b> – (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.	• NB4R (R4 functions)	
<b>Heavy-duty Personnel Basket</b> – One and two-person baskets for main boom and jibs are available.	• BSA-1 • BSA-R1 (provides rotation) • BSAY-1 • BSAY-2	
<b>Air Conditioning for Crane Cab</b> – Provides excellent crane cab cooling to overcome the radiant heat from the sun reflection.	• A/C	
<b>Auxiliary Winch 15,000 lb Line Pull</b> – Second winch redundant to the main, planetary winch with boom tip "rooster sheave" to allow reeving of both winch lines.	• NBT40AW	
Spanish-Language Danger Decals, and Function Decals	• SDD	
Spanish-Language Control Knobs, and Operators' Manuals	• SOM	



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