

# National Crane Series NBT30H

## Product Guide



### Features

- 27,2 t (30 USt) rating
- 33,52 m (110 ft) four-section boom
- All new design
- Multi-position Easy Reach control panel
- Graphical LMI

# Features

## National Crane Series NBT30H

- 27,2 t (30 USt) maximum capacity
- 36,27 m (119 ft) maximum tip height (main boom)
- 49,68 m (163 ft) maximum tip height (boom with jib)



### Boom

The 110 ft four-section boom is the longest in its size range. The longer boom allows the operator to perform more lifts without the use of a jib, reducing setup time and improving efficiency. A 100 ft four-section boom is also available.

### Graphical LMI

The Graphical Load Moment Indicator (LMI) is standard on all Series NBT30H machines. The LMI system displays all crane load lifting values simultaneously while providing real-time information about the crane and truck operating system and includes work area definition system (WADS) and operating limits. The LMI is also weather resistant and visible in full or low light.

### Outriggers

Two sets of "HO"- style outriggers with 6 m (20 ft) full span, a 4,2 m (14 ft) mid span setting with manual locks and reduced capacity chart and fully retracted outrigger spread with reduced capacity chart. Main outriggers are equipped with removable ball and socket aluminum foot pads. Independent outrigger controls (umbilical design) are located at the easy reach control console and includes level indicator (sight bubble).



### Easy Reach control station

The Easy Reach control station can be tilted to the right or left side of the crane as needed and can be stowed in the center position for transport. The single axis pilot operated crane controls allow smooth operation for each crane function.

### Torsion box

The stronger standard torsion box improves rigidity, reduces truck frame flex and reduces the need for counterweight.



## National Crane is proud to introduce the Series NBT30H

- The Series NBT30H comes standard with 410° non-continuous rotation
- Adjustable swing speed also comes standard on the Series NBT30H. A control knob located on the swing motor brake release valve can be easily adjusted to the crane operator's swing speed preference
- Speedy-reeve boom tip and sheave blocks simplify rigging changes by decreasing the time needed to change line reeving
- Two-speed hoist provides faster winch payout and pickup of unloaded cable
- Pre-painted components reduce the possibility of rust, improve serviceability and enhance the appearance of the machine
- Additional serviceability enhancements such as boom bearing grease access points, the reduction of internal boom parts and internal anti-two block wiring keep you working longer
- The state of the art control valve provides smoother operation and eliminates parts to improve serviceability and reduce repair costs
- Easy Glide boom wear pads reduce the conditions that cause boom chatter and vibration. The net result is smoother crane operation
- Internal anti-two-block wire routing eliminates damage potential



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# Specifications

## Boom and jib combinations data

### Available in two basic models:

**NBT30H100** – Equipped with a 8,83 m - 30,48 m (29 ft - 100 ft) four-section boom. This model can be equipped with a 7,62 m - 13,41 m (25 ft - 44 ft) two section jib. Maximum tip height with 13,41 m (44 ft) jib is 44,63 m (153 ft).

8,83 m - 30,48 m (29 ft -100 ft) four-section boom.

**13FJ44M** 7,62 m - 13,41 m (25 ft - 44 ft) two-section jib



**NBT30H110** – Equipped with a 10,05 m - 33,52 m (33 ft - 110 ft) four-section boom. This model can be equipped with a 7,62 m - 13,41 m (25 ft - 44 ft) two-section jib. Maximum tip height with 13,41 m (44 ft) jib is 49,68 m (163 ft).

10,05 m - 33,52 m (33 ft - 110 ft) four-section boom.

**13FJ44M** 7,62 m - 13,41 m (25 ft - 44 ft) two-section jib










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

# Specifications

## NBT30H winch data

- Do not deadhead line block against boom tip when extending boom
- Keep at least three wraps of loadline on drum at all times
- Use only 9/16 in diameter rotation-resistant cable with 38,500 lb breaking strength on this machine

|                 | 1 part line   | 2 part line   | 3 part line   | 4 part line   | 5 part line   | 6 part line   | 7 part line   |
|-----------------|---|---|---|---|---|---|---|
|                 |  |  |  |  |  |  |  |
| 100 ft boom jib |   | 100 ft  | 75 ft   | 60 ft   | 50 ft   | 43 ft   | 36 ft   |
| 110 ft boom jib |   | 110 ft  | 78 ft   | 78 ft   | 62 ft   | 46 ft   | 32 ft   |

MAXIMUM BOOM LENGTH AT MAXIMUM ELEVATION WITH RIGGING SHOWN WITH LOAD BLOCK AT GROUND LEVEL

| Winch            | Average cable supplied              | Breaking strength     | Lift and speed                            | Lift and speed                             | Lift and speed                               | Lift and speed                               | Lift and speed                              | Lift and speed                              | Lift and speed                              |
|------------------|-------------------------------------|-----------------------|---|--|--|--|---|---|---|
| Low speed winch  | 9/16 in Diameter rotation resistant | 17 464 kg (38,500 lb) | 3493 kg (7700 lb)<br>48.8 m/min (160 fpm) | 6986 kg (15,400 lb)<br>24.3 m/min (80 fpm) | 10 478 kg (23,100 lb)<br>16.2 m/min (53 fpm) | 13 971 kg (30,800 lb)<br>12.2 m/min (40 fpm) | 17 464 kg (38,500 lb)<br>9.8 m/min (32 fpm) | 20 956 kg (46,200 lb)<br>8.2 m/min (27 fpm) | 24 449 kg (53,900 lb)<br>7.0 m/min (23 fpm) |
| High speed winch | 9/16 in Diameter rotation resistant | 17 464 kg (38,500 lb) | 1361 kg (3000 lb)<br>94.4 m/min (310 fpm) | 2722 kg (6000 lb)<br>47.2 m/min (155 fpm)  | 4083 kg (9000 lb)<br>31.4 m/min (103 fpm)    | 5443 kg (12,000 lb)<br>23.8 m/min (78 fpm)   | 6804 kg (15,000 lb)<br>18.9 m/min (62 fpm)  | 8165 kg (18,000 lb)<br>15.8 m/min (52 fpm)  | 9526 kg (21,000 lb)<br>13.4 m/min (44 fpm)  |

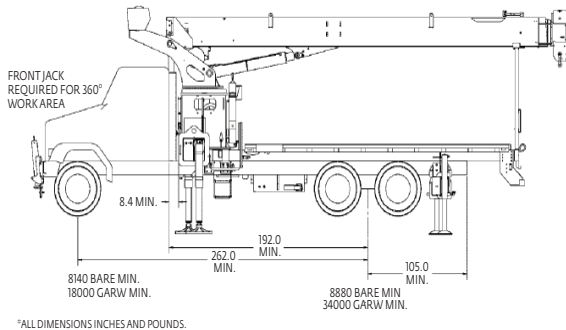
All winch pulls and speeds in this chart are shown on the fourth layer. Winch line pulls would increase on the first, second and third layers. Winch line speed would decrease on the first, second and third layers. Winch line pulls may be limited by the winch capacity or the ANSI 5 to 1 cable safety factor.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

| Winch              | Fourth layer drum pull  | Allowable cable pull |
|--------------------|---|----------------------|
| Standard planetary | 3493 kg (7700 lb) (low speed)<br>1361 kg (3000 lb) (high speed) | 3492 kg (7700 lb)    |

| Block type      | Rating           | Weight          |
|-----------------|------------------|-----------------|
| Downhaul weight | 4,53 t (5 USt)   | 68 kg (150 lb)  |
| 1 Sheave Block  | 10,89 t (12 USt) | 122 kg (270 lb) |
| 2 Sheave Block  | 17,24 t (19 USt) | 159 kg (350 lb) |
| 3 Sheave Block  | 27,22 t (30 USt) | 261 kg (575 lb) |

# Mounting configurations

The mounting configuration is based on an 85% stability factor. If the bare truck weight requirements are not met, counterweight will be required. The complete unit must be installed on the truck in accordance with factory requirements. Since individual truck chassis vary, a test must be performed on the unit to verify actual stability after mounting and installing counterweight (if required). A summary of mounting and truck requirements are:

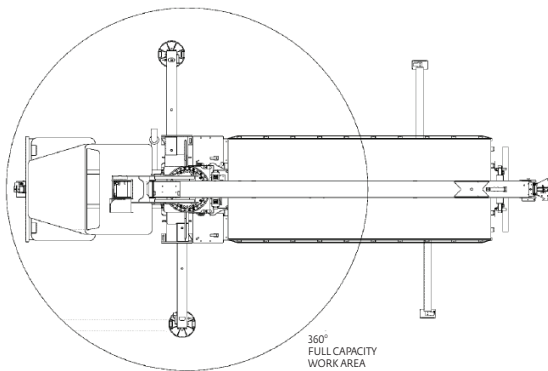


## For 180° working area –

Gross Axle Weight Rating Front (GAWR) – 8165 kg (18,000 lb)  
 Gross Axle Weight Rating Rear (GAWR) – 15 455 kg (34,000 lb)  
 Gross Vehicle Weight Rating (GVW) – 23 587 kg (52,000 lb)  
 Wheelbase (WB) – 6,65 m (262 in)  
 Cab to Axle Trunnion (CT) – 4,88 m (192 in)  
 After Frame (AF) – 2,67 m (105 in)  
 Frame Section Modulus (SM) from outrigger to RSOD – 327 cm<sup>3</sup> (20 in<sup>3</sup>) and 759 MPa (110,000 psi) material  
 Bare Chassis Weight required for stability prior to installation  
 Front – 3692 kg (8140 lb)  
 Rear – 4028 kg (8880 lb)

## For 360° working area –

Optional Single Front Stabilizer (SFO)  
 Gross Axle Weight Rating Front (GAWR) – 8165 kg (18,000 lb)  
 Gross Axle Weight Rating Rear (GAWR) – 15 455 kg (34,000 lb)  
 Gross Vehicle Weight Rating (GVW) – 23 587 kg (52,000 lb )  
 Wheelbase (WB) – 6,65 m (262 in)  
 Cab to Axle Trunnion (CT) – 4,88 m (192 in)  
 After Frame (AF) – 2,67 m (105 in)  
 Frame Section Modulus (SM) from front spring hanger to end of after frame – 327 cm<sup>3</sup> (30 in<sup>3</sup>) and 759 MPa (110,000 psi) material  
 Bare Chassis Weight required for stability prior to installation  
 Front – 3720 kg (8200 lb)  
 Rear – 4037 kg (8900 lb)



**Note:** Chassis will require extended front frame rails for SFO addition.

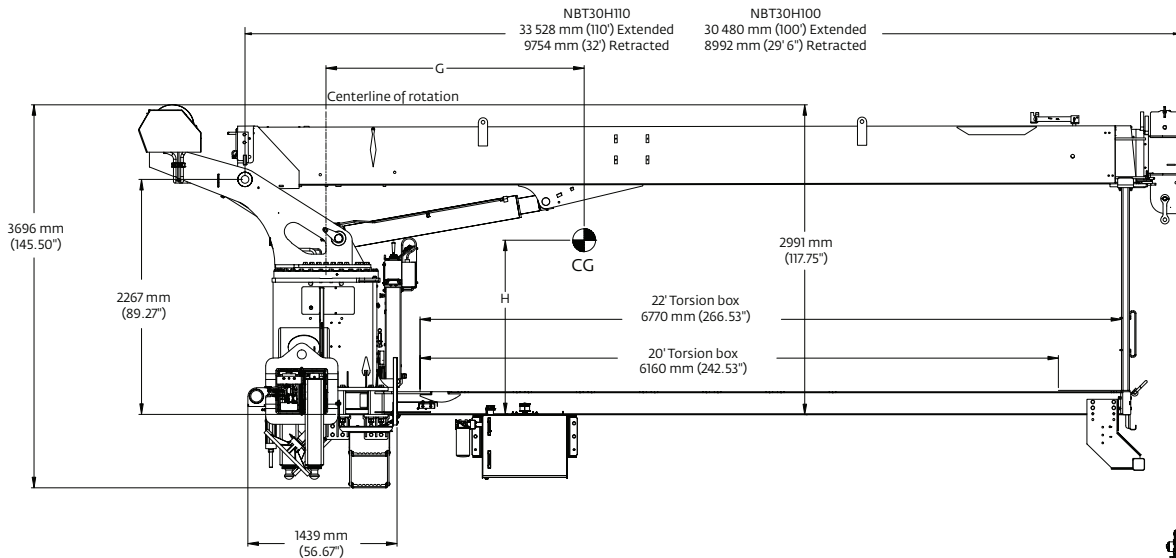
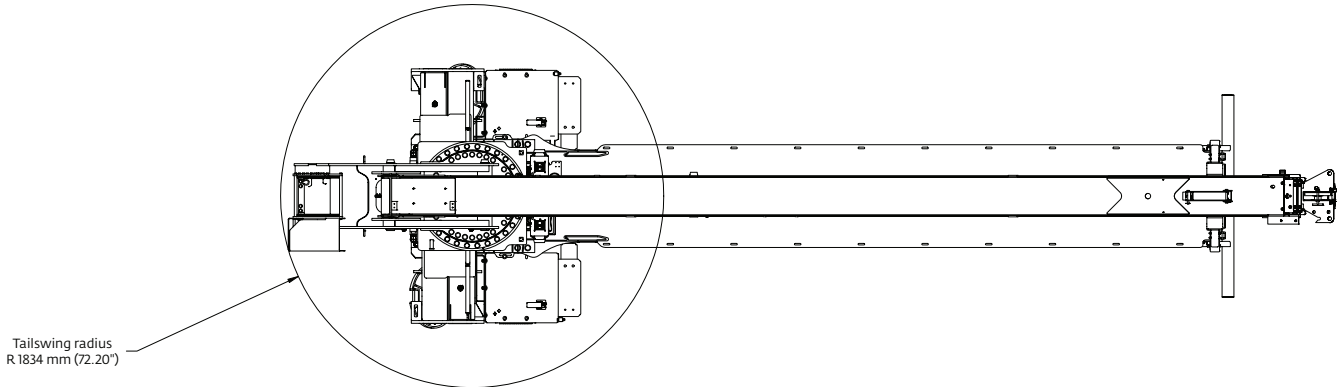
For 360° stability the truck frame must have a 492 cm<sup>3</sup> (30 in<sup>3</sup>) section modulus [372 850 Nm (3,300,000 in-lb) RBM] minimum under the crane frame, 295 cm<sup>3</sup> (18 in<sup>3</sup>) section modulus [223 710 Nm (1,980,000 in-lb) RBM] at the front spring rear hanger, 197 cm<sup>3</sup> (12 in<sup>3</sup>) section modulus [149 140 Nm (1,320,000 in-lb) RBM] through the front spring and 49 cm<sup>3</sup> (3 in<sup>3</sup>) section modulus [37 284 Nm (330,000 in-lb) RBM] at the stabilizer attachment point on each truck frame rail.

## Notes:

- Gross Vehicle Weight Rating (GVWR) is dependent on all components of the vehicle (axles, tires, springs, fame, etc.) meeting manufacturers' recommendations; always specify GVWR when purchasing trucks
- Diesel engines require a variable speed governor and energize-to-run fuel solenoid for smooth crane operation; electronic fuel injection is required
- All mounting data is based on a National Crane Series NBT30H with subbase and 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; contact the factory for details
- Transmission neutral safety interlock switch is required
- NBT30H100 with front center stabilizer will be approximate 40 ft overall length. NBT30H110 will exceed 40 ft overall length

# Dimensions

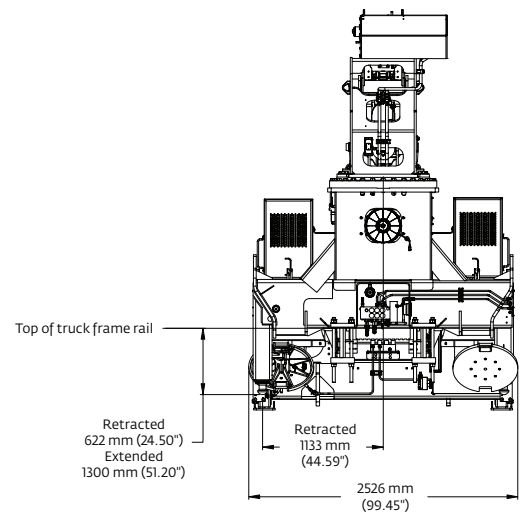


UNITS IN INCHES UNLESS SPECIFIED

| G CENTER OF GRAVITY FROM CENTERLINE |                  |                  |                     |                       |
|-------------------------------------|------------------|------------------|---------------------|-----------------------|
| Series                              | G                | H                | Dry weight*         | With oil weight*      |
| NBT30H100                           | 226 cm (89.1 in) | 163 cm (64.1 in) | 9348 kg (20,608 lb) | 9681 kg (21,342 lb)   |
| NBT30H110                           | 251 cm (98.7 in) | 166 cm (65.4 in) | 9682 kg (21,346 lb) | 10 015 kg (22,080 lb) |

\* Above weights do not include reservoir, RSOD, jib, PTO, pump, BED.

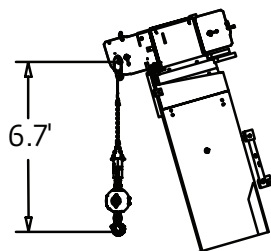
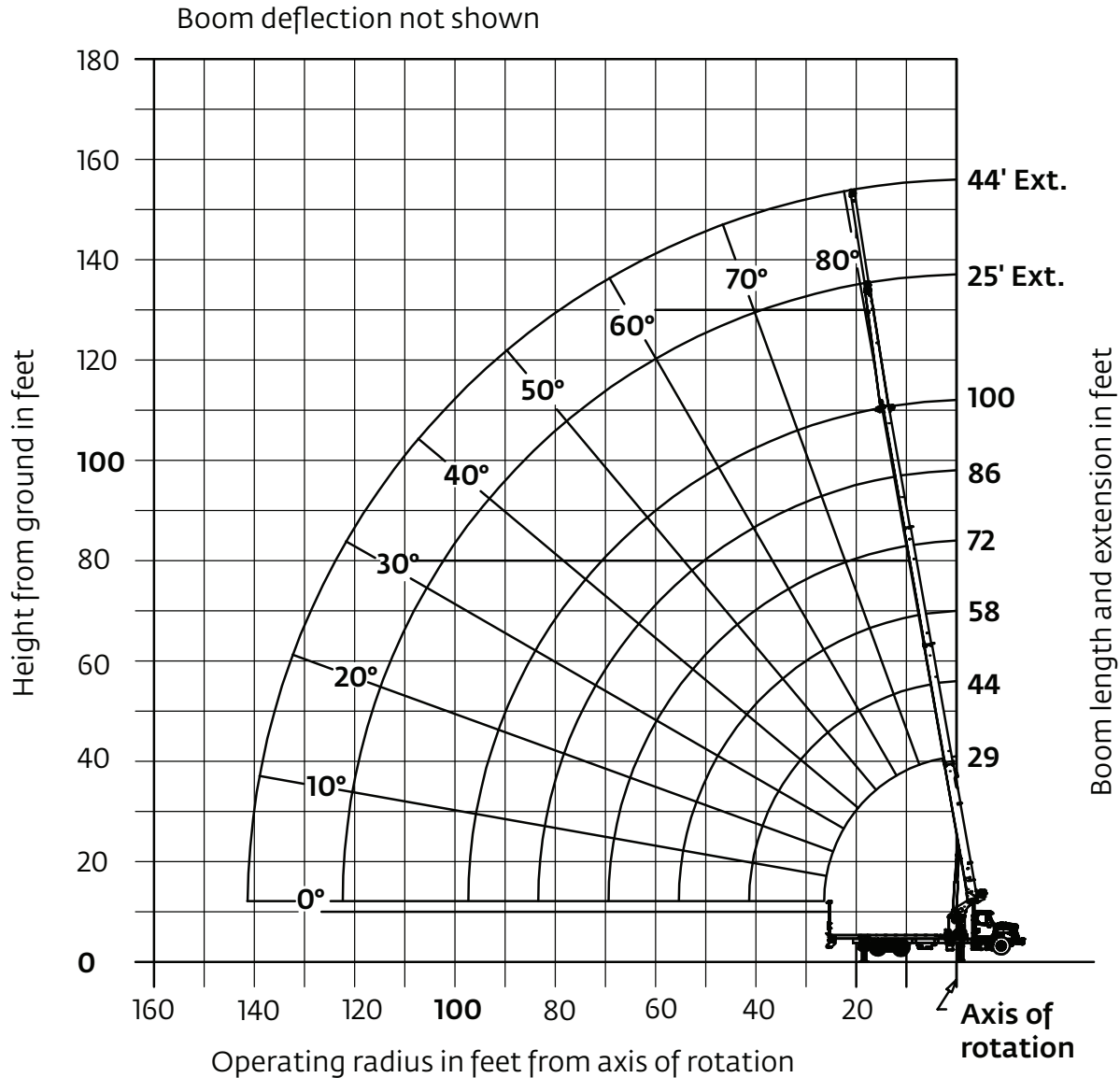
\*\* Weight includes boom, winch, rope, turret, lift cylinder, frame, controls, outriggers, platforms, torque box, boom rest, bumper, downhaul weight.





# Working range

100 ft main boom, full span outrigger, with 25 ft - 44 ft jib



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.

# Load chart

## 100 ft main boom, full span outrigger, without jib

| Radius<br>in<br>feet                                  | #01                      |                  |                  |                  |                  |                  |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|
|   | Main boom length in feet |                  |                  |                  |                  |                  |
|   | 29                       | 44-A             | 58-B             | 72-C             | 86-D             | 100              |
| 5   | *60,000<br>(77.3)        |                  |                  |                  |                  |                  |
| 8   | 44,000<br>(70.8)         | 29,100<br>(77.9) |                  |                  |                  |                  |
| 10  | 36,900<br>(66.4)         | 29,000<br>(75.3) |                  |                  |                  |                  |
| 12  | 33,450<br>(61.8)         | 28,600<br>(72.7) | 28,600<br>(78)   |                  |                  |                  |
| 15  | 28,300<br>(54.5)         | 24,600<br>(68.4) | 23,500<br>(74.8) | 22,900<br>(79)   |                  |                  |
| 20  | 21,950<br>(40.6)         | 21,000<br>(60.9) | 19,000<br>(69.4) | 17,450<br>(74.6) | 16,300<br>(78.3) | 10,650<br>(79.9) |
| 25  | 15,700<br>(19.9)         | 17,500<br>(52.7) | 16,500<br>(63.8) | 15,700<br>(70.3) | 13,700<br>(74.8) | 10,450<br>(77.3) |
| 30  |                          | 12,800<br>(43.5) | 13,200<br>(57.9) | 13,500<br>(65.8) | 11,350<br>(71)   | 10,000<br>(74.4) |
| 35  |                          | 10,150<br>(32.2) | 10,100<br>(51.6) | 10,400<br>(61.1) | 10,600<br>(67.3) | 9400<br>(71.8)   |
| 40  |                          | 7850<br>(16.3)   | 8000<br>(45)     | 8250<br>(56.6)   | 8450<br>(63.8)   | 8050<br>(68.9)   |
| 45  |                          |                  | 6500<br>(37)     | 6700<br>(51.3)   | 6900<br>(59.6)   | 7100<br>(65.6)   |
| 50  |                          |                  | 5250<br>(26.9)   | 5500<br>(45.5)   | 5650<br>(55.3)   | 5850<br>(62)     |
| 55  |                          |                  |                  | 4500<br>(39.1)   | 4700<br>(50.8)   | 4850<br>(58.2)   |
| 60  |                          |                  |                  | 3700<br>(31.7)   | 3800<br>(45.9)   | 4000<br>(54.4)   |
| 65  |                          |                  |                  | 3050<br>(22.1)   | 3150<br>(40.6)   | 3300<br>(50.5)   |
| 70  |                          |                  |                  |                  | 2600<br>(34.7)   | 2750<br>(46.3)   |
| 75  |                          |                  |                  |                  | 2100<br>(27.7)   | 2250<br>(41.8)   |
| 80  |                          |                  |                  |                  | 1700<br>(18.2)   | 1800<br>(36.8)   |
| 85  |                          |                  |                  |                  |                  | 1450<br>(31.2)   |
| 90  |                          |                  |                  |                  |                  | 1150<br>(24.4)   |
| 95  |                          |                  |                  |                  |                  | 900<br>(14.6)    |
| Minimum boom angle (°) for indicated length (no load) |                          |                  |                  |                  |                  | 0                |
| Maximum boom length (ft) at 0° boom angle (no load)   |                          |                  |                  |                  |                  | 100              |

NOTE: Loads displayed in pounds. ( ) Boom angles are in degrees.  
 #LMI operating code. Refer to LMI manual for operating instructions  
 \*This capacity requires optional 9/16" dia. 6x25 IWRC cable.

| Lifting capacities at zero degree boom angle |                          |                |                |                |                |               |
|--|--------------------------|----------------|----------------|----------------|----------------|---------------|
| Boom<br>angle                                | Main boom length in feet |                |                |                |                |               |
|  | 29                       | 44-A           | 58-B           | 72-C           | 86-D           | 100           |
| 0°   | 10,000<br>(26.5)         | 7600<br>(41.5) | 4350<br>(55.5) | 2600<br>(69.5) | 1550<br>(83.5) | 800<br>(97.5) |

NOTE: ( ) Reference radii in feet.

| Rated Load Reductions from main boom capacity when lifting over main boom nose with ext. erected (retracted): |      |      |      |      |      |      |
|---|------|------|------|------|------|------|
| (lb)  | 2200 | 1950 | 1850 | 1750 | 1700 | 1700 |
|   |      |      |      |      |      |      |

80031502

# Load chart

## 100 ft main boom, full span outrigger, with 25 ft - 44 ft jib

| Radius in feet  | #02                      |               |               |               |               |               |
|---|--------------------------|---------------|---------------|---------------|---------------|---------------|
|   | Main boom length in feet |               |               |               |               |               |
|   | 29                       | 44-A          | 58-B          | 72-C          | 86-D          | 100           |
| 5   | *59,200 (77.3)           |               |               |               |               |               |
| 8   | 43,200 (70.8)            | 28,500 (77.9) |               |               |               |               |
| 10  | 36,100 (66.4)            | 28,400 (75.3) |               |               |               |               |
| 12  | 32,650 (61.8)            | 28,000 (72.7) | 28,150 (78)   |               |               |               |
| 15  | 27,500 (54.5)            | 24,000 (68.4) | 23,050 (74.8) | 22,550 (79)   |               |               |
| 20  | 21,150 (40.6)            | 20,400 (60.9) | 18,550 (69.4) | 17,100 (74.6) | 16,000 (78.3) | 10,400 (79.9) |
| 25  | 14,900 (19.9)            | 16,900 (52.7) | 16,050 (63.8) | 15,350 (70.3) | 13,400 (74.8) | 10,200 (77.3) |
| 30  |                          | 12,200 (43.5) | 12,750 (57.9) | 13,150 (65.8) | 11,050 (71)   | 9750 (74.4)   |
| 35  |                          | 9550 (32.2)   | 9650 (51.6)   | 10,050 (61.1) | 10,300 (67.3) | 9150 (71.8)   |
| 40  |                          | 7250 (16.3)   | 7550 (45)     | 7900 (56.6)   | 8150 (63.8)   | 7800 (68.9)   |
| 45  |                          |               | 6050 (37)     | 6350 (51.3)   | 6600 (59.6)   | 6850 (65.6)   |
| 50  |                          |               | 4800 (26.9)   | 5150 (45.5)   | 5350 (55.3)   | 5600 (62)     |
| 55  |                          |               |               | 4150 (39.1)   | 4400 (50.8)   | 4600 (58.2)   |
| 60  |                          |               |               | 3350 (31.7)   | 3500 (45.9)   | 3750 (54.5)   |
| 65  |                          |               |               | 2700 (22.1)   | 2850 (40.6)   | 3050 (50.5)   |
| 70  |                          |               |               |               | 2300 (34.7)   | 2500 (46.3)   |
| 75  |                          |               |               |               | 1800 (27.7)   | 2000 (41.8)   |
| 80  |                          |               |               |               | 1400 (18.2)   | 1550 (36.8)   |
| 85  |                          |               |               |               |               | 1200 (31.2)   |
| 90  |                          |               |               |               |               | 900 (24.4)    |
| 95  |                          |               |               |               |               | 650 (14.6)    |
| Minimum boom angle (°) for indicated length (no load) |                          |               |               |               |               | 0             |
| Maximum boom length (ft) at 0° boom angle (no load)   |                          |               |               |               |               | 100           |

NOTE: Loads displayed in pounds. ( ) Boom angles are in degrees.  
 #LMI operating code. Refer to LMI manual for operating instructions  
 \*This capacity requires optional 9/16" dia. 6x25 IWRC cable.

| Lifting capacities at zero degree boom angle |                          |             |             |             |             |            |
|--|--------------------------|-------------|-------------|-------------|-------------|------------|
| Boom angle                                   | Main boom length in feet |             |             |             |             |            |
|  | 29                       | 44-A        | 58-B        | 72-C        | 86-D        | 100        |
| 0°   | 9200 (26.5)              | 7000 (41.5) | 3900 (55.5) | 2250 (69.5) | 1250 (83.5) | 550 (97.5) |

NOTE: ( ) Reference radii in feet.

80031505

### Boom extension capacity notes:

- All capacities above the bold line are based on structural strength of boom extension.
- 25 ft and 44 ft extension length may be used for single line lifting service.
- 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.
- Capacities listed are with outriggers properly extended and vertical jacks set.
- When lifting over the main boom nose with 25 ft and 44 ft extension erected, the outriggers must be fully extended or 50% (14 ft) spread.

| Radius in feet                                 | 25 ft LENGTH | 44 ft LENGTH |
|--|--------------|--------------|
|  | #03          | #04          |
| 35   | 4900 (77.9)  |              |
| 40   | 4500 (76.5)  |              |
| 45   | 4050 (73.7)  | 2500 (75.9)  |
| 50   | 3700 (71.2)  | 2500 (74.3)  |
| 55   | 3400 (68.7)  | 2500 (72.4)  |
| 60   | 3150 (66.2)  | 2300 (70.2)  |
| 65   | 3000 (63.7)  | 2200 (68.1)  |
| 70   | 2700 (60.7)  | 2100 (66)    |
| 75   | 2250 (57.5)  | 2000 (63.8)  |
| 80   | 1800 (53.9)  | 1850 (61.3)  |
| 85   | 1350 (50.2)  | 1800 (59)    |
| 90   | 1000 (46.2)  | 1500 (56)    |
| 95   | 700 (42.4)   | 1200 (52.8)  |
| 100  |              | 900 (49.5)   |
| 105  |              | 600 (46)     |
| 110  |              | 500 (42.8)   |
| Min. boom angle for indicated length (no load) | 36°          | 40°          |
| Max. boom length at 0° boom angle (no load)    | 72 ft        | 72 ft        |

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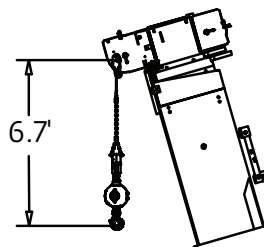
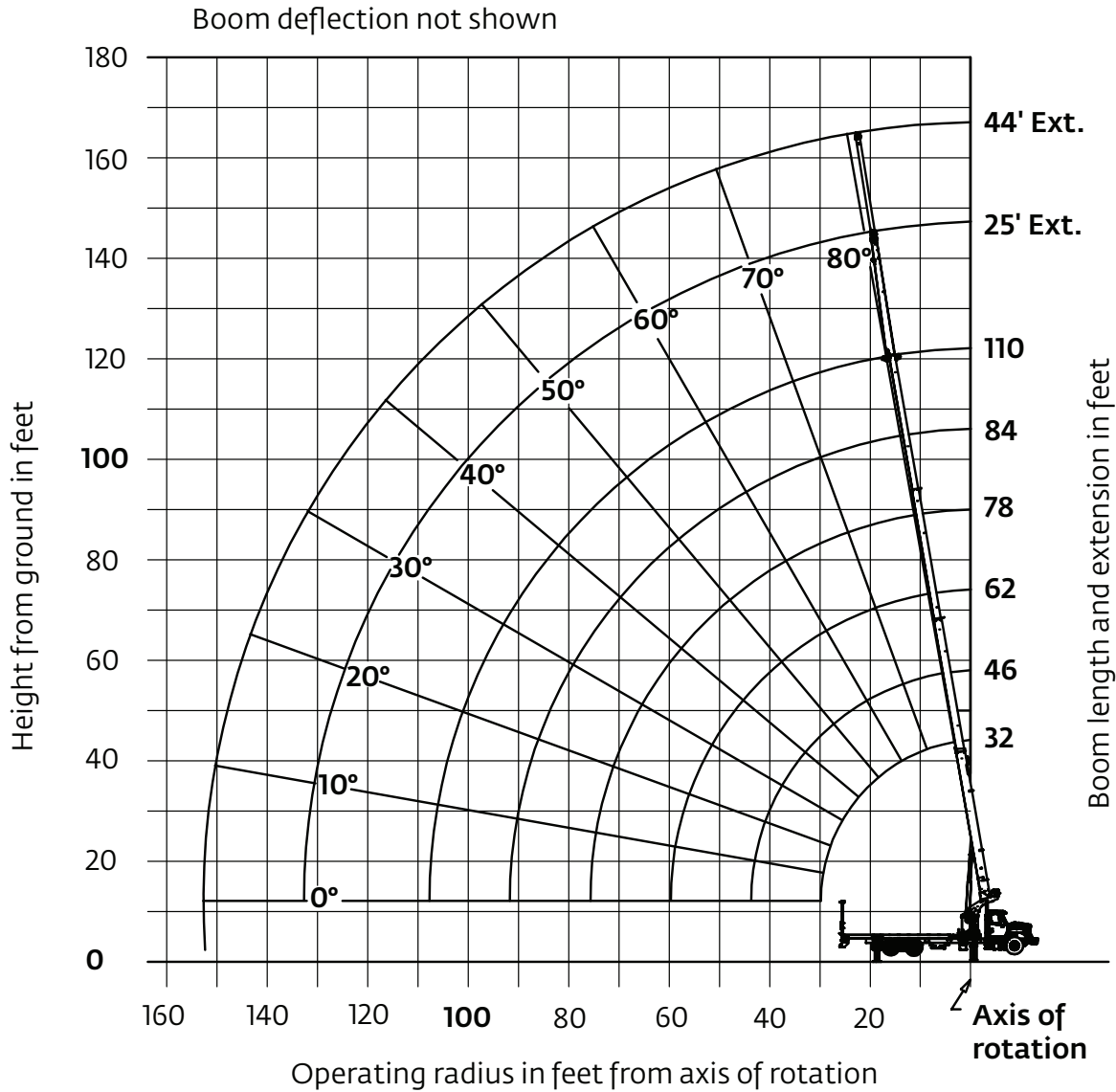
NOTE: Loads displayed in pounds. ( ) Boom angles are in degrees.  
 #LMI operating code. Refer to LMI manual for operating instructions.

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

Series NBT30H The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

# Working range

110 ft main boom, full span outrigger, with 25 ft - 44 ft jib



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.

# Load chart

## 110 ft main boom, full span outrigger, without jib

| Radius<br>in<br>feet                                  | #001                     |                  |                  |                  |                  |                  |
|---|--------------------------|------------------|------------------|------------------|------------------|------------------|
|   | Main boom length in feet |                  |                  |                  |                  |                  |
|   | 32                       | 46-A             | 62-B             | 78-C             | 94-D             | 110              |
| 6   | *60,000<br>(76.7)        |                  |                  |                  |                  |                  |
| 8   | 43,000<br>(72.5)         | 29,100<br>(78.6) |                  |                  |                  |                  |
| 10  | 35,900<br>(68.5)         | 29,000<br>(76.1) |                  |                  |                  |                  |
| 12  | 32,000<br>(64.4)         | 28,000<br>(73.6) | 28,000<br>(78)   |                  |                  |                  |
| 15  | 27,000<br>(57.9)         | 24,000<br>(69.5) | 23,000<br>(76.1) | 19,500<br>(80)   |                  |                  |
| 20  | 19,500<br>(45.9)         | 18,300<br>(62.5) | 17,500<br>(71.1) | 17,500<br>(76.4) | 16,300<br>(80)   |                  |
| 25  | 14,900<br>(30.6)         | 14,500<br>(55)   | 14,050<br>(65.9) | 14,000<br>(72.4) | 13,700<br>(76.8) | 10,450<br>(79.3) |
| 30  |                          | 12,000<br>(46.3) | 11,600<br>(60.8) | 11,500<br>(68.2) | 11,350<br>(73.4) | 9150<br>(76.5)   |
| 35  |                          | 9450<br>(36.2)   | 9800<br>(54.8)   | 9700<br>(64)     | 10,600<br>(70.1) | 8950<br>(74.1)   |
| 40  |                          | 7250<br>(23.9)   | 8100<br>(48.5)   | 8300<br>(59.6)   | 8450<br>(66.7)   | 7700<br>(71.2)   |
| 45  |                          |                  | 6550<br>(42)     | 7000<br>(55.4)   | 6900<br>(63.3)   | 6950<br>(68.7)   |
| 50  |                          |                  | 5300<br>(34)     | 5550<br>(50.4)   | 5650<br>(59.4)   | 5900<br>(65.6)   |
| 55  |                          |                  | 4300<br>(23.8)   | 4550<br>(45)     | 4700<br>(55.4)   | 4900<br>(62.3)   |
| 60  |                          |                  |                  | 3700<br>(39)     | 3800<br>(51.3)   | 4000<br>(58.9)   |
| 65  |                          |                  |                  | 3000<br>(32.1)   | 3100<br>(46.8)   | 3300<br>(55.4)   |
| 70  |                          |                  |                  | 2350<br>(23.5)   | 2550<br>(42.1)   | 2700<br>(51.8)   |
| 75  |                          |                  |                  |                  | 2050<br>(36.9)   | 2200<br>(48.1)   |
| 80  |                          |                  |                  |                  | 1650<br>(30.9)   | 1750<br>(44.2)   |
| 85  |                          |                  |                  |                  | 1250<br>(23.4)   | 1400<br>(39.9)   |
| 90  |                          |                  |                  |                  | 900<br>(11.9)    | 1050<br>(35.2)   |
| 95  |                          |                  |                  |                  |                  | 750<br>(29.9)    |
| 100   |                          |                  |                  |                  |                  | 500<br>(23.4)    |
| Minimum boom angle (°) for indicated length (no load) |                          |                  |                  |                  |                  | 0                |
| Maximum boom length (ft) at 0° boom angle (no load)   |                          |                  |                  |                  |                  | 94               |

NOTE: ( ) Boom angles are in degrees.  
 #LMI operating code. Refer to LMI manual for operating instructions  
 \*This capacity requires optional 9/16" dia. 6x25 IWRC cable.

| Lifting capacities at zero degree boom angle |                          |                |                |                |               |     |
|--|--------------------------|----------------|----------------|----------------|---------------|-----|
| Boom<br>angle                                | Main boom length in feet |                |                |                |               |     |
|  | 32                       | 46-A           | 62-B           | 78-C           | 94-D          | 110 |
| 0°   | 8000<br>(29.5)           | 4800<br>(43.5) | 2600<br>(59.5) | 1200<br>(75.5) | 850<br>(91.5) |     |

NOTE: ( ) Reference radii in feet.

| Rated Load Reductions from main boom capacity when lifting over main boom nose with ext. erected (retracted): |      |      |      |      |      |      |
|---|------|------|------|------|------|------|
| (lb)  | 2100 | 1900 | 1800 | 1750 | 1700 | 1650 |
|   |      |      |      |      |      |      |

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

# Load chart

## 110 ft main boom, full span outrigger, with 25 ft - 44 ft jib

| Radius in feet  | #02                      |               |               |               |               |               |
|---|--------------------------|---------------|---------------|---------------|---------------|---------------|
|   | Main boom length in feet |               |               |               |               |               |
|   | 32                       | 46-A          | 62-B          | 78-C          | 94-D          | 110           |
| 6   | *59,200 (76.7)           |               |               |               |               |               |
| 8   | 42,200 (72.5)            | 28,500 (78.6) |               |               |               |               |
| 10  | 35,100 (68.5)            | 28,400 (76.1) |               |               |               |               |
| 12  | 31,200 (64.4)            | 27,400 (73.6) | 27,550 (78)   |               |               |               |
| 15  | 26,200 (57.9)            | 23,400 (69.5) | 22,550 (76.1) | 19,150 (80)   |               |               |
| 20  | 18,700 (45.9)            | 17,700 (62.5) | 17,050 (71.1) | 17,150 (76.4) | 16,000 (80)   |               |
| 25  | 14,100 (30.6)            | 13,900 (55)   | 13,600 (65.9) | 13,650 (72.4) | 13,400 (76.8) | 10,200 (79.3) |
| 30  |                          | 11,400 (46.3) | 11,150 (60.8) | 11,150 (68.2) | 11,050 (73.4) | 8900 (76.5)   |
| 35  |                          | 8850 (36.2)   | 9350 (54.8)   | 9350 (64)     | 10,300 (70.1) | 8700 (74.1)   |
| 40  |                          | 6650 (23.9)   | 7650 (48.5)   | 7950 (59.6)   | 8150 (66.7)   | 7450 (71.2)   |
| 45  |                          |               | 6100 (42)     | 6650 (55.4)   | 6600 (63.3)   | 6700 (68.7)   |
| 50  |                          |               | 4850 (34)     | 5200 (50.4)   | 5350 (59.4)   | 5650 (65.6)   |
| 55  |                          |               | 3850 (23.8)   | 4200 (45)     | 4400 (55.4)   | 4650 (62.3)   |
| 60  |                          |               |               | 3350 (39)     | 3500 (51.3)   | 3750 (58.9)   |
| 65  |                          |               |               | 2650 (32.1)   | 2800 (46.8)   | 3050 (55.4)   |
| 70  |                          |               |               | 2000 (23.5)   | 2250 (42.1)   | 2450 (51.8)   |
| 75  |                          |               |               |               | 1750 (36.9)   | 1950 (48.1)   |
| 80  |                          |               |               |               | 1350 (30.9)   | 1500 (44.2)   |
| 85  |                          |               |               |               | 950 (23.4)    | 1150 (39.9)   |
| 90  |                          |               |               |               | 600 (11.9)    | 800 (35.2)    |
| 95  |                          |               |               |               |               | 500 (29.9)    |
| 100   |                          |               |               |               |               | 250 (23.4)    |
| Minimum boom angle (°) for indicated length (no load) |                          |               |               |               |               | 0             |
| Maximum boom length (ft) at 0° boom angle (no load)   |                          |               |               |               |               | 110           |

NOTE: Loads displayed in pounds. ( ) Boom angles are in degrees.  
 #LMI operating code. Refer to LMI manual for operating instructions.  
 \*This capacity requires optional 9/16" dia. 6x25 IWRC cable.

| Lifting capacities at zero degree boom angle |                          |              |              |            |            |  |
|--|--------------------------|--------------|--------------|------------|------------|--|
| Boom angle                                   | Main boom length in feet |              |              |            |            |  |
|  | 32                       | 46-A         | 62-B         | 78-C       | 94-D       |  |
| 0°   | 7,200 (29.5)             | 4,200 (43.5) | 2,150 (59.5) | 850 (75.5) | 550 (91.5) |  |

NOTE: ( ) Reference radii in feet.

| Radius in feet                                 | 25 ft LENGTH | 44 ft LENGTH |
|--|--------------|--------------|
|  | #03          | #04          |
| 40   | 4400 (77.4)  |              |
| 45   | 4400 (75.8)  | 2800 (78.3)  |
| 50   | 4100 (73.6)  | 2700 (76.7)  |
| 55   | 3800 (71.3)  | 2650 (75.1)  |
| 60   | 3500 (69)    | 2500 (73.2)  |
| 65   | 3250 (66.6)  | 2300 (71.1)  |
| 70   | 2900 (63.9)  | 2200 (69.2)  |
| 75   | 2200 (61.3)  | 1900 (67)    |
| 80   | 1550 (58)    | 1600 (64.8)  |
| 85   | 1200 (54.7)  | 1550 (62.8)  |
| 90   | 850 (51.4)   | 1400 (60.5)  |
| 95   |              | 1000 (58)    |
| 100  |              | 750 (54.7)   |
| Min. boom angle for indicated length (no load) | 44°          | 52°          |
| Max. boom length at 0° boom angle (no load)    | 62 ft        | 62 ft        |

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

### Boom extension capacity notes:

- All capacities above the bold line are based on structural strength of boom extension.
- 25 ft and 44 ft extension lengths may be used for single line lifting service.
- 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.
- Capacities listed are with outriggers properly extended and vertical jacks set.
- When lifting over the main boom nose with 25 ft and 44 ft extension erected, the outriggers must be fully extended or 50% (14 ft) spread.

## **Radio Remote Controls –**

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

- NB4R

## **Heavy-duty Personnel Basket –**

544 kg (1200 lb) capacity steel basket with safety loops for two passengers. Gravity leveling 183 cm x 107 cm (72 in x 42 in) platform. Fast attachment and secure locking systems.

- BSA-1
- BSA-R1 (provides rotation)
- BSAY-1
- BSAY-2

**Last Layer Indicator Option** on winch with indicator on Easy Reach console.

- LLI

## **Single Front Outrigger**

Center front stabilizer with a 25 in vertical stroke

- SFO

## **Bulkhead-steel for super-duty beds**

- BHSD

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