

NATIONAL CRANE®

NBT50 Series Product Guide

ASME B30.5 • Imperial 85%



Features

- NBT50: 45,4 t (50 USt)
- NBT55: 49,9 t (55 USt)
- 31,1 m (102 ft) four-section, full power boom
- 39,0 m (128 ft) five-section, full power boom
- Hydraulically tilting operator cab
- Hydraulic removable counterweight system with multiple configurations
- Outrigger design eliminates need for SFO

NATIONAL CRANE NBT50 SERIES

Features

The NBT50 delivers 45,36 t (50 USt) maximum capacity, 41,1 m (135 ft) maximum tip height (main boom), 54,6 m (179 ft) maximum tip height (boom with extension). The NBT50 offers all this, plus an increased maximum capacity of 49,90 t (55 USt).

> Four or five-section boom

The Series NBT50 can be equipped with two different boom lengths 31,1 m (102 ft) and 39,01 m (128 ft).



> Deluxe tilting operator's cab

The Series NBT50 operator's cab includes: all-steel construction with 0° to 20° hydraulic tilting capability and acoustical lining and tinted glass throughout, air conditioning, deluxe seat with arm rest mounted single-axis electric controllers, windshield and sliding skylight with electric wipers, diesel heater with defroster, circulating fan, fire extinguisher, and dual cab mounted work lights.



> Innovative outrigger design

Equipped with left, right ground level and in-cab outrigger controls. The Series NBT50 outriggers allow quick and easy crane set-up and includes a new outrigger beam position sensing system that aids the operator in selecting the right load chart based on the crane's outrigger footprint. The front outrigger box has an X-shaped footprint that eliminates the need for a single front outrigger.



> Multiple counterweight configurations

Two-piece 1360,8 kg (3000 lb) each (total 2721,6 kg [6000 lb]) hydraulically removable counterweight slabs; removable counterweight slabs can be stowed on front outrigger box for roading.

> Lift Solutions and exclusive truck customizations

- Factory-installed toolbox, pintle hitches, outrigger cribbing mats
- Wireless anti-two-block system
- Radio remote controls
- Wind speed indicator
- Hoist and side view camera system
- See the Truck Mod Customization catalog for additional turn-key options



Jobsite benefits

➤ The versatility you need with the reliability you've come to expect from National Crane

- Two boom options of 31,1 m (102 ft) and 39,0 m (128 ft) provide the right boom length for the application. If additional reach is needed, the NBT50 Series offers a two stage, manual pullout jib ranging from 7,9 m (26 ft) retracted to 13,7 m (45 ft) extended. This jib is offsettable to 30 degrees perfect for additional horizontal reach.
- No need for a SFO with this innovative outrigger box design
- Rock-solid operating performance with less carrier flex and twist than an average boom truck
- Hydraulically self-removable counterweight with multiple slabs for easy roading

➤ Simpler, smoother and smarter operation

- Graphical RCL for easy setup
- Class-leading features such as adjustable joystick speeds, on-board diagnostics, and service capabilities without the need for a laptop

➤ Enhanced comfort, access and egress and setup

- Comfort of a commercial truck chassis from leading manufacturers
- 20° hydraulically tilting, ergonomic operator cab
- Strong aluminum decking with multiple ladders for easy access
- Lighter polymeric operator floats that are easy to use and less prone to theft when on the job
- Easy-access hydraulics for maintenance increased serviceability



What you need, when you need it.

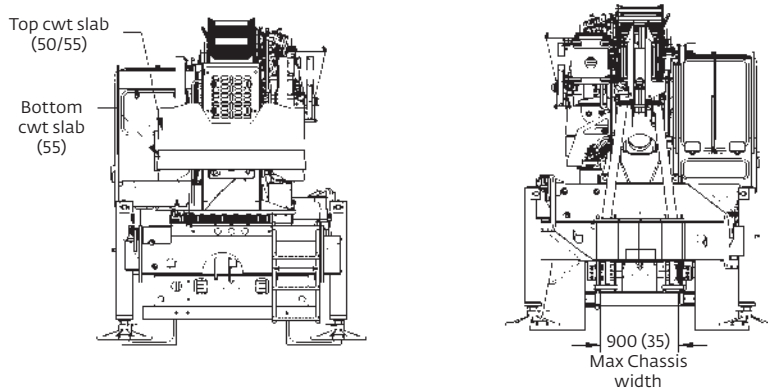
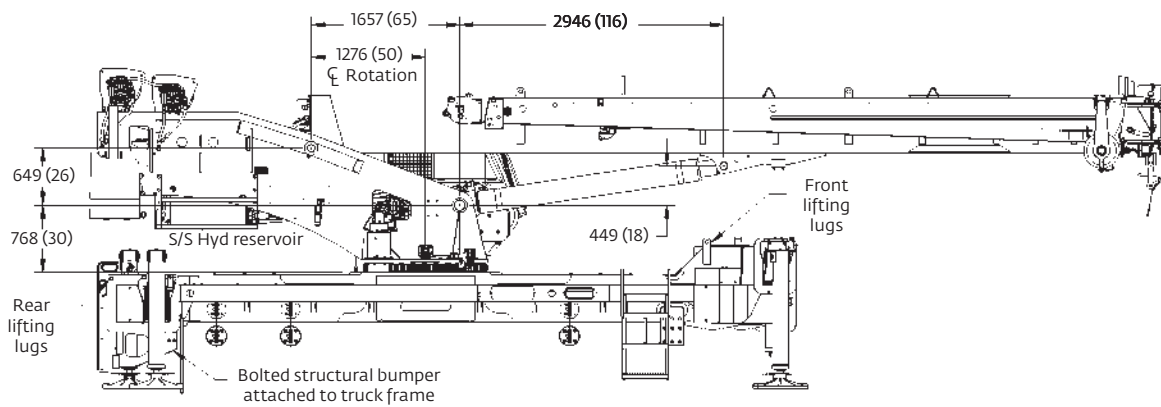
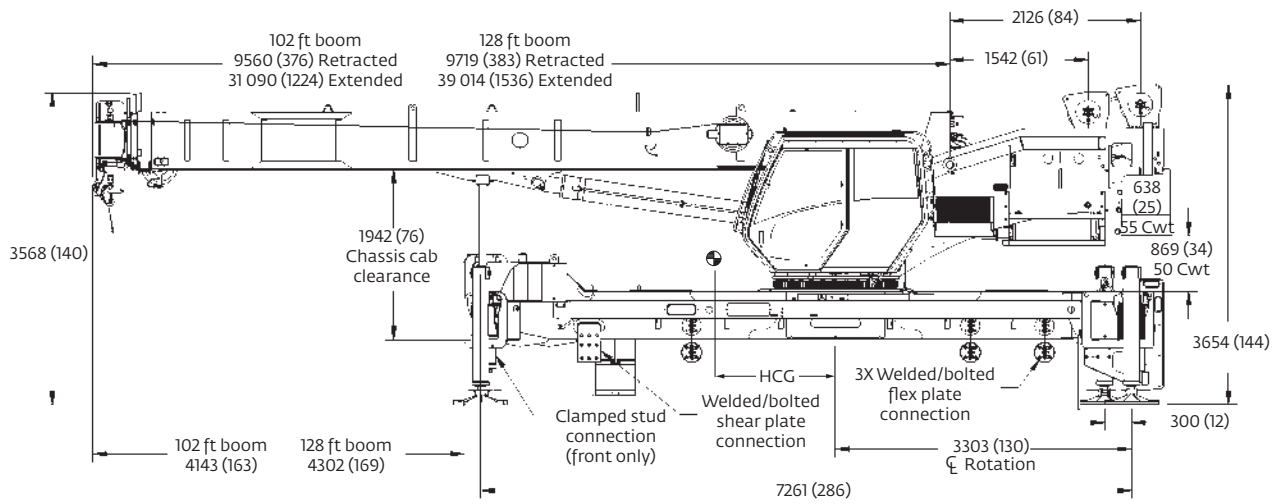
Get right to work with the right equipment — Manitowoc Finance gives you access to flexible, affordable financing you can use to seize profitable new opportunities as they arise.

Feel confident in your investment — rest easy with the assurance of the world's most advanced crane service and support network.

Contents

- Dimensions5
- Weights6
- Mounting configurations7
- Working range — 102 ft. boom8
- Load charts — 102 ft. boom9
- Working range — 128 ft. boom17
- Load charts — 128 ft. boom 18
- Specifications26
- Symbols glossary30

Dimensions



Weights

Weight and Center of Gravity (CG) estimates (see notes)				
Standard NBT Configuration	Horizontal CG mm (in)	Weight with fluids kg (lb)	CWT Pinned (# slabs)	CWT Stowed (# slabs)
NBT55102	348 (13.7)	20 789 (45,832)	2	0
NBT55102	803 (31.6)	20 789 (45,832)	1	1
NBT55102	1267 (49.9)	20 789 (45,832)	0	2
NBT50102	616 (24.3)	19 421 (42,816)	1	0
NBT50102	1113 (43.8)	19 421 (42,816)	0	1
NBT50102	1011 (39.8)	17,710 (39,044)	0	0
NBT55128	486 (19.1)	21 837 (48,142)	2	0
NBT55128	919 (36.2)	21 837 (48,142)	1	1
NBT55128	1361 (53.6)	21 837 (48,142)	0	2
NBT50128	749 (29.5)	20 469 (45,126)	1	0
NBT50128	1221 (48.0)	20 469 (45,126)	0	1
NBT50128	1134 (44.6)	18 758 (41,354)	0	0

Weight and CG Estimate Notes:

- Information provided is for reference only.
- Weight and CG data is applicable for a standard machine:
 - 102 ft or 128 ft boom
 - 2/3 part lineblock included
 - Main hoist only (auxiliary hoist IPO CWT present)
 - STD decking with fixed access ladder
 - No extension equipped
 - No optional turret access step
 - No auxiliary nose or optional hook blocks.
- All counterweight configurations are shown in table
 - Pinned = attached to cylinders and turret (in use)
 - Stowed = attached to torsion box (not in use)
 - “2” = Top and bottom slab(s)
 - “1” = Top or bottom slab only
 - “0” = No slab pinned and/or stowed

If both stowed and pinned columns are “0” the counterweight is physically removed from the machine. IPO counterweight is also assumed removed in this case (if no auxiliary hoist is equipped).

For more information about mounting configuration options, please contact the factory or your local National Crane dealer.

Mounting configurations

Recommended Minimum Truck Specification

Working area: 360°

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

Gross Axle Weight Rating Rear: 29,937 kg (66,000 lb)

Wheelbase: 711 cm (280 in)

Cab to Axle/Trunnion (CA/CT): 482 cm (190 in)

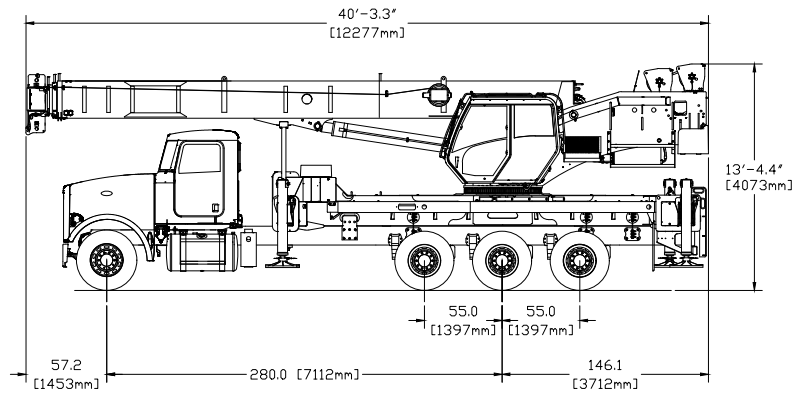
Frame Strength: 7885 MPa (110,000 PSI)

Frame Section Modulus (SM) Front Axle to End of Frame:
327 cm³ (20 in³)

Stability Weight Front: 4445 kg (9,800 lb)

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

Note: Estimated axle scale weights prior to installation of crane assembly for 85% stability. This configuration does not meet Federal Bridge Law.



Recommended 6 Axle Truck Specification

Working area: 360°

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

Gross Axle Weight Rating Pusher: 4536 kg (10,000 lb)

Gross Axle Weight Rating Rear: 29,937 kg (66,000 lb)

Gross Axle Weight Rating Tag: 4536 kg (10,000 lb)

Wheelbase: 670 cm (264 in)

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

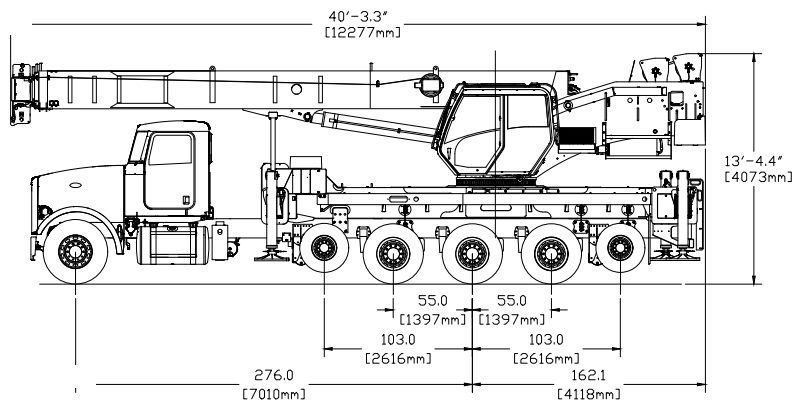
Frame Strength: 7885 MPa (110,000 PSI)

Frame Section Modulus (SM) Front Axle to End of Frame:
327 cm³ (20 in³)

Stability Weight Front: 4445 kg (9,800 lb)

Stability Weight Rear: 5896 kg (13,000 lb)

Note: Estimated axle scale weights prior to installation of crane assembly for 85% stability. This configuration has the potential to meet Federal Bridge Law depending on crane equipment installed.



Minimum Truck Requirements

Many factors must be considered in the selection of the proper truck for an NBT50 Series 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 NBT50 Series 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 AF section modulus (SM) and resistance to bending moment (RBM) so that reinforcing is not required. The frame under the cab through the front suspension must have the minimum SM 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 SM and RBM 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 be equipped with electronic engine control, increased cooling and a transmission with a PTO opening available with an extra heavy-duty PTO. A conventional cab truck should be used for standard crane mounts.

5. Neutral Start Switch. The chassis must be equipped with a switch that prevents operation of the engine starter when the transmission is in gear.

Notes:

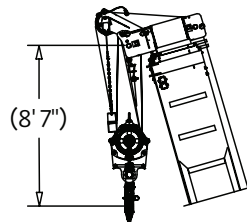
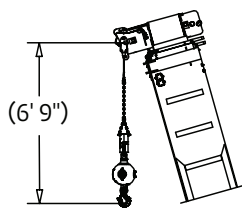
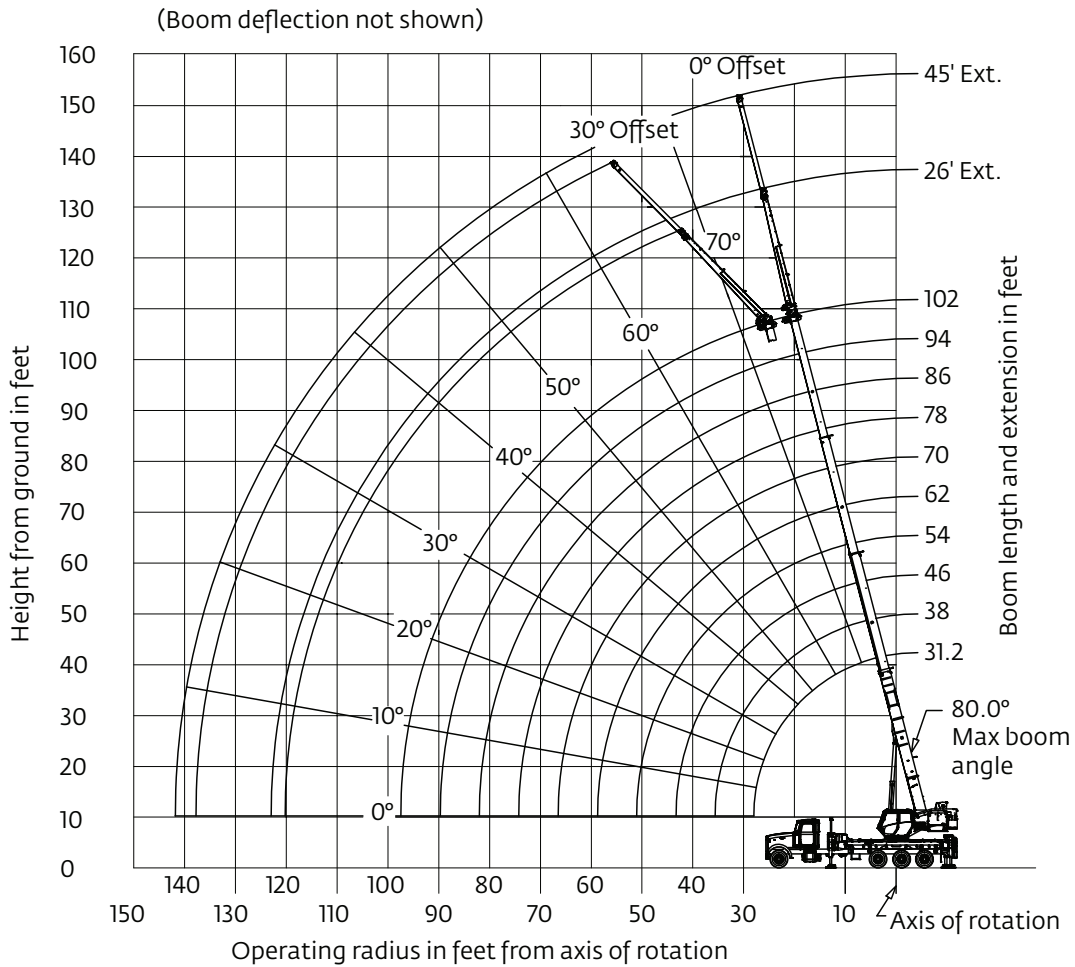
- Gross Vehicle Weight Rating (GVWR) is dependent on all components of the vehicle (axles, tires, springs, frame, etc.) meeting manufacturers' recommendations; always specify GVWR when purchasing trucks.
- Diesel engines require a variable speed governor for smooth crane operation; electronic fuel injection requires EET engine remote throttle.

- All mounting data is based on a National Crane NBT50 Series 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.

Working range

NBT50/NBT55: 102 ft main boom, full span outriggers, with extensions



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

*This drawing shows the physical reach of the machine. Always refer to the load chart to see which portions of this diagram are valid for the specific machine configuration and where the loads are structurally or stability limited.

*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

NBT55



31,1 m
(102 ft)



2722 kg
(6000 lb)



100%



360°

Radius in Feet	#001									
	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	102
8	110,000 (68.3)									
10	93,350 (64.2)	51,200 (69.2)	50,350 (73.1)	50,200 (75.9)	50,000 (78.0)	41,000 (79.6)				
12	82,350 (59.9)	51,200 (65.8)	50,350 (70.4)	50,200 (73.9)	50,000 (76.1)	41,000 (77.9)	34,350 (79.4)			
15	66,350 (53.0)	51,200 (60.7)	50,350 (66.4)	50,200 (70.5)	50,000 (73.5)	41,000 (75.5)	34,350 (77.3)	26,800 (78.7)		
20	48,750 (39.8)	49,150 (51.3)	49,450 (59.3)	49,650 (64.6)	46,450 (68.5)	41,000 (71.3)	34,350 (73.7)	26,800 (75.5)	23,000 (77.1)	18,000 (82.2)
25	31,500 (20.0)	38,350 (40.3)	38,650 (51.4)	38,850 (58.3)	39,000 (63.2)	35,950 (66.9)	30,150 (69.7)	26,800 (72.2)	23,000 (74.2)	18,000 (75.6)
30		29,000 (25.7)	31,100 (42.6)	31,300 (51.6)	31,500 (57.7)	31,400 (62.2)	26,750 (65.7)	23,800 (68.6)	21,250 (71.0)	18,000 (72.9)
35			25,550 (31.9)	25,750 (44.2)	25,950 (51.9)	26,050 (57.3)	23,700 (61.5)	21,250 (64.9)	18,950 (67.7)	17,000 (69.9)
40			16,000 (15.1)	20,800 (35.7)	21,000 (45.6)	21,150 (52.1)	21,150 (57.1)	19,100 (61.1)	17,100 (64.3)	15,350 (66.9)
45				16,800 (24.4)	17,000 (38.4)	17,200 (46.4)	17,300 (52.4)	17,050 (57.1)	15,550 (60.8)	13,950 (63.7)
50					14,100 (29.6)	14,250 (40.2)	14,350 (47.3)	14,450 (52.8)	14,200 (57.1)	12,700 (60.5)
55					*11,150 (18.6)	11,950 (33.0)	12,100 (41.8)	12,200 (48.2)	12,250 (53.1)	11,650 (57.1)
60						10,250 (24.9)	10,400 (36.3)	10,500 (43.7)	10,550 (49.3)	10,650 (53.8)
65						*6,400 (9.8)	8,900 (29.0)	9,000 (38.3)	9,100 (44.9)	9,150 (50.0)
70							7,650 (19.4)	7,800 (32.2)	7,850 (40.1)	7,950 (45.9)
75								6,750 (24.7)	6,850 (34.7)	6,900 (41.6)
80								*5,200 (13.2)	5,950 (28.4)	6,000 (36.7)
85									5,150 (20.3)	5,250 (31.3)
90										4,550 (24.7)
95										4,000 (15.5)
97										*2,200 (8.7)
Minimum boom angle (°) for indicated length (no load)										0
Maximum boom length (ft.) at 0° boom angle (no load)										102

NOTE: () Boom angles are in degrees.

*Loads are structurally limited.

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

Lifting Capacities at Zero Degree Boom Angle										
Boom Angle	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	
0°	12,450 (27)	9,250 (33.8)	6,750 (41.8)	5,000 (49.8)	3,700 (57.8)	2,700 (65.8)	1,950 (73.8)	1,300 (81.8)	700 (89.8)	

NOTE: () Reference radii in feet.

80108239

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

NBT55



31,1 m
(102 ft)



2722 kg
(6000 lb)



100%



Over Rear

Radius in Feet	#003									
	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	102
8	110,000 (68.3)									
10	93,350 (64.2)	51,200 (69.2)	50,350 (73.1)	50,200 (75.9)	50,000 (78.0)	41,000 (79.6)				
12	82,350 (59.9)	51,200 (65.8)	50,350 (70.4)	50,200 (73.9)	50,000 (76.1)	41,000 (77.9)	34,350 (79.6)			
15	66,350 (53.0)	51,200 (60.7)	50,350 (66.4)	50,200 (70.5)	50,000 (73.5)	41,000 (75.5)	34,350 (77.3)	26,800 (78.7)		
20	48,750 (39.8)	49,150 (51.3)	49,450 (59.3)	49,650 (64.6)	46,450 (68.4)	41,000 (71.3)	34,350 (73.7)	26,800 (75.5)	23,000 (77.1)	18,000 (78.2)
25	31,500 (20.0)	38,350 (40.3)	38,650 (51.4)	38,850 (58.3)	39,000 (63.2)	35,950 (66.9)	30,150 (69.7)	26,800 (72.2)	23,000 (74.2)	18,000 (75.6)
30		29,000 (25.7)	31,100 (42.6)	31,300 (51.6)	31,500 (57.7)	31,400 (62.2)	26,750 (65.7)	23,800 (68.6)	21,250 (71.0)	18,000 (72.9)
35			25,550 (31.9)	25,750 (44.2)	25,950 (51.9)	26,050 (57.3)	23,700 (61.5)	21,250 (64.9)	18,950 (67.7)	17,000 (69.9)
40			16,000 (15.1)	21,650 (35.6)	21,850 (45.5)	21,950 (52.1)	21,150 (57.1)	19,100 (61.1)	17,100 (64.3)	15,350 (66.9)
45				17,300 (24.4)	18,550 (38.3)	18,650 (46.4)	18,800 (52.5)	17,050 (57.1)	15,550 (60.8)	13,950 (63.7)
50					15,500 (29.6)	15,650 (40.2)	15,750 (47.4)	15,300 (52.9)	14,200 (57.1)	12,700 (60.5)
55					*11,150 (18.6)	13,300 (33.0)	13,400 (41.9)	13,500 (48.3)	13,000 (53.2)	11,650 (57.1)
60						11,450 (24.9)	11,550 (35.7)	11,650 (43.4)	11,700 (49.1)	10,750 (53.8)
65						*6,400 (9.8)	10,100 (29.1)	10,200 (38.5)	10,300 (45.1)	9,800 (50.1)
70							*8,350 (19.5)	8,900 (32.3)	9,000 (40.3)	9,050 (46.1)
75								7,800 (24.8)	7,900 (34.9)	7,950 (41.8)
80								*5,200 (13.2)	6,950 (28.6)	7,000 (37.0)
85									*6,100 (20.4)	6,200 (31.5)
90										5,500 (24.9)
95										*4,050 (15.5)
97										*2,200 (8.7)
Minimum boom angle (°) for indicated length (no load)										0
Maximum boom length (ft.) at 0° boom angle (no load)										102

NOTE: () Boom angles are in degrees.

*Loads are structurally limited.

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

Boom Angle	Lifting Capacities at Zero Degree Boom Angle									
	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	
0°	12,450 (27)	9,250 (33.8)	6,750 (41.8)	5,000 (49.8)	3,700 (57.8)	2,700 (65.8)	1,950 (73.8)	1,300 (81.8)	700 (89.8)	

NOTE: () Reference radii in feet.

80108243

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

NBT55



7,9 m - 13,7 m
(26 ft - 45 ft)



2722 kg
(6000 lb)



100%



360°

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0005	#0007	#0009	#0011
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
25	8,100 (77.9)			
30	8,100 (75.8)		5,450 (77.9)	
35	8,100 (73.8)	5,700 (79.5)	5,450 (76.2)	
40	8,100 (71.6)	5,700 (77.2)	5,450 (74.4)	
45	8,100 (69.5)	5,700 (75.1)	5,450 (72.6)	
50	8,050 (67.2)	5,700 (72.7)	5,450 (70.7)	3,150 (78.8)
55	7,450 (64.7)	5,700 (70.2)	5,450 (68.9)	3,150 (76.8)
60	7,000 (62.3)	5,550 (67.7)	5,350 (66.8)	3,150 (74.8)
65	6,500 (59.7)	5,350 (65.0)	5,000 (64.7)	3,150 (72.6)
70	6,000 (57.0)	5,200 (62.3)	4,700 (62.6)	3,150 (70.3)
75	5,650 (54.3)	5,050 (59.4)	4,400 (60.3)	3,050 (68.0)
80	5,300 (51.4)	4,800 (56.4)	4,200 (58.1)	2,950 (65.5)
85	5,000 (48.4)	4,550 (53.2)	3,950 (55.7)	2,850 (63.0)
90	4,450 (45.1)	4,350 (49.8)	3,750 (53.2)	2,800 (60.4)
95	3,900 (41.6)	4,150 (46.2)	3,550 (50.7)	2,750 (57.7)
100	3,350 (37.8)	3,650 (42.1)	3,400 (48.0)	2,700 (54.9)
105	2,900 (33.6)	3,100 (37.5)	3,250 (45.3)	2,650 (51.9)
110	2,450 (28.9)	2,600 (32.3)	3,100 (42.3)	2,600 (48.6)
115	2,050 (23.3)		2,850 (39.0)	2,550 (45.1)
120	*1,600 (15.7)		2,500 (35.4)	2,500 (41.2)
125			2,150 (31.4)	2,400 (36.7)
130			1,850 (26.8)	2,000 (31.1)
135			1,600 (21.3)	
140			*900 (13.2)	
Min. boom angle for indicated length (no load)	10°	30°	10°	30°
Max. boom length at 0° boom angle (no load)	70 ft.		70 ft.	

NOTE: () Boom angles are in degrees. 80108245

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

*Loads are structurally limited.

**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

- All capacities above the bold line are based on structural strength limitations.
 - 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- Warning:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
 - Capacities listed are with outriggers properly extended and vertical jacks set only.

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

NBT55



7,9 m - 13,7 m
(26 ft - 45 ft)



2722 kg
(6000 lb)



100%



Over Rear

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0006	#0008	#0010	#0012
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
25	8,100 (77.9)			
30	8,100 (75.8)		5,450 (77.9)	
35	8,100 (73.8)	5,700 (79.5)	5,450 (76.2)	
40	8,100 (71.6)	5,700 (77.2)	5,450 (74.4)	
45	8,100 (69.5)	5,700 (75.1)	5,450 (72.6)	
50	8,050 (67.2)	5,700 (72.7)	5,450 (70.7)	3,150 (78.8)
55	7,450 (64.7)	5,700 (70.2)	5,450 (68.9)	3,150 (76.8)
60	7,000 (62.3)	5,550 (67.7)	5,350 (66.8)	3,150 (74.8)
65	6,500 (59.7)	5,350 (65.0)	5,000 (64.7)	3,150 (72.6)
70	6,000 (57.0)	5,200 (62.3)	4,700 (62.6)	3,150 (70.3)
75	5,650 (54.3)	5,050 (59.4)	4,400 (60.3)	3,050 (68.0)
80	5,300 (51.4)	4,800 (56.4)	4,200 (58.1)	2,950 (65.5)
85	5,000 (48.4)	4,550 (53.2)	3,950 (55.7)	2,850 (63.0)
90	4,450 (45.1)	4,350 (49.8)	3,750 (53.2)	2,800 (60.4)
95	3,900 (41.6)	4,150 (46.2)	3,550 (50.7)	2,750 (57.7)
100	3,450 (37.8)	3,750 (42.2)	3,400 (48.0)	2,700 (54.9)
105	3,050 (33.7)	3,250 (37.6)	3,250 (45.3)	2,650 (51.9)
110	2,650 (29.0)	2,850 (32.4)	3,100 (42.3)	2,600 (48.6)
115	2,300 (23.4)		2,900 (39.1)	2,550 (45.1)
120	1,600 (15.7)		2,550 (35.4)	2,500 (41.2)
125			2,300 (31.5)	2,450 (36.7)
130			2,000 (26.9)	2,300 (31.2)
135			1,750 (21.5)	
140			900 (13.2)	
Min. boom angle for indicated length (no load)	10°	30°	10°	30°
Max. boom length at 0° boom angle (no load)	70 ft.		70 ft.	

NOTE: () Boom angles are in degrees. 80108246

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

**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength limitations.
 2. 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- Warning:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
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 only.

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

NBT50/NBT55



31,1 m
(102 ft)



1361 kg
(3000 lb)



100%



360°

Radius in Feet	#0001									
	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	102
8	100,000 (68.3)									
10	93,350 (64.2)	51,200 (69.2)	50,350 (73.1)	50,200 (75.9)	50,000 (78.0)	41,000 (79.6)				
12	80,950 (59.9)	51,200 (65.8)	50,350 (70.4)	50,200 (73.7)	50,000 (76.1)	41,000 (77.9)	34,350 (79.4)			
15	64,400 (53)	51,200 (60.7)	50,350 (66.4)	50,200 (70.3)	50,000 (73.3)	41,000 (75.5)	34,350 (77.3)	26,800 (78.7)		
20	47,300 (39.8)	47,650 (51.3)	47,950 (59.3)	48,150 (64.5)	46,450 (68.4)	41,000 (71.3)	34,350 (73.7)	26,800 (75.5)	23,000 (77.1)	18,000 (78.2)
25	31,500 (20)	37,050 (40.3)	37,400 (51.4)	37,600 (58.3)	37,800 (63.2)	35,950 (66.9)	30,150 (69.7)	26,800 (72.2)	23,000 (74.2)	18,000 (75.6)
30		29,000 (25.7)	29,850 (42.6)	30,050 (51.6)	30,250 (57.7)	30,350 (62.2)	26,750 (65.7)	23,800 (68.6)	21,250 (71)	18,000 (72.9)
35			23,600 (31.9)	23,900 (44.2)	24,100 (51.8)	24,250 (57.3)	23,700 (61.5)	21,250 (64.9)	18,950 (67.7)	17,000 (69.9)
40			*16,000 (15.1)	18,700 (35.6)	18,900 (45.4)	19,050 (52)	19,200 (57)	19,100 (61.1)	17,100 (64.3)	15,350 (66.9)
45				15,050 (24.4)	15,250 (38.2)	15,400 (46.4)	15,500 (52.3)	15,650 (57)	15,550 (60.8)	13,950 (63.7)
50					12,550 (29.5)	12,700 (40.1)	12,800 (47.2)	12,900 (52.6)	13,000 (56.9)	12,700 (60.5)
55					10,550 (18.5)	10,700 (33.7)	10,800 (42.3)	10,900 (48.5)	11,000 (53.3)	11,100 (57.3)
60						9,050 (24.8)	9,150 (36.2)	9,250 (43.6)	9,350 (49.2)	9,400 (53.6)
65						*6,400 (9.8)	7,800 (29)	7,900 (38.2)	8,000 (44.7)	8,050 (49.8)
70							6,650 (19.3)	6,750 (32.1)	6,850 (39.9)	6,900 (45.7)
75								5,800 (24.6)	5,900 (34.5)	5,950 (41.4)
80								5,000 (13.2)	5,100 (28.3)	5,150 (36.6)
85									4,350 (20.1)	4,450 (31.1)
90										3,800 (24.6)
95										3,250 (15.3)
97										*2,000 (8.7)
Minimum boom angle (°) for indicated length (no load)										0
Maximum boom length (ft.) at 0° boom angle (no load)										102

NOTE: () Boom angles are in degrees.

*Loads are structurally limited.

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

Lifting Capacities at Zero Degree Boom Angle										
Boom Angle	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	
0°	12,450 (27)	9,250 (33.8)	6,750 (41.8)	5,000 (49.8)	3,700 (57.8)	2,700 (65.8)	1,950 (73.8)	1,300 (81.8)	700 (89.8)	

NOTE: () Reference radii in feet.

80109846

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

NBT50/NBT55



31,1 m
(102 ft)



1361 kg
(3000 lb)



100%



Over Rear

Radius in Feet	#0003									
	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	102
8	100,000 (68.3)									
10	93,350 (64.2)	51,200 (69.2)	50,350 (73.1)	50,200 (75.9)	50,000 (78.0)	41,000 (79.6)				
12	80,950 (59.9)	51,200 (65.8)	50,350 (70.4)	50,200 (73.7)	50,000 (76.1)	41,000 (77.9)	34,350 (79.4)			
15	64,400 (53)	51,200 (60.7)	50,350 (66.4)	50,200 (70.3)	50,000 (73.3)	41,000 (75.5)	34,350 (77.3)	26,800 (78.7)		
20	47,300 (39.8)	47,650 (51.3)	47,950 (59.3)	48,150 (64.5)	46,450 (68.4)	41,000 (71.3)	34,350 (73.7)	26,800 (75.5)	23,000 (77.1)	18,000 (78.2)
25	31,500 (20)	37,050 (40.3)	37,400 (51.4)	37,600 (58.3)	37,800 (63.2)	35,950 (66.9)	30,150 (69.7)	26,800 (72.2)	23,000 (74.2)	18,000 (75.6)
30		29,000 (25.7)	29,850 (42.6)	30,050 (51.6)	30,250 (57.7)	30,350 (62.2)	26,750 (65.7)	23,800 (68.6)	21,250 (71)	18,000 (72.9)
35			24,450 (31.9)	24,700 (44.2)	24,850 (51.8)	25,000 (57.3)	23,700 (61.5)	21,250 (64.9)	18,950 (67.7)	17,000 (69.9)
40			16,000 (15.1)	20,500 (35.6)	20,700 (45.4)	20,850 (52.1)	21,000 (57.1)	19,100 (61.1)	17,100 (64.3)	15,350 (66.9)
45				16,750 (24.4)	16,950 (38.2)	17,100 (46.4)	17,200 (52.4)	17,050 (57.1)	15,550 (60.8)	13,950 (63.7)
50					14,150 (29.5)	14,250 (40.2)	14,400 (47.3)	14,500 (52.8)	14,200 (57.1)	12,700 (60.5)
55					11,050 (18.5)	12,100 (33.0)	12,200 (41.8)	12,300 (48.2)	12,350 (53.2)	11,650 (57.1)
60						10,400 (24.9)	10,550 (36.3)	10,650 (43.7)	10,700 (49.4)	10,750 (53.8)
65						*6,400 (9.8)	9,100 (29.1)	9,200 (38.4)	9,300 (44.9)	9,350 (50)
70							*7,900 (19.4)	8,000 (32.2)	8,050 (40.1)	8,150 (46)
75								6,950 (24.7)	7,050 (34.7)	7,100 (41.6)
80								*5,200 (13.2)	6,150 (28.4)	6,250 (36.8)
85									5,400 (20.3)	5,450 (31.3)
90										4,800 (24.8)
95										*4,000 (15.5)
97										*2,000 (8.7)
Minimum boom angle (°) for indicated length (no load)										0
Maximum boom length (ft.) at 0° boom angle (no load)										102

NOTE: () Boom angles are in degrees.

*Loads are structurally limited.

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

Boom Angle	Lifting Capacities at Zero Degree Boom Angle									
	Main Boom Length in Feet									
	31.2	38-A	46-B	54-C	62-D	70-E	78-F	86-G	94-H	
0°	12,450 (27)	9,250 (33.8)	6,750 (41.8)	5,000 (49.8)	3,700 (57.8)	2,700 (65.8)	1,950 (73.8)	1,300 (81.8)	700 (89.8)	

NOTE: () Reference radii in feet.

80109850

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

NBT50/NBT55



7,9 m - 13,7 m
(26 ft - 45 ft)



1361 kg
(3000 lb)



100%



360°

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0005	#0007	#0009	#0011
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
25	8,100 (77.9)			
30	8,100 (75.8)		5,450 (77.9)	
35	8,100 (73.8)	5,700 (79.5)	5,450 (76.2)	
40	8,100 (71.6)	5,700 (77.2)	5,450 (74.4)	
45	8,100 (69.5)	5,700 (75.1)	5,450 (72.6)	
50	8,050 (67.2)	5,700 (72.7)	5,450 (70.7)	3,150 (78.8)
55	7,450 (64.7)	5,700 (70.2)	5,450 (68.9)	3,150 (76.8)
60	7,000 (62.3)	5,550 (67.7)	5,350 (66.8)	3,150 (74.8)
65	6,500 (59.7)	5,350 (65)	5,000 (64.7)	3,150 (72.6)
70	6,000 (57)	5,200 (62.3)	4,700 (62.6)	3,150 (70.3)
75	5,650 (54.3)	5,050 (59.4)	4,400 (60.3)	3,050 (68)
80	5,100 (51.3)	4,800 (56.4)	4,200 (58.1)	2,950 (65.5)
85	4,350 (48.1)	4,550 (53.2)	3,950 (55.7)	2,850 (63)
90	3,750 (44.8)	4,150 (49.7)	3,750 (53.2)	2,800 (60.4)
95	3,150 (41.3)	3,550 (46)	3,550 (50.7)	2,750 (57.7)
100	2,700 (37.5)	2,950 (41.8)	3,400 (48)	2,700 (54.9)
105	2,250 (33.3)	2,450 (37.3)	3,050 (45.1)	2,650 (51.9)
110	1,850 (28.6)	2,000 (32.1)	2,650 (41.9)	2,600 (48.6)
115	1,500 (23)		2,250 (38.6)	2,550 (45.1)
120	1,200 (15.5)		1,950 (35)	2,250 (41.1)
125			1,650 (31)	1,850 (36.4)
130			1,350 (26.4)	1,500 (30.9)
135			1,100 (20.9)	
140			850 (13.2)	
Min. boom angle for indicated length (no load)	10°	30°	10°	30°
Max. boom length at 0° boom angle (no load)	70 ft.		70 ft.	

NOTE: () Boom angles are in degrees. 80109852

#RCL operating code. Refer to RCL manual for instructions
**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength limitations.
2. 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.

Warning: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

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 only.

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

NBT50/NBT55



7,9 m - 13,7 m
(26 ft - 45 ft)



1361 kg
(3000 lb)



100%



Over Rear

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0006	#0008	#0010	#0012
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
25	8,100 (77.9)			
30	8,100 (75.8)		5,450 (77.9)	
35	8,100 (73.8)	5,700 (79.5)	5,450 (76.2)	
40	8,100 (71.6)	5,700 (77.2)	5,450 (74.4)	
45	8,100 (69.5)	5,700 (75.1)	5,450 (72.6)	
50	8,050 (67.2)	5,700 (72.7)	5,450 (70.7)	3,150 (78.8)
55	7,450 (64.7)	5,700 (70.2)	5,450 (68.9)	3,150 (76.8)
60	7,000 (62.3)	5,550 (67.7)	5,350 (66.8)	3,150 (74.8)
65	6,500 (59.7)	5,350 (65)	5,000 (64.7)	3,150 (72.6)
70	6,000 (57)	5,200 (62.3)	4,700 (62.6)	3,150 (70.3)
75	5,650 (54.3)	5,050 (59.4)	4,400 (60.3)	3,050 (68)
80	5,300 (51.4)	4,800 (56.4)	4,200 (58.1)	2,950 (65.5)
85	5,000 (48.4)	4,550 (53.2)	3,950 (55.7)	2,850 (63)
90	4,450 (45.1)	4,350 (49.8)	3,750 (53.2)	2,800 (60.4)
95	3,900 (41.6)	4,150 (46.2)	3,550 (50.7)	2,750 (57.7)
100	3,450 (37.8)	3,750 (42.2)	3,400 (48)	2,700 (54.9)
105	3,050 (33.7)	3,250 (37.6)	3,250 (45.3)	2,650 (51.9)
110	2,650 (29)	2,800 (32.4)	3,100 (42.3)	2,600 (48.6)
115	2,250 (23.4)		2,900 (39.1)	2,550 (45.1)
120	*1,600 (15.7)		2,550 (35.4)	2,500 (41.2)
125			2,300 (31.5)	2,450 (36.7)
130			2,000 (26.9)	2,150 (31.1)
135			1,750 (21.5)	
140			900 (13.2)	
Min. boom angle for indicated length (no load)	10°	30°	10°	30°
Max. boom length at 0° boom angle (no load)	70 ft.		70 ft.	

NOTE: () Boom angles are in degrees. 80109853

*Loads are structurally limited.
#RCL operating code. Refer to RCL manual for instructions.
**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength limitations.
2. 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.

Warning: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

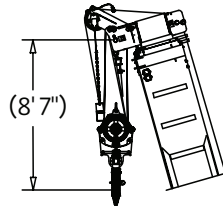
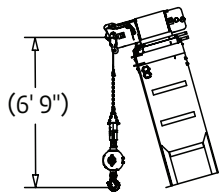
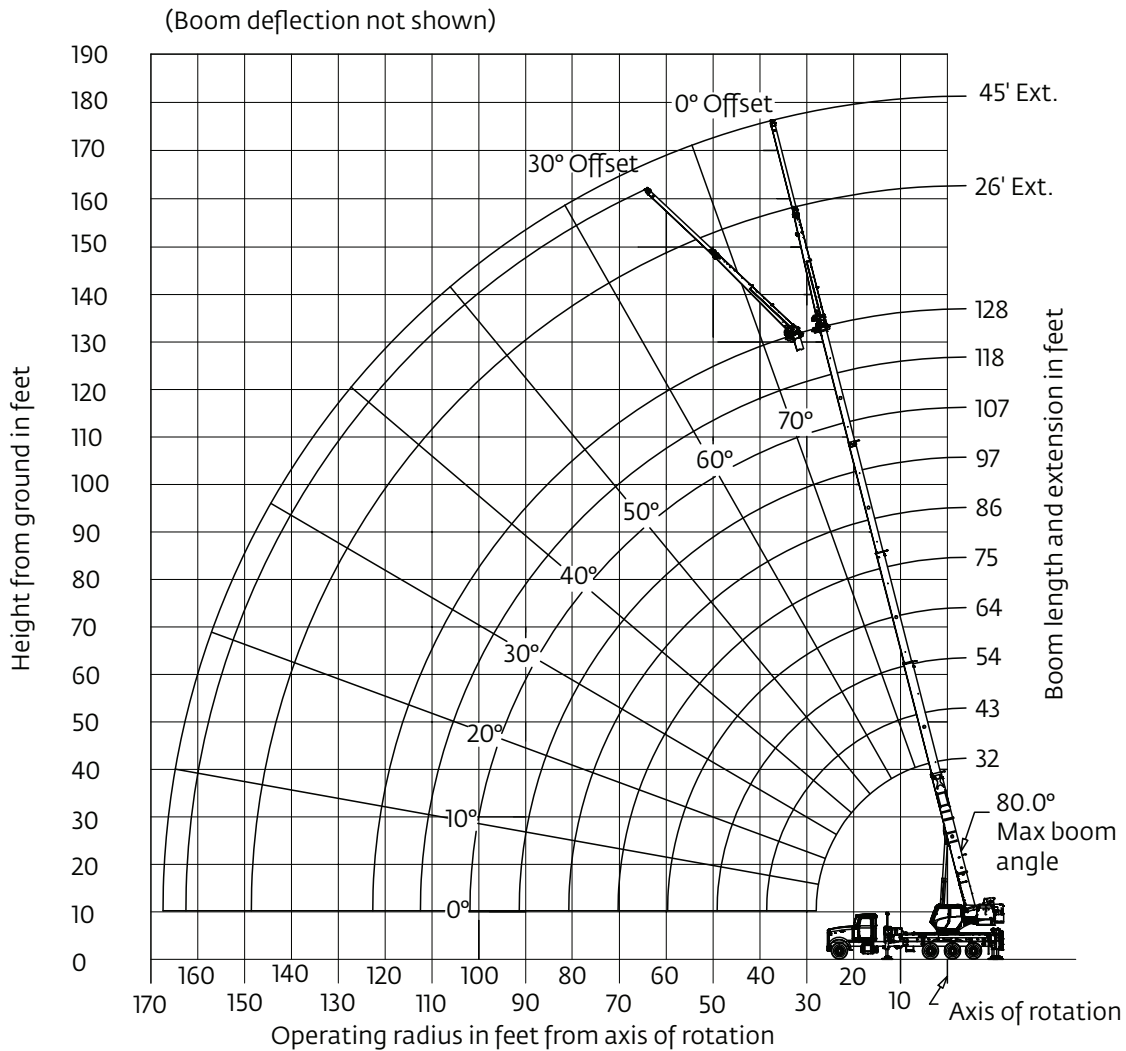
4. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
5. Capacities listed are with outriggers properly extended and vertical jacks set only.

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.

Working range

NBT50/NBT55: 128 ft main boom, with extensions



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

*This drawing shows the physical reach of the machine. Always refer to the load chart to see which portions of this diagram are valid for the specific machine configuration and where the loads are structurally or stability limited.

*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

NBT55



39,0 m
(128 ft)



2722 kg
(6000 lb)



100%



360°

Radius in Feet	#0001									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E	97-F	107-G	118-H	128
8	110,000 (68.1)									
10	92,300 (64)	39,200 (71.6)	39,700 (75.6)							
12	81,200 (59.8)	39,200 (68.7)	39,700 (73.4)	40,300 (76.4)	34,100 (78.7)					
15	65,400 (53.1)	39,200 (64.4)	39,700 (70.1)	40,300 (73.5)	34,100 (76.4)	22,650 (78.3)				
20	47,750 (40.3)	39,200 (56.7)	39,700 (64.4)	40,300 (68.8)	34,100 (72.5)	22,650 (75)	17,800 (77.1)	14,700 (78.6)		
25	31,650 (21.8)	37,700 (47.5)	38,150 (58)	37,150 (63.9)	30,100 (68.4)	22,650 (71.5)	17,800 (74.2)	14,700 (76.1)	12,900 (77.8)	9,600 (78.9)
30		30,200 (37.3)	30,700 (51.3)	31,000 (58.6)	27,100 (64.2)	20,400 (68)	17,800 (71.2)	14,700 (73.5)	12,900 (75.6)	9,600 (76.9)
35		22,300 (23.6)	25,100 (43.9)	25,350 (53.1)	24,600 (59.8)	18,500 (64.3)	16,300 (68)	14,700 (70.8)	12,900 (73.2)	9,600 (74.8)
40			20,700 (35.2)	21,050 (47)	21,350 (55.1)	17,050 (60.5)	15,100 (64.7)	13,650 (68)	12,050 (70.8)	9,600 (72.7)
45			*16,400 (24)	16,950 (40.3)	17,200 (50)	15,800 (56.5)	14,000 (61.5)	12,550 (65)	11,300 (68.2)	9,600 (70.6)
50				13,900 (32.4)	14,150 (44.6)	14,400 (52.3)	12,850 (58)	11,750 (62)	10,650 (65.8)	9,600 (68.4)
55				11,600 (22.2)	11,850 (38.6)	12,050 (47.8)	12,000 (54.4)	10,950 (59.2)	10,000 (63.2)	8,750 (65.9)
60					10,100 (32.4)	10,300 (43.3)	10,450 (50.8)	10,300 (56)	9,400 (60.4)	7,850 (63.3)
65					8,550 (23.9)	8,750 (37.9)	8,950 (46.6)	9,100 (52.4)	8,850 (57.5)	7,000 (60.6)
70					*4,650 (9.2)	7,500 (31.8)	7,650 (42.1)	7,800 (48.7)	7,950 (54.3)	6,300 (57.9)
75						6,450 (24.3)	6,600 (37.2)	6,750 (44.7)	6,850 (51)	5,700 (55)
80						*4,400 (12.8)	5,700 (31.6)	5,800 (40.5)	5,950 (47.5)	5,150 (52.1)
85							4,900 (24.8)	5,000 (35.8)	5,150 (43.8)	4,650 (49)
90							*3,850 (15.3)	4,300 (30.4)	4,450 (39.8)	4,150 (45.7)
95								3,700 (24)	3,800 (35.4)	3,700 (42.2)
100								*2,800 (14.9)	3,300 (30.5)	3,300 (38.4)
105									2,800 (24.6)	2,850 (34.2)
110									2,350 (16.8)	2,450 (29.5)
115										*1,900 (23.7)
120										*1,100 (15.8)
Minimum boom angle (°) for indicated length (no load)							0	5	8	10
Maximum boom length (ft.) at 0° boom angle (no load)							97			

NOTE: () Boom angles are in degrees.
 *Loads are structurally limited.
 #RCL operating code. Refer to RCL manual for operating instructions.

Boom Angle	Lifting Capacities at Zero Degree Boom Angle									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E				
0°	12,900 (27.6)	7,600 (38.8)	4,850 (49.8)	3,700 (59.8)	2,200 (70.8)	1,150 (81.8)				

NOTE: () Reference radii in feet.

80083162

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

NBT55



39,0 m
(128 ft)



2722 kg
(6000 lb)



100%



Over Rear

Radius in Feet	#0003									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E	97-F	107-G	118-H	128
8	110,000 (68.1)									
10	92,300 (64)	39,200 (71.6)	39,700 (75.6)							
12	81,200 (59.8)	39,200 (68.7)	39,700 (73.4)	40,300 (76.4)	34,100 (78.7)					
15	65,400 (53.1)	39,200 (64.4)	39,700 (70.1)	40,300 (73.5)	34,100 (76.4)	22,650 (78.3)				
20	47,750 (40.3)	39,200 (56.7)	39,700 (64.4)	40,300 (68.8)	34,100 (72.5)	22,650 (75)	17,800 (77.1)	14,700 (78.6)		
25	31,650 (21.8)	37,700 (47.5)	38,150 (58)	37,150 (63.9)	30,100 (68.4)	22,650 (71.5)	17,800 (74.2)	14,700 (76.1)	12,900 (77.8)	9,600 (78.9)
30		30,200 (37.3)	30,700 (51.3)	31,000 (58.6)	27,100 (64.2)	20,400 (68)	17,800 (71.2)	14,700 (73.5)	12,900 (75.6)	9,600 (76.9)
35		22,300 (23.6)	25,100 (43.9)	25,350 (53.1)	24,600 (59.8)	18,500 (64.3)	16,300 (68)	14,700 (70.8)	12,900 (73.2)	9,600 (74.8)
40			20,950 (35.2)	21,250 (47)	21,500 (55.1)	17,050 (60.5)	15,100 (64.7)	13,650 (68)	12,050 (70.8)	9,600 (72.7)
45			16,400 (24)	18,000 (40.3)	18,250 (50)	15,800 (56.5)	14,000 (61.5)	12,550 (65)	11,300 (68.2)	9,600 (70.6)
50				15,250 (32.4)	15,500 (44.6)	14,600 (52.3)	12,850 (58)	11,750 (62)	10,650 (65.8)	9,600 (68.4)
55				*11,900 (22.2)	13,100 (38.6)	13,300 (47.8)	12,000 (54.4)	10,950 (59.2)	10,000 (63.2)	8,750 (65.9)
60					11,200 (32.4)	11,400 (43.3)	11,250 (50.8)	10,300 (56)	9,400 (60.4)	7,850 (63.3)
65					9,700 (23.9)	9,900 (37.9)	10,100 (46.6)	9,700 (52.4)	8,850 (57.5)	7,000 (60.6)
70					*4,650 (9.2)	8,600 (31.8)	8,750 (42.1)	8,900 (48.7)	8,400 (54.3)	6,300 (57.9)
75						7,450 (24.3)	7,600 (37.2)	7,750 (44.7)	7,900 (51)	5,700 (55)
80						*4,400 (12.8)	6,650 (31.6)	6,800 (40.5)	6,900 (47.5)	5,150 (52.1)
85							5,800 (24.8)	5,950 (35.8)	6,050 (43.8)	4,650 (49)
90							*3,850 (15.3)	5,200 (30.4)	5,300 (39.8)	4,150 (45.7)
95								4,550 (24)	4,650 (35.4)	3,700 (42.2)
100								*2,800 (14.9)	4,050 (30.5)	3,300 (38.4)
105									3,550 (24.6)	3,000 (34.2)
110									*2,400 (16.8)	2,650 (29.5)
115										1,900 (23.7)
120										1,100 (15.8)
Minimum boom angle (°) for indicated length (no load)							0	5	8	10
Maximum boom length (ft.) at 0° boom angle (no load)							97			

NOTE: () Boom angles are in degrees.

*Loads are structurally limited.

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

Lifting Capacities at Zero Degree Boom Angle										
Boom Angle	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E				
0°	12,900 (27.6)	7,600 (38.8)	4,850 (49.8)	3,700 (59.8)	2,200 (70.8)	1,150 (81.8)				

NOTE: () Reference radii in feet.

80083166

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

NBT55



7,9 m - 13,7 m
(26 ft - 45 ft)



2722 kg
(6000 lb)



100%



360°

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0005	#0007	#0009	#0011
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
35	5,200 (76.9)			
40	5,200 (75.3)		3,700 (77.3)	
45	5,200 (73.6)		3,700 (75.8)	
50	5,200 (71.9)	4,800 (77.4)	3,700 (74.4)	
55	5,200 (70.1)	4,800 (75.6)	3,700 (72.9)	
60	5,200 (68.4)	4,800 (73.7)	3,700 (71.4)	
65	5,200 (66.7)	4,800 (71.7)	3,700 (69.9)	2,500 (77)
70	4,850 (64.7)	4,650 (69.7)	3,700 (68.4)	2,500 (75.2)
75	4,500 (62.6)	4,400 (67.5)	3,700 (66.9)	2,500 (73.5)
80	4,250 (60.5)	4,150 (65.2)	3,700 (65.4)	2,500 (71.7)
85	3,950 (58.3)	4,000 (62.9)	3,700 (63.8)	2,500 (69.8)
90	3,800 (56.1)	3,800 (60.5)	3,550 (61.9)	2,500 (67.9)
95	3,650 (53.8)	3,650 (58.1)	3,250 (59.9)	2,500 (65.9)
100	3,150 (51.2)	3,350 (55.4)	3,000 (57.8)	2,500 (63.9)
105	2,600 (48.4)	2,900 (52.5)	2,700 (55.6)	2,450 (61.7)
110	2,100 (45.5)	2,550 (49.5)	2,500 (53.5)	2,400 (59.5)
115	1,700 (42.5)	2,100 (46.3)	2,300 (51.2)	2,350 (57.1)
120	1,350 (39.3)	*1,650 (42.7)	2,050 (48.7)	2,300 (54.7)
125	950 (35.8)	*1,200 (38.9)	1,750 (46)	2,250 (52.1)
130	650 (32.1)	*850 (34.8)	1,500 (43.3)	2,000 (49.1)
135		*450 (30)	1,200 (40.4)	1,600 (45.9)
140			900 (37.2)	1,250 (42.3)
145			650 (33.9)	*900 (38.2)
150				*600 (33.9)
Min. boom angle for indicated length (no load)	29°	30°	30°	31°
Max. boom length at 0° boom angle (no load)	64 ft.		64 ft.	

NOTE: () Boom angles are in degrees. 80084530

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

*Loads are structurally limited.

**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength limitations.
 2. 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- Warning:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
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 only.

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

NBT55



7,9 m - 13,7 m
(26 ft - 45 ft)



2722 kg
(6000 lb)



100%



Over Rear

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0006	#0008	#0010	#0012
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
35	5,200 (76.9)			
40	5,200 (75.3)		3,700 (77.3)	
45	5,200 (73.6)		3,700 (75.8)	
50	5,200 (71.9)	4,800 (77.4)	3,700 (74.4)	
55	5,200 (70.1)	4,800 (75.6)	3,700 (72.9)	
60	5,200 (68.4)	4,800 (73.7)	3,700 (71.4)	
65	5,200 (66.7)	4,800 (71.7)	3,700 (69.9)	2,500 (77)
70	4,850 (64.7)	4,650 (69.7)	3,700 (68.4)	2,500 (75.2)
75	4,500 (62.6)	4,400 (67.5)	3,700 (66.9)	2,500 (73.5)
80	4,250 (60.5)	4,150 (65.2)	3,700 (65.4)	2,500 (71.7)
85	3,950 (58.3)	4,000 (62.9)	3,700 (63.8)	2,500 (69.8)
90	3,800 (56.1)	3,800 (60.5)	3,550 (61.9)	2,500 (67.9)
95	3,650 (53.8)	3,650 (58.1)	3,250 (59.9)	2,500 (65.9)
100	3,150 (51.2)	3,350 (55.4)	3,000 (57.8)	2,500 (63.9)
105	2,600 (48.4)	2,900 (52.5)	2,700 (55.6)	2,450 (61.7)
110	2,100 (45.5)	2,550 (49.5)	2,500 (53.5)	2,400 (59.5)
115	1,700 (42.5)	2,150 (46.3)	2,300 (51.2)	2,350 (57.1)
120	1,350 (39.3)	1,650 (42.7)	2,050 (48.7)	2,300 (54.7)
125	950 (35.8)	1,200 (38.9)	1,750 (46)	2,250 (52.1)
130	650 (32.1)	850 (34.8)	1,500 (43.3)	2,000 (49.1)
135		450 (30)	1,200 (40.4)	1,750 (45.9)
140			900 (37.2)	1,350 (42.3)
145			650 (33.9)	900 (38.2)
150				600 (33.9)
Min. boom angle for indicated length (no load)	29°	30°	30°	31°
Max. boom length at 0° boom angle (no load)	64 ft.		64 ft.	

NOTE: () Boom angles are in degrees. 80084531

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

**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

- All capacities above the bold line are based on structural strength limitations.
 - 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- Warning:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
 - Capacities listed are with outriggers properly extended and vertical jacks set only.

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

NBT50/55



39,0 m
(128 ft)



1361 kg
(3000 lb)



100%



360°

Radius in Feet	#0001									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E	97-F	107-G	118-H	128
8	100,000 (68.1)									
10	92,250 (64)	39,200 (71.6)	39,700 (75.6)							
12	80,100 (59.8)	39,200 (68.7)	39,700 (73.4)	40,300 (76.4)	34,100 (78.7)					
15	63,450 (53.1)	39,200 (64.4)	39,700 (70.1)	40,300 (73.5)	34,100 (76.4)	22,650 (78.3)				
20	46,300 (40.3)	39,200 (56.7)	39,700 (64.4)	40,300 (68.8)	34,100 (72.5)	22,650 (75)	17,800 (77.1)	14,700 (78.6)		
25	31,650 (21.8)	36,500 (47.5)	36,950 (58)	37,150 (63.9)	30,100 (68.4)	22,650 (71.5)	17,800 (74.2)	14,700 (76.1)	12,900 (77.8)	
30		28,950 (37.3)	29,400 (51.3)	29,700 (58.6)	27,100 (64.2)	20,400 (68)	17,800 (71.2)	14,700 (73.5)	12,900 (75.6)	9,600 (76.9)
35		22,300 (23.6)	23,900 (43.9)	24,300 (53.1)	24,550 (59.8)	18,500 (64.3)	16,300 (68)	14,700 (70.8)	12,900 (73.2)	9,600 (74.8)
40			18,600 (35.2)	18,950 (47)	19,250 (55.1)	17,050 (60.5)	15,100 (64.7)	13,650 (68)	12,050 (70.8)	9,600 (72.7)
45			14,800 (24)	15,150 (40.3)	15,450 (50)	15,650 (56.5)	14,000 (61.5)	12,550 (65)	11,300 (68.2)	9,600 (70.6)
50				12,350 (32.4)	12,600 (44.6)	12,800 (52.3)	12,850 (58)	11,750 (62)	10,650 (65.8)	9,600 (68.4)
55				10,300 (22.2)	10,600 (38.6)	10,800 (47.8)	11,000 (54.4)	10,950 (59.2)	10,000 (63.2)	8,750 (65.9)
60					8,850 (32.4)	9,050 (43.3)	9,250 (50.8)	9,400 (56)	9,400 (60.4)	7,850 (63.3)
65					7,450 (23.9)	7,650 (37.9)	7,800 (46.6)	7,950 (52.4)	8,100 (57.5)	7,000 (60.6)
70					*4,650 (9.2)	6,500 (31.8)	6,650 (42.1)	6,800 (48.7)	6,900 (54.3)	6,300 (57.9)
75						5,500 (24.3)	5,650 (37.2)	5,800 (44.7)	5,900 (51)	5,700 (55)
80							*4,400 (12.8)	4,800 (31.6)	4,950 (40.5)	5,050 (47.5)
85								4,100 (24.8)	4,200 (35.8)	4,300 (43.8)
90								3,450 (15.3)	3,550 (30.4)	3,650 (39.8)
95									3,000 (24)	3,100 (35.4)
100									2,500 (14.9)	2,600 (30.5)
105										2,150 (24.6)
110										1,750 (16.8)
115										1,450 (23.7)
120										*1,100 (15.8)
Minimum boom angle (°) for indicated length (no load)							0	5	8	10
Maximum boom length (ft.) at 0° boom angle (no load)							97			

NOTE: () Boom angles are in degrees.
*Loads are structurally limited.
#RCL operating code. Refer to RCL manual for operating instructions.

Boom Angle	Lifting Capacities at Zero Degree Boom Angle									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E				
0°	12,900 (27.6)	7,600 (38.8)	4,850 (49.8)	3,700 (59.8)	2,200 (70.8)	1,150 (81.8)				

NOTE: () Reference radii in feet.

80109641

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

NBT50/55



39,0 m
(128 ft)



1361 kg
(3000 lb)



100%



Over Rear

Radius in Feet	#0003									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E	97-F	107-G	118-H	128
8	100,000 (68.1)									
10	92,250 (64)	39,200 (71.6)	39,700 (75.6)							
12	80,100 (59.8)	39,200 (68.7)	39,700 (73.4)	40,300 (76.4)	34,100 (78.7)					
15	63,450 (53.1)	39,200 (64.4)	39,700 (70.1)	40,300 (73.5)	34,100 (76.4)	22,650 (78.3)				
20	46,300 (40.3)	39,200 (56.7)	39,700 (64.4)	40,300 (68.8)	34,100 (72.5)	22,650 (75)	17,800 (77.1)	14,700 (78.6)		
25	31,650 (21.8)	36,500 (47.5)	36,950 (58)	37,150 (63.9)	30,100 (68.4)	22,650 (71.5)	17,800 (74.2)	14,700 (76.1)	12,900 (77.8)	9,600 (78.9)
30		28,950 (37.3)	29,400 (51.3)	29,700 (58.6)	27,100 (64.2)	20,400 (68)	17,800 (71.2)	14,700 (73.5)	12,900 (75.6)	9,600 (76.9)
35		22,300 (23.6)	24,000 (43.9)	24,300 (53.1)	24,550 (59.8)	18,500 (64.3)	16,300 (68)	14,700 (70.8)	12,900 (73.2)	9,600 (74.8)
40			20,000 (35.2)	20,300 (47)	20,550 (55.1)	17,050 (60.5)	15,100 (64.7)	13,650 (68)	12,050 (70.8)	9,600 (72.7)
45			16,400 (40.3)	16,800 (50)	17,050 (56.5)	15,800 (61.5)	14,000 (65)	12,550 (68.2)	11,300 (70.6)	9,600 (76)
50			13,900 (32.4)	14,150 (44.6)	14,350 (52.3)	12,850 (58)	11,750 (62)	10,650 (65.8)	9,600 (68.4)	
55			11,650 (22.2)	11,900 (38.6)	12,100 (47.8)	12,000 (54.4)	10,950 (59.2)	10,000 (63.2)	8,750 (65.9)	
60				10,200 (32.4)	10,400 (43.3)	10,550 (50.8)	10,300 (56)	9,400 (60.4)	7,850 (63.3)	
65					8,700 (23.9)	8,900 (37.9)	9,050 (46.6)	9,200 (52.4)	8,850 (57.5)	7,000 (60.6)
70					*4,650 (9.2)	7,650 (31.8)	7,850 (42.1)	7,950 (48.7)	8,100 (54.3)	6,300 (57.9)
75						6,600 (24.3)	6,750 (37.2)	6,900 (44.7)	7,000 (51)	5,700 (55)
80						*4,400 (12.8)	5,850 (31.6)	6,000 (40.5)	6,100 (47.5)	5,150 (52.1)
85							5,100 (24.8)	5,200 (35.8)	5,300 (43.8)	4,650 (49)
90							*3,850 (15.3)	4,500 (30.4)	4,600 (39.8)	4,150 (45.7)
95								3,900 (24)	4,000 (35.4)	3,700 (42.2)
100								*2,800 (14.9)	3,450 (30.5)	3,300 (38.4)
105									2,950 (24.6)	3,000 (34.2)
110									*2,400 (16.8)	2,600 (29.5)
115										*1,900 (23.7)
120										*1,100 (15.8)
Minimum boom angle (°) for indicated length (no load)							0	5	8	10
Maximum boom length (ft.) at 0° boom angle (no load)							97			

NOTE: () Boom angles are in degrees.

*Loads are structurally limited.

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

Boom Angle	Lifting Capacities at Zero Degree Boom Angle									
	Main Boom Length in Feet									
	31.7	43-A	54-B	64-C	75-D	86-E				
0°	12,900 (27.6)	7,600 (38.8)	4,850 (49.8)	3,700 (59.8)	2,200 (70.8)	1,150 (81.8)				

NOTE: () Reference radii in feet.

80109645

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

NBT50/55



7,9 m - 13,7 m
(26 ft - 45 ft)



1361 kg
(3000 lb)



100%



360°

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0005	#0007	#0009	#0011
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
35	5,200 (76.9)			
40	5,200 (75.3)		3,700 (77.3)	
45	5,200 (73.6)		3,700 (75.8)	
50	5,200 (71.9)	4,800 (77.4)	3,700 (74.4)	
55	5,200 (70.1)	4,800 (75.6)	3,700 (72.9)	
60	5,200 (68.4)	4,800 (73.7)	3,700 (71.4)	
65	5,200 (66.7)	4,800 (71.7)	3,700 (69.9)	2,500 (77)
70	4,850 (64.7)	4,650 (69.7)	3,700 (68.4)	2,500 (75.2)
75	4,500 (62.6)	4,400 (67.5)	3,700 (66.9)	2,500 (73.5)
80	4,250 (60.5)	4,150 (65.2)	3,700 (65.4)	2,500 (71.7)
85	3,450 (58.3)	4,000 (62.9)	3,700 (63.8)	2,500 (69.8)
90	3,450 (56.1)	3,800 (60.5)	3,550 (61.9)	2,500 (67.9)
95	3,000 (53.8)	3,550 (58.1)	3,250 (59.9)	2,500 (65.9)
100	2,450 (51.2)	2,950 (55.4)	3,000 (57.8)	2,500 (63.9)
105	2,000 (48.4)	2,450 (52.5)	2,700 (55.6)	2,450 (61.7)
110	1,600 (45.5)	1,950 (49.5)	2,400 (53.5)	2,400 (59.5)
115	1,200 (42.5)	1,500 (46.3)	2,000 (51.2)	2,350 (57.1)
120	850 (39.3)	1,100 (42.7)	1,650 (48.7)	2,200 (54.7)
125	550 (35.8)	750 (38.9)	1,300 (46)	1,800 (52.1)
130			1,000 (43.3)	1,450 (49.1)
135			700 (40.4)	1,050 (45.9)
140			450 (37.2)	800 (42.3)
145				500 (38.2)
Min. boom angle for indicated length (no load)	34°	34°	36°	36°
Max. boom length at 0° boom angle (no load)	64 ft.		64 ft.	

NOTE: () Boom angles are in degrees. 80109647

#RCL operating code. Refer to RCL manual for instructions.
**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength limitations.
 2. 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- Warning:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
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 only.

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

NBT50/55



7,9 m - 13,7 m
(26 ft - 45 ft)



1361 kg
(3000 lb)



100%



Over Rear

Radius in Feet	**26 ft. LENGTH		45 ft. LENGTH	
	#0006	#0008	#0010	#0012
	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
35	5,200 (76.9)			
40	5,200 (75.3)		3,700 (77.3)	
45	5,200 (73.6)		3,700 (75.8)	
50	5,200 (71.9)	4,800 (77.4)	3,700 (74.4)	
55	5,200 (70.1)	4,800 (75.6)	3,700 (72.9)	
60	5,200 (68.4)	4,800 (73.7)	3,700 (71.4)	
65	5,200 (66.7)	4,800 (71.7)	3,700 (69.9)	2,500 (77)
70	4,850 (64.7)	4,650 (69.7)	3,700 (68.4)	2,500 (75.2)
75	4,500 (62.6)	4,400 (67.5)	3,700 (66.9)	2,500 (73.5)
80	4,250 (60.5)	4,150 (65.2)	3,700 (65.4)	2,500 (71.7)
85	3,950 (58.3)	4,000 (62.9)	3,700 (63.8)	2,500 (69.8)
90	3,800 (56.1)	3,800 (60.5)	3,550 (61.9)	2,500 (67.9)
95	3,650 (53.8)	3,650 (58.1)	3,250 (59.9)	2,500 (65.9)
100	3,150 (51.2)	3,350 (55.4)	3,000 (57.8)	2,500 (63.9)
105	2,600 (48.4)	2,900 (52.5)	2,700 (55.6)	2,450 (61.7)
110	2,100 (45.5)	2,550 (49.5)	2,500 (53.5)	2,400 (59.5)
115	1,700 (42.5)	2,150 (46.3)	2,300 (51.2)	2,350 (57.1)
120	1,350 (39.3)	1,650 (42.7)	2,050 (48.7)	2,300 (54.7)
125	950 (35.8)	1,200 (38.9)	1,750 (46)	2,250 (52.1)
130	650 (32.1)	850 (34.8)	1,500 (43.3)	2,100 (49.1)
135		450 (30)	1,200 (40.4)	1,700 (45.9)
140			900 (37.2)	*1,350 (42.3)
145			650 (33.9)	*900 (38.2)
150				*600 (33.9)
Min. boom angle for indicated length (no load)	29°	30°	30°	31°
Max. boom length at 0° boom angle (no load)	64 ft.		64 ft.	

NOTE: () Boom angles are in degrees. 80109648

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

*Capacities are structurally limited.

**26 ft. capacities are applicable to both 26' fixed and 26' tele extension.

Boom extension capacity notes:

- All capacities above the bold line are based on structural strength limitations.
 - 26 ft and 45 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. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.
- Warning:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
 - Capacities listed are with outriggers properly extended and vertical jacks set only.

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.

Specifications

Superstructure

Boom

Two boom options: 9,51 m - 31,1 m (31.2 ft - 102 ft) four-section boom and 9,7 m - 39,0 m (31.7 ft - 128 ft) five-section boom. Includes proportional extension via multi-stage hydraulic cylinder and cable operation, four-plate, high-strength steel construction, three-sheave, quick reeve boom nose and Easy-Glide wear pads.

Boom elevation

One (1) double-acting, hydraulic cylinder with integral holding valve with integral pressure transducers provides elevation from -8° to +80°.

Rated Capacity Limiting (RCL) and anti-two-block (ATB) systems

Graphical display capacity limiter and anti-two-block system with audio visual warning and crane function lockout. The graphical display is a 178 mm (7 in) color and polarized screen for real-time display of boom angle, length, radius, tip height, maximum permissible load, load indication and warning of impending overload or anti-two-block condition. Work area definition system (WADS) allowing operator definable non-lockout warning limits for crane operations, and CANbus sensors and hard-wired ATB circuit routed externally to the boom. Outrigger monitoring system (OMS) to sense the configuration of the outriggers and aid the operator in selecting an appropriate setup. On-board setup and diagnostics for RCL sensors allow for improved service and an event recorder to protect your investment.

Control System

Fully integrated RCL and CANbus crane control system for maximum performance. Real-time diagnostics for truck chassis data such as engine regeneration, fuel level, engine coolant, oil pressure, engine RPM and battery voltage. On-board setup and diagnostics for all sensors and control modules allowing for improved service and little need for a laptop or diagnostic cables. Fault codes to quickly identify service needs and event recorder to protect your investment.

Operator cab and controls

Cab structure: rigid galvanealed steel structure, well insulated, offering optimum operator visibility and comfort. Equipped with tilting cab feature from horizontal to +20°, tinted safety glass, fixed front window with windshield wiper and washer, sliding skylight window with windshield wiper, sliding left side glass door, sliding right side window for ventilation w/ safety grille, tilting rear window for ventilation, four way adjustable, cushioned/heated seat and armrests with seat belt, diesel-fired warm-water heater with air ducts at operators feet, left side of cab and front dash — standard, hydraulic-powered air conditioner — standard, circulation fan, bubble level, adjustable sun visor, dome light, cup holder, fire

extinguisher, load chart binder with tear-proof paper load charts and operator manual.

Armrest control functions are arranged per ASME B30.5: Two single axis electric joystick controllers for swing, boom telescope, main hoist, auxiliary hoist (optional), boom lift, warning horn button, swing park brake switch, hoist rotation indicator, tilt cab up/down, main hoist high/low speed switch, and aux hoist high/low speed switch (optional).

Outrigger controls: front console mounted electronic keypad allowing the operator to activate all horizontal beams and vertical jacks. Pre-selection capabilities to easily activate more than one function for ease of setup.

Rigging remote: Standard wireless rigging remote stored and charged inside the crane cab which allows the operation of the main and (optional) aux hoist to stow and unstow the hookblocks at front bumper of truck chassis for transport or operation. If the crane is equipped with an optional single front outrigger (SFO), this remote allows for raising and lowering of this vertical outrigger.

Foot controls: engine throttle (electronic), dynamic swing brake (electronic), boom telescope (electronic, if equipped with aux hoist option).

Front console controls and indicators for rated capacity limiter display, outriggers, engine ignition key, emergency stop switch, and RCL override keyswitch (momentary). 12VDC power outlet.

Overhead console controls and indicators for heater, A/C and fan speed, windshield wiper and washer, skylight wiper, cab mounted work lights, crane function power, radio remote power.

Removable counterweight

Hydraulically removable counterweight system consisting of (2) vertical double-acting hydraulic cylinders equipped with holding valves to independently raise and lower the desired counterweight slabs. Controls can be activated at both the left and right side of turret near the counterweight for ease of activation during counterweight pin reconfiguration. When not in use, one or all of the slabs can be stowed on top of the front outrigger box. One or all of the slabs can also be removed from the crane by using the crane itself after stowing on front outrigger box first.

NBT50:

Counterweight consists of one slab for two unique load chart configurations:

- (1) slabs installed on turret: (1) x 1360 lb (3000 lb)
- (0) slabs installed on turret: no slabs installed

Specifications

NBT55:

Counterweight consists of (2) slabs for (3) unique load chart configurations:

- (2) slabs installed on turret: (2) x 1360 lb (3000 lb)
- (1) slabs installed on turret: (1) x 1360 lb (3000 lb)
- (0) slabs installed on turret: no slabs installed

Slewing

Continuous 360° rotation using (1) low speed, high torque motor with a manually adjustable swing adjustment valve integrated to the hydraulic motor control manifold mounted to a planetary reduction gear. A proportional electronic brake pedal located in the operator cab allows for the dynamic application of the multi-disk swing brake circuit. A separate spring-applied, hydraulic-released brake for disabling rotation can be activated from the left-hand seat armrest. Free-swing functionality is disabled when using the optional crane radio remote control.

Hydraulic system

Efficient closed-center, load sense hydraulics system featuring flow-sharing technology allowing for smooth multifunction operation of all crane functions. One (1) SAE-C mounted, 130cc axial piston pump for all functions and optimized system performance. Shaft input of 2200 RPM generating 288 lpm (76 gpm) max flow at 310 bar (4500 psi) max operating pressure. 143 gal (541 L) hydraulic reservoir with SAE o-ring connections and integrated butterfly shut-off valve for easy maintenance. SAE o-ring hydraulic fittings and hoses throughout. Boom lift, boom telescope, main and aux hoist(s) and vertical outrigger jacks are all equipped with counterbalance valves for controlled movement and load holding.

Hydraulic oil cooler: standard electric fan, plate and fin style oil cooler mounted in the rear of the superstructure to remove heat from the hydraulic oil under heavy operating conditions.

Electrical system

Automotive grade, fully wire harnessed 12VDC electrical system using state-of-the-art sealed connectors and control modules. Dual-tone backup and outrigger motion alarm located at rear of machine. LED marker and triple ID lights.

Lower

Chassis mounting

Torsion-resistant, high-strength steel sub frame attached using high-strength steel mounting brackets that are welded to the sub-frame and bolted to the truck chassis using Huck® bolts to ensure a secure and maintenance-free connection. Rear bumper under ride protection standard. Fixed boom rest mounted to front outrigger box and fabricated from structural steel.

Outriggers

Out and down style outriggers at both the front and rear with individual control of each horizontal beam extension and vertical jack cylinder. Each outrigger jack is equipped with a 500m (19.7 in) polymeric outrigger float standard. Horizontal beams are non-proportional and can be pinned in (4) different configurations for operation. Front outriggers are angled toward the truck cab, minimizing the need for an SFO. Ground level control stations located at the left and right side for all vertical jacks and only the horizontal beams for each station. Operator cab features an electronic keypad mounted on the front console to control all outrigger functions.

100% span: Front = 7,09 m (23 ft 3 in)
Rear = 7,39 m (24 ft 3 in)

50% span: Front = 4,72 m (15 ft 6 in)
Rear = 4,90 m (16 ft 1 in)

0% span: Front and Rear = 2,39 m (7 ft 10 in)

Outrigger monitoring system for horizontal beam extension is standard. Inverted cylinder rods for vertical outrigger jack cylinders for best protection of chromed rod. Optional single front outrigger (SFO) is available for heavy front axle mounting configurations.











Specifications

Optional items

- **Operator aids**
 - > Six-function wireless radio remote control of approximately 75 m (250 ft) (NB6R)
- **Telescopic offsettable jib**
 - > 7,9 m – 13,7 m (26 ft – 45 ft) telescoping boom extension (side fold for stowing), includes 5,8 m (19 ft) manual pull out section
 - > Max tip height of 61,9 m (203 ft)
 - > Offsets of 0° and 30°
 - > RCL calibration for future jib option
- **Auxiliary hoist**
 - > A second turret-mounted hoist located to the rear of the standard main hoist
 - > Standard with rotation-resistant wire rope and round, top-swivel downhaul weight
- **Personnel handling platforms**
 - > (2) person steel, non-insulated, platform options
 - > Rapid Attach Platform system available in both the rotating (R-RAP2) and yoke-style (Y-RAP2) options
 - > Capacities up to 544,3 kg (1200 lb) on main boom and 226,8 kg (500 lb) on jib
 - > Platform test weight sets available for each
 - > Compliant to ASME B30.23 requirements
- **Hook blocks**
 - > Single sheave, 18,1 t (20 USt) quick-reeve hook block for 2-3 part reeving [186 kg (410 lb)]
 - > Triple sheave, 36,3 t (40 USt) quick-reeve hook block for 4-7 part reeving including auxiliary sheave case assembly (272 kg [600 lb])
 - > Five sheave, 49,9 t (55 USt) quick-reeve hook block for 8-10 part reeving including auxiliary sheave case assembly (498 kg [1098 lb])
- **Single Front Outrigger**
 - > 63,5 m (25 in) vertical stroke
 - > Available for certain mounting configurations
- **Aluminum outrigger floats**
 - > 610 mm (24 in) aluminum floats in lieu of the standard 500 mm (19.7 in) polymeric floats
- **Dual Axis Joysticks**
 - > Electronic joysticks with capability for operator customization to their preferred speeds
- **Additional Ingress/Egress options**
 - > Auxiliary access step located at the front passenger side of the decking for easy access to the crane decking

Specifications

NBT50 and NBT55 winch data

<ul style="list-style-type: none"> All winch pulls and speeds are shown on the fourth layer. Winch line pulls would increase on the first, second, and third layers. Winch line speed would decrease on the first, second, and third layers. Winch line pulls may be limited by the winch capacity or the ANSI 5 to 1 cable safety factor. 			1 part line max. pull	2 part line max. pull	3 part line max. pull	4 part line max. pull	5 part line max. pull	6 part line max. pull	7 part line max. pull	8 part line max. pull	9 part line max. pull	10 part line max. pull
												
Standard planetary winch	Cable supplied	Average breaking strength	1 sheave			3 sheave			5 sheave			
Low speed	16 mm (5/8 in) diameter rotation resistant IWRC	25 583 kg (56,400 lb)	5103 kg (11,250 lb) 58,2 m/min (191 fpm)	10 206 kg (22,500 lb) 28,9 m/min (95 fpm)	15 309 kg (33,750 lb) 14,2 m/min (63 fpm)	20 412 kg (45,000 lb) 17,3 m/min (47 fpm)	25 515 kg (56,250 lb) 11,6 m/min (38 fpm)	30 618 kg (67,500 lb) 9,4 m/min (31 fpm)	35 721 kg (78,750 lb) 8,2 m/min (27 fpm)	40 824 kg (90,000 lb) 7,0 m/min (23 fpm)	45 359 kg (100,000 lb) 6,4 m/min (21 fpm)	48 895 kg (110,000 lb) 5,8 m/min (19 fpm)
High speed	16 mm (5/8 in) diameter rotation resistant IWRC	25 583 kg (56,400 lb)	2268 kg (5000 lb) 116,7 m/min (383 fpm)	4536 kg (10,000 lb) 58,2 m/min (191 fpm)	6804 kg (15,000 lb) 38,7 m/min (127 fpm)	9072 kg (20,000 lb) 28,9 m/min (95 fpm)	11 340 kg (25,000 lb) 23,2 m/min (76 fpm)	13 608 kg (30,000 lb) 19,2 m/min (63 fpm)	15 876 kg (35,000 lb) 16,5 m/min (54 fpm)	18 144 kg (40,000 lb) 14,3 m/min (47 fpm)	20 412 kg (45,000 lb) 12,8 m/min (42 fpm)	22 680 kg (50,000 lb) 11,6 m/min (38 fpm)

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

Loadline deduct		
	Aux boom nose	36 kg (80 lb)
7 USt	Downhaul weight	78 kg (171 lb)
20 USt	1-sheave block	181 kg (400 lb)
40 USt	3-sheave block	272 kg (500 lb)
55 USt	5-sheave block	498 kg (1098 lb)

Symbols glossary



Axles



Drive



Heavy duty jib



Radius



Boom



Electrical system



Hoist



Rotation



Boom elevation



Engine



Hook block



Speed



Boom extension



Extension



Hydraulic system



Steering



Boom length



Frame



Insert



Suspension



Boom nose



Fuel tank capacity



Lights



Swing



Brakes



Gear



Oil



Tires



Operators station



Grade



Outrigger controls



Transmission



Counterweight



Height (no max)



Outriggers

Notes

The Manitowoc Company, Inc.

Regional headquarters

Americas

Milwaukee, Wisconsin, USA
Tel: +1 414 760 4600

Shady Grove, Pennsylvania, USA
Tel: +1 717 597 8121

Europe and Africa

Dardilly, France - TOWERS
Tel: +33 (0) 4 72 18 20 20

Wilhelmshaven, Germany - MOBILE
Tel: +49 (0) 4421 294 0

APAC

Shanghai, China
Tel: +86 21 6457 0066

Singapore
Tel: +65 6264 1188

Middle East and India

Dubai, UAE
Tel: +971 4 8862677

This document is non-contractual. Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.

