

NATIONAL CRANE®

NBT40-2 Series NBT40-2/NBT45-2 Product Guide

ASME B30.5 & CSA Z150 • Imperial 85%

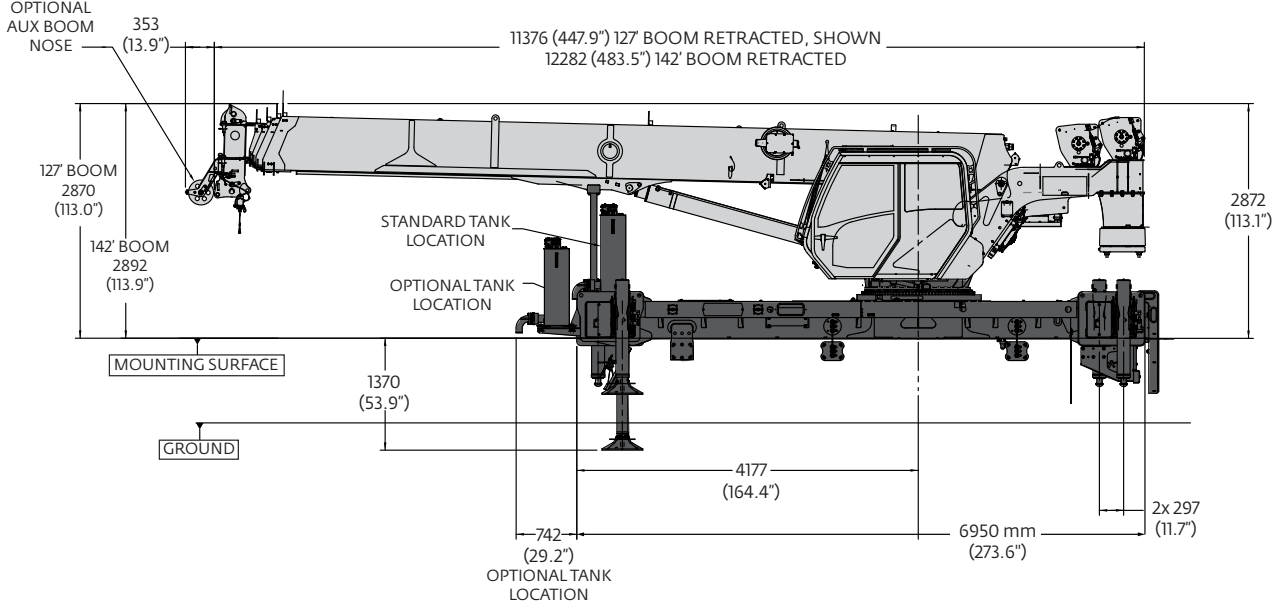
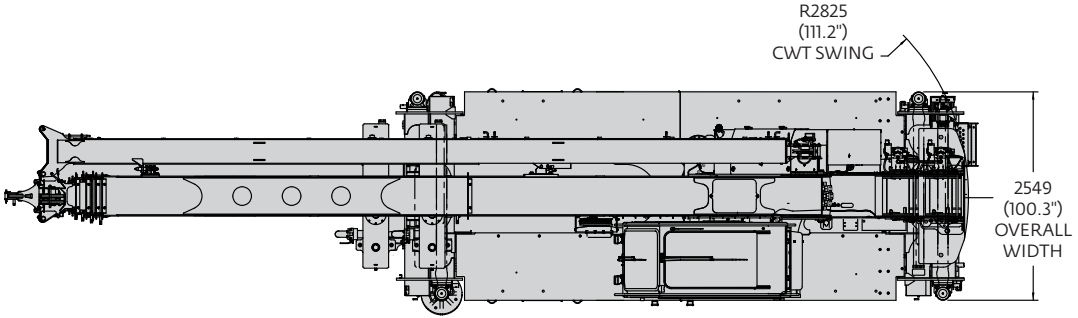


Features

- NBT40-2: 36,3 t (40 USt) rating
NBT45-2: 40,8 t (45 USt) rating
- Multiple boom length options 38,7 m - 43,3 m (127 ft - 142 ft)
- Premium hydraulic tilting cab (0° to 20°) with heated operator seat and adjustable joystick controls
- Easy, fast setup with front bumper mounted controls and optional wireless outrigger remote
- Operator focused features to monitor truck and crane vital information from in crane cab
- Available with a number of productivity increasing options

Dimensions and weights

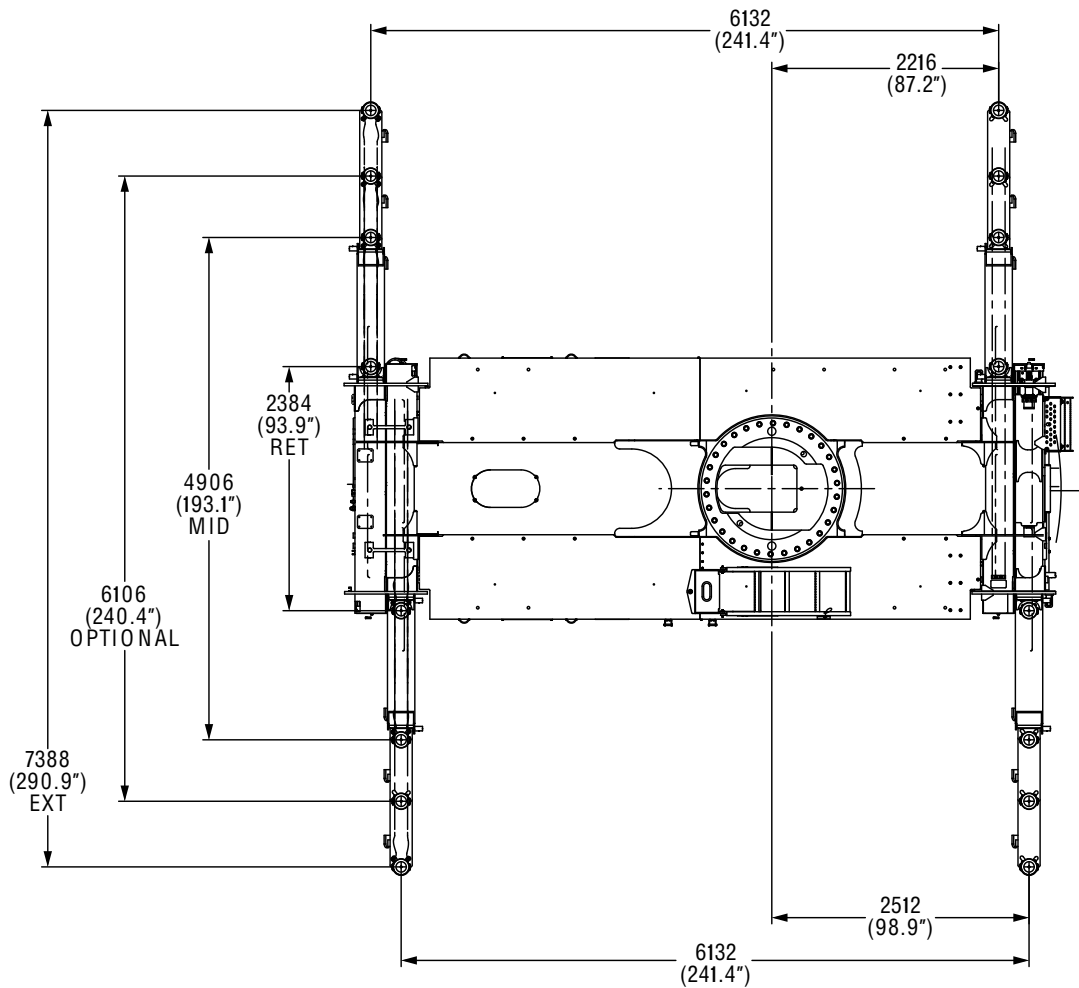
Standard torsion box



Dimensions are in mm (inches) unless otherwise specified.

Dimensions and weights

Standard torsion box



Dimensions are in mm (inches) unless otherwise specified.

Standard		
Series	Weight	CG
NBT/NTC40127-2	36378 lbs (16501 kg)	61.9 in (1574 mm)
NBT/NTC40142-2	37620 lbs (17064 kg)	72.1 in (1832 mm)
NBT/NTC45127-2	39533 lbs (17932 kg)	49.2 (1250 mm)
NBT/NTC45142-2	40774 lbs (18495 kg)	58.9 in (1497 mm)
NBT/NTC45127-2 MAX	41575 lbs (18858 kg)	41.9 in (1066 mm)
NBT/NTC45142-2 MAX	42816 lbs (19421 kg)	51.4 in (1307 mm)

Weight includes base machine, 2/3 part line block, polymeric floats, wire rope, PTO, hydraulic reservoir and oil. SFO, jib and auxiliary hoist not included.

Recommended truck specifications

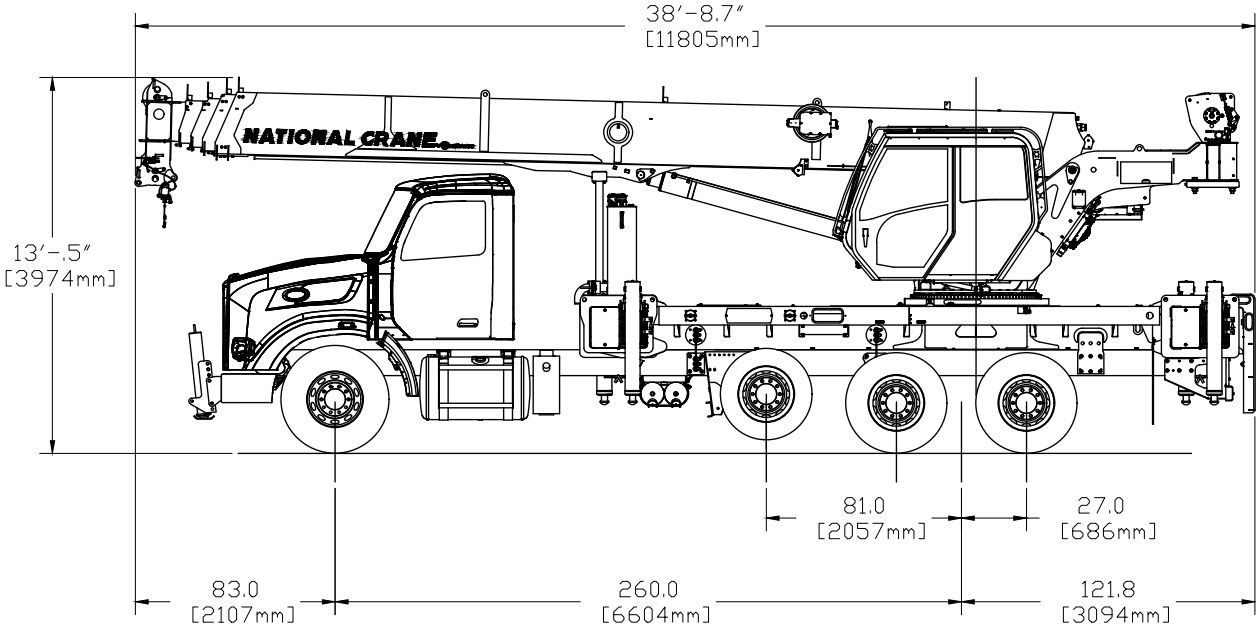
The configurations are based on the NBT40-2 with an 85% stability factor. The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary.

NBT40127-1 Recommended Minimum Truck Specification:

- Working area:** 360°
- Gross Axle Weight Rating Front:** 9072 kg (20,000 lb)
- Gross Axle Weight Rating Pusher:** 6124 kg (13,500 lb)
- Gross Axle Weight Rating Rear:** 20,865 kg (46,000 lb)
- Wheelbase:** 660 cm (260 in)
- Cab to Axle/Trunnion (CA/CT):** 470 cm (185 in)
- Frame Strength:** 7885 MPa (110,000 PSI)
- Frame Section Modulus (SM) Front Axle to End of Frame:** 442 cm³ (27 in³)
- Stability Weight Front:** 4853 kg (10,700 lb)
- Stability Weight Rear:** 4173 kg (9,200 lb)

This configuration shows the 360° working area that is achieved with the front stabilizer (standard on NBT40-2). Extended front frame rails required for SFO installation unless application without extended rails has been approved by National Crane.

Note: Estimated axle scale weights prior to installation of crane assembly for 85% stability.



Other configurations are available, please consult the factory for more information. Please refer to page 13 of this product guide for important notes regarding the recommended truck specifications.

Working range

NBT40-2 and NBT45-2 (127)



38,7 m
(127 ft)



9,45 m - 16,76 m
(31 ft - 55 ft)

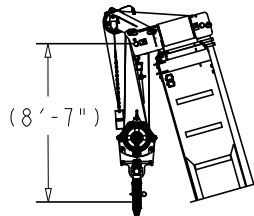
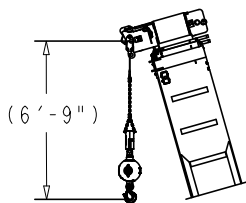
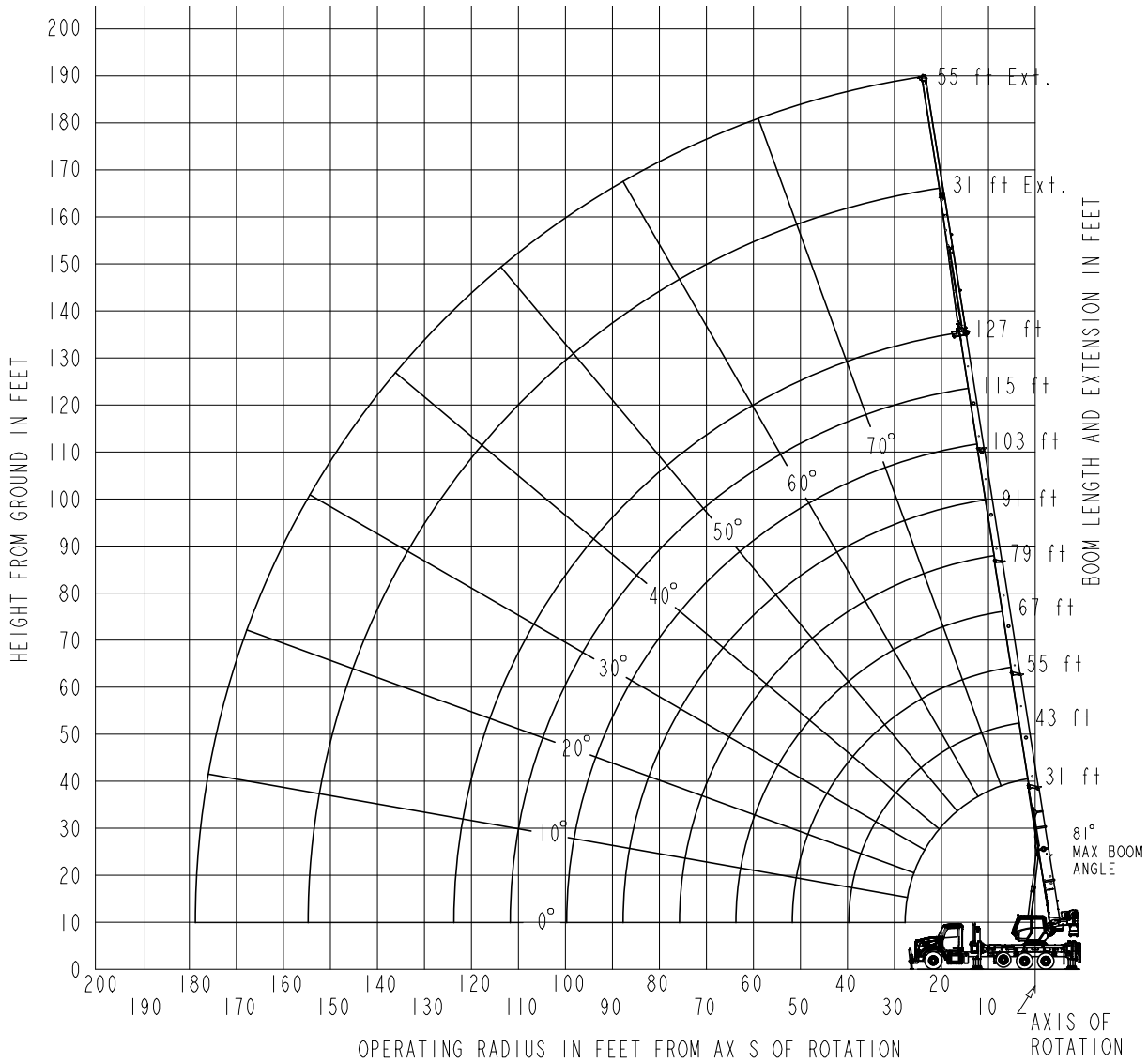


7,52 m
(24.7 ft)



360°

BOOM DEFLECTION NOT SHOWN



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

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

NBT45127-2



9,4 m - 38,7 m (31 ft - 127 ft)



2 722 kg (6,000 lb)



100%



360°



Pounds

Radius in Feet	Main Boom Length in Feet								
	31	43-A	55-B	67-C	79-D	91-E	103-F	115-G	127
6	90,000 (74.6)	41,800 (79.4)							
8	81,650 (70.8)	41,800 (76.6)	41,800 (80)						
10	71,350 (66.8)	41,800 (73.9)	41,800 (77.9)	37,500 (80.6)					
12	63,200 (62.7)	41,800 (71.1)	41,050 (75.8)	36,450 (78.9)	29,900 (81)				
15	53,650 (56.1)	41,800 (66.8)	38,350 (72.6)	33,200 (76.3)	29,300 (78.8)	22,950 (80.8)			
20	38,150 (43.3)	39,200 (59.2)	34,500 (67.1)	28,900 (72)	25,850 (75.3)	20,750 (77.7)	18,050 (79.6)		
25	28,400 (25.3)	29,500 (50.7)	29,700 (61.4)	25,600 (67.5)	22,850 (71.6)	18,650 (74.6)	16,750 (76.9)	14,500 (78.8)	10,900 (80.3)
30		23,150 (40.7)	23,350 (55)	23,000 (62.8)	20,500 (67.8)	16,600 (71.4)	14,950 (74.2)	13,350 (76.4)	10,900 (78.2)
35		18,600 (27.4)	18,850 (48)	19,450 (57.7)	18,600 (63.9)	14,850 (68.2)	13,400 (71.4)	12,050 (73.9)	10,350 (76)
40			15,500 (39.7)	16,100 (52.3)	16,300 (59.7)	13,400 (64.8)	12,050 (68.5)	10,950 (71.4)	9,750 (73.8)
45			12,850 (29.3)	13,500 (46.1)	13,700 (55.3)	12,100 (61.2)	10,950 (65.6)	9,960 (68.9)	9,080 (71.6)
50			10,750 (13.1)	11,400 (39.3)	11,650 (50.4)	10,950 (57.4)	9,960 (62.5)	9,080 (66.3)	8,310 (69.3)
55				9,520 (30.7)	9,940 (45)	9,960 (53.4)	9,050 (59.2)	8,320 (63.6)	7,620 (67)
60				7,960 (18.9)	8,360 (39)	8,390 (49)	8,270 (55.8)	7,590 (60.6)	7,010 (64.7)
65					7,080 (31.6)	7,110 (44.2)	7,090 (52.1)	6,950 (57.6)	6,420 (62.1)
70					6,020 (22.2)	6,060 (38.9)	6,060 (48)	6,120 (54.4)	5,890 (59.3)
75					4,740 (5.1)	5,110 (32.4)	5,210 (43.6)	5,260 (50.9)	5,310 (56.5)
80						4,340 (24.5)	4,490 (38.8)	4,530 (47.2)	4,570 (53.5)
85						3,670 (13.4)	3,870 (33)	3,900 (43.2)	3,930 (50.2)
90							3,330 (26.1)	3,210 (38.9)	3,380 (46.8)
95							2,860 (17.3)	2,710 (33.6)	2,890 (43.1)
100								2,260 (27.4)	2,450 (39.1)
105								1,860 (20)	2,010 (34.3)
110								1,490 (9)	1,600 (28.8)
115									1,220 (22.4)
120									870 (14.1)
Min. boom angle for indicated length (no load)									13.1°
Max. boom length at 0° boom angle (no load)									115 ft

NOTE: () Boom angles are in degrees.

Boom Angle	Main Boom Length in Feet								
	31	43	55	67	79	91	103	115	127
0°	14,150 (30.5)	8,720 (43.2)	5,360 (57.2)	3,390 (70.2)	1,950 (84.2)	940 (97.2)	—	—	—

NOTE: () Reference radii in feet.

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