

## **National Crane NBT40-127**

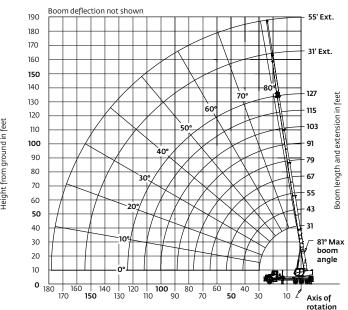
## **Quick Reference**

Capacity: 36,3 t (40 USt) rating

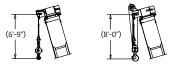
**Boom:** 38,7 m (127 ft)

• 41,15 m (135 ft) maximum tip height (main boom)

# Working range: 127 ft main boom, full span outrigger, and 31 ft - 55 ft jib



Operating radius in feet from axis of rotation



Dimensions are for largest furnished hookblock and headache ball with anti-two block activated. • 57,91 m (190 ft) maximum tip height (boom with jib)

# Load chart: 127 ft main boom, full span outrigger, without jib

Radius	#01										
in Feet	Main boom length in feet										
	<b>31</b> 80.000	43-A	55-B	67-C	79-D	91-E	103-F	115-G	127		
7	(73.6)										
8	75,000 (71.6)										
10	67,300 (67.6)	41,000 (71.4)									
12	56,000 (63.4)	41,000 (67)	40,500 (75.8)	40,300 (78.8)							
15	43,750 (56.8)	39,000 (59.4)	40,500 (72.6)	37,300 (76.2)	28,700 (78.6)	21,850 (80.4)					
20	31,500 (44.4)	32,000 (51.0)	32,200 (66.9)	32,600 (71.7)	25,100 (74.9)	19,400 (77.2)	16,300 (79.2)	12,850 (80.7)			
25	23,950 (27.8)	24,500 (41.4)	24,600 (61)	25,100 (67)	22,200 (71.1)	17,250 (74)	14,950 (76.5)	12,600 (78.4)	10,000 (79.9)		
30	, , , , ,	19,300 (29.4)	19,750 (54.6)	20,000 (62.1)	20,150 (67.2)	15,650 (70.8)	13,700 (73.7)	11,800	9900 (77.9)		
35		14,850 (28.6)	15,250 (47.7)	15,500 (57)	15,700 (63.1)	14,450 (67.4)	12,650 (70.8)	10,950 (73.7)	9500 (75.8)		
40		(20.0)	12,150	12,400 (51.6)	12,550 (58.7)	12,700 (63.9)	11,600	10,300 (71.2)	9000 (73.6)		
45			10,100	10,200 (46.2)	10,400 (54.6)	10,500 (60.5)	10,650 (65.1)	9600 (68.6)	8600 (71.3)		
50			8500 (18.5)	8400 (39.7)	8800 (49.9)	8700 (56.6)	8850 (61.8)	9000 (65.9)	8100 (69)		
55			(10.5)	6950 (32.1)	7500 (44.8)	7250 (52.6)	7500 (58.4)	7500 (63)	7650 (66.6)		
60				5800 (22.3)	6400 (39.1)	6100 (48.3)	6500 (54.9)	6350 (59.9)	6450 (63.9)		
65				(LL.S)	5400 (32.6)	5150 (43.8)	5600 (51.2)	5350 (56.8)	5450 (61.2)		
70					4600 (24.7)	4350 (38.8)	4,700 (47.3)	4550 (53.5)	4650 (58.3)		
75					3850 (12.3)	3650 (33.1)	3950 (43.2)	3850 (50.2)	3900 (55.4)		
80					(12.3)	3050 (26.4)	3350 (38.7)	3250 (46.6)	3400 (52.3)		
85						2550 (17.3)	2800 (33.7)	2700 (42.8)	2850 (49.2)		
90						(11.5)	2300 (27.9)	2250 (38.7)	2350 (45.9)		
95							1850 (20.5)	1850 (34.2)	1900 (42.3)		
100							1500	1450 (29)	1550 (38.5)		
105							(/)	1150	1200		
110								(22.8) 850	900		
115								(13.7)	(29.7) 650		
	M	inimum boo	m angle (°)	for indicate	d length (no	load)		0	(24.2)		
Minimum boom angle (*) for indicated length (no load)  Maximum boom length (ft) at 0* boom angle (no load)  NOTE: Loads displayed in pounds. () Boom angles are in degrees.									0 24		

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

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

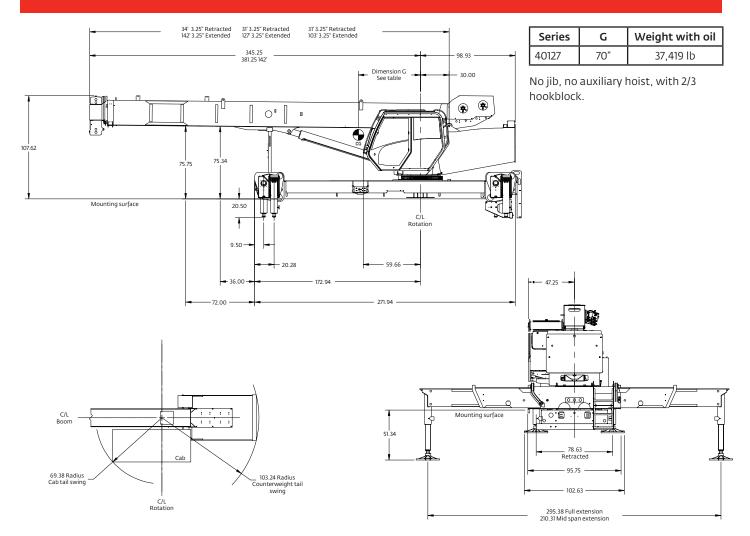
 NOTE: ( ) Reference radii in feet.
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 Rated Load Reductions from main boom capacity when lifting over main boom nose with ext. erected (retracted):
 (in lb)

 2300
 2150
 2000
 1950
 1900
 1850
 1800
 1750
 1700

<sup>°</sup>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.

#### **Dimensions**



More information about this product can be found in the National Crane NBT40 Product Guide.

### Specifications

#### **Boom**

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

#### Outriggers

Outrigger span of 7,52 m (24.7ft) when fully extended; 5,33 m (17.5 ft) at mid-span. Equipped with both ground level and in-cab outrigger controls, the NBT40 outriggers allow quick and easy crane set-up and can be positioned at 0%, 50% and 100%.

### Operator's cab

Rigid galvanized steel structure, well insulated, with tinted safety glass for operator visibility and comfort.

Multi-position seat with arm rest mounted single axis controls, ventilation fans, diesel heater, dual cab mounted worklights and wipers. Optional air conditioning is available.

#### Overload protection

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

#### **Torsion box**

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

#### **Easy Glide Boom Wear Pads**

Easy Glide boom wear pads reduce the conditions that cause boom chatter and vibration. The net result is smoother crane operation.

## Speedy-reeve boom tip and sheave blocks

These standard features simplify rigging changes by decreasing the time needed to change line reeving.

#### **Pre-painted components**

Painting crane components before assembly reduces the possibility of rust, improves serviceability and enhances the appearance of the machine.

#### **Control valve**

State of the art control valve provides smoother operation. The new design eliminates parts, reducing repair costs and improving the machines serviceability.

#### Serviceability

- Bearings on the boom extend and retract cables can be greased through access holes in the boom side plates
- Boom sections are supported by one hydraulic extend cylinder, minimizing maintenance

#### Hoist

Two-speed grooved drum hoist with cable packer, and electronic drum rotation indicator (DRI).

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