



Grove Maniowoc National Crane Potain



National Crane Series 1100

Product Guide



Features

- 25,4 t (28 USt) rating
- 32,0 m (105 ft) four-section boom
- Self-lubricating Easy Glide wear pads



Features

National Crane 1100

- 25,4 t (28 USt) maximum capacity
- 49,10 m (161 ft) maximum vertical reach*
- 34,75 m (114 ft) maximum vertical hydraulic reach

*Maximum vertical reach is ground-level to boom tip height at maximum extension and angle with outriggers/stabilizers full extended.



Outriggers

The 1100 utilizes "A" frame outriggers with a 23 ft span. Includes RSOD 14 ft out and down, rear stabilizers for standard behind cab mount.



Four-section boom

At 32,0 m (105 ft), the Series 1100 four-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. A 28,96 m (95 ft) four-section boom is also available.

Overload protection

All National Crane boom trucks are equipped with overload protection. A Load Moment Indicator (LMI) is standard on all Series 1100 machines. The LMI display console is weatherproof. The LCD display is visible in full or low light and displays all crane load lifting values simultaneously.



Easy Glide boom wear pads

Easy Glide boom wear pads reduce the conditions that cause boom chatter resulting in smoother crane operation.



Features



Best in class performance and serviceability

- The stronger standard torsion box improves rigidity, reduces truck frame flex and reduces the need for counterweight.
- Crane components painted before assembly reduce the chance of rust, improve serviceability and enhance the appearance of the crane.
- Bearings on the boom and retract cables can be greased through access holes in the boom side plates and number of internal boom parts has been reduced improving serviceability.
- The Series 1100 is supplied with 375° non-continuous rotation standard.
- A state of the art control valve uses specially designed spools to provide optimum control for the smoothest metering and most precise load positioning.

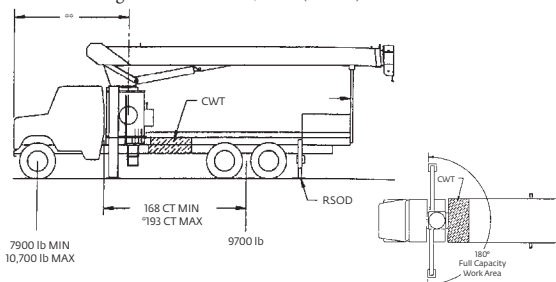


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Mounting configurations

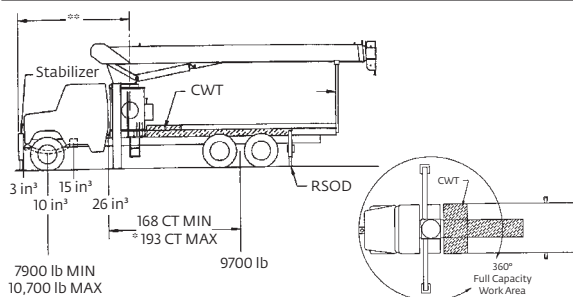
The configurations are based on the Series 1100 with an 85% stability factor. The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements since individual truck chassis vary. Trucks with a frame height in excess of 107 cm (42 in) after mounting will have a final mounted unit height more than 411,5 cm (13.5 ft). Chassis that do not meet these minimum stability weights may require counterweight.



Configuration 1 – 11105

| | |
|---|----------------------------|
| Working area | 180° |
| Gross Axle Weight Rating Front | 8165 kg (18,000 lb) |
| Gross Axle Weight Rating Rear | 15 422 kg (34,000 lb) |
| Gross Vehicle Weight Rating | 23 587 kg (52,000 lb) |
| Wheelbase | 650 cm (256 in) |
| Cab to Axle/trunnion (CA/CT) | 488 cm (192 in) |
| Frame Section Modulus (SM) under crane with 758 MPa (110,000 PSI) | 261 cm³ (15.9 in³) |
| Frame Section Modulus (SM) over rear stabilizers with 758 MPa (110,000 PSI) | 213 cm³ (13.0 in³) |
| Stability Weight, Front | 3583 kg (7900 lb) minimum* |
| Stability Weight, Rear | 4400 kg (9700 lb) minimum* |
| Estimated Average Final Weight | 21 001 kg (46,300 lb) |

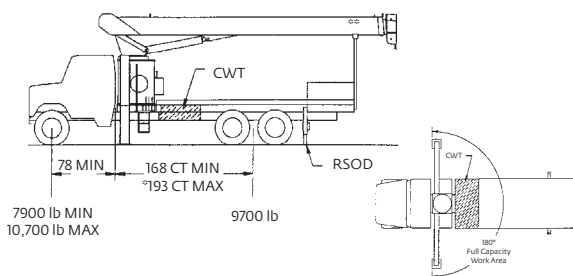
This configuration allows the installation of the Series 11105 by using the subbase for a 6,71 m (22 ft) bed.



Configuration 2 – 11105 with SFO (Extended front frame rails required for SFO installation.)

| | |
|---|----------------------------|
| Working area | 360° |
| Gross Axle Weight Rating Front | 7257 kg (18,000 lb) |
| Gross Axle Weight Rating Rear | 15 422 kg (34,000 lb) |
| Gross Vehicle Weight Rating | 23 587 kg (52,000 lb) |
| Wheelbase | 650 cm (256 in) |
| Cab to Axle/trunnion (CA/CT) | 488 cm (192 in) |
| Frame Section Modulus (SM) under crane with 758 MPa (110,000 PSI) | 426 cm³ (26.0 in³) |
| Frame Section Modulus (SM) over rear stabilizers with 758 MPa (110,000 PSI) | 245 cm³ (15.0 in³) |
| Stability Weight, Front | 3583 kg (7900 lb) minimum* |
| Stability Weight, Rear | 4400 kg (9700 lb) minimum* |
| Estimated Average Final Weight | 21 001 kg (46,300 lb) |

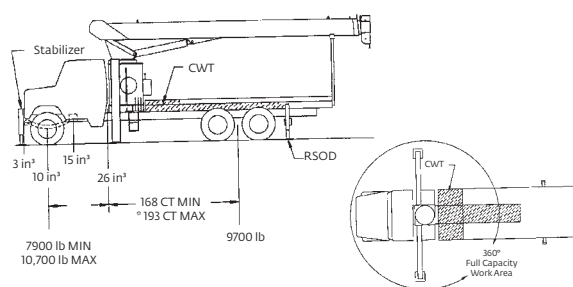
This mount requires front stabilizer for full capacity 360° around the truck. Front stabilizer gives the machine a solid base, helping the operator control loads precisely. This configuration requires a 6,71 m (22 ft) bed.



Configuration 3 – 1195

| | |
|---|----------------------------|
| Working area | 180° |
| Gross Axle Weight Rating Front | 8165 kg (18,000 lb) |
| Gross Axle Weight Rating Rear | 15 422 kg (34,000 lb) |
| Gross Vehicle Weight Rating | 23 587 kg (52,000 lb) |
| Wheelbase | 625 cm (246 in) |
| Cab to Axle/trunnion (CA/CT) | 427 cm (168 in) |
| Frame Section Modulus (SM) under crane with 758 MPa (110,000 PSI) | 261 cm³ (15.9 in³) |
| Frame Section Modulus (SM) over rear stabilizers with 758 MPa (110,000 PSI) | 213 cm³ (13.0 in³) |
| Stability Weight, Front | 3583 kg (7900 lb) minimum* |
| Stability Weight, Rear | 4400 kg (9700 lb) minimum* |
| Estimated Average Final Weight | 20 321 kg (44,800 lb) |

This configuration allows the installation of the Series 1195 on a chassis with a small frame by using a subbase for a 6,10 m (20 ft) bed or a different subbase for a 6,71 m (22 ft) bed.



Configuration 4 – 1195 with SFO (Extended front frame rails required for SFO installation.)

| | |
|---|----------------------------|
| Working area | 360° |
| Gross Axle Weight Rating Front | 8165 kg (18,000 lb) |
| Gross Axle Weight Rating Rear | 15 422 kg (34,000 lb) |
| Gross Vehicle Weight Rating | 23 587 kg (52,000 lb) |
| Wheelbase | 625 cm (246 in) |
| Cab to Axle/trunnion (CA/CT) | 427 cm (168 in) |
| Frame Section Modulus (SM) under crane with 758 MPa (110,000 PSI) | 426 cm³ (26.0 in³) |
| Frame Section Modulus (SM) over rear stabilizers with 758 MPa (110,000 PSI) | 213 cm³ (13.0 in³) |
| Stability Weight, Front | 3583 kg (7900 lb) minimum* |
| Stability Weight, Rear | 4400 kg (9700 lb) minimum* |
| Estimated Average Final Weight | 20 321 kg (44,800 lb) |

This configuration allows the installation of the 1195 on a chassis by using a subbase for a 6,10 m (20 ft) bed or a different subbase for a 6,71 m (22 ft) bed. This mount requires front stabilizer for full capacity 360° around the truck. Front stabilizer gives the machine a solid base, helping the operator control loads.

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 and energize-to-run fuel solenoid for smooth crane operation; electronic fuel injection requires EET engine remote throttle

- All mounting data is based on a National Crane Series 1100 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
- Transmission neutral safety interlock switch is required with optional remote control

*Estimated axle scale weights prior to installation of crane, stabilizers and subbase for 85% stability.

**If the distance from the front bumper (SFO) to center of rotation exceeds (366 cm 144 in), the (12.19 m 40 ft) overall truck length restriction will be exceeded. Overall length restrictions vary from state to state. In some states it is legal to be more than (12.18 m 40 ft) in length, and some states allow overlength permits.

Specifications

Boom and jib combinations data

Available in two basic models

Model 1195 — Equipped with a 8,53 m - 28,96 m (28 ft - 95 ft) four-section boom. This model can be equipped with a 7,62 m - 13,41 m (25 ft - 44 ft) manual pull-out jib. Maximum tip height with 13,41 m (44 ft) jib is 44,81 m (147 ft).

8,54 m - 28,96 m (28 ft - 95 ft) four-section boom

11FJ44M 7,62 m - 13,41 m (25 ft - 44 ft) manual pull-out jib



Model 11105 — Equipped with a 9,44 m - 32,01 m (31 ft - 105 ft) four-section boom. This model can be equipped with a 7,62 m - 13,41 m (25 ft - 44 ft) manual pull-out jib. Maximum tip height with 13,41 m (44 ft) jib is 47,85 m (157 ft).

9,45 m - 32,01 m (31 ft - 105 ft) four-section boom

11FJ44M 7,62 m - 13,41 m (25 ft - 44 ft) manual pull-out jib










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

Specifications

1100 winch data

- 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 pulls may be limited by the winch capacity or the ANSI 5 to 1 cable safety factor
- Hook blocks are rated at maximum capacity for the block. Do not exceed rated cable pull with any block

| | | | 1 part line | 2 part line | 3 part line | 4 part line | 5 part line | 6 part line | 7 part line |
|---------------------------|--|---------------------------|---|---|---|--|---|---|---|
| | | |  |  |  |  |  |  |  |
| Winch | Cable supplied | Average breaking strength | Lift and speed | Lift and speed | Lift and speed | Lift and speed | Lift and speed | Lift and speed | Lift and speed |
| Standard planetary winch | 9/16" diameter rotation resistant | 17 463 kg (38,500 lb) | 3492 kg (7700 lb) 50 m/min (164 fpm) | 6985 kg (15,400 lb) 25 m/min (82 fpm) | 10 477 kg (23,100 lb) 17 m/min (55 fpm) | 13 970 kg (30,800 lb) 13 m/min (41 fpm) | 17 463 kg (38,500 lb) 10 m/min (33 fpm) | 20 955 kg (46,200 lb) 8 m/min (27 fpm) | 24 449 kg (53,900 lb) 7 m/min (23 fpm) |
| With Burst of Speed winch | Same as corresponding data shown above | | 1361 kg (3000 lb) 181 m/min (265 fpm) | 2722 kg (6000 lb) 41 m/min (133 fpm) | 4082 kg (9000 lb) 27 m/min (88 fpm) | 5443 kg (12,000 lb) 20 m/min (66 fpm) | 6803 kg (15,000 lb) 16 m/min (53 fpm) | 8164 kg (18,000 lb) 13 m/min (44 fpm) | 9525 kg (21,000 lb) 11 m/min (37 fpm) |

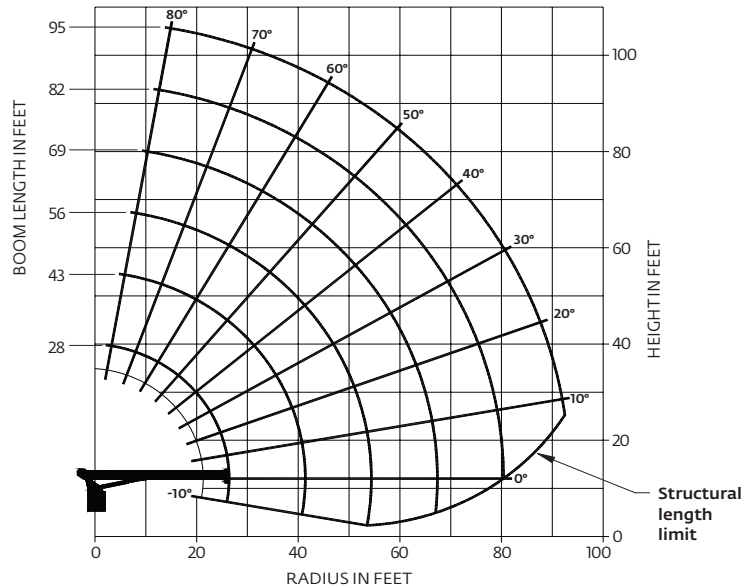
| Winch | Bare drum pull | Allowable cable pull |
|---------------------------------------|---------------------|----------------------|
| With standard rotation resistant rope | 4536 kg (10,000 lb) | 3493 kg (7700 lb) |

| Loadline deduct | | |
|-----------------|---------------------|-----------------|
| Block type | Rating | Weight |
| Downhaul weight | 3,49 t (3.85 USt) | 68 kg (150 lb) |
| 1-sheave block | 10,48 t (11.55 USt) | 138 kg (305 lb) |
| 2-sheave block | 17,46 t (19.25 USt) | 161 kg (355 lb) |
| 3-sheave block | 25,40 t (28.0 USt) | 261 kg (575 lb) |

Capacities

Series 1195: 95 ft boom

Other Series 1100 Load Rating Charts are available. National Crane will send you a chart on request – or you may secure needed load rating information through your nearest National Crane dealer.



CAUTION:

- Do not operate crane booms, jib extensions, any accessories or loads within 3 m (10 ft) of live power lines or other conductors of electricity.
- Jib and boom capacities shown are maximum for each section.
- Do not exceed capacities at reduced radii.
- Load ratings shown on the load rating charts are maximum allowable loads with the outriggers properly extended on a firm, level surface and the crane leveled and mounted on a factory recommended truck.
- Always level the crane with the level indicator located on the crane.
- The operator must reduce load to allow for factors such as wind, ground conditions, operating speeds and their effects on freely suspended loads.
- Overloading this crane may cause structural collapse or instability.
- Weights on any accessories attached to the boom or loadline must be deducted from the load chart capacities.
- Do not exceed jib capabilities at any reduced boom lengths.
- Do not deadhead lineblock against boom tip when extending boom or winching up.
- Keep at least three wraps of loadline on drum at all times.
- Use only specified cable with this machine.

Load chart

| LOAD RADIUS (ft) | LOADED BOOM ANGLE | 28 ft BOOM (lb) | LOADED BOOM ANGLE | 43 ft BOOM (lb) | LOADED BOOM ANGLE | 56 ft BOOM (lb) | LOADED BOOM ANGLE | 69 ft BOOM (lb) | LOADED BOOM ANGLE | 82 ft BOOM (lb) | LOADED BOOM ANGLE | 95 ft BOOM (lb) |
|------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| 5 | 78.5 | *53,900 | | | | | | | | | | |
| 8 | 71.5 | 40,300 | | | | | | | | | | |
| 10 | 67 | 33,700 | 76 | 30,500 | | | | | | | | |
| 12 | 62.5 | 28,900 | 73.5 | 26,200 | 78 | 24,000 | | | | | | |
| 14 | 57.5 | 25,400 | 70.5 | 23,000 | 76 | 21,000 | 79 | 19,000 | | | | |
| 16 | 52 | 22,400 | 67.5 | 20,400 | 73.5 | 18,700 | 77.5 | 17,000 | 80 | 14,500 | | |
| 20 | 40 | 17,700 | 61.5 | 16,700 | 69 | 15,300 | 74 | 13,900 | 77 | 12,500 | 79 | 10,200 |
| 25 | 17.5 | 11,800 | 53 | 13,500 | 63.5 | 12,400 | 69.5 | 11,400 | 73.5 | 10,500 | 76 | 9000 |
| 30 | | | 43.5 | 11,000 | 57.5 | 10,400 | 65 | 9600 | 69.5 | 8900 | 73 | 8000 |
| 35 | | | 32 | 8800 | 50.5 | 8800 | 60 | 8200 | 66 | 7500 | 70 | 7000 |
| 40 | | | 15.5 | 6200 | 44 | 7500 | 55 | 7100 | 62 | 6600 | 66.5 | 6100 |
| 45 | | | | | 35.5 | 6100 | 50 | 5950 | 58 | 5650 | 63 | 5300 |
| 50 | | | | | 24.5 | 4900 | 43.5 | 4950 | 53.5 | 4750 | 59.5 | 4600 |
| 55 | | | | | | | 37 | 4100 | 48.5 | 4000 | 56 | 4000 |
| 60 | | | | | | | 28.5 | 3350 | 43.5 | 3400 | 52 | 3400 |
| 65 | | | | | | | 16.5 | 2600 | 37.5 | 2800 | 47.5 | 2850 |
| 70 | | | | | | | | | 31 | 2300 | 43 | 2350 |
| 75 | | | | | | | | | 22.5 | 1900 | 38 | 1950 |
| 80 | | | | | | | | | | | 32.5 | 1550 |
| 85 | | | | | | | | | | | 26 | 1250 |
| 90 | | | | | | | | | | | 16.5 | 950 |
| | 0 | 6200 | 0 | 2900 | 0 | 1450 | 0 | 650 | | | | |

*Note: 56,000 lb (28 US_t) load requires optional 9/16 in 6x25 IWRC cable. Shaded areas are structurally limited capacities.

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

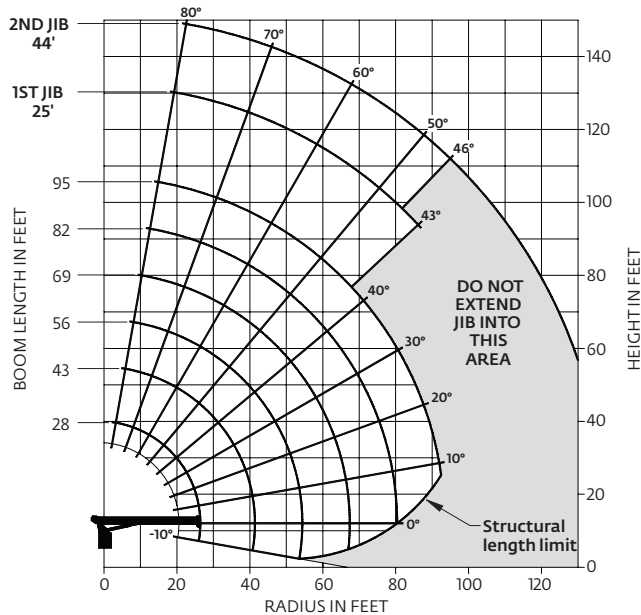
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



Capacities

Series 1195: 95 ft boom with 44 ft jib

Other Series 1100 Load Rating Charts are available. National Crane will send you a chart on request – or you may secure needed load rating information through your nearest National Crane dealer.



CAUTION:

- Do not operate crane booms, jib extensions, any accessories or loads within 3 m (10 ft) of live power lines or other conductors of electricity.
- Jib and boom capacities shown are maximum for each section.
- Do not exceed capacities at reduced radii.
- Load ratings shown on the load rating charts are maximum allowable loads with the outriggers properly extended on a firm, level surface and the crane leveled and mounted on a factory recommended truck.
- Always level the crane with the level indicator located on the crane.
- The operator must reduce load to allow for factors such as wind, ground conditions, operating speeds and their effects on freely suspended loads.
- Overloading this crane may cause structural collapse or instability.
- Weights on any accessories attached to the boom or loadline must be deducted from the load chart capacities.
- Do not exceed jib capabilities at any reduced boom lengths.
- Do not deadhead lineblock against boom tip when extending boom or winching up.
- Keep at least three wraps of loadline on drum at all times.
- Use only specified cable with this machine.

NOTE:

- Operate with jib by radius when main boom is fully extended. If necessary increase boom angle to maintain loaded radius.
- Operate with jib by boom angle when main boom is not fully extended. Do not exceed rated jib capacities at any reduced boom lengths.

Load chart

| LOAD RADIUS (ft) | LOADED BOOM ANGLE | 28 ft BOOM (lb) | LOADED BOOM ANGLE | 43 ft BOOM (lb) | LOADED BOOM ANGLE | 56 ft BOOM (lb) | LOADED BOOM ANGLE | 69 ft BOOM (lb) | LOADED BOOM ANGLE | 82 ft BOOM (lb) | LOADED BOOM ANGLE | 95 ft BOOM (lb) |
|---|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| 5 | 78.5 | *53,900 | | | | | | | | | | |
| 8 | 71.5 | 39,700 | | | | | | | | | | |
| 10 | 67 | 33,100 | 76 | 30,100 | | | | | | | | |
| 12 | 62.5 | 28,300 | 73.5 | 25,800 | 78 | 23,700 | | | | | | |
| 14 | 57.5 | 24,800 | 70.5 | 22,600 | 76 | 20,700 | 79 | 18,700 | | | | |
| 16 | 52 | 21,800 | 67.5 | 20,000 | 73.5 | 18,400 | 77.5 | 16,700 | 80 | 14,300 | | |
| 20 | 40 | 17,100 | 61.5 | 16,300 | 69 | 15,000 | 74 | 13,600 | 77 | 12,300 | 79 | 10,000 |
| 25 | 17.5 | 11,200 | 53 | 13,100 | 63.5 | 12,100 | 69.5 | 11,100 | 73.5 | 10,300 | 76 | 8800 |
| 30 | | | 43.5 | 10,600 | 57.5 | 10,100 | 65 | 9300 | 69.5 | 8700 | 73 | 7800 |
| 35 | | | 32 | 8400 | 50.5 | 8500 | 60 | 7900 | 66 | 7300 | 70 | 6800 |
| 40 | | | 15.5 | 5800 | 44 | 7200 | 55 | 6800 | 62 | 6400 | 66.5 | 5900 |
| 45 | | | | | 35.5 | 5800 | 50 | 5650 | 58 | 5450 | 63 | 5100 |
| 50 | | | | | 24.5 | 4600 | 43.5 | 4650 | 53.5 | 4550 | 59.5 | 4400 |
| 55 | | | | | | | 37 | 3800 | 48.5 | 3800 | 56 | 3800 |
| 60 | | | | | | | 28.5 | 3050 | 43.5 | 3200 | 52 | 3200 |
| 65 | | | | | | | 16.5 | 2300 | 37.5 | 2600 | 47.5 | 2650 |
| 70 | | | | | | | | | 31 | 2100 | 43 | 2150 |
| 75 | | | | | | | | | 22.5 | 1700 | 38 | 1750 |
| 80 | | | | | | | | | | | 32.5 | 1350 |
| 85 | | | | | | | | | | | 26 | 1050 |
| 90 | | | | | | | | | | | 16.5 | 750 |
| | 0 | 5600 | 0 | 2500 | 0 | 1150 | 0 | 350 | | | | |
| ADD TO CAPACITIES WHEN NO JIB STOWED (lb) | | 600 | | 400 | | 300 | | 300 | | 200 | | 200 |

| LOAD RADIUS (ft) | LOADED BOOM ANGLE | 25 ft JIB (lb) | LOADED BOOM ANGLE | 44 ft JIB (lb) |
|------------------|-------------------|----------------|-------------------|----------------|
| 30 | 77 | 5200 | 79.5 | 3200 |
| 35 | 75 | 4800 | 78 | 3050 |
| 40 | 72.5 | 4350 | 76 | 2850 |
| 45 | 70 | 3900 | 74 | 2650 |
| 50 | 67.5 | 3500 | 72 | 2450 |
| 55 | 65 | 3050 | 70 | 2300 |
| 60 | 62 | 2550 | 67 | 2150 |
| 65 | 59 | 2100 | 65 | 2000 |
| 70 | 56 | 1750 | 63 | 1850 |
| 75 | 52.5 | 1400 | 60.5 | 1600 |
| 80 | 49.5 | 1100 | 58 | 1350 |
| 85 | 46 | 800 | 54.5 | 1150 |
| 90 | 43 | 600 | 52 | 950 |
| 95 | | | 49 | 750 |
| 100 | | | 46 | 600 |

*Note: 56,000 lb (28 USt) load requires optional 9/16 in 6x25 IWRC cable. Shaded areas are structurally limited capacities.

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

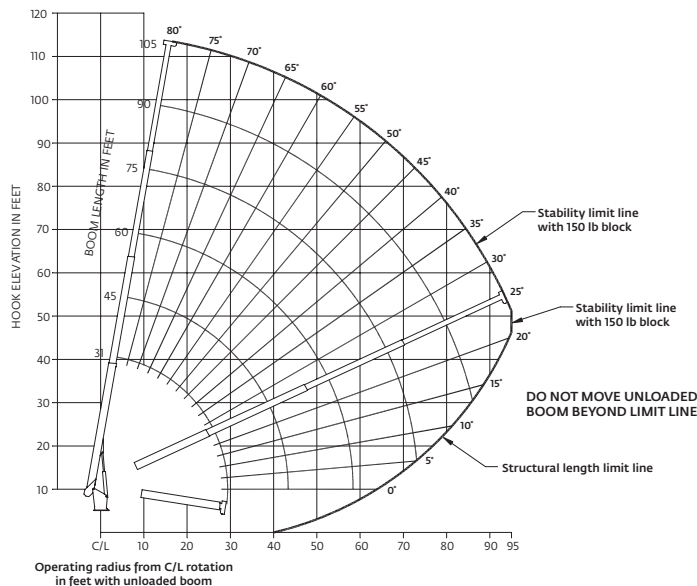
Series 1100

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

Capacities

Series 11105: 105 ft boom

Other Series 1100 Load Rating Charts are available. National Crane will send you a chart on request – or you may secure needed load rating information through your nearest National Crane dealer.



CAUTION:

- Do not operate crane booms, jib extensions, any accessories or loads within 3 m (10 ft) of live power lines or other conductors of electricity.
- Jib and boom capacities shown are maximum for each section.
- Do not exceed capacities at reduced radii.
- Load ratings shown on the load rating charts are maximum allowable loads with the outriggers properly extended on a firm, level surface and the crane leveled and mounted on a factory recommended truck.
- Always level the crane with the level indicator located on the crane.
- The operator must reduce load to allow for factors such as wind, ground conditions, operating speeds and their effects on freely suspended loads.
- Overloading this crane may cause structural collapse or instability.
- Weights on any accessories attached to the boom or loadline must be deducted from the load chart capacities.
- Do not exceed jib capabilities at any reduced boom lengths.
- Do not deadhead lineblock against boom tip when extending boom or winching up.
- Keep at least three wraps of loadline on drum at all times.
- Use only specified cable with this machine.

Load chart

| LOAD RADIUS (ft) | LOADED BOOM ANGLE | 31 ft BOOM (lb) | LOADED BOOM ANGLE | 45 ft BOOM (lb) | LOADED BOOM ANGLE | 60 ft BOOM (lb) | LOADED BOOM ANGLE | 75 ft BOOM (lb) | LOADED BOOM ANGLE | 90 ft BOOM (lb) | LOADED BOOM ANGLE | 105 ft BOOM (lb) |
|------------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|------------------|
| 5 | 79.4 | *53,900 | | | | | | | | | | |
| 8 | 73.1 | 38,400 | 79.3 | 30,000 | | | | | | | | |
| 10 | 68.9 | 31,800 | 76.8 | 29,100 | | | | | | | | |
| 12 | 64.6 | 27,300 | 74 | 24,800 | 78.8 | 22,300 | | | | | | |
| 14 | 60.2 | 23,700 | 71.2 | 21,700 | 76.8 | 19,500 | 80 | 15,400 | | | | |
| 16 | 55.6 | 21,000 | 68.4 | 19,200 | 74.8 | 17,300 | 78.5 | 15,000 | | | | |
| 20 | 45.5 | 16,700 | 62.6 | 15,600 | 70.7 | 14,100 | 75.4 | 12,600 | 78.4 | 10,800 | 80.2 | 7700 |
| 25 | 29.1 | 12,200 | 54.8 | 12,500 | 65.4 | 11,300 | 71.3 | 10,200 | 75.1 | 9000 | 77.8 | 7300 |
| 30 | | | 46.3 | 10,200 | 59.8 | 9400 | 67.1 | 8500 | 71.8 | 7800 | 75 | 6500 |
| 35 | | | 36.1 | 8200 | 53.9 | 7950 | 63.1 | 7050 | 68.6 | 6500 | 72.2 | 5700 |
| 40 | | | 23.5 | 6100 | 48 | 6600 | 58.6 | 6100 | 65 | 5550 | 69.3 | 5000 |
| 45 | | | | | 40.8 | 5550 | 53.8 | 5250 | 61.3 | 4800 | 66.2 | 4300 |
| 50 | | | | | 32.2 | 4550 | 48.7 | 4550 | 57.5 | 4200 | 63.1 | 3800 |
| 55 | | | | | 20.6 | 3300 | 43 | 3900 | 53.5 | 3700 | 60 | 3400 |
| 60 | | | | | | | 36.7 | 3250 | 49.2 | 3200 | 56.6 | 2950 |
| 65 | | | | | | | 29.1 | 2650 | 44.6 | 2750 | 53.2 | 2650 |
| 70 | | | | | | | 18.7 | 1800 | 39.4 | 2200 | 49.5 | 2300 |
| 75 | | | | | | | | | 33.6 | 1800 | 45.5 | 1850 |
| 80 | | | | | | | | | 26.8 | 1400 | 41.2 | 1450 |
| 85 | | | | | | | | | 17.2 | 800 | 36.5 | 1150 |
| 90 | | | | | | | | | | | 31.2 | 850 |
| 95 | | | | | | | | | | | 24.8 | 600 |
| | 0 | 5200 | 0 | 2400 | 0 | 900 | | | | | | |

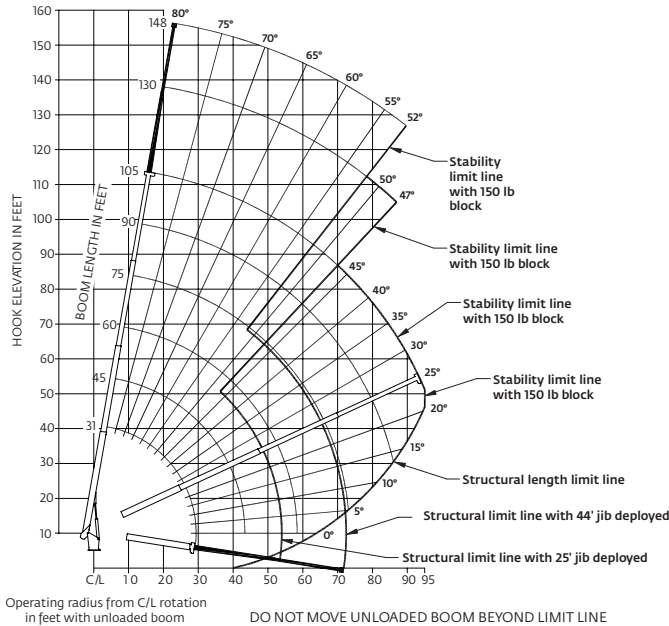
*Note: 56,000 lb (28 USt) load requires optional 9/16 in 6x25 IWRC cable.

Shaded areas are structurally limited capacities.

Capacities

Series 11105: 105 ft boom and 44 ft jib

Other Series 1100 Load Rating Charts are available. National Crane will send you a chart on request – or you may secure needed load rating information through your nearest National Crane dealer.



CAUTION:

- Do not operate crane booms, jib extensions, any accessories or loads within 3 m (10 ft) of live power lines or other conductors of electricity.
- Jib and boom capacities shown are maximum for each section.
- Do not exceed capacities at reduced radii.
- Load ratings shown on the load rating charts are maximum allowable loads with the outriggers properly extended on a firm, level surface and the crane leveled and mounted on a factory recommended truck.
- Always level the crane with the level indicator located on the crane.
- The operator must reduce load to allow for factors such as wind, ground conditions, operating speeds and their effects on freely suspended loads.
- Overloading this crane may cause structural collapse or instability.
- Weights on any accessories attached to the boom or loadline must be deducted from the load chart capacities.
- Do not exceed jib capacities at any reduced boom lengths.
- Do not deadhead lineblock against boom tip when extending boom or winching up.
- Keep at least three wraps of loadline on drum at all times.
- Use only specified cable with this machine.

NOTE:

1. Operate with jib by radius when main boom is fully extended. If necessary increase boom angle to maintain loaded radius.
2. Operate with jib by boom angle when main boom is not fully extended. Do not exceed rated jib capacities at any reduced boom lengths.

Load chart

| LOAD RADIUS (ft) | LOADED BOOM ANGLE | 31 ft BOOM (lb) | LOADED BOOM ANGLE | 45 ft BOOM (lb) | LOADED BOOM ANGLE | 60 ft BOOM (lb) | LOADED BOOM ANGLE | 75 ft BOOM (lb) | LOADED BOOM ANGLE | 90 ft BOOM (lb) | LOADED BOOM ANGLE | 105 ft BOOM (lb) |
|---|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|------------------|
| 5 | 79.4 | 53,900 | | | | | | | | | | |
| 8 | 73.1 | 37,550 | 79.3 | 29,400 | | | | | | | | |
| 10 | 68.9 | 30,950 | 76.8 | 28,500 | | | | | | | | |
| 12 | 64.6 | 26,450 | 74 | 24,200 | 78.8 | 21,850 | | | | | | |
| 14 | 60.2 | 22,850 | 71.2 | 21,100 | 76.8 | 19,050 | 80 | 15,050 | | | | |
| 16 | 55.6 | 20,150 | 68.4 | 18,600 | 74.8 | 16,850 | 78.5 | 14,650 | | | | |
| 20 | 45.5 | 15,850 | 62.6 | 15,000 | 70.7 | 13,650 | 75.4 | 12,250 | 78.4 | 10,500 | 80.2 | 7450 |
| 25 | 29.1 | 11,350 | 54.8 | 11,900 | 65.4 | 10,850 | 71.3 | 9850 | 75.1 | 8700 | 77.8 | 7050 |
| 30 | | | 46.3 | 9600 | 59.8 | 8950 | 67.1 | 8150 | 71.8 | 7500 | 75 | 6250 |
| 35 | | | 36.1 | 7600 | 53.9 | 7500 | 63.1 | 6700 | 68.6 | 6200 | 72.2 | 5450 |
| 40 | | | 23.5 | 5500 | 48 | 6150 | 58.6 | 5750 | 65 | 5250 | 69.3 | 4750 |
| 45 | | | | | 40.8 | 5100 | 53.8 | 4900 | 61.3 | 4500 | 66.2 | 4050 |
| 50 | | | | | 32.2 | 4100 | 48.7 | 4200 | 57.5 | 3900 | 63.1 | 3550 |
| 55 | | | | | 20.6 | 2850 | 43 | 3550 | 53.5 | 3,400 | 60 | 3150 |
| 60 | | | | | | | 36.7 | 2900 | 49.2 | 2900 | 56.6 | 2700 |
| 65 | | | | | | | 29.1 | 2300 | 44.6 | 2450 | 53.2 | 2400 |
| 70 | | | | | | | 18.7 | 1450 | 39.4 | 1900 | 49.5 | 2050 |
| 75 | | | | | | | | | 33.6 | 1500 | 45.5 | 1600 |
| 80 | | | | | | | | | 26.8 | 1100 | 41.2 | 1200 |
| 85 | | | | | | | | | 17.2 | 500 | 36.5 | 900 |
| 90 | | | | | | | | | | | 31.2 | 600 |
| 95 | | | | | | | | | | | 24.8 | 350 |
| | 0 | 4350 | 0 | 1800 | 0 | 450 | | | | | | |
| ADD TO CAPACITIES WHEN NO JIB STOWED (lb) | | 850 | | 600 | | 450 | | 350 | | 300 | | 250 |

| LOAD RADIUS (ft) | LOADED BOOM ANGLE | 25 ft JIB (lb) | LOADED BOOM ANGLE | 44 ft JIB (lb) |
|------------------|-------------------|----------------|-------------------|----------------|
| 30 | 78.3 | 4200 | | |
| 35 | 76.2 | 3800 | 78.2 | 2400 |
| 40 | 74 | 3400 | 76.4 | 2250 |
| 45 | 71.7 | 2900 | 74.7 | 2150 |
| 50 | 69.4 | 2500 | 72.8 | 2000 |
| 55 | 66.9 | 2100 | 70.8 | 1800 |
| 60 | 64.5 | 1800 | 68.9 | 1650 |
| 65 | 61.9 | 1500 | 66.8 | 1450 |
| 70 | 59.4 | 1300 | 64.6 | 1300 |
| 75 | 56.7 | 1100 | 62.4 | 1100 |
| 80 | 53.9 | 900 | 60 | 900 |
| 85 | 51 | 700 | 57.8 | 800 |
| 90 | 47.9 | 500 | 55.4 | 700 |
| 95 | | | 52.9 | 550 |

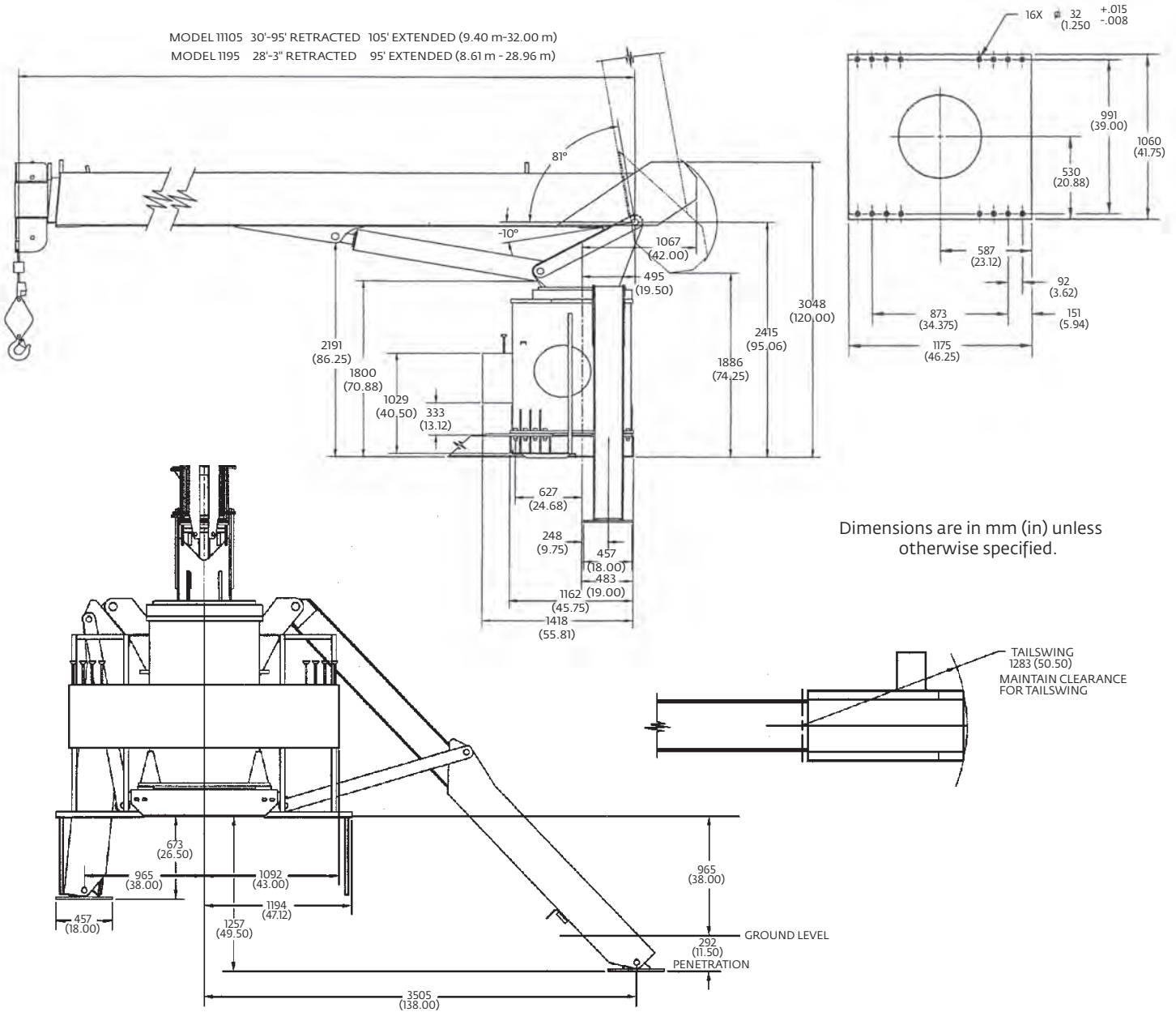
*Note: 56,000 lb (28 USt) load requires optional 9/16 in 6x25 IWRC cable. Shaded areas are structurally limited capacities.

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.

Dimensions

MODEL 11105 30'-95' RETRACTED 105' EXTENDED (9.40 m-32.00 m)
 MODEL 1195 28'-3" RETRACTED 95' EXTENDED (8.61 m - 28.96 m)



Dimensions are in mm (in) unless otherwise specified.

| Mount | Series | G mm (in) | Dry weight kg (lb) | With oil weight kg (lb) |
|----------|--------|--------------|-----------------------|----------------------------|
| Standard | 1195 | 98 (2489) | 9434 (20,800) | 9798(21,600) |
| Standard | 11105 | 100 (2540) | 9816 (21,640) | 10 197 (22,480) |

*Weight includes all items except RSOD (1400 lb). Boom fully retracted



Accessories

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. Load chart must show 1043 kg (2300 lb) minimum to operate this accessory.

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

Hydraulic Oil Cooler –

Automatic, self-contained radiator system with electric fans cools oil under continuous operation.

- OC

Bulkhead Option –

Steel 30 in solid wall bulkhead for all flatbeds.

- BHSD

Spanish-Language Danger Decals, Control Knobs, and Operators' Manuals

- SDD
- SOM



Notes



Notes



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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.