

## GCD20 Product Guide

ASME B30.5  
Imperial 85%/Metric 85%



### Features

- 18 t (20 USt) capacity
- 16,6 m (54.5 ft) four-section, four-plate, full-power boom
- 9,07 t (10 USt) deck carrying ability
- Exclusive pivoting boom nose

# GROVE GCD20

The GCD20 is a 18 t (20 USt) capacity carrydeck crane, offering a four-section 16,6 m (54.5 ft) boom with standard two-wheel drive/ four wheel steer capability. It also has a three-position pivoting boom head for low head room clearance and out and down outriggers that can be setup in several modes depending on jobsite requirements.

## Features

### > Reach and capacity to get the job done

The 5,64 m – 16,61 m (18.5 ft – 54.5 ft) four-section boom can be enhanced with optional boom extensions. The 4,6 m (15 ft) fixed swingaway extension offers a maximum tip height of 23,1 m (76 ft) while the 4,6 m – 7,6 m (15 ft – 25 ft) telescopic extension provides a maximum tip height of 26,2 m (86 ft). Both extensions can be offset 0°, -15°, and -30° via the pivoting boom nose.



### > Outriggers

The GCD20 outriggers are two-position (0% and 100%) beam/jack style with inverted jack cylinders and pivoting pad.



### > Pivoting boom nose

Three-position mechanically offset (0°, 40°, and 80°), lowers boom nose head height by 40,5 cm (1.33 ft) when pivoted fully forward. Negative pivoting of 0°, 15°, and 30° allows boom extension offset capability.

### > Operator cab

Modern operator control layout with hydraulic proportional joystick controls, tilt steering wheel, and automotive dash panel gauges and indicator lights.



### > Customized Lift Solution Options

Standard options may not always meet the job requirements. Consult your local dealer for a Lift Solution quote for customized options, such as:

- Non-marking tires
- Oil cooler
- Barge charts
- External light bar
- Spark arrestor



## Jobsite benefits

- > **Optimized productivity**  
Hydraulic proportional joystick controls via load sensing piston pump hydraulics provide smooth and efficient operation. Optional RCL system with Work Area Definition System (WADS) and datalogger capability helps to improve operations.
- > **Outstanding versatility and durability**  
Split cab door with sliding glass window and tilt steering wheel for added operator comfort. Two-position out and down outriggers help to maximize load charts to meet space requirements. Full LED lighting package offers improved visibility and last longer than traditional light bulbs.
- > **Piston pump hydraulics**  
Provides excellent multi-function operation speeds.
- > **Easy serviceability**  
Large swing open access panel for easy serviceability.



**What you need, when you need it.**

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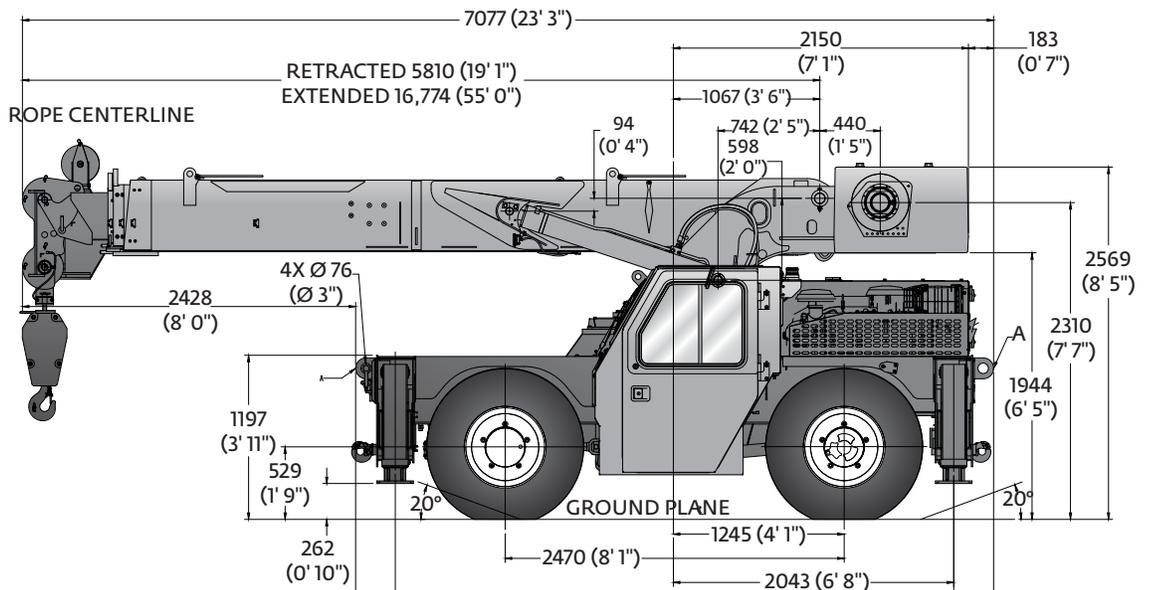
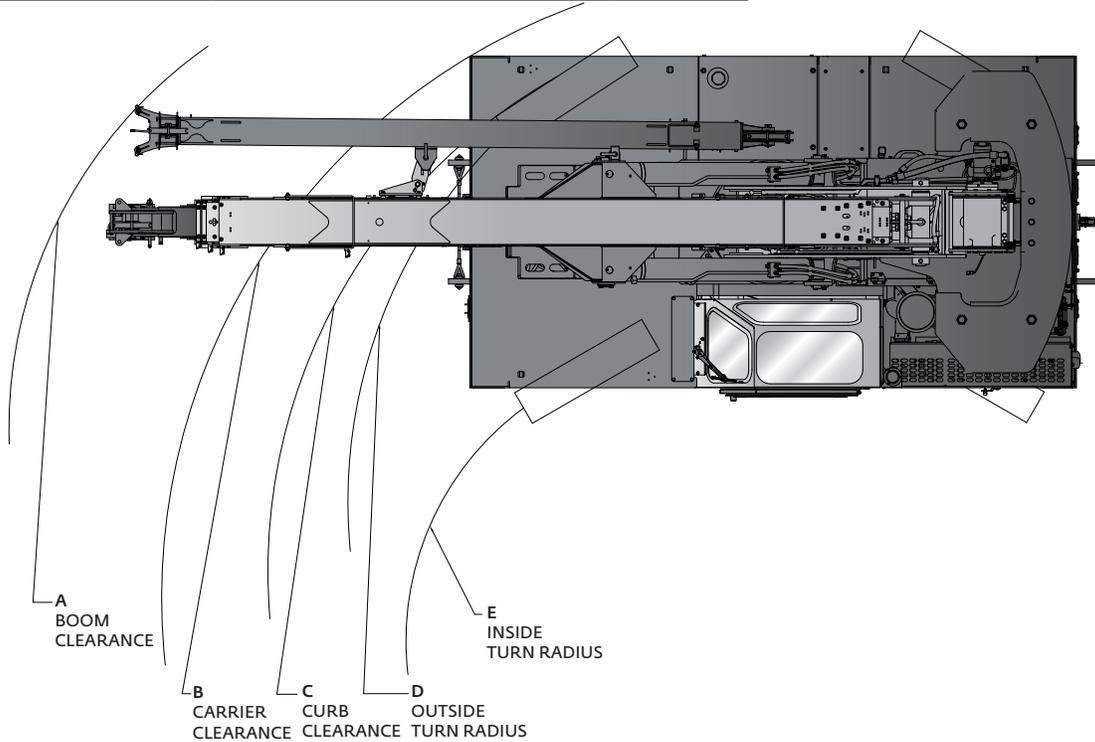
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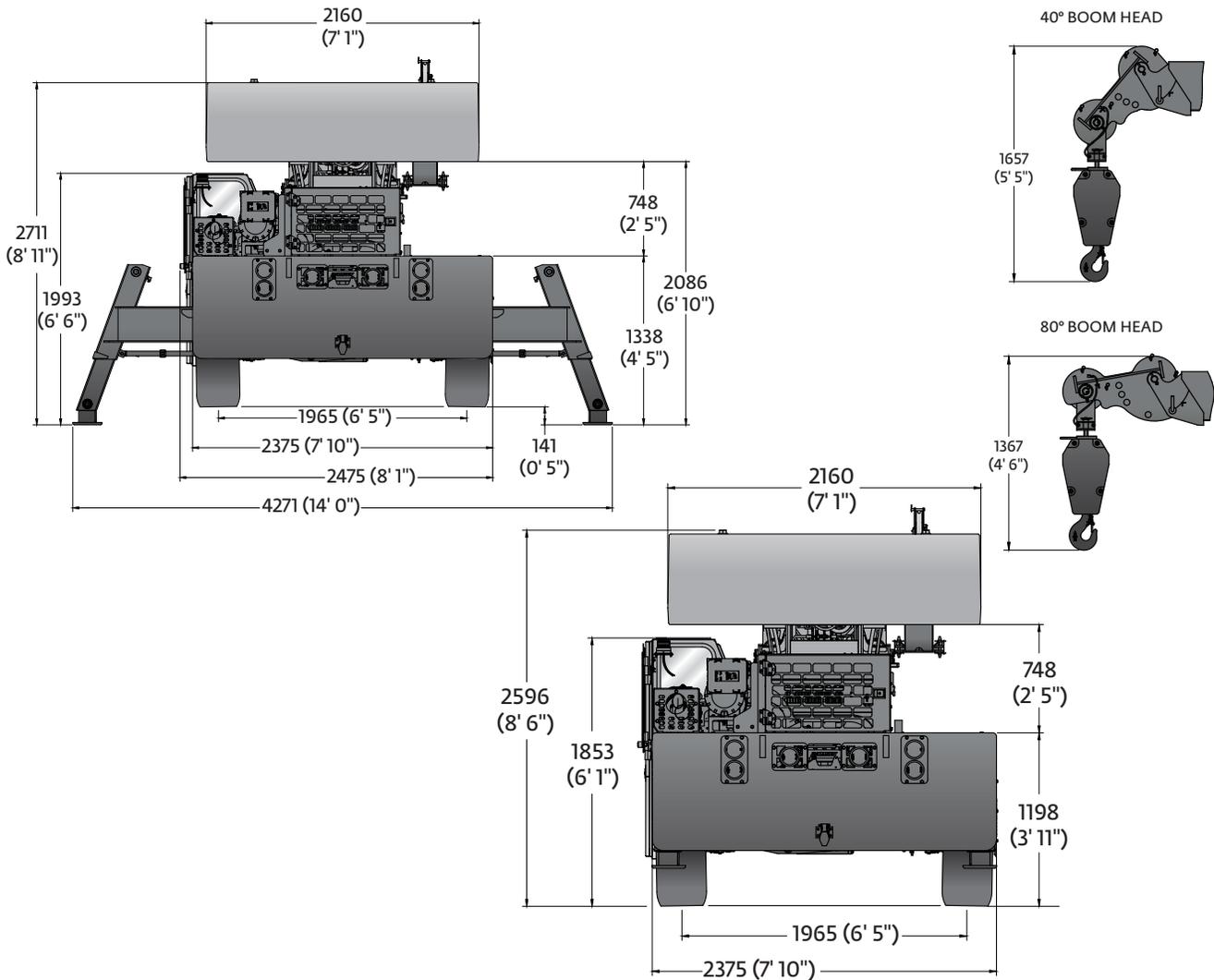
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# Dimensions

| Dimensions       |                    |                    |                    |                    |                  |
|------------------|--------------------|--------------------|--------------------|--------------------|------------------|
| Tire Size        | A                  | B                  | C                  | D                  | E                |
| Two-wheel steer  | 7407 mm (291.6 in) | 6675 mm (262.8 in) | 6218 mm (244.8 in) | 6058 mm (238.5 in) | 3375 mm (133 in) |
| Four-wheel steer | 5380 mm (212 in)   | 4481 mm (176 in)   | 3993 mm (157 in)   | 3841 mm (151 in)   | 1722 mm (68 in)  |



# Dimensions and weights

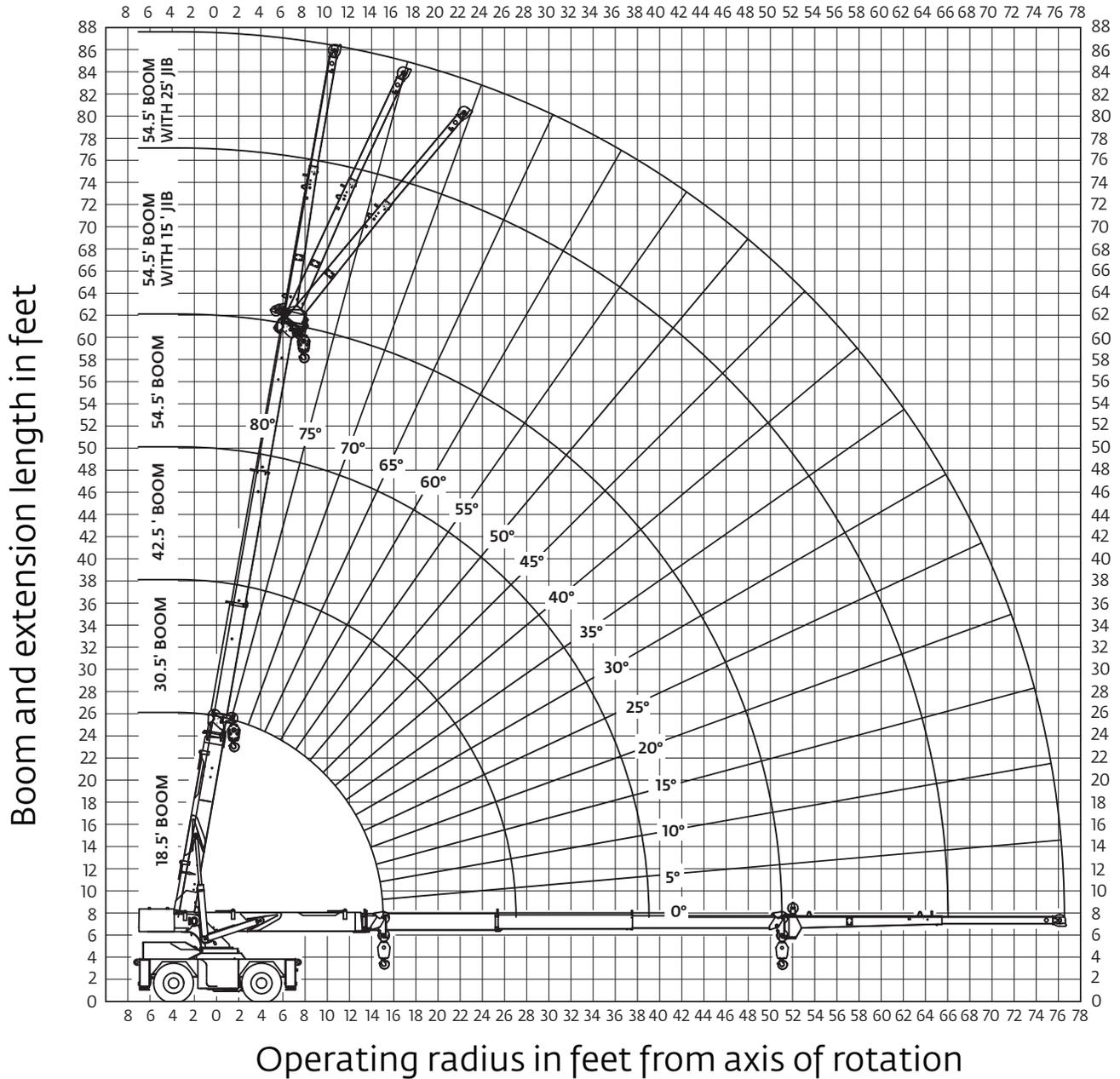


|   | GVW    |        | Front |        | Rear   |        |
|---|--------|--------|-------|--------|--------|--------|
|   | kg     | lb     | kg    | lb     | kg     | lb     |
| Basic machine: Including 16,6 m (54.5 ft) main boom, main hoist with 97,5 m (320 ft) of wire rope, 18 t (20 USt) hook block, full counterweight, Tier IV engine | 16 680 | 36,774 | 6236  | 13,747 | 10 445 | 23,027 |
| Add: 4,6 m (15 ft) fixed swingaway extension and extension carrier brackets and downhaul weight   | 179    | 394    | 291   | 641    | -112   | -247   |
| Crane weight  | 16 859 | 37,168 | 6527  | 14,388 | 10 333 | 22,780 |
| Basic machine including 16,6 m (54.5 ft) main boom, main hoist with 97,5 m (320 ft) of wire rope, 18 t (20 USt) hook block, full counterweight, Tier IV engine  | 16 680 | 36,774 | 6236  | 13,747 | 10 445 | 23,027 |
| Add: Enclosed cab, heater and glass   | 89     | 197    | 40    | 89     | 49     | 108    |
| Crane weight  | 16 769 | 36,971 | 6276  | 13,836 | 10 494 | 23,135 |
| Basic machine: Including 16,6 m (54.5 ft) main boom, main hoist with 97,5 m (320 ft) of wire rope, 18 t (20 USt) hook block, full counterweight, Tier IV engine | 16 680 | 36,774 | 6236  | 13,747 | 10 445 | 23,027 |
| Add: 4,6 m - 7,6 m (15 ft - 25 ft) telescopic swingaway extension and extension carrier brackets and downhaul weight  | 324    | 714    | 489   | 1079   | -166   | -365   |
| Crane weight  | 17 004 | 37,488 | 6725  | 14,826 | 10 279 | 22,662 |

# Working range

Imperial

(BOOM DEFLECTION NOT SHOWN)



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

Imperial



18.5 ft - 54.5 ft



100% (360°)



0% (front/rear ± 15° defined arc)



Pounds

| Radius<br>in Feet | Main Boom Length in Feet |                  |                  |                  |
|-------------------|--------------------------|------------------|------------------|------------------|
|                   | 18.5                     | 30.5             | 42.5             | 54.5             |
| 6                 | 40,000<br>(65)           | 24,000<br>(75.5) |                  |                  |
| 8                 | 33,850<br>(57.5)         | 24,000<br>(71.5) | 23,650<br>(77.5) |                  |
| 10                | 30,100<br>(49.5)         | 24,000<br>(67.5) | 21,550<br>(75)   | 16,800<br>(79)   |
| 12                | 26,950<br>(39.5)         | 24,000<br>(63)   | 19,850<br>(72)   | 15,350<br>(77)   |
| 14                | 23,550<br>(25.5)         | 24,000<br>(58.5) | 18,050<br>(69)   | 14,100<br>(74.5) |
| 15                | 18,900<br>(0)            | 22,500<br>(56.5) | 17,250<br>(67.5) | 13,500<br>(73.5) |
| 16                |                          | 21,000<br>(54)   | 16,550<br>(66)   | 13,000<br>(72.5) |
| 18                |                          | 18,450<br>(49)   | 15,250<br>(63)   | 12,100<br>(70)   |
| 20                |                          | 16,300<br>(43.5) | 14,250<br>(60)   | 11,250<br>(68)   |
| 22                |                          | 14,150<br>(37)   | 13,300<br>(56.5) | 10,550<br>(65.5) |
| 24                |                          | 12,250<br>(29.5) | 12,200<br>(53)   | 9940<br>(63)     |
| 26                |                          | 10,700<br>(19)   | 10,750<br>(49.5) | 9380<br>(60.5)   |
| 27                |                          | 10,050<br>(0)    | 10,150<br>(47.5) | 9120<br>(59.5)   |
| 28                |                          |                  | 9600<br>(45.5)   | 8880<br>(58)     |
| 30                |                          |                  | 8620<br>(41.5)   | 8430<br>(55.5)   |
| 32                |                          |                  | 7790<br>(37)     | 8020<br>(53)     |
| 34                |                          |                  | 7090<br>(31.5)   | 7300<br>(50)     |
| 36                |                          |                  | 6470<br>(25)     | 6680<br>(47)     |
| 38                |                          |                  | 5920<br>(16)     | 6130<br>(44)     |
| 39                |                          |                  | 5680<br>(0)      | 5890<br>(42.5)   |
| 40                |                          |                  |                  | 5650<br>(40.5)   |
| 42                |                          |                  |                  | 5230<br>(37)     |
| 44                |                          |                  |                  | 4850<br>(33)     |
| 46                |                          |                  |                  | 4500<br>(28.5)   |
| 48                |                          |                  |                  | 4180<br>(23)     |
| 51                |                          |                  |                  | 3760<br>(0)      |

NOTE: ( ) Boom angles are in degrees. 80090205

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# Load chart

Imperial



Pounds

| Main Boom Angle (°) | 0° OFFSET            |                      | 15° OFFSET           |                      | 30° OFFSET      |
|---------------------|----------------------|----------------------|----------------------|----------------------|-----------------|
|                     | To 42.5' boom length | To 54.5' boom length | To 42.5' boom length | To 54.5' boom length | Any boom length |
| 75                  | 9300                 | 6500                 | 7400                 | 5650                 | 3500            |
| 70                  | 8550                 | 6100                 | 6950                 | 4350                 | 2800            |
| 65                  | 7950                 | 6100                 | 6500                 | 3800                 | 2350            |
| 60                  | 7400                 | 5650                 | 5350                 | 3500                 | 2150            |
| 55                  | 6950                 | 4350                 | 4550                 | 2800                 | 1900            |
| 50                  | 6500                 | 3800                 | 4050                 | 2350                 | 1750            |
| 45                  | 5350                 | 3500                 | 3450                 | 2150                 | 1670            |
| 40                  | 4550                 | 2800                 | 3300                 | 1900                 | 1550            |
| 35                  | 4050                 | 2350                 | 3150                 | 1750                 |                 |
| 30                  | 3450                 | 2150                 | 3000                 | 1670                 |                 |
| 25                  | 3300                 | 1900                 | 2800                 | 1550                 |                 |
| 20                  | 3150                 | 1750                 |                      |                      |                 |
| 15                  | 3000                 | 1670                 |                      |                      |                 |
| 10                  | 2800                 | 1550                 |                      |                      |                 |

80090207

NOTES:

1. 15 ft boom extension may be used for single line lifting service only.
2. 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.

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# Load chart

Imperial



15 ft - 25 ft



100%



360°



Pounds

| Main Boom Angle (°) | 15 FT LENGTH         |                      |                      |                      |                 | 25 FT LENGTH         |                      |                      |                      |                 |
|---------------------|----------------------|----------------------|----------------------|----------------------|-----------------|----------------------|----------------------|----------------------|----------------------|-----------------|
|                     | 0° OFFSET            |                      | 15° OFFSET           |                      | 30° OFFSET      | 0° OFFSET            |                      | 15° OFFSET           |                      | 30° OFFSET      |
|                     | To 42.5' boom length | To 54.5' boom length | To 42.5' boom length | To 54.5' boom length | Any boom length | To 42.5' boom length | To 54.5' boom length | To 42.5' boom length | To 54.5' boom length | Any boom length |
| 80                  | 8500                 | 8550                 | 5100                 | 4770                 | 3060            | 5830                 | 5800                 | 3710                 | 3460                 | 2200            |
| 75                  | 6990                 | 6650                 | 4400                 | 4100                 | 2640            | 5120                 | 4860                 | 3190                 | 2970                 | 1890            |
| 70                  | 5940                 | 5580                 | 3790                 | 3540                 | 2290            | 4330                 | 4070                 | 2740                 | 2560                 | 1630            |
| 65                  | 5100                 | 4770                 | 3270                 | 3060                 | 1990            | 3710                 | 3460                 | 2350                 | 2200                 | 1410            |
| 60                  | 4400                 | 4100                 | 2810                 | 2640                 | 1750            | 3190                 | 2970                 | 2020                 | 1890                 | 1230            |
| 55                  | 3790                 | 3540                 | 2420                 | 2290                 | 1560            | 2740                 | 2560                 | 1730                 | 1630                 | 1090            |
| 50                  | 3270                 | 3060                 | 2090                 | 1990                 | 1430            | 2350                 | 2200                 | 1480                 | 1410                 | 990             |
| 45                  | 2810                 | 2640                 | 1830                 | 1750                 | 1370            | 2020                 | 1890                 | 1290                 | 1230                 | 950             |
| 40                  | 2420                 | 2290                 | 1630                 | 1560                 | 1370            | 1730                 | 1630                 | 1140                 | 1090                 | 950             |
| 35                  | 2090                 | 1990                 | 1490                 | 1430                 | 1280            | 1480                 | 1410                 | 1040                 | 990                  | 900             |
| 30                  | 1830                 | 1750                 | 1440                 | 1370                 | 1250            | 1290                 | 1230                 | 1000                 | 950                  | 800             |
| 25                  | 1630                 | 1560                 | 1440                 | 1370                 |                 | 1140                 | 1090                 | 1000                 | 950                  |                 |
| 20                  | 1490                 | 1430                 | 1440                 | 1280                 |                 | 1040                 | 990                  | 900                  | 900                  |                 |
| 15                  | 1440                 | 1370                 | 1250                 | 1250                 |                 | 1000                 | 950                  | 800                  | 800                  |                 |
| 10                  | 1440                 | 1370                 |                      |                      |                 | 1000                 | 950                  |                      |                      |                 |
| 5                   | 1440                 | 1280                 |                      |                      |                 | 900                  | 900                  |                      |                      |                 |
| 0                   | 1250                 | 1250                 |                      |                      |                 | 800                  | 800                  |                      |                      |                 |

80090208

NOTES:

1. 15 ft - 25 ft boom extension may be used for single line lifting service only.
2. 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.

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

# Load chart

Imperial



| Radius in Feet | Defined Arc 15° Over Front | Stationary 360° |
|----------------|----------------------------|-----------------|
| 6              | 16,000                     | 15,500          |
| 8              | 14,100                     | 13,550          |
| 10             | 11,250                     | 10,800          |
| 12             | 9860                       | 8880            |
| 14             | 8700                       | 7420            |
| 15             | 8190                       | 6800            |
| 16             | 7720                       | 6350            |
| 18             | 6890                       | 5890            |
| 20             | 6180                       | 5070            |
| 22             | 5570                       | 4370            |
| 24             | 4990                       | 3760            |
| 26             | 4460                       | 3250            |
| 27             | 4220                       | 3010            |
| 28             | 4100                       | 2810            |
| 30             | 3680                       | 2690            |
| 32             | 3300                       | 2580            |
| 34             | 2950                       | 2130            |
| 36             | 2640                       | 1890            |
| 38             | 2350                       | 1650            |
| 39             | 2220                       | 1540            |
| 40             | 2160                       | 1420            |
| 42             | 2110                       | 1300            |
| 44             | 1910                       | 1170            |
| 46             | 1720                       | 1030            |
| 48             | 1550                       | 900             |
| 51             | 1310                       | 730             |

80090209

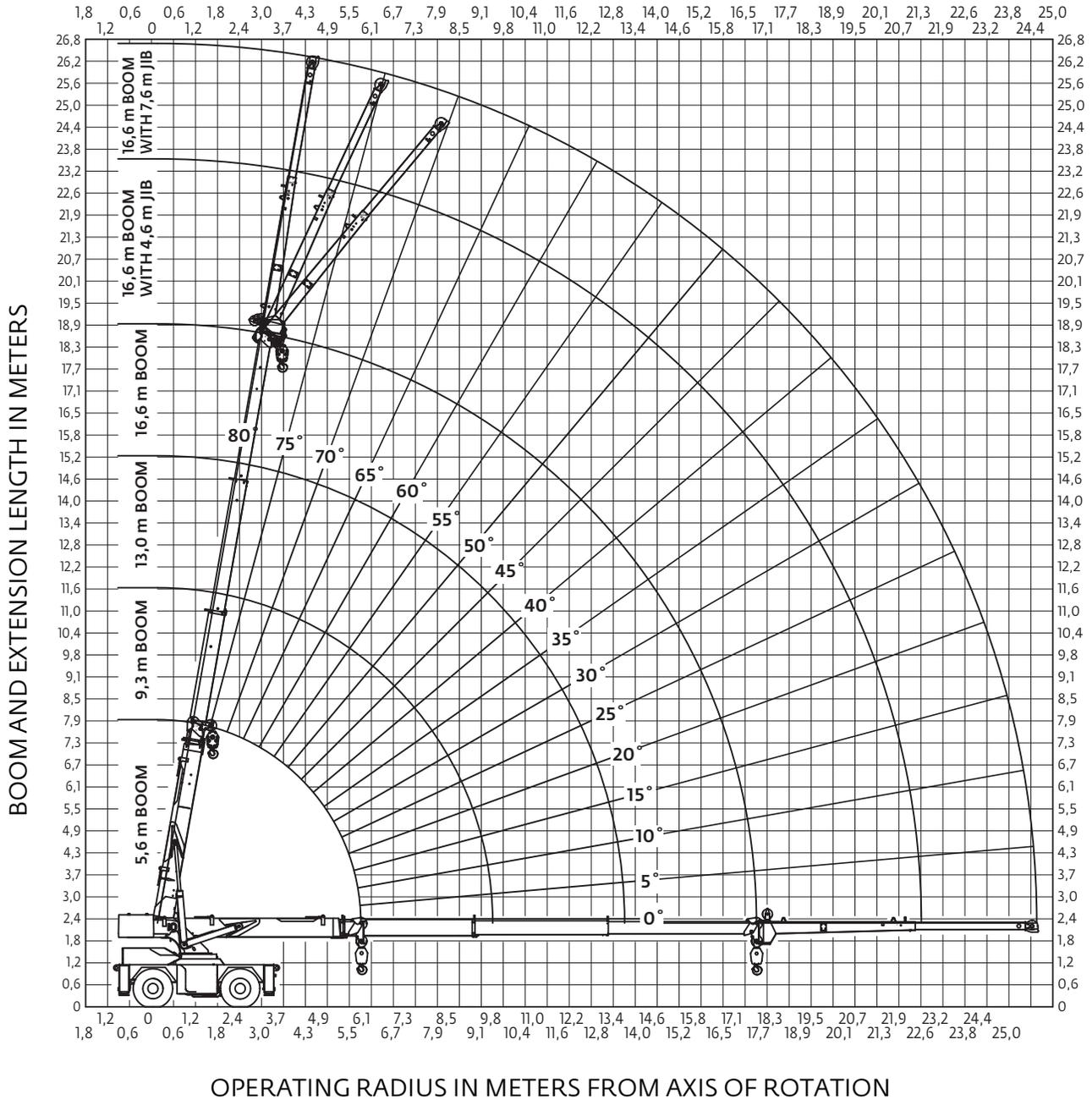
1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 12.00R20 at 130 psi cold inflation pressure.
3. Capacities are applicable only with machine on a smooth, level and firm surface.
4. Defined Arc - Over front includes 15° on either side of longitudinal centerline of machine.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. Maximum speed is 2.5 mph.
7. On rubber lifting with boom extension not permitted.

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# Working range

Metric

(BOOM DEFLECTION NOT SHOWN)



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# Load chart

Metric



5,6 m - 16,6 m



100% (360°)



0% (front/rear ± 15° defined arc)



Kilograms

| Radius<br>in meters | Main Boom Length in meters |                  |                |                |
|---------------------|----------------------------|------------------|----------------|----------------|
|                     | 5,6                        | 9,3              | 13,0           | 16,6           |
| 2                   | 18 000<br>(63)             | 10 875<br>(74,5) |                |                |
| 2,4                 | 15 350<br>(58)             | 10 875<br>(71,5) | 10 725<br>(78) |                |
| 3                   | 13 650<br>(50)             | 10 875<br>(67,5) | 9775<br>(75)   | 7620<br>(79)   |
| 3,7                 | 12 200<br>(38,5)           | 10 875<br>(62,5) | 9000<br>(71,5) | 6960<br>(76,5) |
| 4,3                 | 10 375<br>(24,5)           | 10 875<br>(58,5) | 8185<br>(69)   | 6395<br>(74,5) |
| 4,6                 | 8570<br>(0)                | 10 200<br>(56)   | 7820<br>(67,5) | 6120<br>(73,5) |
| 4,9                 |                            | 9525<br>(53,5)   | 7505<br>(66)   | 5895<br>(72,5) |
| 5,5                 |                            | 8365<br>(49)     | 6915<br>(63)   | 5485<br>(70)   |
| 6,1                 |                            | 7390<br>(43,5)   | 6460<br>(60)   | 5100<br>(68)   |
| 6,7                 |                            | 6360<br>(37)     | 6030<br>(56,5) | 4785<br>(65,5) |
| 7,3                 |                            | 5560<br>(29,5)   | 5555<br>(53)   | 4505<br>(63)   |
| 7,9                 |                            | 4905<br>(19,5)   | 4905<br>(49,5) | 4255<br>(61)   |
| 8,2                 |                            | 4610<br>(0)      | 4630<br>(47,5) | 4135<br>(59,5) |
| 8,5                 |                            |                  | 4380<br>(46)   | 4025<br>(58,5) |
| 9,1                 |                            |                  | 3940<br>(41,5) | 3820<br>(56)   |
| 9,8                 |                            |                  | 3510<br>(36,5) | 3625<br>(52,5) |
| 10,4                |                            |                  | 3200<br>(31)   | 3300<br>(50)   |
| 11,0                |                            |                  | 2930<br>(25)   | 3020<br>(47)   |
| 11,6                |                            |                  | 2690<br>(15,5) | 2780<br>(44)   |
| 11,9                |                            |                  | 2590<br>(0)    | 2670<br>(42,5) |
| 12,2                |                            |                  |                | 2565<br>(40,5) |
| 12,8                |                            |                  |                | 2370<br>(37)   |
| 13,4                |                            |                  |                | 2200<br>(33)   |
| 14,0                |                            |                  |                | 2045<br>(28,5) |
| 14,6                |                            |                  |                | 1905<br>(23)   |
| 15,5                |                            |                  |                | 1715<br>(0)    |

NOTE: ( ) Boom angles are in degrees. 80093261

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# Load chart

Metric



Kilograms

| Main Boom Angle (°) | 0° OFFSET             |                       | 15° OFFSET            |                       | 30° OFFSET      |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------|
|                     | To 13.0 m boom length | To 16.6 m boom length | To 13.0 m boom length | To 16.6 m boom length | Any boom length |
| 75                  | 4215                  | 2945                  | 3355                  | 2560                  | 1585            |
| 70                  | 3875                  | 2765                  | 3150                  | 1970                  | 1270            |
| 65                  | 3605                  | 2765                  | 2945                  | 1720                  | 1065            |
| 60                  | 3355                  | 2560                  | 2425                  | 1585                  | 975             |
| 55                  | 3150                  | 1970                  | 2060                  | 1270                  | 860             |
| 50                  | 2945                  | 1720                  | 1835                  | 1065                  | 790             |
| 45                  | 2425                  | 1585                  | 1565                  | 975                   | 760             |
| 40                  | 2060                  | 1270                  | 1495                  | 860                   | 700             |
| 35                  | 1835                  | 1065                  | 1425                  | 790                   |                 |
| 30                  | 1565                  | 975                   | 1360                  | 760                   |                 |
| 25                  | 1495                  | 860                   | 1270                  | 700                   |                 |
| 20                  | 1425                  | 790                   |                       |                       |                 |
| 15                  | 1360                  | 760                   |                       |                       |                 |
| 10                  | 1270                  | 700                   |                       |                       |                 |

80093263

NOTES:

1. 4,6 m boom extension may be used for single line lifting service only.
2. 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.

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# Load chart

Metric



4,6 m - 7,6 m



100%



360°



Kilograms

| Main Boom Angle (°) | 4,6 m LENGTH          |                       |                       |                       |                 | 7,6 m LENGTH          |                       |                       |                       |                 |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------|
|                     | 0° OFFSET             |                       | 15° OFFSET            |                       | 30° OFFSET      | 0° OFFSET             |                       | 15° OFFSET            |                       | 30° OFFSET      |
|                     | To 13,0 m boom length | To 16,6 m boom length | To 13,0 m boom length | To 16,6 m boom length | Any boom length | To 13,0 m boom length | To 16,6 m boom length | To 13,0 m boom length | To 16,6 m boom length | Any boom length |
| 80                  | 3855                  | 3875                  | 2310                  | 2160                  | 1385            | 2640                  | 2630                  | 1680                  | 1565                  | 995             |
| 75                  | 3170                  | 3015                  | 1995                  | 1860                  | 1195            | 2320                  | 2220                  | 1445                  | 1345                  | 855             |
| 70                  | 2690                  | 2530                  | 1715                  | 1605                  | 1035            | 1960                  | 1845                  | 1240                  | 1160                  | 735             |
| 65                  | 2310                  | 2160                  | 1480                  | 1385                  | 900             | 1680                  | 1565                  | 1065                  | 995                   | 640             |
| 60                  | 1995                  | 1860                  | 1275                  | 1195                  | 790             | 1445                  | 1345                  | 915                   | 855                   | 555             |
| 55                  | 1715                  | 1605                  | 1095                  | 1035                  | 705             | 1240                  | 1160                  | 785                   | 735                   | 490             |
| 50                  | 1480                  | 1385                  | 945                   | 900                   | 645             | 1065                  | 995                   | 670                   | 640                   | 445             |
| 45                  | 1275                  | 1195                  | 830                   | 790                   | 620             | 915                   | 855                   | 585                   | 555                   | 430             |
| 40                  | 1095                  | 1035                  | 735                   | 705                   | 620             | 785                   | 735                   | 515                   | 490                   | 430             |
| 35                  | 945                   | 900                   | 675                   | 645                   | 580             | 670                   | 640                   | 470                   | 445                   | 405             |
| 30                  | 830                   | 790                   | 650                   | 620                   | 565             | 585                   | 555                   | 450                   | 430                   | 360             |
| 25                  | 735                   | 705                   | 650                   | 620                   | ---             | 515                   | 490                   | 450                   | 430                   | ---             |
| 20                  | 675                   | 645                   | 650                   | 580                   | ---             | 470                   | 445                   | 405                   | 405                   | ---             |
| 15                  | 650                   | 620                   | 565                   | 565                   | ---             | 450                   | 430                   | 360                   | 360                   | ---             |
| 10                  | 650                   | 620                   | ---                   | ---                   | ---             | 450                   | 430                   | ---                   | ---                   | ---             |
| 5                   | 650                   | 580                   | ---                   | ---                   | ---             | 405                   | 405                   | ---                   | ---                   | ---             |
| 0                   | 565                   | 565                   | ---                   | ---                   | ---             | 360                   | 360                   | ---                   | ---                   | ---             |

80093264

NOTES:

- 4,6 m - 7,6 m boom extension may be used for single line lifting service only.
- 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.

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

# Load chart

Metric



| Radius in meters | Defined Arc 15° Over Front | Stationary 360° |
|------------------|----------------------------|-----------------|
| 2,0              | 6965                       | 6735            |
| 2,4              | 6395                       | 6145            |
| 3,0              | 5100                       | 4985            |
| 3,7              | 4470                       | 4025            |
| 4,3              | 3945                       | 3365            |
| 4,6              | 3715                       | 3080            |
| 4,9              | 3500                       | 2880            |
| 5,5              | 3125                       | 2670            |
| 6,1              | 2800                       | 2300            |
| 6,7              | 2525                       | 1980            |
| 7,3              | 2260                       | 1705            |
| 7,9              | 2020                       | 1470            |
| 8,2              | 1910                       | 1365            |
| 8,5              | 1860                       | 1275            |
| 9,1              | 1665                       | 1220            |
| 9,8              | 1495                       | 1170            |
| 10,4             | 1335                       | 965             |
| 11,0             | 1195                       | 855             |
| 11,6             | 1065                       | 745             |
| 11,9             | 1005                       | 695             |
| 12,2             | 980                        | 640             |
| 12,8             | 955                        | 590             |
| 13,4             | 865                        | 530             |
| 14,0             | 780                        | 465             |
| 14,6             | 700                        | 405             |
| 15,5             | 590                        | 330             |

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1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 12.00R20 at 130 psi cold inflation pressure.
3. Capacities are applicable only with machine on a smooth, level and firm surface.
4. Defined Arc - Over front includes 15° on either side of longitudinal centerline of machine.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. Maximum speed is 4,0 km/h.
7. On rubber lifting with boom extension not permitted.

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

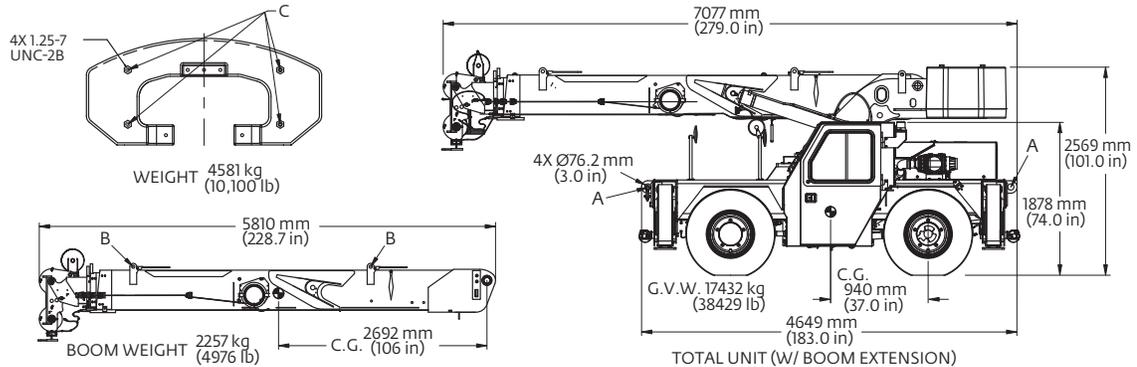
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

# Transportation and lifting

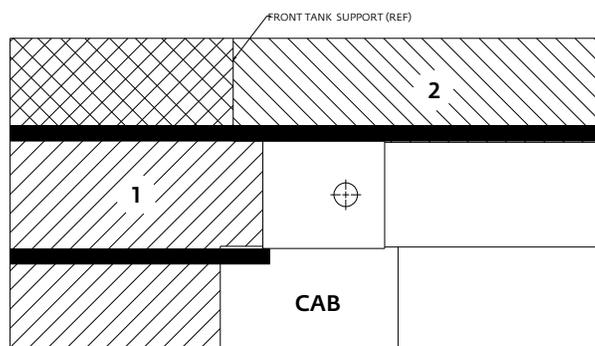
## TRANSPORTATION AND LIFTING DATA

1. LIFTING OF ENTIRE CRANE OR MAJOR CRANE ASSEMBLIES MUST BE ACCOMPLISHED BY UTILIZING SPECIFIC FITTINGS INDICATED ON ADJACENT CHART. USE OF FITTINGS FOR PURPOSES OTHER THAN THOSE DESIGNATED ON CHART IS PROHIBITED. FITTING CAPACITIES ARE MAXIMUM ALLOWABLE LOADS PER INDIVIDUAL FITTING.
2. RIGGING PERSONNEL SHALL BE RESPONSIBLE FOR PROPER SELECTION AND PLACEMENT OF ALL SLINGS AND LOAD HANDLING DEVICES.
3. DIMENSIONS AND WEIGHTS SHOWN ARE ESTIMATED FOR LARGEST CONFIGURATION AVAILABLE. WEIGHTS DO NOT INCLUDE BOOM EXTENSION AND OR JIB, UNLESS OTHERWISE INDICATED.
4. RIGGING PERSONNEL SHALL VERIFY DIMENSIONS AS REQUIRED FOR CLEARANCE.
5. DO NOT USE COUNTERWEIGHT LIFT LOCATIONS OR BOOM SLING POINT FOR LIFTING OR TIE DOWN OF ENTIRE CRANE.
6. LIFTING OF THE COUNTERWEIGHT TO BE ACCOMPLISHED WITH A PROPERLY RATED 1 1/4 INCH EYEBOLT.

| FITTING | NO. / UNIT |      |     |          | BOOM |      | CWT         |              | CAPACITY-TONNES [TONS] |            |              |
|---------|------------|------|-----|----------|------|------|-------------|--------------|------------------------|------------|--------------|
|         |            | LIFT | TOW | TIE DOWN | LIFT | LIFT | LIFT        | TOW          | TIE DOWN               |            |              |
|         |            |      |     |          |      |      |             |              | FORE & AFT             | SIDE       | DOWN         |
| A       | 4          | X    | X   | X        |      |      | 9.1<br>[10] | 27.2<br>[30] | 27.2<br>[30]           | 0.9<br>[1] | 27.2<br>[30] |
| B       | 4          |      |     |          | X    |      | 1.8<br>[2]  |              |                        |            |              |
| C       | 4          |      |     |          |      | X    | 0.9<br>[1]  |              |                        |            |              |



## LOAD DISTRIBUTION FOR CARRYDECK



Maximum Allowable Uniformly Distributed Load

AREA 1  
9071 kg (20,000 lb)

OR

AREA 2  
4082 kg (9000 lb)

1. Maximum travel speed with any or all loads - 4.0 kmh (2.5 MPH)
2. Loads to be transported on smooth level firm surfaces only.
3. Boom must be retracted and in center forward position, and lowered as much as the load allows.
4. Pick and carry loads may be transported on either Deck Area 1 or Deck Area 2; combined loading of Deck Area 1 and Deck Area 2 not permitted.
5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
6. The maximum pick and carry loads may be transported on deck area 1 provided the load is centered over the front axle and cribbed directly on the frame rails.

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

# Load handling

## WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

| OFFSETTABLE EXTENSIONS    |         |
|---------------------------|---------|
| *Stowed                   | N/A     |
| *15 ft fixed ext. erected | 700 lb  |
| *15 ft tele. ext. erected | 1400 lb |
| *25 ft tele ext. erected  | 1950 lb |

\*Reduction of main boom capacities

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

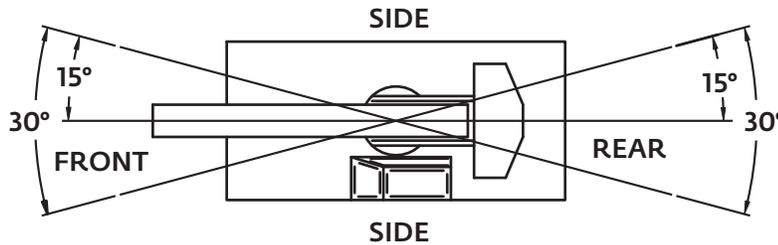
| HOOK BLOCKS AND HEADACHE BALLS |         |
|--------------------------------|---------|
| 20 USt, two-sheave hook block  | 388 lb+ |
| 6.25 USt down haul weight      | 105 lb+ |

+Refer to rating plate for actual weight

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Shuttlelift furnished equipment.

| TIRE INFLATION - BAR (PSI) |            |  |
|----------------------------|------------|--|
| SIZE<br>(FRONT & REAR)     | PLY RATING | LIFTING SERVICE, GENERAL<br>TRAVEL & EXTENDED TRAVEL |
|                            |            | STATIC & 2.5 MPH                                     |
| ADVANCE 12.00R20 GL073A    | 18         | 130  |

## LIFTING AREA DIAGRAM



## LINE PULLS AND REEVING INFORMATION

| HOISTS | CABLE SPECS.  | PERMISSIBLE LINE PULLS | NOMINAL CABLE LENGTH |
|--------|---|------------------------|----------------------|
| Main   | 9/16" 6x19 class<br>Bridon EEIPS (XXIPS)<br>Min. breaking strength<br>37,000 lb | 10,000 lb*             | 320 ft               |

The approximate weight of 9/16" wire rope is 0.59 lb/ft.

\*With certain boom and hoist tackle combinations, the allowable line pull may be limited by hoist performance. Refer to hoist performance table for lift planning to ensure adequate hoist performance on drum rope layer required.

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# Specifications

## Superstructure



### Boom

5,64 m – 16,61 m (18.5 ft – 54.5 ft) four-section full power boom.

Maximum tip height: 19,2 m (63 ft)



### Optional boom extensions\*

4,6 m (15 ft) fixed swingaway extension.

Maximum tip height: 23,1 m (76 ft)

4,6 m – 7,6 m (15 ft – 25 ft) telescopic swingaway extension.

Maximum tip height: 26,2 m (86 ft)

Both extensions can be offset 0°, -15°, and -30° via pivoting boom nose.



### Boom nose

Two sheave, quick reeve type with three- pinned pivoting (0°, +40°, and +80°) design to minimize head space requirements. Lowers head height 40,5 cm (1.33 ft) when nose is pivoted fully forward.



### Boom elevation

Two double acting hydraulic cylinders with integral holding valve. Elevation: 0° to 80°.



### Anti-two block device

Standard anti-two block device (hard wired), which, when activated, provides an audible and visual warning to the operator and “locks out” all functions whose movement can cause two-blocking.



### Rated Capacity Limiter (RCL)

Full-color, graphical display of boom angle, boom length, boom radius, rated load, and calculated load. Allows for operator inputs to set the crane configuration. RCL system is hardwired and calculates load via pressure transducers in the lift cylinder. Display includes a color coded light bar and audible alarm with function cut-out if load exceeds the load chart parameters.

\*Optional RCL system includes work area definition (WADS), and is datalogger capable.



### Swing

Ball bearing swing circle with 360° continuous rotation. Worm gear and pinion driven by hydraulic motor. Spring applied, hydraulic released brake. Equipped with swing enable control.

Maximum speed: 2.5 rpm



### Hydraulic system

One pressure compensated variable displacement axial piston pump, with load sensing.

Maximum output of: 155 LPM (41.0 GPM)

Maximum operating pressure: 276 bars (4000 p.s.i.)

Four-section valve bank, chassis mounted, operated via dash mounted pilot pressure hydraulic joystick controllers.

130.6 L (34.5 gal) steel hydraulic reservoir with sight level gauge and steel side plating to guard against side impact.

Return line replaceable filter with by-pass protection and service indicator. Cartridge filter rating of three micron.



## Hoist specifications

Smooth drum with cable follower.

Maximum hoist pull (first layer): 63,6 kN (14,300 lb)

Maximum permissible single line pull:  
44,5 kN (10,000 lb.) (3.5:1 design factor)

Maximum single line speed: 64 m/min (210 fpm)

Rope construction: 6 x 19 XXIPS / IWRC

Rope diameter: 14 mm (9/16 in)

Rope length: 97,5 m (320 ft)

## Carrier



### Chassis

High strength alloy frame constructed with integral outrigger housings; front and rear lifting, tie-down, and towing lugs. Deck carrying capacities of 9071 kg (20,000 lb) or 4082 kg (9000 lb). Deck coated with anti-skid treatment.



### Outriggers

Single stage hydraulic telescoping beam with oblique style jack cylinder on all four corners. Provides extended and down and retracted and down lifting capabilities. Integral holding valve on both beam and jack.

Outrigger positioning indicator located in dash display.

Outrigger pad size: 222 mm x 254 mm (8.75 in x 10 in)

Maximum outrigger pad load: 15 468 kg (34,100 lb)/ 401 p.s.i.



### Outrigger controls

Independent outrigger control rocker switches for beam or jack selection with a separate extend /retract rocker selector switch. 360° level bubble located inside cab.



### Engine (Tier IV)

Cummins QSF 3.8L Tier 4F four-cylinder/turbo-charged diesel rated at 97 kW (130 hp) at 2500 rpm. Includes standard 120V engine block heater and air intake “Grid” heater. Engine hour meter located in dash display. Alternator: 135 amp. Maximum Torque: 488 Nm (360 ft/lb) at 1600 rpm. Fuel requirements: Maximum of 15 ppm sulphur content Requires “Ultra Low” diesel fuel.

NOTE: Tier IV required for sale in North America.



### Engine (Tier III)

Cummins QSF 3.8L Tier III four-cylinder/turbo-charged diesel rated at 97 kW (130 hp) at 2500 rpm. Includes standard 120V engine block heater and air intake “Grid” heater. Engine hour meter located in dash display. Alternator: 135 amp. Maximum Torque: 489 Nm (361 ft/lb) at 1600 rpm.

NOTE: Required for sale outside of North America and European Union countries.

*\*Denotes optional equipment*

# Specifications

## Engine (Dual Fuel)

KEM 4.3L V-6 gasoline 90 HP @ 2200 rpm / LP gas engine (07 EPA) 87 HP @ 2200 rpm (LP tank not included) with engine shutdown feature.

## Fuel tank capacity

Steel with side impact plate. Capacity: 151,4L (40 gal).

## Carrier

### Transmission

Powershift with four speeds forward and four reverse. Steering column mounted shifter.

### Operators control station

Frame mounted, open air style control station with cab shell includes all crane functions and driving controls and equipped with overhead safety glass. Other standard equipment includes a suspension seat with seat belt, sight level bubble and 1,1 kg (2.5 lb) fire extinguisher, and tilt steering wheel. The dash panel will display the fuel level gauge, water temperature gauge, engine r.p.m., battery voltage, and hour meter. Indicator lights will display parking brake, low transmission pressure, low brake pressure, outrigger position, headlights, work lights (if ordered), and hoist 3rd wrap (if ordered). Crane function indicator and turn signal indicators are also included. The RCL display will be mounted on the top of the dash panel for direct line of sight for the operator.

### \*Operators control station enclosed

Includes the standard cab shell and all controls and indicators noted above, with the addition of front, rear, and right side glass, a split (two-piece) hinged door with sliding glass, front windshield wiper and washer, hot water heater and defroster with fan and cab dome light.

### Electrical system

One heavy duty maintenance free 12V battery, 820CCA at 0°F.

### Drive

Two-wheel (front-wheel) as standard with four-wheel drive as an option. Drive axles supplied with planetary hubs and limited slip differential.

### Steer

Standard three steering modes.

Front (two-wheel), four-wheel coordinated, and four-wheel crab steer with electronic self alignment. Three position rocker switch located on dash panel.

Outside Turning Radius:

Two wheel steer: 6,05 m (19.84 ft)

Four wheel steer: 3,8 m (12.46 ft)

## Suspension/axles

Front: Drive / steer in both two-wheel drive and four-wheel drive  
Rear: non-drive with steer in two-wheel drive, drive/steer in four-wheel drive.

Front axle is rigid mounted to frame. Rear axle offers 1.5° of oscillation.

## Brakes

Hydraulic actuated internal wet-disc service brake acting on each drive wheel. Dash mounted rocker switch with indicator light for activating or release of the dry disc parking brake mounted on the transmission output yoke.

## Tires

Tubeless type, semi-aggressive tread. 12.00 R20

## Light

Full LED lighting includes turn indicators, head, tail, brake, and hazard warning lights recessed mounted.

## Maximum speed

33,8 km/h (21.0 mph)

## Gradeability (theoretical)

68% ... (to drive train stall) NO LOAD

40% ... (to drive train stall) with 9072 kg(20,000 lb) DECK LOAD

## Gross vehicle weight (GVW)

Open cab: 16504 kg (36,386 lb) with Tier IV Final

Enclosed cab: 16 594 kg (36,583 lb) with Tier IV Final

## Miscellaneous standard equipment

- Back-up motion alarm
- Outrigger motion alarm
- No-skid decking
- Front and rear lifting
- Towing
- Tie-down lugs
- Hoist third wrap indicator with hoist function cut-out
- Hoist drum rotation indicator

## \*Optional equipment

- Auxiliary lighting: includes cab mounted amber flashing light and dual base boom mounted LED work lights
- Convenience package: includes front and rear pintle hitch, dual rear view mirrors, head and tail light metal mesh grille covers
- Enclosed cab package: includes heater and defroster, cab dome light, all window glass, and two-piece split door
- Four-wheel drive
- Below deck hydraulic tow winch with 4536 kg (10,000 lb) capacity
- 4,6 m (15 ft) fixed boom extension
- 4,6 m – 7,6 m (15 ft – 25 ft) telescopic boom extension
- Air conditioning (closed cab option required)
- 360° swing lock

*\*Denotes optional equipment*

# Symbols glossary



Axles



Counterweight



Grade



Outriggers



Boom



Drive



Heavy duty jib



Radius



Boom elevation



Electrical system



Hoist



Rotation



Boom extension



Engine



Hookblock



Speed



Boom length



Extension



Hydraulic system



Steering



Boom nose



Frame



Lights



Suspension



Brakes



Fuel tank capacity



Oil



Swing



Cab



Gear



Outrigger controls



Tires



Transmission

# Notes



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