

# GRT9165

## Preliminary Product Guide

ANSI B30.5  
Imperial 85%



### Features

- 150 t (165 USt) capacity
- 13,7 m – 62,5 m (44.9 ft – 205 ft) six-section MEGAFORM™ boom
- TWIN-LOCK™ boom pinning system
- 11,2 m – 17,8 m (36.7 ft – 58.4 ft) manual or hydraulic bi-fold lattice swingaway extension with offsets up to 50°
- Crane Control System (CCS)
- New wider full vision cab with 20° cab tilt

# GROVE GRT9165

The GRT9165 was designed after gathering feedback from crane owners and operators to ensure that it is loaded with the features and reliability you demand.

## Features

### > New wider full vision cab

The new wider full vision cab was designed with operator comfort, visibility and productivity in mind. Additional width, redesigned armrests and 20° cab tilt maximize the operator experience. Standard features include tilt/telescoping steering wheel, USB charging port, electronic seat adjustments, high-output heating and air conditioning system, large pivoting cup holder, windshield sun visor, and added storage behind the seat. Additional optional equipment includes radio with Bluetooth, heated seat and three camera package.



### > Innovative control system

The Crane Control System (CCS) offers a user-friendly interface, two full graphic adjustable displays mounted vertically for easier viewing and a jog dial for easier navigation and data input. The system allows the electronic controllers to be programmed by the operator for specific speed and reaction. Parts commonality across Grove, Manitowoc and Potain product lines enhances operator familiarization and serviceability. Additional features include ECO mode, Working Range Limiter (WRL) and Boom Configurator telescoping mode.



### > Superior strength and reach

Class-leading lifting performance is enhanced by the 13,7 m to 62,5 m (44.9 ft to 205 ft) six-section MEGAFORM™ boom with TWIN-LOCK™ boom pinning system. The MEGAFORM™ boom design provides exceptional strength-to-weight ratio. Boosting overall reach is the 17,8 m (58.4 ft) manual or hydraulic swingaway jib, which can be further extended by adding an 8 m (26.2 ft) lattice insert for a total extension length of 25,8 m (84.6 ft). Either swingaway jib can be offset up to 50°, which is unmatched in its class and provides additional reach and versatility.



### > Backing up our promise

Our new GRT line of Rough Terrain cranes have been designed from the ground up to provide class-leading specifications. And they have undergone extensive testing to ensure they provide industry-leading quality and reliability. We stand behind our new line of GRT cranes, and we are willing to prove it. With new three-, four- or five-year extended warranty programs as well as a new two-year standard warranty, our GRT line of cranes are built to be GROVE. REAL. TOUGH.

**THE ONLY FIVE-YEAR  
WARRANTY PROGRAM  
AVAILABLE IN THE INDUSTRY**

## GRT9165 benefits

- > Class-leading boom length and capacities maximize utilization.
- > Compact transport height and self-rigging, removable components allow for efficient and easy transportation to the job.
- > Wireless rigging remote enables fast and convenient setup.
- > TWIN-LOCK™ boom pinning system maximizes capacities by reducing weight inside the extended boom.
- > Boom Configurator mode increases efficiency and simplifies telescoping operation.
- > Manual or hydraulic bi-fold swingaway with offset capability to 50° increases ability to reach over obstacles and increases jobsite versatility.
- > Innovative smart-sensing outrigger monitoring system offers reliable accuracy.
- > ECO mode supports intelligent power management and decreased fuel consumption.
- > New wider cab with 20° cab tilt and high-output heating and air conditioning system maximizes operator comfort.
- > Four modes of steering increase jobsite maneuverability and make crane positioning easier.



### Manitowoc Crane Care when you need it.

The assurance of the world's most advanced crane service and support to get you back to work fast.



### Manitowoc Finance helps you get right to work generating profits for your business.

Financial tools that help you capitalize on opportunity with solutions that fit your needs.

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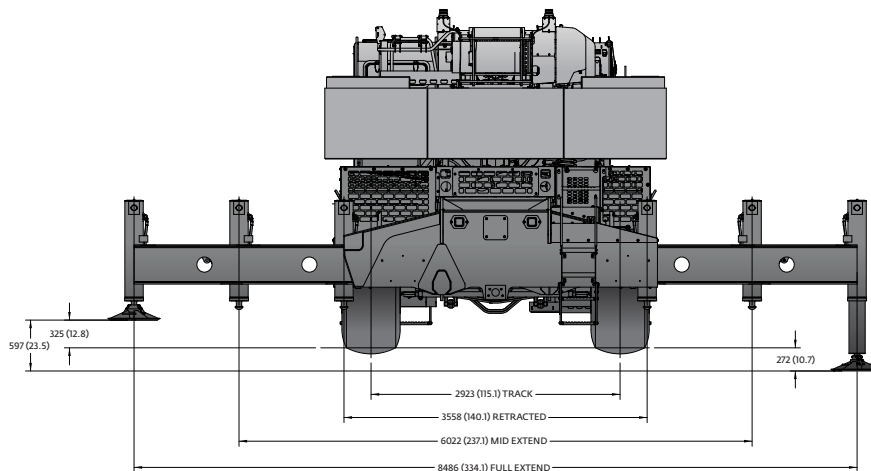
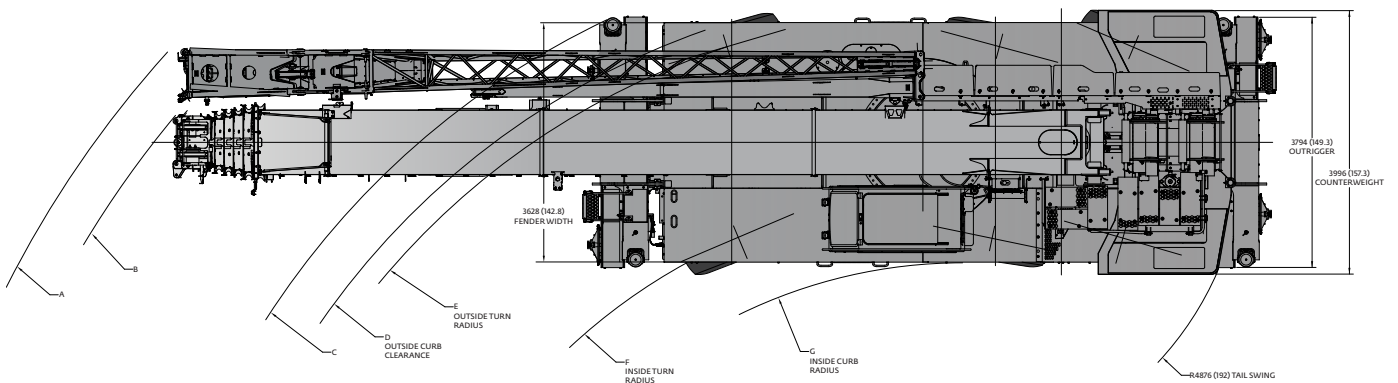
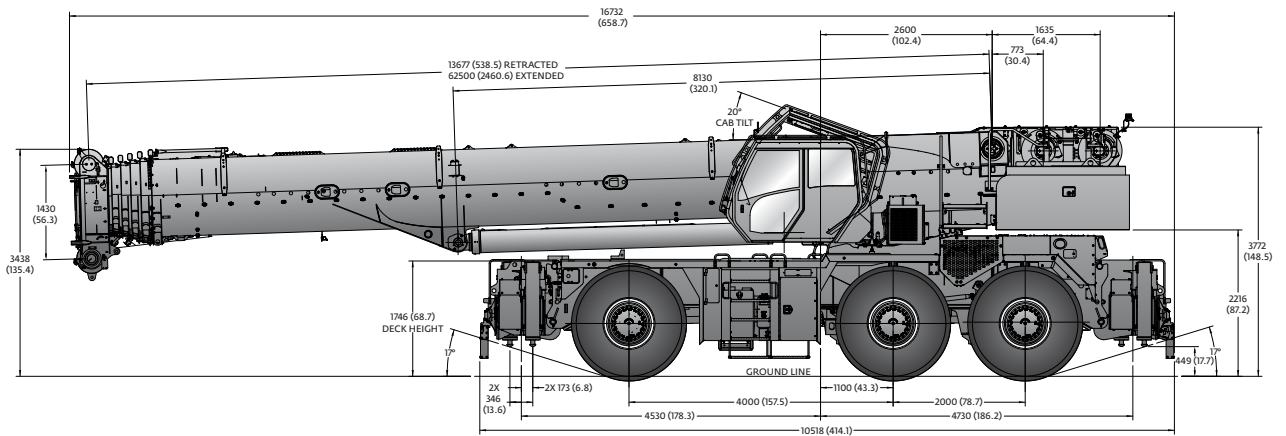
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# Dimensions

Tire size: 26.5 x 25

| A                  | B                  | C                   | D                  | E                   | F                  | G                  | A                  | B                  | C                  | D                  | E                  | F                 | G                 |
|--------------------|--------------------|---------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|
| 19,7 m<br>(64' 8") | 19,0 m<br>(62' 4") | 16,4 m<br>(53' 10") | 15,6 m<br>(51' 2") | 15,2 m<br>(49' 10") | 12,5 m<br>(41' 0") | 11,2 m<br>(36' 9") | 15,0 m<br>(49' 3") | 14,4 m<br>(47' 3") | 11,3 m<br>(37' 1") | 10,6 m<br>(34' 9") | 10,2 m<br>(33' 6") | 7,4 m<br>(24' 3") | 6,5 m<br>(21' 4") |
| Two-wheel steer    |                    |                     |                    |                     |                    |                    | Six-wheel steer    |                    |                    |                    |                    |                   |                   |

Dimensions in mm (in) unless otherwise specified.



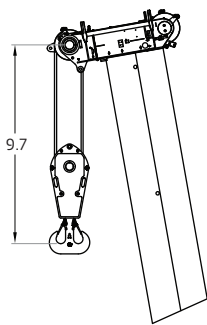
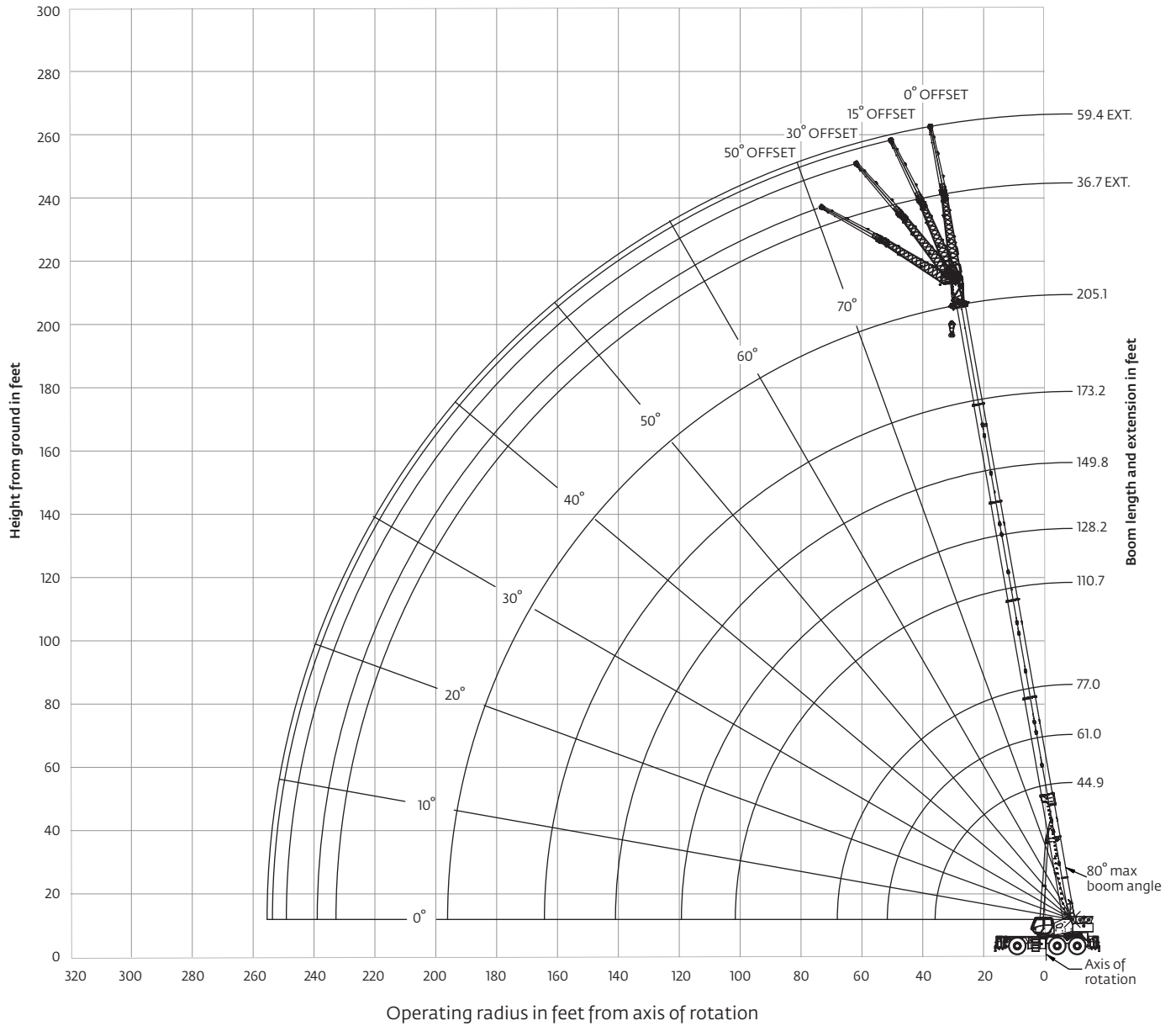
# Weights

| Weights  |         |         |         |         |             |         |
|--|---------|---------|---------|---------|-------------|---------|
|  | Gross   |         | Axle 1  |         | Axles 2 & 3 |         |
|  | kg      | lb      | kg      | lb      | kg          | lb      |
| <b>Basic crane</b> with Cummins T4F/Stage V engine, 62,5 m (205 ft) main boom, main and auxiliary hoist with wire rope, 17,8 m (58.4 ft) manually offset bi-fold swingaway, 100 t (110 USt) hook block, 11 t (12 USt) overhaul weight, auxiliary boom nose, front and rear outrigger box installed and 25,764 kg (56 800 lb) counterweight | 86 580  | 190,877 | 29 032  | 64,004  | 57 549      | 126,873 |
| <b>Substitute</b> 11,2 m – 17,8 m (36.7 ft – 58.4 ft) hydraulically offset bi-fold swingaway and stowage brackets ILO standard manual bi-fold swingaway  | 287     | 633     | 616     | 1357    | -328        | -724    |
| <b>Remove</b> 18 799 kg (41,400 lb) counterweight base and two 3485 kg (7700 lb) counterweight inserts   | -25 764 | -56,800 | 8483    | 18,703  | -34 247     | -75,503 |
| <b>Remove</b> front outrigger box  | -3955   | -8720   | -5245   | -11,563 | 1290        | 2843    |
| <b>Remove</b> rear outrigger box   | -3955   | -8720   | 2081    | 4587    | -6036       | -13,307 |
| <b>Remove</b> auxiliary boom nose  | -195    | -430    | -534    | -1177   | 339         | 747     |
| <b>Remove</b> 17,8 m (58.4 ft) manual offset bi-fold swingaway   | -1658   | -3655   | -2786   | -6142   | 1128        | 2487    |
| <b>Remove</b> 11 t (12 USt) overhaul weight  | -294    | -648    | -463    | -1020   | 169         | 372     |
| <b>Remove</b> 100 t (110 USt) hook block   | -1140   | -2513   | -1071   | -2362   | -68         | -151    |
| <b>Remove</b> 62,5 m (205 ft) main boom and manually offsettable swingaway extension brackets  | -15 816 | -34,868 | -19 340 | -42,637 | 3524        | 7769    |

# Working range

## Working range diagram with bi-fold extension

(Boom deflection not shown)



Dimensions are for the largest Grove furnished hook block, 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 — Preliminary

Main boom



44.9 ft – 205.1 ft



56,800 lb



100%



360°



Pounds

| Radius in feet | Main boom length in feet |           |           |           |            |             |           |             |             |             |             |        |        |        |
|----------------|--------------------------|-----------|-----------|-----------|------------|-------------|-----------|-------------|-------------|-------------|-------------|--------|--------|--------|
|                | 44.9                     | 60.9–62.4 | 73.5–78.6 | 79.9–94.6 | 96.1–110.7 | 112.1–125.2 | 128.2–139 | 140.7–153.2 | 158.9–162.4 | 165.8–174.9 | 176.6–190.7 | 198    | 205.1  |        |
| 8              | 330,000*                 |           |           |           |            |             |           |             |             |             |             |        |        |        |
| 9              | 235,500                  |           |           |           |            |             |           |             |             |             |             |        |        |        |
| 10             | 228,500                  | 201,500   | 168,000   | 175,000   |            |             |           |             |             |             |             |        |        |        |
| 12             | 217,000                  | 188,000   | 168,000   | 173,000   |            |             |           |             |             |             |             |        |        |        |
| 15             | 200,000                  | 172,500   | 159,000   | 156,000   | 133,000    |             |           |             |             |             |             |        |        |        |
| 20             | 164,500                  | 159,000   | 139,500   | 136,500   | 128,000    | 103,000     | 103,000   |             |             |             |             |        |        |        |
| 25             | 136,500                  | 137,000   | 125,000   | 124,000   | 114,500    | 103,000     | 103,000   | 64,700      | 45,250      |             |             |        |        |        |
| 30             | 111,000                  | 116,500   | 109,000   | 113,500   | 105,000    | 98,750      | 98,750    | 64,700      | 45,250      | 41,100      | 35,200      |        |        |        |
| 35             | 77,100                   | 97,950    | 97,050    | 95,850    | 97,450     | 91,300      | 91,300    | 60,150      | 45,250      | 41,100      | 35,200      | 26,250 | 23,950 |        |
| 40             |                          | 83,800    | 84,250    | 81,700    | 83,250     | 85,150      | 85,150    | 55,750      | 45,250      | 41,100      | 35,200      | 26,250 | 23,950 |        |
| 45             |                          | 70,800    | 69,050    | 70,400    | 67,500     | 69,150      | 70,550    | 54,450      | 45,250      | 40,950      | 35,200      | 26,250 | 23,950 |        |
| 50             |                          | 55,800    | 60,150    | 59,450    | 58,500     | 57,750      | 59,650    | 51,700      | 45,250      | 38,250      | 35,200      | 26,250 | 23,950 |        |
| 55             |                          |           | 51,400    | 50,750    | 52,500     | 49,150      | 51,000    | 47,900      | 44,200      | 36,350      | 35,200      | 26,250 | 23,950 |        |
| 60             |                          |           | 44,350    | 45,600    | 45,650     | 42,250      | 44,000    | 42,850      | 41,350      | 36,350      | 34,000      | 26,250 | 23,950 |        |
| 65             |                          |           | 39,400    | 40,950    | 40,050     | 36,700      | 38,450    | 39,500      | 38,250      | 34,650      | 31,850      | 26,250 | 23,950 |        |
| 70             |                          |           | 18,650    | 36,300    | 35,400     | 34,100      | 34,100    | 34,850      | 33,900      | 32,550      | 30,550      | 26,000 | 23,950 |        |
| 75             |                          |           |           | 32,400    | 31,700     | 32,200      | 32,200    | 31,200      | 30,050      | 29,950      | 28,850      | 24,450 | 23,950 |        |
| 80             |                          |           |           | 29,100    | 28,400     | 29,400      | 29,400    | 28,450      | 26,800      | 26,700      | 27,150      | 23,050 | 23,450 |        |
| 85             |                          |           |           | 20,500    | 25,550     | 26,600      | 26,600    | 25,600      | 24,000      | 24,300      | 24,650      | 21,750 | 22,200 |        |
| 90             |                          |           |           |           | 24,100     | 24,100      | 24,100    | 23,150      | 21,550      | 23,000      | 22,950      | 20,600 | 21,050 |        |
| 95             |                          |           |           |           | 22,650     | 21,950      | 22,200    | 21,000      | 19,450      | 21,050      | 20,800      | 19,500 | 19,950 |        |
| 100            |                          |           |           |           | 19,000     | 20,000      | 20,500    | 19,100      | 18,100      | 19,150      | 18,900      | 18,450 | 18,200 |        |
| 105            |                          |           |           |           |            | 18,300      | 18,800    | 17,600      | 17,000      | 17,500      | 17,200      | 17,050 | 16,750 |        |
| 110            |                          |           |           |           |            | 16,850      | 17,250    | 16,700      | 16,000      | 16,150      | 15,900      | 15,500 | 15,250 |        |
| 115            |                          |           |           |           |            | 13,450      | 15,950    | 15,850      | 15,100      | 14,800      | 14,750      | 14,150 | 13,900 |        |
| 120            |                          |           |           |           |            |             |           | 14,650      | 14,700      | 14,250      | 13,550      | 13,500 | 12,900 | 12,650 |
| 125            |                          |           |           |           |            |             |           | 13,350      | 13,550      | 13,100      | 12,400      | 12,350 | 11,800 | 11,550 |
| 130            |                          |           |           |           |            |             |           | 4,590       | 12,500      | 12,050      | 11,400      | 11,350 | 10,750 | 10,500 |
| 135            |                          |           |           |           |            |             |           |             | 11,550      | 11,100      | 10,400      | 10,400 | 9840   | 9590   |
| 140            |                          |           |           |           |            |             |           |             | 9450        | 10,200      | 9630        | 9560   | 8980   | 8720   |
| 145            |                          |           |           |           |            |             |           |             |             | 9420        | 9070        | 8760   | 8180   | 7930   |
| 150            |                          |           |           |           |            |             |           |             |             | 6470        | 8540        | 8020   | 7450   | 7190   |
| 155            |                          |           |           |           |            |             |           |             |             |             | 8040        | 7310   | 6760   | 6510   |
| 160            |                          |           |           |           |            |             |           |             |             |             | 7470        | 6660   | 6110   | 5870   |
| 165            |                          |           |           |           |            |             |           |             |             |             | 2640        | 6050   | 5500   | 5260   |
| 170            |                          |           |           |           |            |             |           |             |             |             |             | 5490   | 4940   | 4700   |
| 175            |                          |           |           |           |            |             |           |             |             |             |             | 4960   | 4410   | 4170   |
| 180            |                          |           |           |           |            |             |           |             |             |             |             | 3670   | 3910   | 3670   |
| 185            |                          |           |           |           |            |             |           |             |             |             |             |        | 3460   | 3210   |
| 190            |                          |           |           |           |            |             |           |             |             |             |             |        |        | 2770   |

\*Requires special equipment

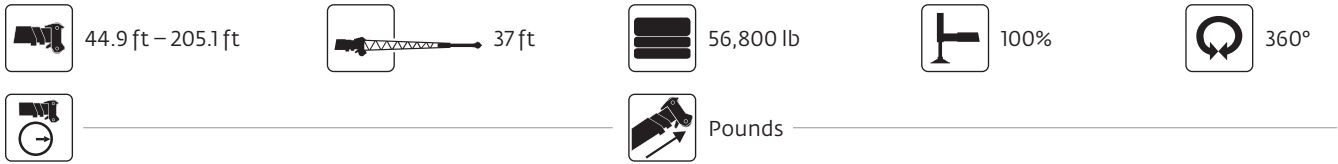
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# Load chart — Preliminary

## Bi-fold extension



| Radius<br>in feet | 37 ft boom extension |            |            |            |                      |            |            |            |                    |            |            |            |                      |            |            |            |
|-------------------|----------------------|------------|------------|------------|----------------------|------------|------------|------------|--------------------|------------|------------|------------|----------------------|------------|------------|------------|
|                   | 176.6 ft boom length |            |            |            | 187.4 ft boom length |            |            |            | 198 ft boom length |            |            |            | 205.1 ft boom length |            |            |            |
|                   | 0° offset            | 15° offset | 30° offset | 50° offset | 0° offset            | 15° offset | 30° offset | 50° offset | 0° offset          | 15° offset | 30° offset | 50° offset | 0° offset            | 15° offset | 30° offset | 50° offset |
| 35                | 19,650               |            |            |            | 17,550               |            |            |            | 15,050             |            |            |            | 13,800               |            |            |            |
| 40                | 19,650               | 20,000     |            |            | 17,550               | 17,700     |            |            | 15,050             |            |            |            | 13,800               |            |            |            |
| 45                | 19,650               | 20,000     | 20,050     |            | 17,550               | 17,700     |            |            | 15,050             | 15,200     |            |            | 13,800               | 13,900     |            |            |
| 50                | 19,650               | 20,000     | 20,050     | 21,000     | 17,550               | 17,700     | 17,850     |            | 15,050             | 15,200     | 15,100     |            | 13,800               | 13,900     | 13,750     |            |
| 55                | 19,650               | 20,000     | 20,050     | 21,000     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 60                | 19,650               | 20,000     | 20,050     | 21,000     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 65                | 19,650               | 20,000     | 20,050     | 21,000     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 70                | 19,650               | 20,000     | 20,050     | 21,000     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 75                | 19,650               | 20,000     | 20,050     | 20,350     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 80                | 19,650               | 20,000     | 19,600     | 19,500     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 85                | 19,650               | 19,300     | 18,800     | 18,700     | 17,550               | 17,700     | 17,850     | 18,500     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 90                | 18,750               | 18,450     | 18,000     | 17,950     | 17,550               | 17,700     | 17,850     | 18,250     | 15,050             | 15,200     | 15,100     | 15,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 95                | 17,750               | 17,500     | 17,250     | 17,250     | 17,550               | 17,700     | 17,550     | 17,550     | 15,050             | 15,000     | 15,000     | 15,300     | 13,800               | 13,900     | 13,750     | 14,000     |
| 100               | 16,850               | 16,600     | 16,550     | 16,600     | 16,900               | 17,100     | 16,900     | 16,950     | 14,350             | 14,200     | 14,200     | 14,500     | 13,800               | 13,900     | 13,750     | 14,000     |
| 105               | 15,950               | 15,800     | 15,800     | 16,000     | 15,550               | 16,300     | 16,250     | 16,350     | 13,550             | 13,450     | 13,450     | 13,750     | 13,800               | 13,700     | 13,650     | 13,950     |
| 110               | 14,850               | 15,050     | 15,050     | 15,350     | 14,150               | 14,850     | 15,400     | 15,750     | 12,850             | 12,750     | 12,750     | 13,050     | 13,100               | 13,000     | 13,000     | 13,250     |
| 115               | 13,550               | 14,150     | 14,350     | 14,650     | 12,850               | 13,500     | 14,000     | 14,400     | 12,150             | 12,100     | 12,100     | 12,400     | 12,450               | 12,350     | 12,350     | 12,600     |
| 120               | 12,350               | 12,900     | 13,350     | 13,650     | 11,650               | 12,250     | 12,750     | 13,100     | 11,500             | 11,450     | 11,500     | 11,750     | 11,500               | 11,750     | 11,750     | 12,000     |
| 125               | 11,300               | 11,800     | 12,200     | 12,450     | 10,600               | 11,150     | 11,600     | 11,900     | 10,750             | 10,900     | 10,950     | 11,200     | 10,450               | 11,050     | 11,200     | 11,450     |
| 130               | 10,300               | 10,800     | 11,150     | 11,350     | 9,650                | 10,150     | 10,550     | 10,800     | 9,780              | 10,300     | 10,400     | 10,650     | 9,490                | 10,050     | 10,450     | 10,750     |
| 135               | 9,440                | 9,870      | 10,150     | 10,350     | 8,760                | 9,240      | 9,600      | 9,820      | 8,890              | 9,380      | 9,760      | 10,000     | 8,600                | 9,120      | 9,510      | 9,790      |
| 140               | 8,620                | 9,020      | 9,300      |            | 7,940                | 8,390      | 8,710      | 8,890      | 8,060              | 8,530      | 8,870      | 9,090      | 7,780                | 8,270      | 8,630      | 8,870      |
| 145               | 7,860                | 8,230      | 8,480      |            | 7,180                | 7,600      | 7,890      | 8,040      | 7,310              | 7,740      | 8,050      | 8,230      | 7,030                | 7,480      | 7,810      | 8,020      |
| 150               | 7,160                | 7,490      | 7,720      |            | 6,480                | 6,870      | 7,130      |            | 6,610              | 7,010      | 7,290      | 7,440      | 6,320                | 6,750      | 7,050      | 7,230      |
| 155               | 6,510                | 6,810      | 7,010      |            | 5,840                | 6,190      | 6,420      |            | 5,960              | 6,330      | 6,590      |            | 5,680                | 6,070      | 6,350      | 6,490      |
| 160               | 5,900                | 6,180      | 6,350      |            | 5,230                | 5,560      | 5,770      |            | 5,350              | 5,700      | 5,930      |            | 5,070                | 5,440      | 5,690      |            |
| 165               | 5,340                | 5,590      | 5,730      |            | 4,670                | 4,970      | 5,150      |            | 4,790              | 5,110      | 5,320      |            | 4,510                | 4,850      | 5,080      |            |
| 170               | 4,810                | 5,040      | 5,150      |            | 4,150                | 4,420      | 4,570      |            | 4,260              | 4,550      | 4,740      |            | 3,980                | 4,300      | 4,500      |            |
| 175               | 4,320                | 4,520      | 4,600      |            | 3,660                | 3,900      | 4,030      |            | 3,770              | 4,040      | 4,200      |            | 3,490                | 3,780      | 3,960      |            |
| 180               | 3,870                | 4,030      |            |            | 3,200                | 3,410      | 3,520      |            | 3,310              | 3,550      | 3,690      |            | 3,030                | 3,300      | 3,460      |            |
| 185               | 3,440                | 3,570      |            |            | 2,770                | 2,960      | 3,030      |            | 2,870              | 3,100      | 3,210      |            | 2,590                | 2,840      | 2,980      |            |
| 190               | 3,040                | 3,140      |            |            | 2,360                | 2,530      |            |            | 2,470              | 2,660      | 2,760      |            | 2,190                | 2,410      | 2,530      |            |
| 195               | 2,670                | 2,740      |            |            | 1,990                | 2,120      |            |            | 2,080              | 2,260      | 2,330      |            | 1,800                | 2,000      | 2,100      |            |
| 200               | 2,330                |            |            |            | 1,630                | 1,740      |            |            | 1,730              | 1,870      |            |            | 1,440                | 1,620      | 1,690      |            |
| 205               |                      |            |            |            | 1,300                | 1,370      |            |            | 1,390              | 1,510      |            |            | 1,100                | 1,260      |            |            |
| 210               |                      |            |            |            | 1,300                |            |            |            | 1,390              | 1,170      |            |            |                      |            |            |            |
| 215               |                      |            |            |            | 1,300                |            |            |            | 1,390              |            |            |            |                      |            |            |            |
| 220               |                      |            |            |            | 1,300                |            |            |            | 1,390              |            |            |            |                      |            |            |            |

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# Load chart — Preliminary

Bi-fold extension



44.9 ft – 205.1 ft



59 ft



56,800 lb



100%



360°



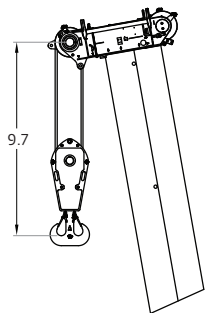
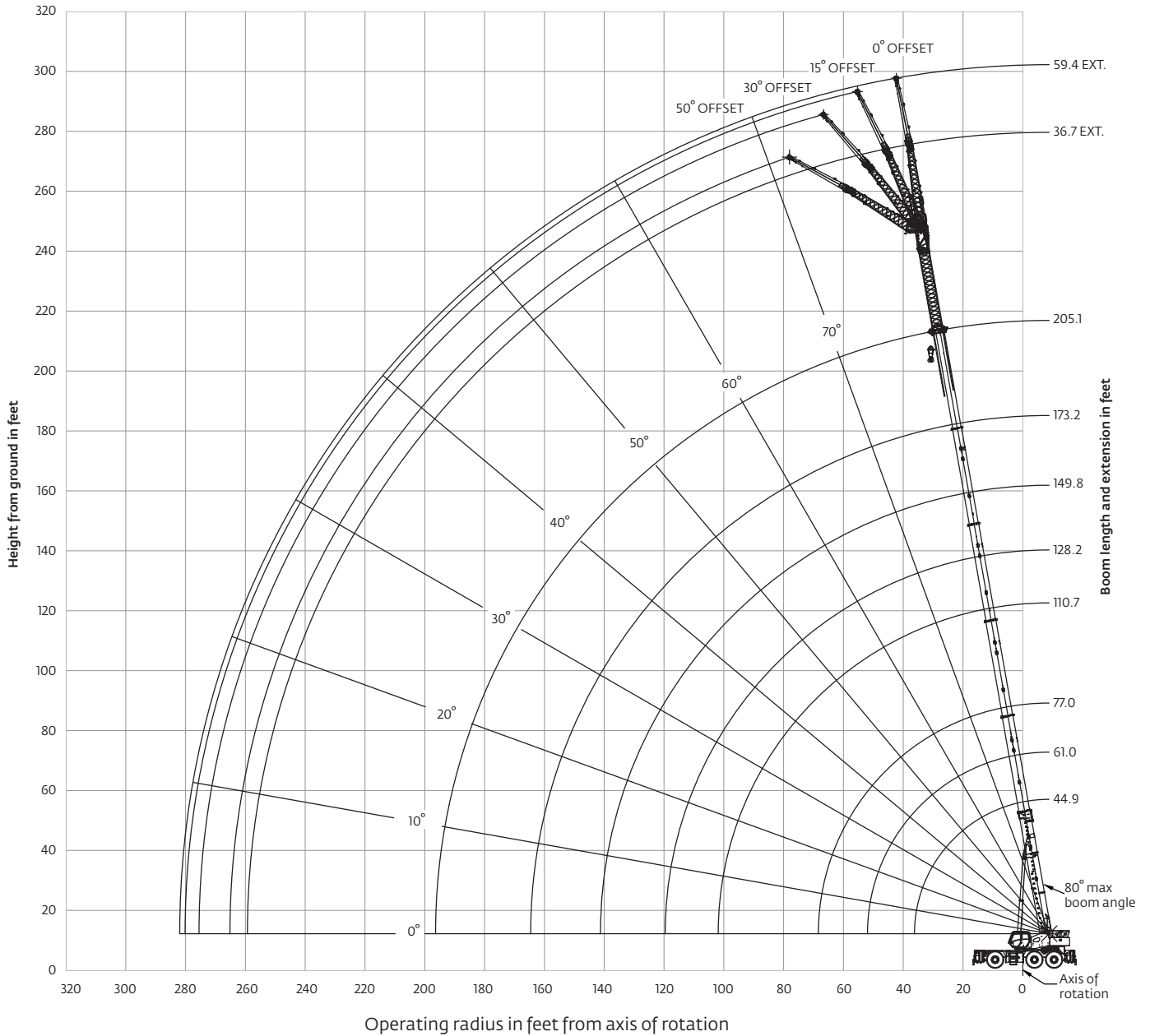
Pounds

| Radius<br>in feet | 59 ft boom extension    |               |               |               |                         |               |               |               |                       |               |               |               |                         |               |               |               |
|-------------------|-------------------------|---------------|---------------|---------------|-------------------------|---------------|---------------|---------------|-----------------------|---------------|---------------|---------------|-------------------------|---------------|---------------|---------------|
|                   | 176.6 ft<br>boom length |               |               |               | 187.4 ft<br>boom length |               |               |               | 198 ft<br>boom length |               |               |               | 205.1 ft<br>boom length |               |               |               |
|                   | 0°<br>offset            | 15°<br>offset | 30°<br>offset | 50°<br>offset | 0°<br>offset            | 15°<br>offset | 30°<br>offset | 50°<br>offset | 0°<br>offset          | 15°<br>offset | 30°<br>offset | 50°<br>offset | 0°<br>offset            | 15°<br>offset | 30°<br>offset | 50°<br>offset |
| 35                | 12,600                  |               |               |               |                         |               |               |               |                       |               |               |               |                         |               |               |               |
| 40                | 12,600                  |               |               |               | 11,650                  |               |               |               | 10,200                |               |               |               | 9540                    |               |               |               |
| 45                | 12,600                  |               |               |               | 11,650                  |               |               |               | 10,200                |               |               |               | 9540                    |               |               |               |
| 50                | 12,600                  | 13,400        |               |               | 11,650                  | 12,200        |               |               | 10,200                |               |               |               | 9540                    |               |               |               |
| 55                | 12,600                  | 13,400        |               |               | 11,650                  | 12,200        |               |               | 10,200                | 10,750        |               |               | 9540                    | 10,000        |               |               |
| 60                | 12,600                  | 13,400        | 12,850        |               | 11,650                  | 12,200        | 12,700        |               | 10,200                | 10,750        |               |               | 9540                    | 10,000        |               |               |
| 65                | 12,600                  | 13,400        | 12,700        |               | 11,650                  | 12,200        | 12,550        |               | 10,200                | 10,750        | 11,550        |               | 9540                    | 10,000        | 10,650        |               |
| 70                | 12,600                  | 13,400        | 12,550        | 11,150        | 11,650                  | 12,200        | 12,400        |               | 10,200                | 10,750        | 11,550        |               | 9540                    | 10,000        | 10,650        |               |
| 75                | 12,600                  | 13,400        | 12,400        | 11,050        | 11,650                  | 12,200        | 12,300        | 11,050        | 10,200                | 10,750        | 11,550        | 11,000        | 9540                    | 10,000        | 10,650        | 11,000        |
| 80                | 12,600                  | 13,400        | 12,250        | 10,900        | 11,650                  | 12,200        | 12,150        | 10,950        | 10,200                | 10,750        | 11,550        | 10,900        | 9540                    | 10,000        | 10,650        | 10,900        |
| 85                | 12,600                  | 13,200        | 12,100        | 10,850        | 11,650                  | 12,200        | 12,050        | 10,850        | 10,200                | 10,750        | 11,550        | 10,800        | 9540                    | 10,000        | 10,650        | 10,800        |
| 90                | 12,600                  | 13,050        | 12,000        | 10,750        | 11,650                  | 12,200        | 11,900        | 10,750        | 10,200                | 10,750        | 11,550        | 10,750        | 9540                    | 10,000        | 10,650        | 10,750        |
| 95                | 12,600                  | 12,900        | 11,850        | 10,650        | 11,650                  | 12,200        | 11,800        | 10,700        | 10,200                | 10,750        | 11,550        | 10,650        | 9540                    | 10,000        | 10,650        | 10,650        |
| 100               | 12,600                  | 12,700        | 11,750        | 10,600        | 11,650                  | 12,200        | 11,700        | 10,600        | 10,200                | 10,750        | 11,500        | 10,600        | 9540                    | 10,000        | 10,650        | 10,600        |
| 105               | 12,600                  | 12,550        | 11,600        | 10,550        | 11,650                  | 12,200        | 11,600        | 10,550        | 10,200                | 10,750        | 11,400        | 10,550        | 9540                    | 10,000        | 10,650        | 10,550        |
| 110               | 12,600                  | 12,400        | 11,400        | 10,500        | 11,650                  | 12,200        | 11,500        | 10,500        | 10,200                | 10,750        | 11,350        | 10,500        | 9540                    | 10,000        | 10,650        | 10,500        |
| 115               | 12,600                  | 12,250        | 11,250        | 10,450        | 11,650                  | 12,200        | 11,350        | 10,450        | 10,200                | 10,750        | 11,250        | 10,450        | 9540                    | 10,000        | 10,650        | 10,450        |
| 120               | 12,500                  | 12,100        | 11,150        | 10,400        | 11,650                  | 12,050        | 11,200        | 10,400        | 10,200                | 10,550        | 10,700        | 10,400        | 9540                    | 10,000        | 10,650        | 10,400        |
| 125               | 11,900                  | 11,650        | 11,000        | 10,400        | 11,300                  | 11,900        | 11,100        | 10,400        | 10,000                | 10,050        | 10,200        | 10,350        | 9540                    | 10,000        | 10,350        | 10,350        |
| 130               | 11,000                  | 11,200        | 10,900        | 10,350        | 10,300                  | 11,250        | 10,950        | 10,350        | 9520                  | 9560          | 9740          | 10,200        | 9540                    | 9740          | 9900          | 10,350        |
| 135               | 10,050                  | 10,800        | 10,700        | 10,350        | 9420                    | 10,300        | 10,850        | 10,350        | 9040                  | 9100          | 9280          | 9750          | 9190                    | 9280          | 9440          | 9910          |
| 140               | 9260                    | 10,000        | 10,350        | 10,350        | 8590                    | 9420          | 10,100        | 10,350        | 8590                  | 8660          | 8840          | 9280          | 8360                    | 8850          | 9010          | 9460          |
| 145               | 8490                    | 9210          | 9780          | 10,150        | 7820                    | 8610          | 9240          | 9730          | 7880                  | 8240          | 8420          | 8840          | 7590                    | 8430          | 8600          | 9020          |
| 150               | 7780                    | 8450          | 8970          | 9330          | 7120                    | 7850          | 8430          | 8870          | 7180                  | 7850          | 8020          | 8410          | 6890                    | 7670          | 8210          | 8610          |
| 155               | 7120                    | 7740          | 8220          | 8530          | 6460                    | 7150          | 7690          | 8060          | 6520                  | 7230          | 7650          | 8010          | 6230                    | 6970          | 7560          | 8020          |
| 160               | 6510                    | 7090          | 7520          | 7770          | 5850                    | 6490          | 6990          | 7310          | 5910                  | 6570          | 7090          | 7460          | 5620                    | 6320          | 6870          | 7270          |
| 165               | 5940                    | 6480          | 6870          |               | 5280                    | 5880          | 6330          | 6600          | 5340                  | 5960          | 6440          | 6760          | 5050                    | 5700          | 6220          | 6570          |
| 170               | 5400                    | 5900          | 6260          |               | 4750                    | 5310          | 5720          |               | 4800                  | 5390          | 5830          | 6100          | 4520                    | 5130          | 5610          | 5910          |
| 175               | 4910                    | 5360          | 5680          |               | 4250                    | 4770          | 5150          |               | 4300                  | 4850          | 5260          | 5480          | 4020                    | 4600          | 5030          | 5300          |
| 180               | 4440                    | 4860          | 5130          |               | 3780                    | 4270          | 4600          |               | 3830                  | 4350          | 4720          |               | 3550                    | 4090          | 4500          |               |
| 185               | 4000                    | 4380          | 4620          |               | 3340                    | 3790          | 4090          |               | 3390                  | 3870          | 4210          |               | 3110                    | 3620          | 3990          |               |
| 190               | 3590                    | 3930          | 4130          |               | 2930                    | 3340          | 3610          |               | 2980                  | 3420          | 3730          |               | 2700                    | 3170          | 3510          |               |
| 195               | 3200                    | 3510          | 3670          |               | 2540                    | 2920          | 3150          |               | 2590                  | 3000          | 3270          |               | 2310                    | 2750          | 3050          |               |
| 200               | 2830                    | 3100          | 3220          |               | 2180                    | 2520          | 2710          |               | 2220                  | 2600          | 2840          |               | 1940                    | 2350          | 2620          |               |
| 205               | 2490                    | 2720          |               |               | 1830                    | 2130          | 2290          |               | 1880                  | 2220          | 2430          |               | 1590                    | 1970          | 2210          |               |
| 210               | 2170                    | 2360          |               |               | 1510                    | 1770          | 1890          |               | 1550                  | 1860          | 2030          |               | 1260                    | 1610          | 1820          |               |
| 215               | 1870                    | 2010          |               |               | 1200                    | 1430          |               |               | 1240                  | 1520          | 1660          |               |                         | 1270          | 1440          |               |
| 220               | 1590                    | 1670          |               |               |                         | 1100          |               |               |                       | 1190          | 1290          |               |                         |               | 1080          |               |

# Working range

## Working range diagram with bi-fold extension and insert

(Boom deflection not shown)



Dimensions are for the largest Grove furnished hook block, with anti-two block activated.

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# Load chart — Preliminary

Insert and bi-fold extension



44.9 ft – 205.1 ft



85 ft



26 ft



56,800 lb



100%



360°



Pounds

| Radius<br>in feet | 85 ft boom extension    |               |               |               |                         |               |               |               |                       |               |               |               |                         |               |               |               |
|-------------------|-------------------------|---------------|---------------|---------------|-------------------------|---------------|---------------|---------------|-----------------------|---------------|---------------|---------------|-------------------------|---------------|---------------|---------------|
|                   | 176.6 ft<br>boom length |               |               |               | 187.4 ft<br>boom length |               |               |               | 198 ft<br>boom length |               |               |               | 205.1 ft<br>boom length |               |               |               |
|                   | 0°<br>offset            | 15°<br>offset | 30°<br>offset | 50°<br>offset | 0°<br>offset            | 15°<br>offset | 30°<br>offset | 50°<br>offset | 0°<br>offset          | 15°<br>offset | 30°<br>offset | 50°<br>offset | 0°<br>offset            | 15°<br>offset | 30°<br>offset | 50°<br>offset |
| 40                | 8840                    |               |               |               | 8080                    |               |               |               |                       |               |               |               |                         |               |               |               |
| 45                | 8840                    |               |               |               | 8080                    |               |               |               | 7040                  |               |               |               | 6530                    |               |               |               |
| 50                | 8840                    |               |               |               | 8080                    |               |               |               | 7040                  |               |               |               | 6530                    |               |               |               |
| 55                | 8840                    | 8800          |               |               | 8080                    | 8050          |               |               | 7040                  | 7000          |               |               | 6530                    |               |               |               |
| 60                | 8840                    | 8800          |               |               | 8080                    | 8050          |               |               | 7040                  | 7000          |               |               | 6530                    | 6780          |               |               |
| 65                | 8840                    | 8800          | 8840          |               | 8080                    | 8050          | 8080          |               | 7040                  | 7000          |               |               | 6530                    | 6780          |               |               |
| 70                | 8840                    | 8800          | 8840          |               | 8080                    | 8050          | 8080          |               | 7040                  | 7000          | 7040          |               | 6530                    | 6780          | 7080          |               |
| 75                | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          |               | 7040                  | 7000          | 7040          |               | 6530                    | 6780          | 7080          |               |
| 80                | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 85                | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 90                | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 95                | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 100               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 105               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 110               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 115               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 120               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 125               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 130               | 8840                    | 8800          | 8840          | 8840          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 135               | 8840                    | 8800          | 8670          | 8770          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 140               | 8600                    | 8510          | 8400          | 8530          | 8080                    | 8050          | 8080          | 8080          | 7040                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 145               | 8250                    | 8180          | 8150          | 8290          | 7920                    | 8050          | 8080          | 8080          | 6860                  | 7000          | 7040          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 150               | 7850                    | 7860          | 7910          | 8060          | 7200                    | 7990          | 8070          | 8080          | 6480                  | 6690          | 6960          | 7040          | 6530                    | 6780          | 7080          | 6530          |
| 155               | 7190                    | 7560          | 7640          | 7850          | 6540                    | 7290          | 7840          | 8000          | 6130                  | 6330          | 6600          | 7040          | 6250                    | 6480          | 6740          | 6530          |
| 160               | 6570                    | 7220          | 7350          | 7640          | 5920                    | 6630          | 7190          | 7620          | 5790                  | 5990          | 6250          | 6700          | 5640                    | 6140          | 6390          | 6530          |
| 165               | 5990                    | 6600          | 7070          | 7400          | 5350                    | 6010          | 6540          | 6920          | 5350                  | 5670          | 5910          | 6330          | 5060                    | 5770          | 6060          | 6490          |
| 170               | 5450                    | 6020          | 6460          | 6740          | 4810                    | 5440          | 5920          | 6260          | 4810                  | 5360          | 5590          | 5980          | 4520                    | 5200          | 5730          | 6140          |
| 175               | 4940                    | 5480          | 5880          | 6120          | 4300                    | 4900          | 5350          | 5640          | 4310                  | 4920          | 5290          | 5640          | 4020                    | 4660          | 5160          | 5520          |
| 180               | 4470                    | 4970          | 5340          |               | 3830                    | 4390          | 4810          | 5060          | 3830                  | 4410          | 4860          | 5150          | 3550                    | 4150          | 4620          | 4950          |
| 185               | 4020                    | 4490          | 4830          |               | 3390                    | 3910          | 4300          | 4510          | 3390                  | 3930          | 4350          | 4600          | 3100                    | 3670          | 4110          | 4400          |
| 190               | 3600                    | 4040          | 4350          |               | 2970                    | 3460          | 3820          |               | 2970                  | 3480          | 3870          | 4080          | 2680                    | 3220          | 3630          | 3880          |
| 195               | 3210                    | 3620          | 3890          |               | 2570                    | 3030          | 3360          |               | 2570                  | 3060          | 3410          |               | 2290                    | 2800          | 3180          | 3390          |
| 200               | 2830                    | 3210          | 3460          |               | 2200                    | 2630          | 2930          |               | 2200                  | 2660          | 2980          |               | 1910                    | 2400          | 2750          |               |
| 205               | 2480                    | 2830          | 3050          |               | 1850                    | 2250          | 2510          |               | 1850                  | 2270          | 2570          |               | 1560                    | 2020          | 2340          |               |
| 210               | 2150                    | 2470          | 2650          |               | 1520                    | 1890          | 2120          |               | 1510                  | 1910          | 2180          |               | 1230                    | 1650          | 1950          |               |
| 215               | 1830                    | 2120          | 2280          |               | 1200                    | 1540          | 1750          |               | 1200                  | 1570          | 1810          |               |                         | 1310          | 1580          |               |
| 220               | 1540                    | 1790          | 1920          |               |                         | 1210          | 1390          |               |                       | 1240          | 1460          |               |                         |               | 1230          |               |
| 225               | 1250                    | 1480          | 1570          |               |                         |               | 1050          |               |                       |               | 1120          |               |                         |               |               |               |
| 230               |                         | 1180          |               |               |                         |               |               |               |                       |               |               |               |                         |               |               |               |

# Load handling

| Weight reductions for load handling devices |                    |
|---|--------------------|
| Auxiliary boom nose                         | 195 kg (430 lb)    |
| <b>Hook blocks and overhaul weights:</b>    |                    |
| 134 USt (120 t), 8-sheave                   | 1180 kg (2601 lb)* |
| 112 USt (100 t), 7-sheave                   | 1140 kg (2513 lb)* |
| 83 USt (75 t), 5-sheave                     | 1070 kg (2359 lb)* |
| 50 USt (45 t), 3-sheave                     | 770 kg (1698 lb)*  |
| 29 USt (26 t), 1-sheave                     | 323 kg (712 lb)*   |
| 12 USt (11 t) overhaul weight               | 294 kg (648 lb)*   |
| 10 USt (9 t) overhaul ball                  | 330 kg (727 lb)*   |

\*Refer to rating plate for actual weight.

| Tire inflation — bar (psi) |           |   |
|----------------------------|-----------|---|
| Size (front and rear)      | TRA Code  | Lifting service, general travel and extended travel |
|                            |           | Static, creep and 4.0 km/h (2.5 mph)                |
| 26.5 x 25 – 44 PR          | E-3 / L-3 | 6.48 bar (94 psi)                                   |

| Line pulls and reeving information |  |                        |                      |
|------------------------------------|--|------------------------|----------------------|
| Hoists                             | Cable specs.   | Permissible line pulls | Nominal cable length |
| Main                               | 19 mm (3/4 in) 35x7 Class rotation resistant (non-rotating) Min. breaking strength 38 918 kg (85,800 lb) | 7784 kg (17,160 lb)*   | 294 m (964.5 ft)     |
| Auxiliary                          | 19 mm (3/4 in) 35x7 Class rotation resistant (non-rotating) Min. breaking strength 38 918 kg (85,800 lb) | 7784 kg (17,160 lb)*   | 233 m (764.4 ft)     |

The approximate weight of 3/4-in wire rope is 1.5 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.

| 11,2 m – 17,8 m (37 ft – 59 ft) folding boom extension (manual or hydraulic) |                         |                                      |
|--|-------------------------|--------------------------------------|
|  | Without overhaul weight | With 294 kg (648 lb) overhaul weight |
| 11,2 m (37 ft) extension (erected)*  | 2042 kg (4500 lb)       | 3720 kg (8200 lb)                    |
| 17,8 m (59 ft) extension (erected)*  | 3357 kg (7400 lb)       | 6033 kg (13,300 lb)                  |

\*Reduction of main boom capacities (no deduct required for stowed boom extension)

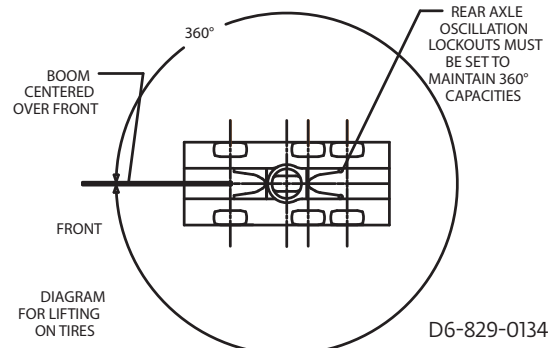
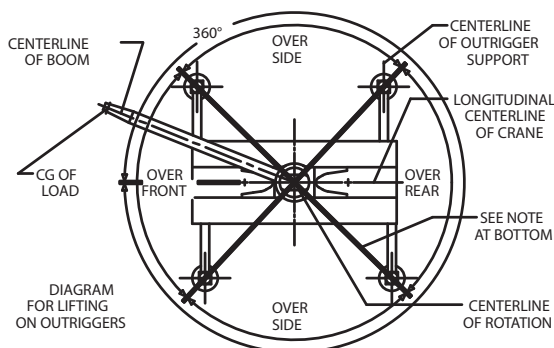
NOTE: All load handling devices and boom attachments are considered part of the load, and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.

NOTE: When operating at temperatures below -40°F, capacities shall be derated 3.6% of rated load for each degree Fahrenheit below -40°F without shock load.

| Hoist performance |                       |                   |                     |
|-------------------|-----------------------|-------------------|---------------------|
| Wire rope layer   | Hoist line pulls      | Layer capacity    | Total drum capacity |
| 1                 | 10 614 kg (23,400 lb) | 33,1 m (108.7 ft) | 33,1 m (108.7 ft)   |
| 2                 | 9752 kg (21,500 lb)   | 36 m (118.4 ft)   | 69,2 m (227.1 ft)   |
| 3                 | 9026 kg (19,900 lb)   | 39 m (128.1 ft)   | 108,2 m (355.2 ft)  |
| 4                 | 8391 kg (18,500 lb)   | 41,9 m (137.7 ft) | 150,2 m (492.9 ft)  |
| 5                 | 7847 kg (17,300 lb)   | 44,9 m (147.4 ft) | 195,1 m (640.3 ft)  |
| 6                 | 7348 kg (16,200 lb)   | 47,8 m (157.1 ft) | 243 m (797.4 ft)    |
| 7                 | 6895 kg (15,200 lb)   | 50,8 m (166.7 ft) | 293,8 m (964.1 ft)  |

\*Refer to Line pulls and reeving information table for max. lifting capacity of wire rope.

## Working area diagram



Bold lines determine the limiting position of any load for operation within working areas indicated.

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# Specifications

## Superstructure

### Boom

BOOM: 13,7 m to 62,5 m (44.9 ft to 205 ft) six-section MEGAFORM™ boom with TWIN-LOCK™ boom pinning system.  
Maximum tip height: 214 ft (65.2 m)

### Boom nose

Seven nylon sheaves mounted on heavy-duty tapered roller bearings with removable pin type guards. Quick reeve boom nose. Removable single sheave auxiliary boom nose with removable pin-type rope guard.

### Boom elevation

Single hydraulic cylinder with integral holding valve provides boom elevation from -2° to +80°.

### Manual bi-fold swingaway extension

11,2 m – 17,8 m (36.7 ft – 58.4 ft) bi-fold lattice swingaway extension. Offsets at 0°, 15°, 30° and 50°. Stows alongside base boom section.  
Maximum tip height: 83,2 m (273 ft)

### Hydraulic bi-fold swingaway extension\*

11,2 m – 17,8 m (36.7 ft – 58.4 ft) bi-fold lattice swingaway extension. Hydraulically offsets from 0° to 50°. Controlled from crane cab. Stows alongside base boom section.  
Maximum tip height: 83,2 m (273 ft)

### Lattice insert\*

One 8 m (26.2 ft) lattice insert. Provides a total extension length of 25.8 m (84.6 ft) when paired with the bi-fold swingaway extension.  
Maximum tip height: 91,1 m (299 ft)

### Crane Control System (CCS)

Rated Capacity Limiter (RCL) with graphical display. Load moment and anti-two block system with audio-visual warning and control lever lockout. This system provides electronic display of boom angle, boom length, load radius, boom tip height, maximum permissible load, actual load and warning of impending two-block condition. Also includes an Operating display which shows the crane operating indicators, levels, warnings and faults. Other features include a Working Range Limiter (WRL) which allows the operator to preselect and define working areas. If the crane approaches the operator preset limits, audio-visual warnings aid the operator in avoiding obstructions. ECO mode system to control engine rpm to lower noise and improve fuel consumption. Operator-programmable function speeds and ramps.

### Cab

Operator-controlled 20° hydraulic cab tilt, full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe seat with headrest, incorporates armrest-mounted electronic programmable single-axis or dual-axis controllers and a jog dial for easy data input. Tilt/telescoping steering wheel with controls incorporated into the steering column. Other standard features include heater (hot water), circulating air fan, high-output air conditioning system, sliding skylight with sunscreen, windshield and skylight washer/wiper, windshield sun visor, fire extinguisher, seat belt, USB charging port, pivoting cup holder, and dual cab-mounted work lights.

### Swing

Variable speed, 360° continuous rotation. Planetary swing drive with foot actuated multi-disc brake. Spring-applied, hydraulically released swing brake. Two-position mechanical swing lock pin, operated from cab.  
Maximum speed: 1.1 rpm

### Counterweight

25 764 kg (56,800 lb) hydraulically installed and removed. Controlled via CCS operating display in cab or via wireless rigging remote.

### Hoist

Main and auxiliary hoists with grooved drums, axial piston motors, planetary gears and multiple disc brakes. Electronic hoist drum rotation indicator alerts operator of hoist movement. Third wrap indicator with hoist function cut-out and hoist mirrors is standard.

Hoist line pull:

First layer: 10 614 kg (23,400 lb)

Maximum line speed:

140 m/min (458 ft/min)

Maximum permissible line pull:

7784 kg (17,160 lb)

Rope construction:

35 x 7 rotation-resistant

Rope diameter:

19 mm (3/4 in)

Rope length:

Main hoist: 294 m (964.5 ft)

Auxiliary hoist: 233 m (764.4 ft)

\* Denotes optional equipment

## Carrier

### Chassis

Parallel box section fabricated from high-strength, low-alloy steel. Removable outrigger boxes. Front and rear lift, towing and tie-down lugs.

### Outrigger system

Four hydraulic telescoping, single-stage, double box beam outriggers with inverted jack cylinders and integral holding valves. Three position settings: 0%, 50% and 100% (fully extended). Outrigger Monitoring System (OMS) with in-cylinder sensors. Outrigger beam position shown on RCL display. Outrigger boxes are removable for ease of transportation, with pinning controls on the carrier.

Steel outrigger floats 610 mm (24 in) diameter.  
Maximum outrigger pad load: 75 296 kg (166,000 lb)

### Outrigger controls

Main controls and crane level indicator located in cab. Extension and retraction are through the CCS system as well as the wireless rigging remote.

### Hydraulic system

Two piston pumps and two gear pumps with a combined capacity of 573 l/min (151.5 gpm)  
Maximum operating pressure: 4350 psi (300 bar)  
Return line in-tank filter with full flow by-pass protection and service indicator. Replaceable cartridge with 4-micron filtration rating per ISO cleanliness level of 17/15/12. Superstructure-mounted oil cooler with thermostatically controlled electric motor driven fan/air to oil. System pressure test ports.  
738 l (195 gal) hydraulic reservoir.

### Engine (Tier 4 Final/Stage V)

Cummins B6.7L diesel engine with after-treatment system. Six-cylinder, turbo-charged and after-cooled engine. 224 kw (300 HP) at 2,500 rpm. Maximum torque: 1288 Nm (950 lb-ft) at 1500 rpm.  
Meets emissions per U.S. EPA Tier 4 Final and E.U. Stage V.  
Fuel requirement: Maximum of 15 ppm sulfur content (ultra low sulfur diesel). Diesel exhaust fluid required.  
Please review your country's appropriate engine emissions standards before selecting an engine.

### Engine (non-certified)

Cummins B6.7L diesel engine without aftertreatment system. Six-cylinder, turbo-charged and after-cooled engine. 224 kw (300 HP) at 2,500 rpm. Maximum torque: 1288 Nm (950 lb-ft) at 1500 rpm.  
Fuel requirement: Maximum of 5000 ppm sulfur diesel fuel.  
Please review your country's appropriate engine emissions standards before selecting an engine.

### Fuel tank capacity

312 l (82 gal)

### Transmission

Rangeshift with torque convertor. Six forward and six reverse speeds. (Three speeds high and three speeds low). Rear axle disconnect for two-wheel drive.

### Axles

Axle 1: Drive/steer with differential and planetary reduction hubs rigid mounted to frame.  
Axle 2: Steer only. Automatic full hydraulic lockouts on rear axle permits 152 mm (6 in) of oscillation for jobsite travel.  
Axle 3: Drive/steer with differential and planetary reduction hubs. Automatic full hydraulic lockouts on rear axle permits 152 mm (6 in) of oscillation for jobsite travel.

### Brakes

Full hydraulic split (dual) circuit dry disc operating on all wheels with dual calipers. High-pressure parking brake is spring applied/hydraulically released, mounted on the front axle.

### Steering

Fully independent hydraulic power steering. Front axle controlled via steering wheel. Rear axles are mechanically linked and are controlled via separate momentary switch in cab. Rear steer alignment indicator included.  
Four steering modes: two-wheel front, four-wheel rear, six-wheel coordinated and six-wheel crab  
Outside six-wheel coordinated steer radius: 10,2 m (33.5 ft)  
Inside six-wheel coordinated steer radius: 7,4 m (24.2 ft)

### Suspension

Front axle: Rigid mounted to frame.  
Rear axles: Hydro-gas suspension that provides +/- 76,2 mm (3 in) of travel from ride height for reduced transportation height.

### Tires

26.5 x 25 – 44 bias ply rating

### Lights

Full lighting package, including turn indicators; head, tail, brake and hazard warning lights; and work lights mounted on cab front.

# Specifications

## Carrier



### Electrical system

Two 12 V maintenance-free batteries provide 24 V electrical system. Lockable battery disconnect located on carrier.



### Maximum drive speed

24 km/h (15 mph) with no counterweight  
(boom over rear w/ boom angle between 0° and 20°)  
16 km/h (10 mph) with full counterweight  
(boom over front w/ boom angle between 0° and 20°)  
4 km/h (2.5 mph) with no counterweight  
(boom over front w/ boom angle between 0° and 20°)



### Gradeability (theoretical)

93% to drivetrain stall based on 86 580 kg (190,877 lb) GVW with 26.5 x 25 tires, 25 764 kg (56,800 lb) counterweight, main and auxiliary hoist, manual bi-fold extension, 100 t (110 USt) hook block and 11 t (12 USt) overhaul weight.

### Miscellaneous standard equipment

Full-length aluminum decking, dual rear-view mirrors, hoist mirrors, hook block tie-down, electronic back-up alarm, carrier storage boxes, cab heat and air conditioning system, Operating hour display, A/V warning system, combination lift/tie-down/towing lugs, hoist access platform, sling assemblies for self-rigging of removable components, cab-controlled differential locks, and wireless rigging remote.


















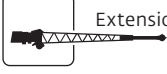











### Optional equipment\*

- Auxiliary Lighting and Convenience Package: Includes superstructure-mounted amber flashing beacon, dual base boom mounted floodlights controlled from cab, in-cab RCL light bar and rubber mat for storage trough.
- 11,2 m to 17,8 m (36.7 ft to 58.4 ft) bi-fold swingaway, hydraulically offset from 0° to 50° in lieu of the standard manually offsettable swingaway
- 1 x 8 m (26.2 ft) lattice boom insert
- Boom nose-mounted, boom position indicator light
- Wind speed indicator
- Three-camera package (back-up, right side and hoists)
- Bluetooth/AM/FM radio
- Vertical RCL light tower (external)
- Heated seat
- Emergency stop buttons on each side of carrier
- Rear pintle hitch
- 360° NYC-style mechanical swing lock
- -29°C/-20°F cold weather package
- -40°C/-40°F arctic weather package
- CraneSTAR telematic system

\* Denotes optional equipment



# Symbols glossary

|   |                |   |                      |   |                    |   |              |
|---|----------------|---|----------------------|---|--------------------|---|--------------|
|    | Axles          |    | Counterweight        |    | Hydraulic system   |  | Steering     |
|    | Boom           |    | Crane control system |    | Insert             |  | Suspension   |
|    | Boom elevation |    | Electrical system    |    | Lights             |  | Swing        |
|    | Boom extension |    | Engine               |    | Outrigger controls |  | Tires        |
|    | Boom nose      |    | Extension            |    | Outriggers         |  | Transmission |
|   | Brakes         |   | Fuel tank capacity   |   | Radius             |   |              |
|  | Cab            |  | Grade                |  | Rotation           |   |              |
|  | Chassis        |  | Hoist                |  | Speed              |   |              |

## Manitowoc Cranes

### Regional headquarters

#### Americas

**Milwaukee, Wisconsin, USA**

Tel: +1 414 760 4600

**Shady Grove, Pennsylvania, USA**

Tel: +1 717 597 8121

Fax: +1 717 597 4062

#### Europe and Africa

**Dardilly, France - TOWERS**

Tel: +33 (0)4 72 18 20 20

Fax: +33 (0)4 72 18 20 00

**Wilhelmshaven, Germany - MOBILE**

Tel: +49 (0) 4421 294 0

Fax: +49 (0) 4421 294 4301

#### China

**Shanghai, China**

Tel: +86 21 6457 0066

Fax: +86 21 6457 4955

#### Middle East and Greater Asia-Pacific

**Singapore**

Tel: +65 6264 1188

Fax: +65 6862 4040

**Dubai, UAE**

Tel: +971 4 8862677

Fax: +971 4 8862678/79



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