

# **Grove RT530E-2**

# **Product Guide**



# **Features**

## Tip height

Maximum tip height of 44,5 m (146 ft) w ith 13,7 m (45 ft) telescopic extension.



## Boom shape

The RT530E-2 incorporates a rectangular boom shape made from 100 k.s.i. steel which eliminates weight and maximizes structural capacities.



## Crane Control System (CCS)

The new Crane Control System offers a user-friendly interface, two full graphic displays mounted vertically for better visibility, and a jog dial for easier data input.

## Cab

The Full Vision cab with tilt-telescoping steering wheel, single or dual-axis controllers, hot water heat and air conditioning provide all day comfort for the operator.



# CraneSTXR

CraneSTAR is an exclusive and innovative crane asset management system that helps improve your profitability and reduce costs by remotely monitoring critical crane data. Visit www.cranestar.com for more information.

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# **Specifications**

#### Superstructure



## **Boom**

8,8 m - 29,0 m (29 ft - 95 ft ) four-section, synchronized full power boom.

Maximum tip height: 31,2 m (102.5 ft).



# \* Optional telecopic swingaway extension

7,9 m - 13,7 m (26 ft - 45 ft) offsettable telescopic lattice swingaway extension. Offsets at 0° and 30°. Stows alongside base boom section.

Maximum tip height: 44,5 m (146 ft).



#### **Boom nose**

Three nylatron sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeve type boom nose.



#### **Boom elevation**

One double-acting hydraulic cylinder with integral holding valve provides elevation from -3° to +76°.



## **Crane Control System (CCS)**

"Graphic Display" load moment and anti-two block system with audio-visual warning and control lever lockout. This system provides electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block condition. The Work Area Definition System allows the operator to pre-select and define safe working areas. If the crane approaches the pre-set limits, audio-visual warnings aid the operator in avoiding job-site obstructions.



#### Cab

Full-vision, all-steel fabricated with acoustical lining and tinted safety glass throughout. Adjustable deluxe seat incorporates armrest-mounted electronic single or dual axis controllers and a jog dial for easier data input. Tilt/telescoping steering wheel with various controls incorporated into the steering column. Other standard features include: hot water heater, cab circulating air fan, sliding side and rear windows, sliding skylight with electric wiper and sunscreen, electric windshield wash/ wipe, fire extinguisher, seat belt, air conditioning, and dual cab mounted work light.



## Hydraulic system

Two main pumps ([1] piston and [1] gear) with a combined capacity of 316,5 LPM (83.6 GPM). Maximum operating pressure: 275,7 bar (4000 psi). Three section pressure compensated valve bank. Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16. 396 L (104.6 gal) hydraulic reservoir. System pressure test ports.



# Hoist specifications (HP15C-17G) main and auxiliary hoist

Planetary reduction with automatic spring applied multi-disc wet brake. Electronic hoist drum rotation indicators, and hoist drum cable followers.

Maximum single line pull:

1st layer: 5280 kg (11,640 lb) 3rd layer: 4323 kg (9530 lb) 5th layer: 3656 kg (8060 lb)

Maximum permissible line pull:

5280 kg (11,640 lb) with 35 x 7 class rope

Maximum single line speed: 136 m/min (445 fpm)

Rope construction:

35 x 7 Rotation Resistant

Rope diameter: 16 mm (5/8 in)

Rope length:

Main hoist: 137,0 m (450 ft) Auxillary hoist: 137,0 m (450 ft)

Maximum Rope Stowage: 181 m (596 ft)

# **Specifications**



## Swing

Single speed, planetary swing drive with foot applied multi-disc wet brake. Spring applied, hydraulically released swing brake. Single position mechanical house lock, operated from cab.

Maximum speed: 2.0 rpm



## Counterweight

3817 kg (8416 lb) pinned to superstructure.

#### Carrier



#### Chassis

Box section frame fabricated from high-strength, low alloy steel. Front/rear towing, lifting, and tie down lugs.



## Outrigger system

Four hydraulic telescoping single-stage double box beam outriggers with inverted jacks and integral holding valves.

Three position setting, 0%, 50% and fully extended. All steel fabricated quick release type outrigger floats, 362 mm (14.25 in) square.

Maximum outrigger pad load: 24 857 kg (54,800 lb) Outrigger monitoring comes standard (required in North America, Canada, and E.U. Countries).



## **Outrigger controls**

Controls and crane level indicator located in cab.



## **Engine (Tier IV)**

Cummins QSB 6.7 L diesel, six cylinders, turbocharged with Cummins Diesel Oxidation Catalyst filter/muffler. Meets emissions per U.S.E.P.A. Tier IV and E.U. Stage III B. 122 kW (164 bhp) at 2300 rpm. Maximum torque: 731 N-m (539 ft lb) at 1500 rpm. Fuel requirement: Maximum of 15 ppm sulphur content (Ultra Low Diesel Fuel).

Note: Tier IV engine Required in North American, Canada, and European Union countries.



## **Engine (Tier III)**

Cummins QSB 6.7 L diesel, six cylinders, 119 kW (160 bhp) (Gross) at 2500 rpm.

(160 bhp) (Gross) at 2500 rpm. Maximum torque: 731 Nm (539 ft lb) at 1500 rpm.



## Fuel tank capacity

220 L (58 gal)



#### **Transmission**

Range-shift 6 speed (3 speeds x 2 range, both forward and reverse).



## **Electrical system**

Four (4) 12V maintenance free batteries. 24V starting and lighting. Battery disconnect. Full CanBus diagnostic system.



4 x 4



## Steering

Fully independent power steering:

Front: Full hydraulic steering wheel controlled.

Rear: Full hydraulic switch controlled.

Provides infinite variations four main steering modes:

front only, rear only, crab, and coordinated.

Rear steer indicator.

Outside turning radius: 5,8 m (19.1 ft) Inside turning radius: 4,0 m (13.1 ft)



## Axles

Front: Drive/steer with differential and planetary reduction hubs rigid mounted to frame.

Rear: Drive/steer with differential and planetary reduction hubs pivot mounted to frame.

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#### Oscillation lockouts

Automatic full hydraulic lockouts on rear axle permits 25,4 cm (10 in) oscillation with boom centered over the front only.



## **Brakes**

Full hydraulic split circuit disc-type brakes operating on all wheels. Spring-applied, hydraulically released parking brake mounted on front axle.



#### **Tires**

Standard: 20.5 x 25 - 24 bias ply \*Option: 16.0 x 25-28 bias ply

# **Specifications**

#### **Carrier continued**



## Lights

Full lighting including turn indicators, head, tail, brake and hazard warning lights.



## Maximum speed

40 kph (25 mph) at 2500 rpm



## Gradeability (theoretical)

119% (at engine stall) (Based on 27 006 kg [59,537 lb] GVW) 20.5 x 25 tires, 29,0 m (95 ft) main boom, plus 13,7 m (45 ft) telescopic swingaway, 3817 kg (8416 lb) counterweight, 27 t (30 USt) hookblock and 6,8 t (7.5 USt) headache ball.

## Miscellaneous standard equipment

Full width steel fenders, full length steel decking with anti-skid, dual rear view mirrors, hook-block tiedown, electronic back-up alarm, light package, front stowage well, tachometer/hourmeter, rear wheel position indicator, 36,000 Btu hot water cab heater, air conditioning (28,500 Btu), hoist mirrors, engine distress A/V warning system, front/rear tie down and tow lugs, coolant sight level indicator, CraneSTAR asset management system.

## \*Optional equipment

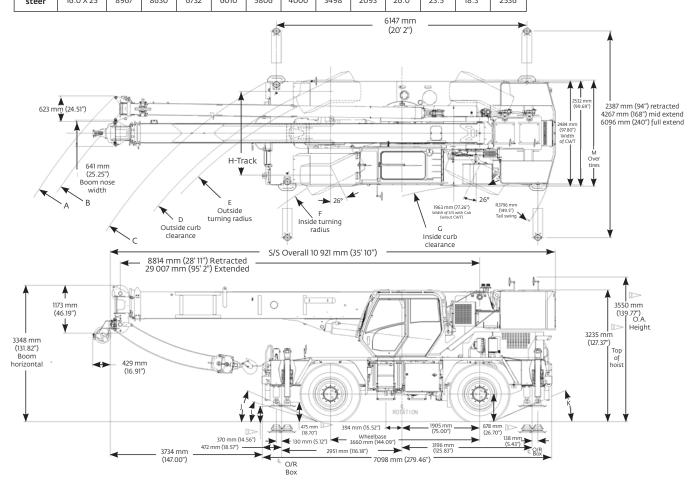
- VALUE PACKAGE: Includes 7,92 m 13,7 m (26 ft - 45 ft) telescoping swingaway and 360° NYC style positive swing lock
- AUXILIARY HOIST PACKAGE: Includes Model HP15C-17G auxiliary hoist with electronic hoist drum rotation indicator, hoist drum cable follower, 137,0 m (450 ft) of 16 mm (5/8 in) 35 x 7 class wire rope and auxiliary single sheave boom nose.
- AUXILIARY LIGHTING PACKAGE: Includes S/S mounted amber flashing light and dual base boom mounted halogen floodlights, LMI light bar (in cab) and rubber mat for stowage trough.
- LMI light bar (in cab)
- ≥ 360° NYC style mechanical swing lock
- Rear Pintle hook
- Cab-controlled cross axle differential locks (front and rear)
- PAT Data logger down-load kit
- Single axis electric controllers
- Third wrap indicator with hoist cut-out for main hoist or main and auxiliary hoist

# **Dimensions and weights**

#### Dimensions Tire Size G М J 20.5 X 25 12 838 12 428 10 899 10 236 10 007 8138 7021 2055 22.5° 2606 Wheel 16.0 X 25 26.0° steer 20.5 X 25 8630 2055 22.5° 17.3° 2606 4 Wheel 16.0 X 25 4000 8967 8630 6732 6010 5806 3498 2093 26.0° 23.5° 18.3° 2536

#### Notes: (All dimensions are in mm)

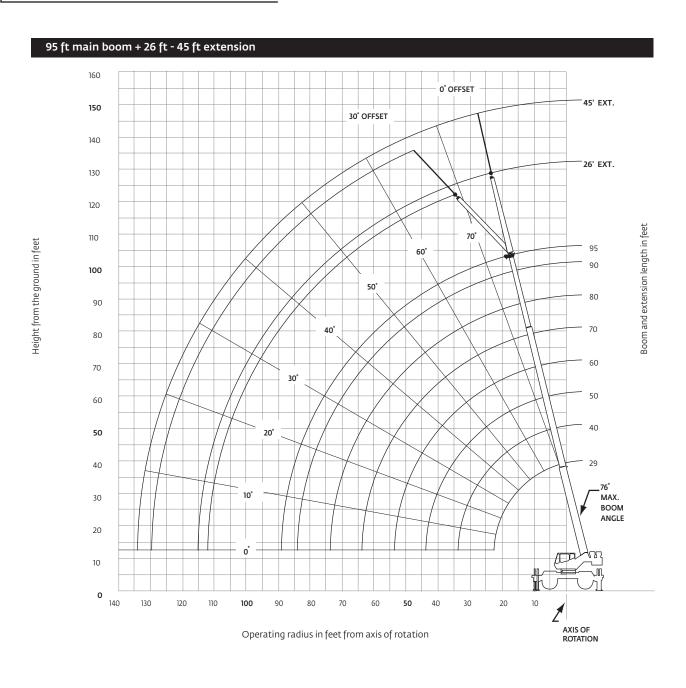
- 1. All dimensions are for reference only
- 2. Boom elevation is -3° to +76°
- 3. Dimensions shown are based on 20.5 x 25 tires. Add 34,5 mm for 16.0 x 25 tires.

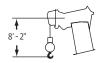


| Weights  |        |        |        |        |        |        |
|--|--------|--------|--------|--------|--------|--------|
|  | G\     | /W     | Front  |        | Rear   |        |
|  | kg     | (Ib)   | kg     | (Ib)   | kg     | (lb)   |
| RT530E-2 Basic Machine:  Basic Machine including 31,0 m (95 ft) main boom, main hoist with 137,0 m (450 ft) of rope, full counterweight + IPO, 6,8 t (7.5 USt) headache ball, and 27 t (30 USt) hookblock: | 26 273 | 57,921 | 11 727 | 25,853 | 14 546 | 32,068 |
| ADD: Auxiliary hoist + 137,0 m (450 ft) of 35x7 hoist cable and auxiliary boom nose ILO IPO C/W  | 26 494 | 58,409 | 11 794 | 26,001 | 14 700 | 32,408 |
| ADD: 7,9 m - 13,7 m (26 ft - 45 ft) telescopic boom extension + extension hangers  | 27 404 | 60,415 | 13 161 | 29,015 | 14 243 | 31,400 |

Grove RT530E-2

# Working range







Dimensions are for largest Grove furnished hookblock and headache ball, with anti-two block activated.

|              |                  | F                                       | Q                |                  |                  |                  |                  |                  |
|--------------|------------------|---|------------------|------------------|------------------|------------------|------------------|------------------|
| 9 ft - 95 ft | 8416 lb          | 100%                                    | 360°             |                  |                  |                  |                  |                  |
|              |                  | 20 ft spread                            |                  | POL              | ınds             |                  |                  |                  |
| Q —          |                  |   |                  |                  | 11103            |                  |                  |                  |
| Feet         | 29               | 40                                      | 50               | 60               | 70               | 80               | 90               | 95               |
| 10           | 60,000<br>(60.5) | 50,100<br>(69.5)                        | 46,950<br>(74.5) |                  |                  |                  |                  |                  |
| 12           | 54,650<br>(56)   | 50,100<br>(66.5)                        | 44,950<br>(72)   | *38,850<br>(76)  |                  |                  |                  |                  |
| 15           | 42,850<br>(47.5) | 43,800<br>(61.5)                        | 41,050<br>(68)   | 36,000<br>(72)   | *29,450<br>(76)  | *22,450<br>(76)  |                  |                  |
| 20           | 30,700<br>(30)   | 31,650<br>(53)                          | 32,100<br>(61.5) | 29,500<br>(67)   | 27,400<br>(71)   | 22,450<br>(73.5) | *18,550<br>(76)  | *15,500<br>(76)  |
| 25           |                  | 24,050<br>(42.5)                        | 24,500<br>(54.5) | 24,800<br>(61.5) | 23,100<br>(66.5) | 19,250<br>(70)   | 16,500<br>(72.5) | 15,300<br>(74)   |
| 30           |                  | 18,800<br>(29)                          | 19,250<br>(47)   | 19,550<br>(56)   | 19,600<br>(61.5) | 16,850<br>(66)   | 14,400<br>(69)   | 13,200<br>(70.5) |
| 35           |                  |   | 15,550<br>(38)   | 15,850<br>(49.5) | 16,000<br>(56.5) | 14,850<br>(61.5) | 12,700<br>(65.5) | 11,500<br>(67.5) |
| 40           |                  |   | 12,800<br>(26)   | 12,950<br>(42.5) | 13,000<br>(51.5) | 13,050<br>(57.5) | 11,000<br>(62)   | 10,000<br>(64)   |
| 45           |                  |   |                  | 10,450<br>(34.5) | 10,500<br>(46)   | 10,550<br>(53)   | 9630<br>(58.5)   | 9060<br>(60.5)   |
| 50           |                  |   |                  | 8610<br>(23.5)   | 8630<br>(39.5)   | 8670<br>(48)     | 8720<br>(54.5)   | 7990<br>(57)     |
| 55           |                  |   |                  |                  | 7170<br>(32)     | 7200<br>(43)     | 7250<br>(50)     | 7100<br>(53)     |
| 60           |                  |   |                  |                  | 6000<br>(22)     | 6030<br>(37)     | 6100<br>(45.5)   | 6110<br>(49)     |
| 65           |                  |   |                  |                  |                  | 5080<br>(30)     | 5120<br>(40.5)   | 5150<br>(44.5)   |
| 70           |                  |   |                  |                  |                  | 4270<br>(20.5)   | 4330<br>(35)     | 4350<br>(40)     |
| 75           |                  |   |                  |                  |                  |                  | 3650<br>(28.5)   | 3700<br>(34.5)   |
| 80           |                  |   |                  |                  |                  |                  | 3100<br>(20)     | 3100<br>(28)     |
| 85           |                  |   |                  |                  |                  |                  |                  | 2600<br>(20)     |
|              |                  | rindicated length<br>at 0° boom angle ( |                  |                  |                  |                  |                  | 0<br>95          |

Note: Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions. \*This capacity is based on maximum boom angle.

|               | Lifting capacities at zero degree boom angle<br>On outriggers fully extended - 360° |                  |                  |                 |                        |                |                |              |
|---------------|---|------------------|------------------|-----------------|------------------------|----------------|----------------|--------------|
| Boom<br>angle | 29  | 40               | 50               | Main boor<br>60 | n length in feet<br>70 | 80             | 90             | 95.2         |
| 0°            | 26,100<br>(22.8)  | 15,800<br>(33.8) | 11,000<br>(43.8) | 7430<br>(53.8)  | 5220<br>(63.8)         | 3730<br>(73.8) | 2660<br>(83.8) | 2220<br>(89) |

Note () Reference radii in feet.

A6-829-101755

|   |                  |                | [ <u></u> ]    |                |
|---|------------------|----------------|----------------|----------------|
| 29 ft - 95 ft   | 26 ft - 45 ft    | 8416 lb        | 100%           | 360°           |
|   |                  | Pound          | Is             |                |
|   | **26 LENG        |                |                | ENGTH          |
| Ö   | #0021            | #0023          | #0041          | #0043          |
| Feet  | 0°<br>OFFSET     | 30°<br>OFFSET  | 0°<br>OFFSET   | 30°<br>OFFSET  |
| 30  | *8200<br>(76)    |                |                |                |
| 35  | 8200<br>(73.5)   |                | *5250<br>(76)  |                |
| 40  | 8200<br>(71)     | *5780<br>(76)  | 5250<br>(75)   |                |
| 45  | 8120<br>(68.5)   | 5780<br>(73.5) | 4940<br>(73)   |                |
| 50  | 7350<br>(66)     | 5360<br>(71)   | 4540<br>(71)   |                |
| 55  | 6370<br>(63)     | 4750<br>(68)   | 4150<br>(68.5) | *2730<br>(76)  |
| 60  | 5670<br>(60.5)   | 4290<br>(65)   | 3890<br>(66)   | 2730<br>(74.5) |
| 65  | 4820<br>(57.5)   | 3870<br>(62)   | 3740<br>(64)   | 2730<br>(72)   |
| 70  | 4200<br>(54.5)   | 3530<br>(59)   | 3600<br>(61.5) | 2580<br>(69.5) |
| 75  | 3680<br>(51.5)   | 3230<br>(56)   | 3470<br>(59)   | 2520<br>(67)   |
| 80  | 3080<br>(48.5)   | 3000<br>(52.5) | 3240<br>(56.5) | 2460<br>(64)   |
| 85  | 2520<br>(45)     | 2780<br>(49)   | 3050<br>(54)   | 2420<br>(61.5) |
| 90  | 2050<br>(41)     | 2410<br>(45)   | 2820<br>(51)   | 2390<br>(58.5) |
| 95  | 1670<br>(37)     | 1970<br>(40.5) | 2480<br>(48.5) | 2370<br>(55.5) |
| 100   | 1370<br>(32.5)   | 1580<br>(35.5) | 2090<br>(45.5) | 2310<br>(52)   |
| 105   | 1020<br>(27.5)   |                | 1740<br>(42)   | 2000<br>(49)   |
| 110   |                  |                | 1430<br>(38.5) | 1580<br>(45)   |
| 115   |                  |                | 1150<br>(35)   | 1260           |
| 120   |                  |                | 900 (30.5)     |                |
| Minimum boo<br>angle (°) for<br>indicated lend<br>(no load) | 24               | 30°            | 30°            | 30°            |
| Maximum bo<br>length (ft) at<br>0° boom angl<br>(no load)   | 80               | ft             | 80             | ) ft           |
| #LMI operating  | g code. Refer to | LMI manual     | l for A        | .6-829-100272A |

#LMI operating code. Refer to LMI manual for

| 29 ft - 95 ft 26  | ft - 45 ft            | 8416 lb                | 50%<br>14 ft spread   | 360°                   |
|---|-----------------------|------------------------|-----------------------|------------------------|
|   | VAAAAAA               | Poun                   |                       |                        |
|   | **26 LE               | NGTH                   | 45 ft                 | LENGTH                 |
| Feet  | #4021<br>0°<br>OFFSET | #4023<br>30°<br>OFFSET | #4041<br>0°<br>OFFSET | #4043<br>30°<br>OFFSET |
| 30  | *8200<br>(76)         |                        |                       |                        |
| 35  | 8200<br>(73.5)        |                        | *5250<br>(76)         |                        |
| 40  | 6940<br>(71)          | *5780<br>(76)          | 5250<br>(75)          |                        |
| 45  | 5580<br>(68.5)        | 5780<br>(73.5)         | 4940<br>(73)          |                        |
| 50  | 4490<br>(66)          | 5360<br>(71)           | 4540<br>(71)          |                        |
| 55  | 3600<br>(63)          | 4350<br>(68)           | 4150<br>(68.5)        | *2730<br>(76)          |
| 60  | 2860<br>(60.5)        | 3430<br>(65)           | 3490<br>(66)          | 2730<br>(74.5)         |
| 65  | 2190<br>(57.5)        | 2670<br>(62)           | 2870<br>(64)          | 2730<br>(72)           |
| 70  | 1610<br>(54.5)        | 2030<br>(59)           | 2340<br>(61.5)        | 2580<br>(69.5)         |
| 75  | 1120<br>(51.5)        | 1490<br>(56)           | 1840<br>(59)          | 2520<br>(67)           |
| 80  |                       | 1020<br>(52.5)         | 1400<br>(56.5)        | 2260<br>(64)           |
| 85  |                       |                        | 1020<br>(54)          | 1760<br>(61.5)         |
| 90  |                       |                        |                       | 1310<br>(58.5)         |
| 0.1A(lb)  | 570                   | 540                    | 500                   | 460                    |
| Minimum boor<br>angle (°) for<br>indicated lengt<br>(no load)   | 44°                   | 46°                    | 48°                   | 49°                    |
| Maximum boo<br>length (ft) at<br>0° boom angle  |                       | 0 ft                   | 6                     | 0 ft                   |
| (no load)  Note: () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for instructions.  *This capacity is based on maximum boom angle.  **26 ft capacities are also applicable to fixed offsettable ext. However, the LMI codes will change to #4051 and #4053 for 0° and 30° offset, respectively. |                       |                        |                       |                        |

#### **BOOM EXTENSION CAPACITY NOTES:**

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 26 ft and 45 ft boom extension lengths may be used for single line lifting service.
- 3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.

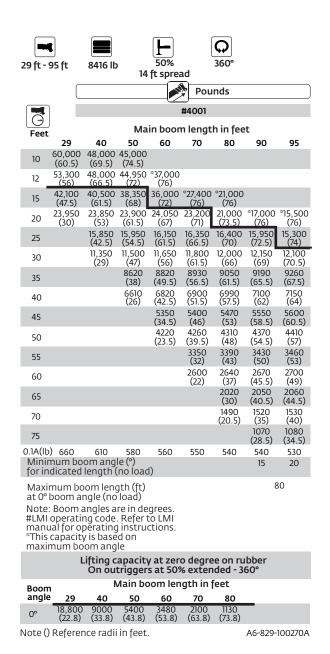
WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.

- 4. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- 5. Capacities listed are with outriggers fully extended and vertical jacks set only.

<sup>#</sup>LMI operating code. Refer to LMI manual for instructions.

\*This capacity is based on maximum boom angle.

\*"26 ft capacities are also applicable to fixed offsettable ext. However, the LMI codes will change to #0051 and #0053 for 0° and 30° offset, respectively.

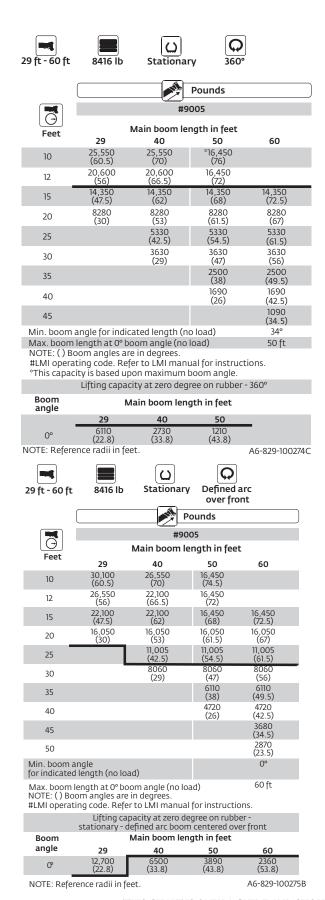


Q 8416 lb 360° 29 ft - 95 ft 0% 7 ft 10 in spread **Pounds** #8001  $\Theta$ Main boom length in feet Feet 70 80 90 95 50 60 30,400 (74.5) 10 (60.5) (69.5) 26,200 (56) 25,400 (66.5) 24,100 (72) 22,90 (76) 12 17.750 17.550 17.550 17.250 15 (72) (47.5) (61.5) (68) (76)(76) 10,650 10,600 10,750 (67) 10,500 (76) 11,000 20 (30)(53) (71) (76)(61.5)(735)6930 7020 7350 7560 7490 25 (42.5) (54.5) (61.5) (66.5) (70) (72.5)(74) 4780 (47) 4950 (56) 5080 (61.5) 5240 (66) 5390 (69) 5480 (70.5) 4670 (29) 30 3660 (61.5) 3780 (65.5) 3450 3850 35 (49.5) (67.5) 2170 (26) 2440 (51.5) 2520 (57.5) 2620 (62) 2670 40 (42.5)(64)1550 (34.5) 1600 (46) 1660 (53) 1780 1740 45 (58.5) (60.5) 1080 1050 50 (57)0.1A(lb) 660 610 550 540 540 530 Minimum boom angle (°) for indicated length (no load) 51 53 55 Maximum boom length (ft) at 0° boom angle (no load) 50 Note: Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions. This capacity is based on maximum boom angle

| Lifting capacity at zero degree on rubber<br>On outriggers at 0% extended - 360° |                |                |                |  |  |  |
|--|----------------|----------------|----------------|--|--|--|
| Boom Main boom length in feet  |                |                |                |  |  |  |
| angle  | 29             | 40             | 50             |  |  |  |
| 0°   | 8310<br>(22.8) | 3390<br>(33.8) | 1480<br>(43.8) |  |  |  |
|  |                |                |                |  |  |  |

Note () Reference radii in feet.

Courtesy of Crane. Market



| 29 ft - 60 ft  | 8416 lb                        | Pick & Car<br>(max. 2.5 m<br>20.5 x 25 ti | iph) over        | entered<br>front |  |
|--|--------------------------------|---|------------------|------------------|--|
|  |                                |   | Pounds           |                  |  |
| $\bigcirc$   |                                | #9<br>Nain boom le                        | 006              |                  |  |
| Feet   | 29                             | 40  | 50               | 60               |  |
| 10   | 25,900<br>(60.5)               | 25,900<br>(70)                            | 18,250<br>(74.5) |                  |  |
| 12   | 22,350<br>(56)                 | 22,350<br>(66.5)                          | 18,250<br>(72)   |                  |  |
| 15   | 18,250<br>(47.5)               | 18,250<br>(62)                            | 18,250<br>(68)   | 13,350<br>(72.5) |  |
| 20   | 13,350<br>(30)                 | 13,350<br>(53)                            | 13,350<br>(61.5) | 13,350<br>(67)   |  |
| 25   |                                | 10,350<br>(42.5)                          | 10,350<br>(54.5) | 10,350<br>(61.5) |  |
| 30   |                                | 8060<br>(29)                              | 8060<br>(47)     | 8060<br>(56)     |  |
| 35   | •                              |   | 4810<br>(38)     | 4810<br>(49.5)   |  |
| 40   |                                |   | 3770<br>(26)     | 3770<br>(42.5)   |  |
| 45   |                                |   |                  | 2930<br>(34.5)   |  |
| 50   |                                |   |                  | 2240<br>(23.5)   |  |
|  | oom angle (°<br>d length (no l |   |                  | 0°               |  |
| Maximum boom length (ft) 60 ft at 0° boom angle (no load) Note: Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions. |                                |   |                  |                  |  |
| Lifting capacity at zero degree on rubber  |                                |   |                  |                  |  |

| Lifting capacity at zero degree on rubber<br>Pick & Carry - boom centered over front |                               |                |                |                |  |  |  |
|--|-------------------------------|----------------|----------------|----------------|--|--|--|
| Boom   | Boom Main boom length in feet |                |                |                |  |  |  |
| angle  | 29                            | 40             | 50             | 60             |  |  |  |
| 0°   | 11,400<br>(22.8)              | 5090<br>(33.8) | 3110<br>(43.8) | 1800<br>(53.8) |  |  |  |
| Note () Refer  |                               | A6-829-1002761 |                |                |  |  |  |

#### NOTES TO ALL RUBBER CAPACITY CHARTS:

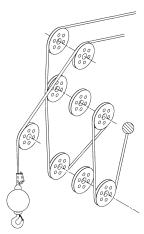
- 1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
- 2. Capacities are applicable to machines equipped with 20.5 x 25 (24 ply) tires at 75 psi cold inflation pressure, and 16.00 x 25 (28 ply) tires at 100 psi cold inflation pressure.
- 3. Defined Arc Over front includes 6° on either side of longitudinal centerline of machine (ref. drawing C6-829-003529).
- 4. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
- $5. \ \ Capacities \ are \ applicable \ only \ with \ machine \ on \ firm \ level \ surface.$
- ${\it 6. \ On \ rubber \ lifting \ with \ boom \ extensions \ not \ permitted}.$
- For pick and carry operation, boom must be centered over front
  of machine, mechanical swing lock engaged and load restrained
  from swinging. When handling loads in the structural range with
  capacities close to maximum ratings, travel should be reduced to
  creep speeds.
- 8. Axle lockouts must be functioning when lifting on rubber.
- All lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity chart for tire used. Damaged tires are hazardous to safe operation of crane.
- 10. Creep Not over 200 ft of movement in any 30 minute period and not exceeding 1 mph.

# **Load handling**

| Weight reductions for load handling devices |        |  |  |  |  |
|---|--------|--|--|--|--|
| 26 ft Offsettable boom extension            | Pounds |  |  |  |  |
| *Erected                                    | 2960   |  |  |  |  |
| 26 ft - 45 ft Telescopic boom extnesion     | Pounds |  |  |  |  |
| *Erected (retracted)                        | 4220   |  |  |  |  |
| *Erected (extended)                         | 5780   |  |  |  |  |
| * Reduction of main boom capacities         |        |  |  |  |  |
| Auxiliary boom nose                         | Pounds |  |  |  |  |
|   | 142    |  |  |  |  |
| Hookblocks and headache balls               | Pounds |  |  |  |  |
| 30 USt, 3-sheave                            | 580+   |  |  |  |  |
| 15 USt, 2-sheave                            | 425+   |  |  |  |  |
| 7.5 USt overhaul ball                       | 354+   |  |  |  |  |
| 7.5 USt headache ball 338+                  |        |  |  |  |  |
| + Refer to rating plate for actual weight   |        |  |  |  |  |

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.

**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.



| Line                  | Line pulls and reeving information   |                        |                         |  |  |  |  |
|-----------------------|--|------------------------|-------------------------|--|--|--|--|
| Hoists                | Cable specs  | Permissable line pulls | Nominal cable<br>length |  |  |  |  |
| Main and<br>auxiliary | 16 mm (5/8 in)<br>Flex-X35<br>35 x 7<br>Rotation<br>Resistant (non<br>rotating)<br>Min. Breaking<br>Str. 61,200 lb | 11,640 lb              | 450 ft                  |  |  |  |  |
| Main                  | 16 mm (5/8 in)<br>6 x3 7 class<br>EIPS, IWRC<br>Special Flexible<br>Min. Breaking<br>Str. 41,200 lb                | 11,640 lb              | 450 ft                  |  |  |  |  |

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

| Hoist performance  |                                     |                         |       |  |  |  |
|--------------------|-------------------------------------|-------------------------|-------|--|--|--|
| Wire rope<br>layer | Hoist line pulls<br>two-speed hoist | Drum rope capacity (ft) |       |  |  |  |
|                    | Available lb*                       | Layer                   | Total |  |  |  |
| 1                  | 11,640                              | 77                      | 77    |  |  |  |
| 2                  | 10,480                              | 85                      | 162   |  |  |  |
| 3                  | 9530                                | 94                      | 256   |  |  |  |
| 4                  | 8730                                | 102                     | 358   |  |  |  |
| 5                  | 8060                                | 111                     | 469   |  |  |  |
| 6                  | 7490                                | 119                     | 588   |  |  |  |

\* Max lifting capacity: 6 x 37 class = 11,640 lb 35 x 7 class = 11,640 lb

# Working area diagram Centerline of outrigger support Centerline of boom Centerline of outrigger support Conterline of outrigger support Conterline of crane Conterline of c

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

# Notes

# **Notes**

Courtesy of Crane.Market

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