

Grove YB4400 Series Product Guide



- 1,8 m (6 ft) fixed extension (YB4409/XL) and 3,6 m (12 ft) offsettable swingaway extension (YB4409-2 and YB4411)
- 63,4 kW (85 bhp) Cummins diesel engine or 59,6 kW (80 bhp) GM EFI dual fuel engine

Features



Boom Standard:

6,4m (21 ft) main boom on the YB4409.
9,1m (30 ft) main boom on the YB4409XL.
10, 0 m (32 ft 10 in) main boom on the YB4409-2 and YB4411. **Optional:** Manual fourth main boom section adds 3,0 m (10 ft) additional main boom length on YB4409 and YB4409-XL only.



Engine

Standard: Cummins QSB 3.3 L turbo-charged diesel rated at 63,4 kW (85 bhp) at 2600 rpm.



Pivoting boom nose

Standard on the YB4409-2 and YB4411 the exclusive pivoting boom nose allows operators to decrease the overall boom head depth and operate in more confined areas.



Cab

Standard: Open air cab shell with overhead safety glass

- **Optional:** Closed cab with hinged door, heater/ defroster, and all
- window glass



Steering

Standard: Four-wheel coordinated steer **Standard:** two-wheel, four-wheel, and crab steer with self alignment (YB4411) **Optional:** two-wheel, four-wheel, and crab steer (standard on YB4409-2)

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Specifications

Superstructure

Boom Boom

YB4409: 2,9 m - 6,5 m (9 ft 8 in - 21 ft 2 in) threesection full power boom. Maximum tip height: 7,6 m (25 ft 2 in)

YB4409XL: 3,8 m - 9,2 m (12 ft 8 in -30 ft 2 in) three- section full power boom. Maximum tip height: 10,2 m (33 ft 6 in)

YB4409-2 and YB4411: 4,2 m – 10,0 m (13 ft 10 in – 32 ft 10 in) three-section full power boom.

Maximum tip height: 11,6 m (38 ft 2 in)

*Optional boom

YB4409 and YB4409XL: Manual fourth main boom fly section adds 3,0 m (10 ft) additional boom length.

*Boom extension

YB4409 and YB4409XL: 1,8 m (6 ft) fixed pin on extension

YB4409-2 and YB4411: 3,6 m (12 ft) offsettable extension 3,6 m - 5,4 m (12 ft- 18 ft) telescopic

offsettable extension

Boom nose

YB4409 / XL: Single sheave non-pivoting

YB4409-2 and YB4411: Single sheave, three-position $(0^{\circ}, + 30^{\circ}, + 80^{\circ})$ pivoting boom nose for minimizing head space requirements. Lowers head height. 0,26 m (10.5 in) when nose is pivoted fully forward.



Single double acting hydraulic cylinder with integral holding valve.

Elevation: 0° to 60° for the **YB4409 and YB4409XL** 0° to 72° for the **YB4409-2 and YB4411**



Standard anti-two block device, when activated, provides an audible warning to the crane operator and disengages all crane functions whose movement can cause two-blocking.

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Load indicator (LSI)

A simple, effective, and easy to use load indicating system used in conjunction with the anti-two block system to assist the operator in efficient operation of the unit within the limits of the load chart. The display panel displays the hook load and warns the operator when a preset load capacity is exceeded. The warning is by a flashing light on the display panel. In conjunction with the load display panel (receiver), there is a wireless transmitter and load sensing pin attached to the boom head that transmits the hook load to the display panel. (wireless system)



*Rated Capacity Limiter (RCL)

Similar to the Load Indicator, but stops the telescope out and boom lift down function when a load limit is exceeded. Uses a similar display panel with the addition of displaying boom angle and boom length read outs on the panel.

(wireless system)



*Load Moment Indicator (LMI)

Digital display of boom angle, boom length, boom radius, capacity, and allows for operator in-put to set the limits based on load chart. Displays color coded light bar and audible alarm with function cutout if load exceeds entered parameters.

(hardwired system)



Ball bearing swing circle with 360° continuous rotation.

Hydraulic driven worm gear and pinion. Maximum speed: 2.05 rpm

Hydraulic system

YB4409 and 4409XL: (2) gear pumps

YB4409-2 and YB4411: Variable displacement piston pump and piggyback gear pump.

Combined flow: 107,9Lpm (28.5 gpm)

Maximum system operating pressure: 3600 psi

YB4409 and YB4409XL: Six section valve bank mounted in dash panel with direct mechanical linkage for low effort lever control.

Superstructure continued

YB4409-2 and YB4411: Six section valve bank chassis mounted; operated via dash mounted, pilot pressure hydraulic joysticks.

Return line filter with full flow by-pass protection and service indicator.

89 L (23.5 gal) hydraulic reservoir with sight level gauge and steel side plating to guard against side impact damage.

Hoist specifications

YB4409 / XL: Worm drive with counter-balance valving. Equal speed power up and down.

YB4409-2 and YB4411: Piston motor drive with spring applied/hydraulic released brake.

Drum diameter: **YB4409 / XL**: 0,24 m (9.69 in) **YB4409-2** and **YB4411**: 0,27 m (10.63 in)

Maximum single line pull: **YB4409 / XL**: 4854 kg (10,700 lb) **YB4409-2 and YB4411**: 6350 kg (14,000 lb)

Maximum single line speed: YB4409 / XL: 26,8 m/min (88 fpm) YB4409-2 and YB4411: 36,6 m/min (120 fpm)

Maximum permissible single line pull: **YB4409 / XL**: 3855 kg (8,500 lb) (12,7mm [1/2 inch] Python Ultra XIPS) **YB4409-2 and YB4411**: 4536 kg (10,000 lb) (14,0mm [9/16 inch] EEIPS)

Rope length : YB4409 / XL: (three-section boom) 29,6 m (97 ft) (four-section boom) 39,6 m (130 ft) YB4409-2 and YB4411: 36,6 m (120 ft)

Carrier



High strength alloy steel constructed with integral outrigger housings; front and rear lifting, towing, and tie-down lugs. 42 ft.² carrydeck size with 6350 kg (14,000 lb) carrying capacity (YB4409 / XL / YB4409-2) and 7711 kg (17,000 lb) carrying capacity (YB4411). Deck coated with anti-skid treatment.

Outriggers

YB4409, YB4409XL and YB4409-2: Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam.

YB4411: Hydraulic telescoping beam with oblique type jack provides extended and down and retracted and down lifting capacities. Integral holding valves on both beam and jack.

Padsize YB4400 Series: 18 cm x 20 cm (7.4 in x 7.8 in)

Maximum outrigger pad load: YB4409/XL: 122 psi YB4411: 387 psi

Outrigger controls

YB4409-2, YB4409 and YB4409XL: Lever controls located on dash panel which operate the beams in pairs from side to side.

YB4411: Two switch operation mounted on dash panel. One -three- position rocker switch to select all beams/jacks, left beams/jacks only, or right beams/ jacks only. Separate -four- way toggle switch to activate beams out/in and jacks down/up. Level bubble indicator located inside operators compartment.

*Independent outrigger controls available as an option.

Standard engine (Tier III)

Cummins QSB 3.3 L turbo-charged diesel rated at 63,4 kW (85 bhp) at 2600 rpm. Supplied with 110 V engine block heater and air intake grid heater.

*Optional engine

G.M. 3.0 L EFI dual fuel (gasoline / L.P.) rated at 59,6 kW (80 bhp) at 2600 rpm.

Operators control station

Frame mounted, open air style control station with cab shell. Includes all crane functions, driving controls, and overhead safety glass. Other standard equipment include a durable weather resistant seat with seat belt, hourmeter, sight level bubble, and fire extinguisher. The dash panel includes engine oil pressure gauge, engine water temperature gauge, fuel gauge, transmission low oil and high temperature warning lights, low battery warning light, and brake system low pressure warning light. The LSI (load indicator) receiver is mounted to the top of the dash and provides warning for A2B and exceeded load capacity.

Specifications



*Operators control station enclosed

Includes the standard cab shell with the addition of front and rear glass and glass on the right side. Hinged full door with sliding glass.

Front windshield wiper and heater and defroster is included.



Fuel tank capacity

70 L (18.5 gallon) all steel construction with steel side plate to guard against side impact.



Electrical system

One 12V maintenance free battery, 820CCA at 0°. Jump start connections. 63 amp alternator.

I-e-I Drive

4 x 2 – Front axle drive with planetary hubs and limited slip Differential.



YB4409 / XL: two-wheel, four-wheel steer YB4409-2: two-wheel, four-wheel with crab steer YB4411: two-wheel, four-wheel, and crab steer with electronic self alignment.

Outside turning radius: **YB4409 / XL / YB4409-2:** Two w/s: 4,47 m (14 ft 8 in) Four w/s: 3,10 m (10 ft 2 in) **YB4411:** Two w/s: 4,88 m (16 ft) Four w/s: 3,17 m (10 ft 5 in)

Transmission

Axles

YB4409 / XL and YB4409-2: Synchromesh

-four- speeds forward and reverse with stalk mounted forward/reverse selector.

YB4411: Powershift -four-gears forward and four gears in reverse. Stalk mounted shifter on left side of steering column.

Front: Carraro planetary drive/steer with internal multi-wet-disc brakes and limited slip differential. Rear: Fabricated non-drive steer with disc brakes

🕐 Tires

10.00 x 15 16PR pneumatic



Brakes

Hydraulic actuated internal wet-disc service brakes acting on all four wheels. A dash mounted toggle switch activates the dry disc parking brake on the transmission output yoke with a dash warning light.



Suspension

Front: Rigid mounted to frame. Rear: Rigid mounted to frame.

Lights

Recessed mounted, includes head, tail, rear work, stop, and turn signals.



35,6 km/h (22 mph)



YB4409 / XL and YB4409-2: 57%....no load 31%.... 5443 kg (12,000 lb) load

YB4411: 68%....no load 40%.... 9072 kg (20,000 lb) load

Gross vehicle weight (G.V.W.)

YB4409: 6849 kg (15,100 lb) **YB4409XL**: 7512 kg (16,560 lb) **YB4409-2**: 7734 kg (17,050 lb) **YB4411**: 7947 kg (17,520 lb) *All weights with enclosed cab

Miscellaneous standard equipment

Single sheave, "Quick Reeve" style hookblock.; YB4409 / XL: 8,0 t (8.5 USt) YB4409-2: 8,1 t (9USt) YB4411: 10 t (10.5 USt) Back-up alarm

Dimensions





Range diagram



YB4409

Operating radius in feet from axis of rotation

Height from the ground in feet

Load chart

YB4409

| RADIUS | | 3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED | | | | | 4-SECTION BOOM WITH 4TH EXTENDED | | | |
|--------|---------------------|--|--------|-----------|-------------|----------------|----------------------------------|--------------------|------|-----------|
| (ft) | ON OUTRIGGERS (Ib) | | ON RU | BBER (Ib) | | RADIUS (ft) | | ON OUTRIGGERS (Ib) | | BBER (Ib) |
| | F/R | 360° | F/R | 360° | | | F/R | 360° | F/R | 360° |
| 5.0 | * 17,000 | [‡] 17,000 | 10,000 | 10,000 | 5 | 5.0 | 6100 | 6100 | 6100 | 6100 |
| 6.0 | * 15,700 | * 14,400 | 10,000 | 7450 | MOO | 6.0 | 6100 | 6100 | 6100 | 6100 |
| 8.0 | [*] 12,400 | 10,800 | 7150 | 4400 | - | 8.0 | 5300 | 5300 | 5300 | 5250 |
| 10.0 | 10,200 | 8600 | 4700 | 2950 | MAIN | 10.0 | 4700 | 4700 | 4700 | 3750 |
| 12.0 | 8500 | 7000 | 3400 | 2175 | ž | 12.0 | 4400 | 4400 | 3800 | 2450 |
| 14.0 | 7200 | 5400 | 2650 | 1700 | | 14.0 | 4400 | 4400 | 2900 | 1875 |
| 16.0 | 6100 | 4300 | 2150 | 1325 | | 16.0 | 4400 | 4400 | 2325 | 1525 |
| 18.0 | 5000 | 3550 | 1775 | 1100 | | 18.0 | 4400 | 4100 | 1900 | 1225 |
| 20.0 | 2700 | 2700 | 1525 | 950 | N | 20.0 | 4300 | 3150 | 1600 | 1000 |
| 22.0 | 2600 | 2600 | 1350 | 825 | $ \rangle$ | 22.0 | 3700 | 2700 | 1375 | 850 |
| 24.5 | 2200 | 2200 | 190 | 675 | $ \rangle$ | 24.5 | 3100 | 2300 | 1200 | 700 |
| 26.0 | - | - | - | - | | 26.0 | 2700 | 2125 | 100 | 650 |
| 28.0 | - | - | - | - | ≝ | 28.0 | 2500 | 1900 | 975 | 575 |
| 30.0 | - | - | - | - | = | 30.0 | 2300 | 1700 | 850 | 475 |
| 31.0 | - | - | - | - | | 31.0 | 2200 | 1625 | 800 | 425 |

* LIMIT RATINGS TO 11,800 LB WHEN 3RD SECTION IS EXTENDED ANY AMOUNT.

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.





1) The rated loads are the maximum lift capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hookblocks, slings, etc., except the hoist rope, shall be considered part of the load. See reduction chart.

| MAIN | JIB STRUCTURAL | CAPACITIES (Ib) |
|------------------------|---|-------------------------------------|
| BOOM ANGLE (deg) | 3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED | 4-SECTION BOOM WITH 4TH EXTENDED |
| 60 | 3500 | 3500 |
| 55 | 3325 | 3325 |
| 50 | 3150 | 3150 |
| 45 | 3000 | 3000 |
| 40 | 2875 | 2875 |
| 35 | 2800 | 2800 |
| 30 | 2700 | 2700 |
| 25 | 2600 | 2600 |
| 20 | 2500 | 2500 |
| 15 | 2400 | 2400 |
| 10 | 2325 | 2325 |
| 5 | 2250 | 2250 |
| 0 | 2200 | 2200 |

4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum seed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.

8) Do not induce any external side loads to boom or jib.

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Dimensions



YB4409XL

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.



YB4409XL (Three-section boom)

Operating radius in feet from axis of rotation

Height from the ground in feet

Range diagram



YB4409XL (Four-section boom)

Operating radius in feet from axis of rotation

| | 3-SECTION I | MAIN BOOM 3-SECTION MAIN BOOM | | MAIN BOOM | | 3-SECTI | ON MAIN BO | DOM W/6 F1 | IJIB DEPL | OYED | |
|--------|--------------------|-------------------------------|--------|----------------|--------|---------|----------------|------------|------------|----------------|------|
| Radius | ON OUTRIGGERS (Ib) | | Radius | ON RUBBER (Ib) | | Radius | LOADED BOOM | ON OUTRI | GGERS (Ib) | ON RUBBER (Ib) | |
| (ft) | F/R | 360° | (ft) | F/R | 360° | (ft) | ANGLE (deg) | F/R | 360° | F/R | 360° |
| 5 | 17,000 | 17,000 | 5 | 10,000 | 10,000 | 16.4 | 60 | 3500 | 3500 | 2000 | 1300 |
| 6 | 15,700 | 14,400 | 6 | 9500 | 8200 | 18 | 57.5 | 3375 | 3375 | 1775 | 1150 |
| 8 | 12,400 | 10,800 | 8 | 7325 | 5125 | 20 | 53.5 | 3225 | 3150 | 1450 | 950 |
| 10 | 10,200 | 8500 | 10 | 4875 | 3475 | 22 | 49 | 3075 | 2700 | 1225 | 800 |
| 12 | 8500 | 6950 | 12 | 3550 | 2550 | 24 | 44.5 | 2950 | 2350 | 1025 | 650 |
| 14 | 7100 | 5800 | 14 | 2750 | 1925 | 26 | 39.5 | 2850 | 2050 | 875 | 525 |
| 16 | 6000 | 4650 | 16 | 2150 | 1450 | 28 | 34 | 2625 | 1825 | 800 | 425 |
| 18 | 5200 | 3800 | 18 | 1775 | 1150 | 30 | 27 | 2400 | 1650 | 725 | 350 |
| 20 | 4450 | 3150 | 20 | 1450 | 950 | 32 | 16.5 | 2175 | 1475 | 650 | 300 |
| 22 | 3800 | 2700 | 22 | 1225 | 800 | 33.5 | 0 | 2000 | 1375 | 600 | 250 |
| 24 | 3300 | 2350 | 24 | 1025 | 650 | | | | | | |
| 26 | 2900 | 2050 | 26 | 875 | 525 | | | | | | |
| 27 | 2750 | 1925 | 27 | 850 | 475 | | | | | | |

YB4409XL (Three-section boom)

NOTES:

OPERATE WITH JIB BY RADIUS WHEN MAIN BOOM IS FULLY EXTENDED AND BY BOOM ANGLE WHEN MAIN BOOM IS PARTIALLY EXTENDED. DO NOT EXCEED JIB CAPACITIES AT ANY PARTIALLY EXTENDED BOOM LENGTH.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH. DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface., operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are with outriggers fully extended.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.

8) Do not induce any external side loads to boom or jib.

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Load chart

YB4409XL (Four-section boom)

| | 4-SECTION MAIN BOOM W/ 4TH RETRACTED | | | | | | | | |
|---|--|---|---|--|--|--|--|--|--|
| | ON OUTRIC | GERS (Ib) | ON RUB | BER (Ib) | | | | | |
| (ft) | F/R | 360° | F/R | 360° | | | | | |
| 5 6 8 10 12 14 16 18 20 22 24 26 27 | 17000 15700 12400 10200 8500 7100 6000 5200 4450 3800 3300 2900 2750 | 17000 14400 10800 8500 6950 5800 4650 3800 3150 2700 2350 2050 1925 | 10000 9500 8000 5400 3800 2750 2150 1800 1500 1300 1300 1100 900 825 | 10000 8200 5600 3800 2700 1950 1450 1150 950 775 600 450 375 | | | | | |

| | | CTION M // 4TH EX | | | |
|---|--|---|---|---|--|
| | ON OUTRIC | GGERS (Ib) | ON RUB | BER (Ib) | |
| (ft) | F/R | 360° | F/R | 360° | |
| 5 6 8 10 12 14 16 22 24 22 24 22 22 23 30 32 33.5 36 | - 4900 3800 3400 2900 2900 2900 2900 2900 2900 2900 2 | - 4900 4300 3800 3400 2900 2900 2900 2900 2900 2650 2300 2150 2000 1800 1600 1400 1250 | - 4900 3800 3800 2900 2400 1950 1600 1350 1350 1350 1350 1350 1000 0925 800 700 625 550 | - 4250 3300 2600 2100 1700 1350 1050 850 700 650 600 500 400 325 250 | |

NOTES:

OPERATE WITH JIB BY RADIUS WHEN MAIN BOOM IS FULLY EXTENDED (WITH 4TH SEC-TION EXTENDED OR RETRACTED) AND BY BOOM ANGLE WHEN MAIN BOOM IS PARTIAL-LY EXTENDED. DO NOT EXCEED JIB CAPACITIES AT ANY PARTIALLY EXTENDED BOOM LENGTH.

SHADED AREAS ARE GOVERNED BY STRUC-TURAL STRENGTH. DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

| | 4-SECTION MAIN BOOM W/ 4TH RETRACTED W/ 6 FT JIB DEPLOYED | | | | | | | | |
|------------------------------------|--|--|--|---|--|--|--|--|--|
| Radius | LOADED BOOM | ON OUTRI | GGERS (Ib) | ON RUE | BBER (Ib) | | | | |
| (ft) | ANGLE (deg) | F/R | 360° | F/R | 360° | | | | |
| 16.4 18 20 22 24 26 | 60 57.5 53.5 49 44.5 39.5 | 3500 3375 3225 3075 2950 2850 | 3500 3375 3150 2700 2350 2050 | 2000 1800 1500 1300 1100 925 | 1300 1150 950 800 650 525 | | | | |
| 28 30 32 33.5 | 34 27 16.5 0 | 2625 2400 2175 2000 | 1825 1650 1475 1375 | 800 725 650 600 | 425 350 300 250 | | | | |

| | | | SECTION M | | | |
|---|--|---|--|---|---|---|
|) | Radius | LOADED BOOM | ON OUTRIC | GGERS (Ib) | ON RUBE | BER (Ib) |
| , | (ft) | ANGLE (deg) | F/R | 360° | F/R | 360° |
| | 22 24 26 28 30 32 33.5 36 38 40 42 43 | 60 57 54 50.5 43 40 34.5 29 22.5 11.5 0 | 2900 2900 2900 2450 2450 2200 1975 1775 1650 1550 1450 1400 | 2900 2650 2300 2000 1800 1600 1400 1250 1150 1075 1000 950 | 1600 1350 1100 925 800 700 625 550 500 450 400 375 | 1050 850 700 600 500 400 325 250 200 150 125 100 |

SIDE REAR FRONT SIDE REDUCTION CHART FROM MAIN BOOM FROM JIB RATINGS RATINGS MAIN BLOCK 140 lb N/A HOOK & BALL 100 lb 100 lb JIB, STOWED 0 lb N/A JIB, DEPLOYED 150 lb 0 lb



1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator. 3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart.

 Ratings on outriggers are with outriggers fully extended.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.

8) Do not induce any external side loads to boom or jib.

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Dimensions

YB4409-2



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.

Range diagram

YB4409-2



Operating radius in feet from axis of rotation

Boom and extension length in feet

Load chart

| | | | ON OUTR | IGGERS (Ib) | | ON RUE | BBER(Ib) |
|-----------|----------------|-------------------|------------------|-------------------|------------------|--------------|--------------|
| | RADIUS (ft) | | F/R | | 50° | F/R | 360° |
| _ | | BOOM RETRACTED | BOOM EXTENDED | BOOM RETRACTED | BOOM EXTENDED | ANY BOOM | ANY BOOM |
| | 5.0 | 18,000 | 14,700 | 18,000 | 14,700 | 11,500 | 9400 |
| | 6.0 | 15,700 | 14,400 | 15,000 | 14,400 | 10,000 | 7500 |
| | 8.0 | 12,200 | 12,200 | 11,400 | 11,400 | 8100 | 5040 |
| L _ | 10.0 | 10,200 | 10,200 | 9100 | 9100 | 5480 | 3530 |
| l ≥ | 12.0 | 8400 | 8400 | 7600 | 7600 | 3920 | 2590 |
| I X | 14.0 | - | 7200 | - | 6500 | 3040 2420 | 1970 1560 |
| 8 | 16.0 18.0 | - | 6200 5400 | - | 5310 4340 | 2420 1970 | 1250 |
| MAIN BOOM | 20.0 | - | 4830 | - | 4340 3610 | 1970 | 1250 |
| Ì ž | 20.0 | | 4000 | | 3030 | 1370 | 850 |
| | 24.0 | | 3480 | | 2590 | 1160 | 710 |
| | 26.0 | | 3020 | | 2250 | 990 | 590 |
| | 28.0 | | 2680 | | 2010 | 830 | 490 |
| | 31.0 | _ | 2270 | - | 1740 | 650 | 360 |
| | 34.0 | - | 1960 | - | 1500 | 510 | 250 |
| | 36.0 | - | 1770 | - | 1350 | 430 | 180 |
| | 38.0 | - | 1590 | - | 1200 | 350 | 130 |
| BL | 40.0 | - | 1420 | - | 1050 | 280 | 80 |
| = | 42.0 | - | 1270 | - | 930 | 210 | 60 |
| | 44.0 | - | 1200 | - | 880 | 190 | 40 |
| | 46.0 | - | 1160 | - | 820 | 170 | 20 |
| | 48.0 | - | 1110 | - | 760 | 140 | 0 |

YB4409-2

| MAIN | | JIB STRUCTURAL CAPACITIES (Ib) | | | | | | | | | |
|---------------|--------------|--------------------------------|---------------|--------------|---------------|---------------|--|--|--|--|--|
| BOOM ANGLE | | 12 ft JII | 3 | | 18 ft JIB | | | | | | |
| (deg) | 0° OFFSET | 15° OFFSET | 30° OFFSET | 0° OFFSET | 15° OFFSET | 30° OFFSET | | | | | |
| 72 | 7500 | 5100 | 3500 | 4000 | 3300 | 2300 | | | | | |
| 70 | 7000 | 4800 | 3400 | 3750 | 3100 | 2200 | | | | | |
| 65 | 5700 | 4100 | 3100 | 3200 | 2700 | 2000 | | | | | |
| 60 | 4500 | 3500 | 2800 | 2800 | 2400 | 1850 | | | | | |
| 55 | 3500 | 3000 | 2550 | 2450 | 2150 | 1700 | | | | | |
| 50 | 2800 | 2500 | 2300 | 2150 | 1950 | 1600 | | | | | |
| 45 | 2300 | 2200 | 2000 | 1900 | 1750 | 1500 | | | | | |
| 40 | 2000 | 1900 | 1800 | 1700 | 1600 | 1400 | | | | | |
| 35 | 1775 | 1675 | 1600 | 1525 | 1450 | 1350 | | | | | |
| 30 | 1600 | 1500 | 1400 | 1400 | 1300 | 1300 | | | | | |
| 25 | 1450 | 1400 | - | 1275 | 1200 | - | | | | | |
| 20 | 1350 | 1350 | - | 1175 | 1125 | - | | | | | |
| 15 | 1300 | 1300 | - | 1100 | 1100 | - | | | | | |
| 10 | 1275 | - | - 1 | 1050 | - | - | | | | | |
| 5 | 1225 | - | - | 1025 | - | - | | | | | |
| 0 | 1200 | - | - | 1000 | - | - | | | | | |

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.





1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface., operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are with outriggers fully extended.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.

8) Do not induce any external side loads to boom or jib.

1303154YB

Grove YB4400 Series

Dimensions

YB4411



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.

Range diagram

YB4411



Boom and extension length in feet



Load chart

| | | | ONOUTRIG | GERS (Ib) | | ONRUE | BER (Ib) | 1 [|
|----------|----------------|-------------------|---------------------|-------------------|------------------|-------------|-------------|-----------------|
| | RADIUS (ft) | | DED 360° TED F/R | RETRAC | TED 360° | F/R | 360° | M B A |
| | | BOOM RETRACTED | BOOM EXTENDED | BOOM RETRACTED | BOOM EXTENDED | ANY BOOM | ANY BOOM |]]7 |
| | 4.0 | 21,000 | 15,000 | 19,625 | 13,975 | 11,500 | 11,500 | |
| | 5.0 | 18,000 | 14,700 | 16,800 | 13,700 | 11,500 | 9400 | |
| | 6.0 | 15,700 | 14,400 | 13,400 | 13,400 | 10,000 | 7800 | |
| | 8.0 | 12,200 | 12,200 | 8700 | 8700 | 7600 | 5600 | 11 |
| | 10.0 | 10,200 | 10,200 | 6150 | 6150 | 5175 | 3875 | |
| Σ | 12.0 | 8400 | 8400 | 4550 | 4550 | 3850 | 2875 | |
| MAINBOOM | 14.0 | - | 7100 | - | 3425 | 3000 | 2250 | |
| | 16.0 | - | 6000 | - | 2775 | 2400 | 1800 | |
| AL A | 18.0 | - | 5000 | - | 2300 | 1975 | 1475 | |
| <u>Š</u> | 20.0 | - | 4300 | - | 1825 | 1650 | 1200 | |
| | 22.0 | - | 3700 | - | 1550 | 1400 | 1000 | |
| | 24.0 | - | 3300 | - | 1275 | 1200 | 850 | |
| | 26.0 | - | 2900 | - | 1075 | 1025 | 700 | |
| | 28.0 | - | 2600 | - | 950 | 875 | 600 | |
| | 31.0 | - | 2300 | - | 800 | 700 | 450 | |
| | 34.0 | - | 1975 | - | 650 | 600 | 350 | 1 L |
| | 36.0 | - | 1775 | - | 550 | 500 | 275 | |
| | 38.0 | - | 1575 | - | 450 | 400 | 200 | |
| ß | 40.0 | - | 1425 | - | 350 | 300 | 125 | |
| JIB | 42.0 | - | 1300 | - | 250 | 200 | - | |
| | 44.0 | - | 1200 | - | 200 | 150 | - | |
| | 46.0 | - | 1100 | - | 175 | - | - | |
| | 48.0 | - | 1000 | - | 150 | - | - | 1 |

YB4411

| | JIB STRUCTURAL CAPACITIES (Ib) | | | | | | | | | | |
|--------------|--------------------------------|----------|------|--------------|---------------|---------------|--|--|--|--|--|
| MAIN BOOM | | 12 ftJIB | | 18 ft JIB | | | | | | | |
| (deg) | 0° OFFSET | | | 0° OFFSET | 15° OFFSET | 30° OFFSET | | | | | |
| 72 | 7500 | 5100 | 3500 | 4000 | 3300 | 2300 | | | | | |
| 70 | 7000 | 4800 | 3400 | 3750 | 3100 | 2200 | | | | | |
| 65 | 5700 | 4100 | 3100 | 3200 | 2700 | 2000 | | | | | |
| 60 | 4500 | 3500 | 2800 | 2800 | 2400 | 1850 | | | | | |
| 55 | 3500 | 3000 | 2550 | 2450 | 2150 | 1700 | | | | | |
| 50 | 2800 | 2500 | 2300 | 2150 | 1950 | 1600 | | | | | |
| 45 | 2300 | 2200 | 2000 | 1900 | 1750 | 1500 | | | | | |
| 40 | 2000 | 1900 | 1800 | 1700 | 1600 | 1400 | | | | | |
| 35 | 1775 | 1675 | 1600 | 1525 | 1450 | 1350 | | | | | |
| 30 | 1600 | 1500 | 1400 | 1400 | 1300 | 1300 | | | | | |
| 25 | 1450 | 1400 | - | 1275 | 1200 | - | | | | | |
| 20 | 1350 | 1350 | - | 1175 | 1125 | - | | | | | |
| 15 | 1300 | 1300 | - | 1100 | 1100 | - | | | | | |
| 10 | 1275 | - | - | 1050 | - | - | | | | | |
| 5 | 1225 | - | - | 1025 | - | - | | | | | |
| 0 | 1200 | - | - | 1000 | - | - | | | | | |

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



 The rated loads are the maximum lifting capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 85% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. Retracted outrigger rated loads meet ASME B30.5-2004. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (125 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 12,000 lb. The maximum deck load only is 14,000 lb.

8) Do not induce any external side loads to boom or jib.

80016879

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.

DIN/ISO range diagram

YB4409



Operating radius in meters from axis of rotation

Height from the ground in meters

DIN/ISO load chart

YB4409

| | 3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED | | | | | | 4-SEC | CTION BOOM WITH 4TH EXTENDED | | | |
|---------------|--|------|----------------|------|-------------|---------------|----------|------------------------------|----------------|------|--|
| RADIUS (m) | ON OUTRIGGERS (kg) | | ON RUBBER (kg) | | 1 | RADIUS (m) | ON OUTRI | GGERS (kg) | ON RUBBER (kg) | | |
| ľ | F/R | 360° | F/R | 360° | 1 | | F/R | 360° | F/R | 360° | |
| 1,5 | 7710 | 7710 | 4540 | 4380 | | 1,5 | 2770 | 2770 | 2770 | 2770 | |
| 1,8 | 7120 | 6530 | 4540 | 3260 | | 1,8 | 2770 | 2770 | 2770 | 2770 | |
| 2,4 | 5620 | 4900 | 3200 | 1970 | Σ | 2,4 | 2400 | 2400 | 2400 | 2380 | |
| 3,0 | 4630 | 3900 | 2080 | 1300 | Ī | 3,0 | 2130 | 2130 | 2130 | 1560 | |
| 3,7 | 3860 | 3000 | 1520 | 950 | 8 | 3,7 | 2000 | 2000 | 1660 | 1080 | |
| 4,3 | 3270 | 2250 | 1160 | 730 | MAIN | 4,3 | 2000 | 2000 | 1280 | 820 | |
| 4,9 | 2580 | 1800 | 930 | 570 | ≥ | 4,9 | 2000 | 2000 | 1010 | 650 | |
| 5,5 | 2100 | 1470 | 770 | 460 | | 5,5 | 2000 | 1720 | 820 | 510 | |
| 6,1 | 1220 | 1220 | 670 | 400 | 1 | 6,1 | 1800 | 1310 | 690 | 420 | |
| 6,7 | 1180 | 1120 | 590 | 340 | $ \rangle$ | 6,7 | 1540 | 1110 | 590 | 340 | |
| 7,5 | 1000 | 930 | 480 | 260 | $ \rangle$ | 7,5 | 1290 | 940 | 500 | 270 | |
| 7,9 | - | - | - | - | | 7,9 | 1190 | 870 | 460 | 250 | |
| 8,5 | - | - | - | - | | 8,5 | 1080 | 780 | 410 | 210 | |
| 9,1 | - | - | - | - | 1 | 9,1 | 970 | 690 | 350 | 170 | |
| 9,4 | - | - | - | - | | 9,4 | 920 | 660 | 330 | 150 | |
| | | | | | | | | | | | |

*LIMIT RATINGS TO 5350 kg WHEN 3RD SECTION IS EXTENDED ANY AMOUNT.

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.





1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are with outriggers fully extended.

IIB STRUCTURAL CAPACITIES (kg)

4-SECTION BOOM WITH 4TH EXTENDED

1508

1429

1361

1304

1270 1225

1179

1134

1089

1055

1021

998

3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED

1510

1430

1360

1305

1270

1225

1180

1135

1090

1055

1020

1000

MAIN

воом

ANGLE (deg) 60 55

50

45

40

35 30

25

20

15

10

0

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.

8) Do not induce any external side loads to boom or jib.

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YB4409XL



Operating radius in meters from axis of rotation

Grove YB4400 Series

DIN/ISO load chart

| | 3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED | | | | | | | ON BOOM V | VITH 4TH EX | TENDED | |
|---------------|--|-------------------|------|------------------|-------------|---------------|--------------------|------------------|----------------|--------|-----|
| RADIUS (m) | ON OUTRI | N OUTRIGGERS (kg) | | ON RUBBER (kg) | | RADIUS (m) | ON OUTRIGGERS (kg) | | ON RUBBER (kg) | | 11 |
| | F/R | 360 [°] | F/R | 360 [°] | 1 | | F/R | 360 [°] | F/R | 360° | 11 |
| 1,5 | 7710 | 7710 | 4535 | 4535 | | 1,5 | - | - | - | - | 11 |
| 1,8 | 7120 | 6530 | 4310 | 3720 | 1 | 1,8 | - | - | - | - | 11 |
| 2,4 | 5625 | 4900 | 3580 | 2490 | | 2,4 | 2225 | 2225 | 2225 | 2225 | ш |
| 3,0 | 4625 | 3855 | 2400 | 1670 | | 3,0 | 1950 | 1950 | 1950 | 1880 | 11 |
| 3,7 | 3855 | 3150 | 1670 | 1170 | BOOM | 3,7 | 1725 | 1725 | 1725 | 1450 | |
| 4,3 | 3220 | 2550 | 1200 | 830 | 18 | 4,3 | 1540 | 1540 | 1540 | 1130 | |
| 4,9 | 2720 | 1930 | 930 | 610 | M M | 4,9 | 1405 | 1405 | 1270 | 900 | |
| 5,5 | 2360 | 1570 | 770 | 470 | MAIN | 5,5 | 1315 | 1315 | 1040 | 720 | |
| 6,1 | 1850 | 1290 | 630 | 380 | ž | 6,1 | 1315 | 1315 | 830 | 560 | |
| 6,7 | 1570 | 1100 | 540 | 310 | | 6,7 | 1315 | 1315 | 680 | 430 | |
| 7,3 | 1360 | 950 | 450 | 240 | | 7,3 | 1315 | 1080 | 560 | 340 | |
| 7,9 | 1180 | 820 | 370 | 190 | | 7,9 | 1315 | 930 | 450 | 270 | |
| 8,2 | 1120 | 770 | 340 | 170 | 1 | 8,2 | 1200 | 860 | 400 | 240 | |
| 8,5 | 1070 | 730 | 310 | 140 | Ν | 8,5 | 1120 | 800 | 370 | 220 | ١ ' |
| 9,1 | 970 | 650 | 280 | 110 | IV – | 9,1 | 990 | 710 | 310 | 180 | |
| 9,8 | 880 | 580 | 240 | 90 | $ \rangle$ | 9,8 | 890 | 630 | 270 | 130 | |
| 10,2 | 800 | 530 | 220 | 60 | $ \rangle$ | 10,2 | 790 | 540 | 230 | 100 | |
| 11,0 | - | - | - | - | \ | 11,0 | 700 | 480 | 200 | 60 | |
| 11,6 | - | - | - | - | | 11,6 | 650 | 440 | 180 | 40 | |
| 12,2 | - | - | - | - | E | 12,2 | 610 | 410 | 150 | 20 | L |
| 12,8 | - | - | - | - | 1 | 12,8 | 570 | 370 | 130 | 10 | L |
| 13,1 | - | - | - | - | | 13,1 | 540 | 350 | 120 | 0 | |

YB4409XL

| MAIN | JIB STRUCTURAL CAPACITIES (kg) | | | | | | | | |
|------------------------|---|-------------------------------------|--|--|--|--|--|--|--|
| BOOM ANGLE (deg) | 3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED | 4-SECTION BOOM WITH 4TH EXTENDED | | | | | | | |
| 60 | 1590 | 1540 | | | | | | | |
| 55 | 1510 | 1405 | | | | | | | |
| 50 | 1430 | 1295 | | | | | | | |
| 45 | 1360 | 1180 | | | | | | | |
| 40 | 1305 | 1100 | | | | | | | |
| 35 | 1270 | 1045 | | | | | | | |
| 30 | 1225 | 1000 | | | | | | | |
| 25 | 1180 | 975 | | | | | | | |
| 20 | 1135 | 965 | | | | | | | |
| 15 | 1090 | 955 | | | | | | | |
| 10 | 1055 | 930 | | | | | | | |
| 5 | 1020 | 920 | | | | | | | |
| 0 | 1000 | 905 | | | | | | | |

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are with outriggers fully extended.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard, level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 5443 kg. The maximum deck load only is 6350 kg.

8) Do not induce any external side loads to boom or jib.

1302119YB

DIN/ISO range diagram

YB4409-2



Operating radius in meters from axis of rotation

Height from the ground in meters

25

DIN/ISO load chart

| | | | ON OUTRI | | ON RUE | BER (kg) |][| |
|-----------|---------------|-------------------|------------------|-------------------|------------------|-------------|------------------|----|
| | RADIUS (m) | , F/R | | 36 | i0° | F/R | 360 [°] | B(|
| | | BOOM RETRACTED | BOOM EXTENDED | BOOM RETRACTED | BOOM EXTENDED | ANY BOOM | ANY BOOM |] |
| | 1,5 | 8160 | 6670 | 8160 | 6670 | 5220 | 4260 | |
| | 1,8 | 7120 | 6530 | 6800 | 6530 | 4540 | 3360 | 11 |
| | 2,4 | 5530 | 5530 | 5170 | 5170 | 3670 | 2240 | 11 |
| | 3,0 | 4630 | 4630 | 4130 | 4130 | 2440 | 1550 | 11 |
| Σ | 3,7 | 3810 | 3810 | 3450 | 3450 | 1730 | 1130 | 11 |
| 8 | 4,3 | - | 3270 | - | 2800 | 1330 | 840 | 11 |
| A B | 4,9 | - | 2810 | - | 2220 | 1050 | 660 | 11 |
| MAIN BOOM | 5,5 | - | 2450 | - | 1800 | 850 | 520 | 11 |
| Σ | 6,1 | - | 2010 | - | 1490 | 700 | 420 | 11 |
| | 6,7 | - | 1670 | - | 1250 | 570 | 340 | 11 |
| | 7,3 | - | 1430 | - | 1060 | 480 | 280 | 11 |
| | 7,9 | - | 1240 | - | 910 | 400 | 220 | 11 |
| | 8,5 | - | 1090 | - | 810 | 330 | 170 | 11 |
| | 9,4 | - | 920 | - | 690 | 250 | 120 | 11 |
| | 10,4 | - | 780 | - | 590 | 180 | 70 | 11 |
| | 11,0 | - | 710 | - | 530 | 150 | 40 | 11 |
| | 11,6 | - | 630 | - | 460 | 110 | 10 | |
| | 12,2 | - | 560 | - | 400 | 80 | 0 | 1 |
| JB | 12,8 | - | 490 | - | 350 | 50 | 0 | |
| | 13,4 | - | 460 | - | 320 | 40 | 0 | |
| | 14,0 | - | 440 | - | 300 | 30 | 0 | |
| | 14,6 | - | 430 | - | 270 | 20 | 0 | |

YB4409-2

| | JIB STRUCTURAL CAPACITIES (kg) | | | | | | | | | |
|-----------------------|--------------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--|--|--|--|
| MAIN BOOM ANGLE | | 3,7 m JIB | | 5,5 m JIB | | | | | | |
| (deg) | 0 [°] OFFSET | 15 [°] OFFSET | 30 [°] OFFSET | 0 [°] OFFSET | 15 [°] OFFSET | 30 [°] OFFSET | | | | |
| 72 | 3400 | 2310 | 1590 | 1810 | 1500 | 1040 | | | | |
| 70 | 3180 | 2180 | 1540 | 1700 | 1410 | 1000 | | | | |
| 65 | 2590 | 1860 | 1410 | 1450 | 1220 | 910 | | | | |
| 60 | 2040 | 1590 | 1270 | 1270 | 1090 | 840 | | | | |
| 55 | 1590 | 1360 | 1160 | 1110 | 980 | 770 | | | | |
| 50 | 1270 | 1130 | 1040 | 980 | 880 | 730 | | | | |
| 45 | 1040 | 1000 | 910 | 860 | 790 | 680 | | | | |
| 40 | 910 | 860 | 820 | 770 | 730 | 640 | | | | |
| 35 | 810 | 760 | 730 | 690 | 660 | 610 | | | | |
| 30 | 730 | 680 | 640 | 640 | 590 | 590 | | | | |
| 25 | 660 | 640 | - | 580 | 540 | - | | | | |
| 20 | 610 | 610 | - | 530 | 510 | - | | | | |
| 15 | 590 | 590 | - | 500 | 500 | - | | | | |
| 10 | 580 | - | - | 480 | - | - | | | | |
| 5 | 560 | - | - | 460 | - | - | | | | |
| 0 | 540 | - | - | 450 | - | - | | | | |

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



| REDUCTION CHART | | | | | | | |
|-----------------|------------------------------|------------------------|--|--|--|--|--|
| | FROM MAIN BOOM RATINGS | FROM JIB RATINGS | | | | | |
| MAIN BLOCK | 60 kg | N/A | | | | | |
| HOOK & BALL | 45 kg | 45 kg | | | | | |
| JIB, STOWED | 0 kg | N/A | | | | | |
| JIB, DEPLOYED | 200 kg | 0 kg | | | | | |



1) The rated loads are the maximum lifting capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of personnel, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are for outriggers fully extended.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (700 kPA). Loads on rubber may be transported at a maximum speed of 1,4 km/h on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.

8) Do not induce any external side loads to boom or jib.

80019958

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.

DIN/ISO range diagram

YB4411



Operating radius in meters from axis of rotation

Height from the ground in meters

DIN/ISO load chart

| | | | ON OUTRI | ON RUBBER (kg) | | | | |
|-----------|---------------|-------------------|------------------|-------------------|------------------|-------------|-------------|----|
| | RADIUS (m) | | | RETRAC | TED 360° | F/R | 360° | |
| | | BOOM RETRACTED | BOOM EXTENDED | BOOM RETRACTED | BOOM EXTENDED | ANY BOOM | ANY BOOM | |
| | 1,2 | 9530 | 6800 | 9530 | 6800 | 5220 | 5220 | 11 |
| | 1,5 | 8160 | 6670 | 8160 | 6670 | 5220 | 4260 | 11 |
| | 1,8 | 7120 | 6530 | 6530 | 6530 | 4540 | 3540 | ш |
| | 2,4 | 5530 | 5530 | 3960 | 3960 | 3670 | 2680 | 11 |
| | 3,0 | 4630 | 4630 | 2810 | 2810 | 2720 | 1810 | 11 |
| Σ | 3,7 | 3810 | 3810 | 2090 | 2090 | 2040 | 1310 | |
| 8 | 4,3 | - | 3220 | - | 1570 | 1590 | 1040 | |
| A A | 4,9 | - | 2720 | - | 1270 | 1270 | 820 | |
| MAIN BOOM | 5,5 | - | 2270 | - | 1060 | 1040 | 680 | |
| Σ | 6,1 | - | 1790 | - | 850 | 860 | 540 | |
| | 6,7 | - | 1530 | - | 720 | 730 | 430 | |
| | 7,3 | - | 1360 | - | 590 | 630 | 380 | |
| | 7,9 | - | 1190 | - | 510 | 540 | 320 | |
| | 8,5 | - | 1060 | - | 440 | 480 | 270 | |
| | 9,4 | - | 930 | - | 380 | 360 | 180 | |
| | 10,4 | - | 790 | - | 310 | 270 | 110 | 11 |
| | 11,0 | - | 710 | - | 270 | 230 | 80 | - |
| | 11,6 | - | 620 | - | 220 | 180 | 40 | |
| ~ | 12,2 | - | 560 | - | 180 | 150 | 10 | |
| JIB | 12,8 | - | 510 | - | 130 | 110 | 0 | |
| | 13,4 | - | 460 | - | 110 | 90 | 0 | |
| | 14,0 | - | 420 | - | 90 | 80 | 0 | |
| | 14,6 | - | 380 | - | 80 | 70 | 0 | |

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| | JIB STRUCTURAL CAPACITIES (kg) | | | | | | | | | |
|-----------------------|--------------------------------|---------------------------|---------------------------|--------------------------|---------------------------|---------------------------|--|--|--|--|
| MAIN BOOM ANGLE | | 3,7 m JIB | | 5,5 m JIB | | | | | | |
| (deg) | 0 [°] OFFSET | 15 [°] OFFSET | 30 [°] OFFSET | 0 [°] OFFSET | 15 [°] OFFSET | 30 [°] OFFSET | | | | |
| 72 | 3400 | 2310 | 1590 | 1810 | 1500 | 1040 | | | | |
| 70 | 3180 | 2180 | 1540 | 1700 | 1410 | 1000 | | | | |
| 65 | 2590 | 1860 | 1410 | 1450 | 1220 | 910 | | | | |
| 60 | 2040 | 1590 | 1270 | 1270 | 1090 | 840 | | | | |
| 55 | 1590 | 1360 | 1160 | 1110 | 980 | 770 | | | | |
| 50 | 1270 | 1130 | 1040 | 980 | 880 | 730 | | | | |
| 45 | 1040 | 1000 | 910 | 860 | 790 | 680 | | | | |
| 40 | 910 | 860 | 820 | 770 | 730 | 640 | | | | |
| 35 | 810 | 760 | 730 | 690 | 660 | 610 | | | | |
| 30 | 730 | 680 | 640 | 640 | 590 | 590 | | | | |
| 25 | 660 | 640 | - | 580 | 540 | - | | | | |
| 20 | 610 | 610 | - | 530 | 510 | - | | | | |
| 15 | 590 | 590 | - | 500 | 500 | - | | | | |
| 10 | 580 | - | - | 480 | - | - | | | | |
| 5 | 560 | - | - | 460 | - | - | | | | |
| 0 | 540 | - | - | 450 | - | - | | | | |

NOTES:

JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.



1) The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.

2) The rated loads shown on outriggers do not exceed 80% of actual tipping. The rated loads shown on rubber do not exceed 75% of actual tipping. These ratings are based on freely suspended loads with the crane leveled, standing on a firm, uniform, supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, climatic conditions, experience of operator, and proper training must all be taken into account by the operator.

3) The weights of all load handling devices such as hooks, hook blocks, slings, etc., except the hoist rope, shall be considered as part of the load. See reduction chart. 4) Ratings on outriggers are with outriggers fully extended.

5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (6,9 bar). Loads on rubber may be transported at a maximum speed of 4 km/h on a smooth, hard level surface with boom retracted to the shortest length possible and centered over front.

6) For operating radius not shown, use load rating of next larger radius.

7) The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6350 kg.

8) Do not induce any external side loads to boom or jib.

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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.

Symbols glossary





Transmission

Notes

Notes



Regional headquarters

Manitowoc - Americas

Manitowoc, Wisconsin, USA Tel: +1 920 684 6621 Fax: +1 920 683 6277

Shady Grove, Pennsylvania, USA Tel: +1717 597 8121 Fax: +1717 597 4062

Regional offices

Americas Brazil Alphaville Mexico Monterrey Chile

Santiago

Europe, Middle East & Africa

Czech Republic Netvorice France Baudemont Cergy Decines Germany Langenfeld Hungary Budapest Italy Parabiago Netherlands Breda Poland Warsaw

Manitowoc - Europe, Middle East & Africa Ecully, France Tel: +33 (0)4 72 18 20 20 Fax: +33 (0)4 72 18 20 00

Manitowoc - Asia Pacific

Shanghai, China Tel: +86 21 6457 0066 Fax: +86 21 6457 4955

Portugal Baltar Russia Moscow U.A.E. Dubai U.K. Gawcott

Asia - Pacific

Australia Brisbane Melbourne Sydney China Beijing Xi'an India Hyderabad Pune Korea Seoul Philippines Makati City Singapore

Brazil Alphaville China TaiAn Zhangjiagang France Charlieu La Clayette Moulins Germany Wilhelmshaven India Pune Italy Niella Tanaro Portugal Baltar Fânzeres Slovakia Saris USA Manitowoc

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