features

- 4 models...
  - YB4409: 8.5T (7.7mt) 3-section boom with 25 ft. 2 in. (7.6m) Tip Height
  - YB4409XL: 8.5T (7.7mt) 3-section boom with 33 ft. 6 in. (10.2m) Tip Height
  - YB4409-2: 9.0T (8.1mt) 3-section boom with 38 ft. 2 in. (11.6m) Tip Height
  - YB4411: 10.5T (9.5mt) 3-section boom with 38 ft. 2 in. (11.6m) Tip Height

- 6 ft. (1.8m) fixed extension (YB4409 / XL) and 12 ft. (3.6m) offsettable swingaway extension (YB4409-2 & YB4411)

- 70 bhp (52.2 kW) GM EFI dual fuel engine or 99 bhp (73.8 kW) Cummins diesel engine

Industrial Hydraulic Crane
www.manitowoccranegroup.com

*Product may be shown with optional equipment.
**Standard:** Cummins QSB 3.3L turbocharged diesel rated @ 99 bhp (73.8kW) @ 2600 rpm.

- Single position oblique style outriggers
- Narrow width for inside aisle way usage

**Standard:** 4-wheel coordinated steer

**Optional:** 2-wheel, 4-wheel, and crab steer (std. on YB4409-2)

**Standard:** 2-wheel, 4-wheel, and crab steer with self alignment (YB4411)

**Standard:** Open air cab shell w/overhead safety glass

**Optional:** Closed cab with hinged door, heater, and defroster

**Standard:** 21 ft. (6.4m) main boom on the YB4409
30 ft. (9.1m) main boom on the YB4409XL
32 ft. 10 in. (10.0m) main boom on the YB4409-2 & YB4411

**Optional:** Manual 4th main boom section adds 10 ft. (3.0m) additional main boom length on YB4409 and YB4409-XL only.
## Superstructure

### Boom

YB4409: 9 ft. 8 in. – 21 ft. 2 in. (2.9m – 6.5m) three- section full power boom.
Maximum tip height: 25 ft. 2 in. (7.6m)

YB4409XL: 12 ft. 8 in. – 30 ft. 2 in. (3.8m – 9.2m) three- section full power boom.
Maximum tip height: 33 ft. 6 in. (10.2m)

YB4409-2 & YB4411: 13 ft. 10 in. – 32 ft. 10 in. (4.2m – 10.0m) three-section full power boom.
Maximum tip height: 38 ft. 2 in. (11.6m)

*Optional Boom
YB4409 & YB4409XL: Manual 4th main boom fly section

*Boom Extension
YB4409 & YB4409XL: 6 ft. (1.8m) fixed pin on extension
YB4409-2 & YB4411: 12 ft. (3.6m) offsettable extension
12-18 ft. (3.6-5.4m) telescopic offsettable extension

### Boom Nose

YB4409 / XL: Single sheave non-pivoting
YB4409-2 & YB4411 only: Single sheave, 3-position (0˚, + 30˚, + 80˚) pivoting boom nose for minimizing head space requirements. Lowers head height 10.5 in. (0.26m) when nose is pivoted fully forward.

### Boom Elevation

Single double acting hydraulic cylinder with integral holding valve.
Elevation: 0° to 60° for the YB4409 & YB4409XL
0° to 72° for the YB4409-2 & YB4411

### Anti-Two Block Device

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.

### Load Indicator

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. Displays color coded light bar and audible alarm with function cutout if load exceeds entered parameters.

### Swing

Ball bearing swing circle with 360° continuous rotation.
Hydraulic driven worm gear and pinion.
Maximum speed: 2.05 rpm

### Hydraulic System

YB4409 & 4409XL: (2) gear pumps
YB4409-2 & YB4411: Variable displacement piston pump and piggyback gear pump.

Combined flow: 28.5gpm (107.9Lpm)
Maximum system operating pressure: 3600 psi

YB4409 & YB4409XL: Six section valve bank mounted in dash panel with direct mechanical linkage for low effort lever control.
YB4409-2 & 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.
23.5 gallon (89 L) 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 & YB4411: Piston motor drive w/spring applied/hydraulic released brake.

Drum Diameter:
YB4409 / XL: 9.69 in. (0.24m)
YB4409-2 & YB4411: 10.63 in. (0.27m)

Maximum Single Line Pull:
YB4409 / XL: 10,700lb (4,854kg)
YB4409-2 & YB4411: 14,000lb (6,350kg)

Maximum Single Line Speed:
YB4409 / XL: 88 FPM (26.8m / min)
YB4409-2 & YB4411: 120FPM (36.6m / min)

Maximum Permissible Single Line Pull:
YB4409 / XL : 8,500lb (3 855 kg)
(1/2” [12.7mm] Python Ultra XIPS)
YB4409-2 & YB4411: 10,000lb (4 536kg)
(9/16” [14.0mm] EEIPS)

Rope Length :
YB4409 / XL: (3-section boom) 97 ft. (29.6m)
(4-section boom) 130 ft. (39.6m)
YB4409-2 & YB4411: 120 ft. (36.6m)

*Denotes optional equipment
Carrier
High strength alloy steel constructed with integral outrigger housings; front and rear lifting, towing, and tie-down lugs. 42 ft. x 42 ft. carrydeck size with 14,000 lb (6,350kg) carrying capacity (YB4409 / XL / YB4409-2) and 17,000 lb (7,711kg) carrying capacity (YB4411). Deck coated with anti-skid treatment.

Outriggers
YB4409, YB4409XL & 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.

Outrigger Controls
YB4409-2, YB4409 & 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 -3- position rocker switch to select all beams / jacks, left beams / jacks only, or right beams / jacks only. Separate -4- 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.

Std. Engine (Tier III)
Cummins QSB 3.3L turbo-charged diesel rated @ 99 bhp (73.8kW) @ 2600 rpm.

*Optional Engine
G.M. 3.0L EFI dual fuel (gasoline / L.P.) rated @ 70 bhp (52.2kW) @ 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.

*Operators Control Station Enclosed
Includes the standard cab shell with the addition of front and rear glass and sliding glass on the right side. Hinged full door with sliding glass.
Front windshield wiper and heater and defroster is included.

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

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

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

Steer
YB4409 / XL: 2-wheel, 4-wheel steer
YB4409-2: 2-wheel, 4-wheel w/crab steer
YB4411: 2-wheel, 4-wheel, and crab steer w/ electronic self alignment.

Transmission
YB4409 / XL & YB4409-2: Clark synchromesh -4- speeds forward and reverse with stalk mounted forward/reverse selector.
YB4411: Clark powershift -4- speeds forward and reverse. Stalk mounted shifter on left side of steering column.

Axles
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 14PR 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.

Maximum Speed
22 MPH (35.6km/h)

Gradeability**
YB4409 / XL & YB4409-2: 57%....no load
YB4411: 68%....no load
31%....12,000lb (5 443kg) load
31%....12,000lb (5 443kg) load
40%....20,000lb (9 072kg) load

G.V.W.
YB4409: 13,400 lb. (6 078 kg)
YB4409XL: 15,180 lb (6 885 kg)
YB4409-2: 15,800 lb (7 167 kg)
YB4411: 16,600 lb (7 530 kg)

Miscellaneous Standard Equipment
Single sheave, “Quick Reeve” style hookblock.
YB4409 / XL 8.5T (8.0mt); YB4409-2: 9T (8.1mt); YB4411 10.5T (10mt).
Back-up alarm.

*Denotes optional equipment
**Theoretical
YB4409 Dimensions

1' 0" (0.30 m)
5' 11.88" (1.82 m)
3' 3.5" (1.08 m)
3' 7.75" (1.11 m)
3' 3" (0.99 m)

5' 8.38" (1.74 m)
5' 11.88" (1.82 m)
5' 8.38" (1.74 m)
5' 7" (1.70 m)
5' 8.38" (1.74 m)

6" 7.5" (2.01 m)

1' 6" (0.46 m)
1' 11.5" (0.60 m)

11' 11.75" (3.65 m)
12' 7" (3.84 m)

4' 2.88" (1.88 m)
1' 1" (0.30 m)
3' 4.5" (1.00 m)
3' 3" (0.99 m)
3' 7.25" (1.93 m)
6' 6.25" (1.99 m)
9' 2.75" (2.81 m)
10' 2" (3.10 m)

7' 10" (2.39 m)
5' 9.7" (1.77 m)
3' 2" (0.97 m)

9.5" (On Tires) (0.25 m)
6' 4" (1.93 m)
5' 6" (1.60 m)

3' 6" (1.07 m)

5" (On Tires) (0.15 m)
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.
YB4400 Series

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.

### JIB CAPACITY

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, 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 (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 12000 lbs. The maximum deck load only is 14000 lbs.

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

### REDUCTION CHART

<table>
<thead>
<tr>
<th>FROM MAIN BOOM RATINGS</th>
<th>FROM JIB RATINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN BLOCK</td>
<td>140 lbs</td>
</tr>
<tr>
<td>Hook &amp; Ball</td>
<td>100 lbs</td>
</tr>
<tr>
<td>JIB, STOWED</td>
<td>0 lbs</td>
</tr>
<tr>
<td>JIB, DEPLOYED</td>
<td>150 lbs</td>
</tr>
</tbody>
</table>

### RIGGING CHART

- **1-PART**: 0-8500 lbs
- **2-PART**: 0-17000 lbs

**Wire Rope**: 1/2 inch diameter

Min. breaking strength 29750 lbs.
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.
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 machine leveled, standing on a firm, uniform supporting surface. Practical working loads depend on supporting surface, operating radius, and other factors affecting stability. Hazardous surroundings, experience of personnel and proper handling 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 the next larger radius.

7. The maximum combined total boom and deck load is 12,000 lbs. For deck loads only, the maximum load is 14,000 lbs with 10:00 x 15 tires. Tire inflation at 100 psi.

8. Do not induce external side loads to boom or jib.
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.
YB4400 Series

range diagram

YB4409-2

OPERATING RADIUS IN FEET FROM AXIS OF ROTATION

HEIGHT FROM GROUND IN FEET

50° 10” (15.59 m) Boom
With 12’ (3.66 m) to 18’ (5.49 m)
Telescopic Offsettable Boom Extension

44° 10” (13.67 m) Boom
With 12’ (3.66 m)
Offsettable Boom Extension

32° 10” (10.10 m) Boom

23° 4” (7.11 m) Boom

13° 10” (4.22 m) Boom

12’ JIB 18’ JIB

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.
**YB4409-2**

<table>
<thead>
<tr>
<th>RADIUS (ft)</th>
<th>ON OUTRIGGERS (lbs)</th>
<th>ON RUBBER (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F/R</td>
<td>360°</td>
</tr>
<tr>
<td></td>
<td>BOOM RETRACTED</td>
<td>BOOM EXTENDED</td>
</tr>
<tr>
<td>5.0</td>
<td>18000</td>
<td>14700</td>
</tr>
<tr>
<td>6.0</td>
<td>17200</td>
<td>14400</td>
</tr>
<tr>
<td>8.0</td>
<td>12200</td>
<td>11400</td>
</tr>
<tr>
<td>12.0</td>
<td>10200</td>
<td>9100</td>
</tr>
<tr>
<td>14.0</td>
<td>8400</td>
<td>7600</td>
</tr>
<tr>
<td>16.0</td>
<td>7200</td>
<td>6300</td>
</tr>
<tr>
<td>18.0</td>
<td>5400</td>
<td>4340</td>
</tr>
<tr>
<td>20.0</td>
<td>4330</td>
<td>3610</td>
</tr>
<tr>
<td>22.0</td>
<td>4000</td>
<td>3030</td>
</tr>
<tr>
<td>24.0</td>
<td>3480</td>
<td>2590</td>
</tr>
<tr>
<td>26.0</td>
<td>3020</td>
<td>2250</td>
</tr>
<tr>
<td>28.0</td>
<td>2699</td>
<td>2010</td>
</tr>
<tr>
<td>31.0</td>
<td>2270</td>
<td>1740</td>
</tr>
<tr>
<td>34.0</td>
<td>1960</td>
<td>1550</td>
</tr>
<tr>
<td>36.0</td>
<td>1770</td>
<td>1350</td>
</tr>
<tr>
<td>38.0</td>
<td>1580</td>
<td>1290</td>
</tr>
<tr>
<td>40.0</td>
<td>1420</td>
<td>1050</td>
</tr>
<tr>
<td>42.0</td>
<td>1270</td>
<td>930</td>
</tr>
<tr>
<td>44.0</td>
<td>1200</td>
<td>880</td>
</tr>
<tr>
<td>46.0</td>
<td>1160</td>
<td>820</td>
</tr>
<tr>
<td>48.0</td>
<td>1110</td>
<td>760</td>
</tr>
</tbody>
</table>

**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. Pracical 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 (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 12000 lbs. The maximum deck load only is 14000 lbs.**

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

---

**REDUCTION CHART**

<table>
<thead>
<tr>
<th>FROM MAIN BOOM RATING</th>
<th>FROM JIB RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN BLOCK</td>
<td>140 lbs</td>
</tr>
<tr>
<td>HOOK &amp; BALL</td>
<td>100 lbs</td>
</tr>
<tr>
<td>JIB, STOWED</td>
<td>0 lbs</td>
</tr>
<tr>
<td>JIB, DEPLOYED</td>
<td>450 lbs</td>
</tr>
</tbody>
</table>

**RIGGING CHART**

1. PART 0-10000 lbs
2. PART 0-18000 lbs

**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.**

---

**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.**
YB4411

SEE INSET

*0° boomhead position can only be used with headache ball.
Dimensions are with the boom horizontal and the anti-two block bottomed.

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.
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

### YB4411

#### JIB Structural Capacities (lbs)

<table>
<thead>
<tr>
<th>MAIN BOOM ANGLE (deg)</th>
<th>12 FT JIB</th>
<th>16 FT JIB</th>
<th>18 FT JIB</th>
</tr>
</thead>
<tbody>
<tr>
<td>0° OFFSET</td>
<td>72</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>15° OFFSET</td>
<td>100</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>30° OFFSET</td>
<td>120</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>0° OFFSET</td>
<td>72</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>15° OFFSET</td>
<td>100</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>30° OFFSET</td>
<td>120</td>
<td>120</td>
<td>110</td>
</tr>
<tr>
<td>0° OFFSET</td>
<td>72</td>
<td>70</td>
<td>65</td>
</tr>
<tr>
<td>15° OFFSET</td>
<td>100</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>30° OFFSET</td>
<td>120</td>
<td>120</td>
<td>110</td>
</tr>
</tbody>
</table>

#### 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, 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 (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 12000 lbs. The maximum deck load only is 14000 lbs.

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

---

Reduction Chart

- **From Main Boom Ratings**
  - MAIN BLOCK: 140 lbs
  - HOOK & BALL: 100 lbs
  - JIB, STOWED: 0 lbs
  - JIB, DEPLOYED: 450 lbs

- **From JIB Ratings**
  - MAIN BLOCK: N/A
  - HOOK & BALL: 100 lbs
  - JIB, STOWED: 0 lbs
  - JIB, DEPLOYED: N/A

Rigging Chart

Wire Rope: 9/16 inch diameter
Min. breaking strength 36750 lbs.

---

**Shaded Areas are Governed by Structural Strength, Do Not Rely on Tipping.**

### Load Chart Breakdown

#### 15° - 30°

- **Front and Rear**
  - **Rigging Chart**
  - **Load Ratings**
  - **Main Block**: 140 lbs
  - **Hook & Ball**: 100 lbs
  - **Jib, Stowed**: 0 lbs
  - **Jib, Deployed**: 450 lbs

- **Reduction Chart**
  - **From Main Boom Ratings**
    - MAIN BLOCK: 140 lbs
    - HOOK & BALL: 100 lbs
    - JIB, STOWED: 0 lbs
    - JIB, DEPLOYED: 450 lbs

- **From JIB Ratings**
  - MAIN BLOCK: N/A
  - HOOK & BALL: 100 lbs
  - JIB, STOWED: 0 lbs
  - JIB, DEPLOYED: N/A

### Key Points

- **Load Ratings**
  - MAIN BLOCK: 140 lbs
  - HOOK & BALL: 100 lbs
  - JIB, STOWED: 0 lbs
  - JIB, DEPLOYED: 450 lbs

- **Reduction Chart**
  - **From Main Boom Ratings**
    - MAIN BLOCK: 140 lbs
    - HOOK & BALL: 100 lbs
    - JIB, STOWED: 0 lbs
    - JIB, DEPLOYED: 450 lbs

- **From JIB Ratings**
  - MAIN BLOCK: N/A
  - HOOK & BALL: 100 lbs
  - JIB, STOWED: 0 lbs
  - JIB, DEPLOYED: N/A

---

**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.
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 Load Chart

**YB4409**

**Capacity Chart and Main Capacity Chart.**

1. Jib capacity is limited by both structural radius and main capacity chart.
2. Shaded areas are governed by structural strength, do not rely on tipping.
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 the boom retracted to the shortest length possible and centered over the front.
6. For operating radius not shown, use load rating of next larger radius.
7. The maximum combined total boom and deck load is 5,440 kgs. The maximum deck load only is 6,350 kgs.
8. Do not induce any external side loads to boom or jib.

#### Reduction Chart

| MAIN BLOCK | 64 kg | N/A |
| Hook & Ball | 45 kg | 45 kg |
| Jib, Stowed | 0 kg | N/A |
| Jib, Deployed | 68 kg | 0 kg |

#### Rigging Chart

- **Wire Rope:** 13mm diameter
- **Min. breaking strength:** 133.8 kN

*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.*
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 load chart**

**YB4409XL**

**Main Boom Structural Capacities (kg)**

<table>
<thead>
<tr>
<th>Radius (m)</th>
<th>On Outriggers</th>
<th>On Rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>7710</td>
<td>7710</td>
</tr>
<tr>
<td>1.8</td>
<td>7120</td>
<td>6530</td>
</tr>
<tr>
<td>2.4</td>
<td>6025</td>
<td>4900</td>
</tr>
<tr>
<td>3.0</td>
<td>4625</td>
<td>3855</td>
</tr>
<tr>
<td>3.7</td>
<td>3855</td>
<td>3150</td>
</tr>
<tr>
<td>4.3</td>
<td>3220</td>
<td>2510</td>
</tr>
<tr>
<td>4.9</td>
<td>2720</td>
<td>1930</td>
</tr>
<tr>
<td>5.5</td>
<td>2250</td>
<td>1570</td>
</tr>
<tr>
<td>6.1</td>
<td>1850</td>
<td>1290</td>
</tr>
<tr>
<td>6.7</td>
<td>1570</td>
<td>1100</td>
</tr>
<tr>
<td>7.3</td>
<td>1360</td>
<td>950</td>
</tr>
<tr>
<td>7.9</td>
<td>1180</td>
<td>820</td>
</tr>
<tr>
<td>8.5</td>
<td>1070</td>
<td>730</td>
</tr>
<tr>
<td>9.1</td>
<td>970</td>
<td>650</td>
</tr>
<tr>
<td>9.6</td>
<td>880</td>
<td>580</td>
</tr>
<tr>
<td>10.2</td>
<td>800</td>
<td>530</td>
</tr>
<tr>
<td>10.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11.6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12.2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>13.1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Jib Structural Capacities (kg)**

<table>
<thead>
<tr>
<th>Jib Capacity</th>
<th>On Outriggers</th>
<th>On Rubber</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-Section Boom</td>
<td>1000</td>
<td>1225</td>
</tr>
<tr>
<td>4-Section Boom</td>
<td>1000</td>
<td>1270</td>
</tr>
</tbody>
</table>

**Reduction Chart**

<table>
<thead>
<tr>
<th>From Main Boom Ratings</th>
<th>From Jib Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Block</td>
<td>64 kg</td>
</tr>
<tr>
<td>Hook &amp; Ball</td>
<td>45 kg</td>
</tr>
<tr>
<td>Jib, Stowed</td>
<td>0 kg</td>
</tr>
<tr>
<td>Jib, Deployed</td>
<td>68 kg</td>
</tr>
</tbody>
</table>

**Rigging Chart**

- **1-Part Wire Rope:** D-3395 kg
- **2-Part Wire Rope:** D-7710 kg

**WIRE ROPE:** 13mm diameter

**Min. breaking strength:** 139.8 kN

---

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 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 the boom retracted to the shortest length possible and centered over the 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 kgs. The maximum deck load only is 6350 kgs.

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

---

**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.
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.
### Main Boom Structural Capacities (kg)

<table>
<thead>
<tr>
<th>MAIN BOOM ANGLE (deg)</th>
<th>0° OFFSET</th>
<th>15° OFFSET</th>
<th>30° OFFSET</th>
<th>45° OFFSET</th>
<th>60° OFFSET</th>
<th>75° OFFSET</th>
<th>90° OFFSET</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°</td>
<td>810 kg</td>
<td>1040 kg</td>
<td>1250 kg</td>
<td>1470 kg</td>
<td>1670 kg</td>
<td>1900 kg</td>
<td>2040 kg</td>
</tr>
<tr>
<td>15°</td>
<td>600 kg</td>
<td>810 kg</td>
<td>1020 kg</td>
<td>1230 kg</td>
<td>1440 kg</td>
<td>1660 kg</td>
<td>1880 kg</td>
</tr>
<tr>
<td>30°</td>
<td>450 kg</td>
<td>650 kg</td>
<td>850 kg</td>
<td>1050 kg</td>
<td>1260 kg</td>
<td>1470 kg</td>
<td>1680 kg</td>
</tr>
<tr>
<td>45°</td>
<td>300 kg</td>
<td>500 kg</td>
<td>700 kg</td>
<td>900 kg</td>
<td>1100 kg</td>
<td>1300 kg</td>
<td>1500 kg</td>
</tr>
<tr>
<td>60°</td>
<td>150 kg</td>
<td>300 kg</td>
<td>500 kg</td>
<td>700 kg</td>
<td>900 kg</td>
<td>1100 kg</td>
<td>1300 kg</td>
</tr>
<tr>
<td>75°</td>
<td>0 kg</td>
<td>150 kg</td>
<td>300 kg</td>
<td>500 kg</td>
<td>700 kg</td>
<td>900 kg</td>
<td>1100 kg</td>
</tr>
<tr>
<td>90°</td>
<td>0 kg</td>
<td>0 kg</td>
<td>150 kg</td>
<td>300 kg</td>
<td>500 kg</td>
<td>700 kg</td>
<td>900 kg</td>
</tr>
</tbody>
</table>

### JIB Structural Capacities (kg)

<table>
<thead>
<tr>
<th>JIB ANGLE (deg)</th>
<th>0° OFFSET</th>
<th>15° OFFSET</th>
<th>30° OFFSET</th>
<th>45° OFFSET</th>
<th>60° OFFSET</th>
<th>75° OFFSET</th>
<th>90° OFFSET</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°</td>
<td>1670 kg</td>
<td>1810 kg</td>
<td>2000 kg</td>
<td>2200 kg</td>
<td>2400 kg</td>
<td>2620 kg</td>
<td>2840 kg</td>
</tr>
<tr>
<td>15°</td>
<td>1470 kg</td>
<td>1610 kg</td>
<td>1760 kg</td>
<td>1920 kg</td>
<td>2080 kg</td>
<td>2240 kg</td>
<td>2400 kg</td>
</tr>
<tr>
<td>30°</td>
<td>1270 kg</td>
<td>1420 kg</td>
<td>1580 kg</td>
<td>1740 kg</td>
<td>1900 kg</td>
<td>2060 kg</td>
<td>2220 kg</td>
</tr>
<tr>
<td>45°</td>
<td>1070 kg</td>
<td>1230 kg</td>
<td>1390 kg</td>
<td>1550 kg</td>
<td>1710 kg</td>
<td>1870 kg</td>
<td>2030 kg</td>
</tr>
<tr>
<td>60°</td>
<td>870 kg</td>
<td>1030 kg</td>
<td>1190 kg</td>
<td>1350 kg</td>
<td>1510 kg</td>
<td>1670 kg</td>
<td>1830 kg</td>
</tr>
<tr>
<td>75°</td>
<td>670 kg</td>
<td>830 kg</td>
<td>990 kg</td>
<td>1150 kg</td>
<td>1310 kg</td>
<td>1470 kg</td>
<td>1630 kg</td>
</tr>
<tr>
<td>90°</td>
<td>470 kg</td>
<td>630 kg</td>
<td>790 kg</td>
<td>950 kg</td>
<td>1110 kg</td>
<td>1270 kg</td>
<td>1430 kg</td>
</tr>
</tbody>
</table>

### Reduction Chart

<table>
<thead>
<tr>
<th>FROM MAIN BOOM RATING</th>
<th>FROM JIB RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAIN BLOCK 60 kg</td>
<td>N/A</td>
</tr>
<tr>
<td>HOOK &amp; BALL 45 kg</td>
<td>45 kg</td>
</tr>
<tr>
<td>JIB, STOWED 0 kg</td>
<td>N/A</td>
</tr>
<tr>
<td>JIB, DEPLOYED 200 kg</td>
<td>0 kg</td>
</tr>
</tbody>
</table>

### Rigging Chart

- **Wire Rope:** 14 mm diameter
- **Min. Breaking Strength:** 181.3 kN

**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 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 6530 kg.

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

---

**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.
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.
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 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 as part of the load. See reduction chart.

4) Ratings on outriggers are without 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 the boom retracted to the shortest length possible and centered over the front.

6) For operating radius not shown, use the shortest length possible and load rating of next larger radius.

7) The maximum combined total boom and deck load is 5 440 kgs. The maximum deck load only is 6 350 kgs.

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

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.
Constant improvement and engineering progress make it necessary that we reserve the right to make specification, equipment and price changes without notice. Illustrations shown may include optional equipment and accessories, and may not include all standard equipment.

©2007 MANITOWOC
Printed in USA
Form No. Y84400 Series
Part No. 04-019 / 0108 / 2M