GROVE

YB4400 Series



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)



Manıtowoc

Industrial Hydraulic Crane

*Product may be shown with optional equipment.

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Range Diagram

Load Chart

YB4409 (metric)

Range Diagram

DIN/ISO Load Chart

YB4409XL (metric)

Range Diagram

DIN/ISO Load Chart

YB4409-2 (metric)

Range Diagram

DIN/ISO Load Chart

YB4411 (metric)

Range Diagram

DIN/ISO Load Chart

2 3

567

89

<u>11</u>

12 13

14 15

17

18

19 20

21

21 **2**2

23

features

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



Standard: Cummins QSB 3.3L turbocharged diesel rated @ 99 bhp (73.8kW) @ 2600 rpm.



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.



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)



■® 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

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.



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.

*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.

*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.



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

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:

9.69 in. (0.24m) YB4409 / XI · YB4409-2 & YB4411: 10.63 in. (0.27m)

Maximum Single Line Pull:

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

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

Frame

High strength alloy steel constructed with integral outrigger housings; front and rear lifting, towing, and tie-down lugs. 42 ft.² 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)

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

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

$|\widehat{\mathbf{T}}|$ 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

<u>U</u> Tires

10.00 x 15 14PR pneumatic

O 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.

V

Maximum Speed

22 MPH (35.6km/h)

Gradeability**

YB4409 / XL & YB4409-2: 57%....no load 31%....12,000lb (5 443kg) load

YB4411: 68%....no 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.

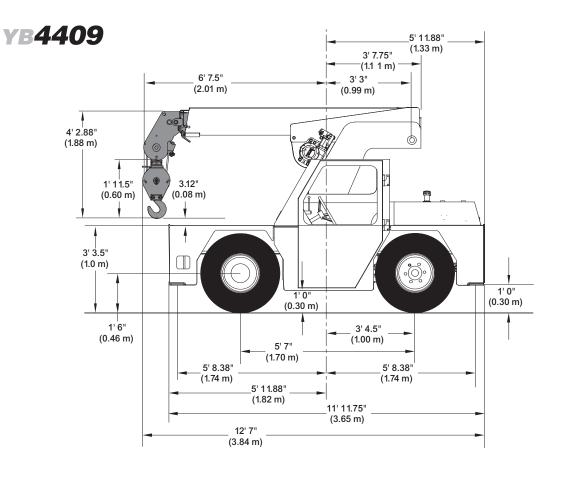
*Denotes optional equipment

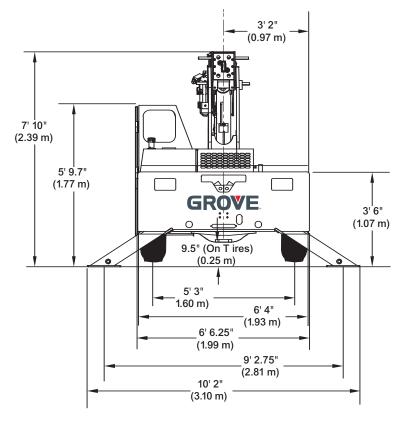
**Theoretical





dimensions

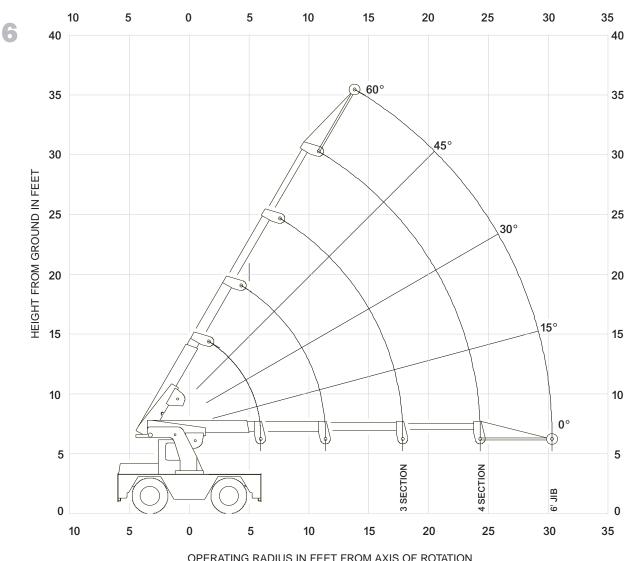




YB4400 Series

range diagram





OPERATING RADIUS IN FEET FROM AXIS OF ROTATION



load chart

YB4409

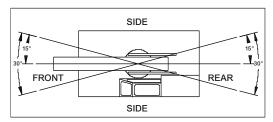
RADIUS -		N BOOM WIT	BOOM OR H 4TH RETRAG	CTED	RADIUS		4-SECTION BOOM WITH 4TH EXTENDED			
(ft)	ON OUTRIGO	GERS (lbs)	ON RUBB	ON RUBBER (lbs)		(ft)	ON OUTRIGGERS (lbs)		ON RUBBER (lbs)	
	F/R	360°	F/R	360°			F/R	360°	F/R	360°
5.0	17000	* 17000	10000	10000		5.0	6100	6100	6100	6100
6.0	15700	* 14400	10000	7450	BOOM	6.0	6100	6100	6100	6100
8.0	12400	10800	7150	4400	l ä	8.0	5300	5300	5300	5250
10.0	10200	8600	4700	2950	MAIN	10.0	4700	4700	4700	3750
12.0	8500	7000	3400	2175	Σ	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	Λ	20.0	4300	3150	1600	1000
22.0	2600	2600	1350	825		22.0	3700	2700	1375	850
24.5	2200	2200	1150	675	\	24.5	3100	2300	1200	700
26.0	-	-	-	-		26.0	2700	2125	1100	650
28.0	-	-	-	-	8	28.0	2500	1900	975	575
30.0	-	-	-	-	_	30.0	2300	1700	850	475
31.0	-	-	-	-		31.0	2200	1625	800	425

MAIN	JIB STRUCTURAL CAPACITIES (lbs.)							
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						

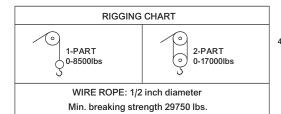
*LIMIT RATINGS TO 11.800 LBS WHEN 3RD SECTION IS EXTENDED ANY AMOUNT

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.



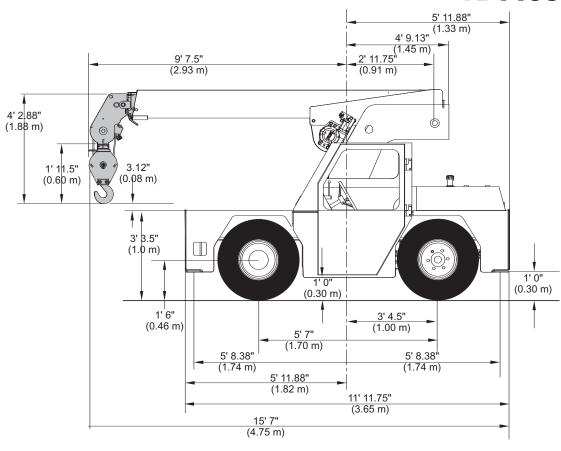
R	EDUCTION CHART					
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS				
MAIN BLOCK	140 lbs	N/A				
HOOK & BALL	100 lbs	100 lbs				
JIB, STOWED	0 lbs	N/A				
JIB, DEPLOYED	150 lbs	0 lbs				

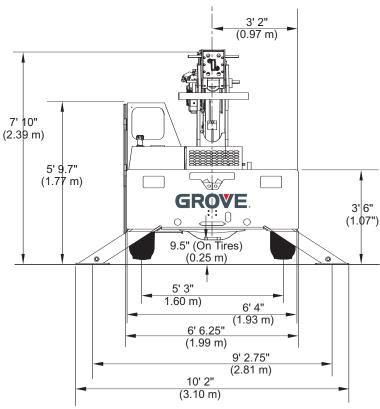


- The rated loads are the maximum lift capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with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

- 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.
- For operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 12000 lbs. The maximum deck load only is 14000 bs.
- Do not induce any external side loads to boom or jib.

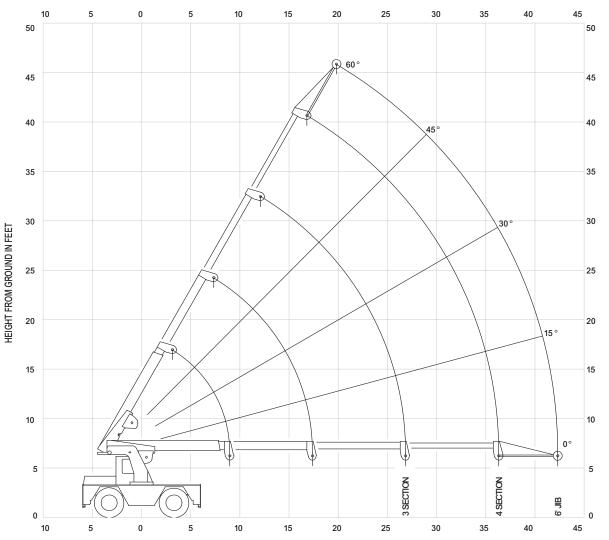






range diagram





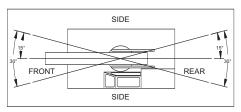
OPERATING RADIUS IN FEET FROM AXIS OF ROTATION



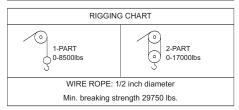
	3-SE	CTION BOOM OR 4-SECTIO	N BOOM WITH 4TH RETR	ACTED				4-SECTION BOOM V	WITH 4TH EXTENDED	
PERATING RADIUS	ON OU	TRIGGERS	ON F	RUBBER	1	OPERATING RADIUS	ON OU	TRIGGERS	ON RI	JBBER
	FRONT	360°	FRONT	360°	1		FRONT	360°	FRONT	360°
5.0 ft	17000 lbs	17000 lbs	10000 lbs	10000 lbs		5.0 ft	-	-	-	
6.0 ft	15700 lbs	14400 lbs	9500 lbs	8200 lbs		6.0 ft	-	-		
8.0 ft	12400 lbs	10800 lbs	8000 lbs	5600 lbs		8.0 ft	4900 lbs	4900 lbs	4900 lbs	4900 lbs
10.0 ft	10200 lbs	8500 lbs	5400 lbs	3800 lbs		10.0 ft	4300 lbs	4300 lbs	4300 lbs	4250 lbs
12.0 ft	8500 lbs	6950 lbs	3800 lbs	2700 lbs	Σ	12.0 ft	3800 lbs	3800 lbs	3800 lbs	3300 lbs
14.0 ft	7100 lbs	5800 lbs	2750 lbs	1950 lbs	ВООМ	14.0 ft	3400 lbs	3400 lbs	3400 lbs	2600 lbs
16.0 ft	6000 lbs	4650 lbs	2150 lbs	1450 lbs	ĕ	16.0 ft	3100 lbs	3100 lbs	2900 lbs	2100 lbs
18.0 ft	5200 lbs	3800 lbs	1800 lbs	1150 lbs	MAIN	18.0 ft	2900 lbs	2900 lbs	2400 lbs	1700 lbs
20.0 ft	4450 lbs	3150 lbs	1500 lbs	950 lbs	ž	20.0 ft	2900 lbs	2900 lbs	1950 lbs	1350 lbs
22.0 ft	3800 lbs	2700 lbs	1300 lbs	800 lbs		22.0 ft	2900 lbs	2900 lbs	1600 lbs	1050 lbs
24.0 ft	3300 lbs	2350 lbs	1100 lbs	650 lbs		24.0 ft	2900 lbs	2650 lbs	1350 lbs	850 lbs
26.0 ft	2900 lbs	2050 lbs	950 lbs	550 lbs		26.0 ft	2900 lbs	2300 lbs	1100 lbs	700 lbs
27.0 ft	2750 lbs	1900 lbs	850 lbs	500 lbs		27.0 ft	2900 lbs	2150 lbs	1000 lbs	650 lbs
28.0 ft	2525 lbs	1775 lbs	800 lbs	475 lbs	7	28.0 ft	2750 lbs	2000 lbs	950 lbs	600 lbs
30.0 ft	2275 lbs	1600 lbs	700 lbs	400 lbs	\	30.0 ft	2450 lbs	1800 lbs	800 lbs	500 lbs
32.0 ft	2025 lbs	1425 lbs	600 lbs	325 lbs	\	32.0 ft	2200 lbs	1600 lbs	700 lbs	400 lbs
33.5 ft	1875 lbs	1300 lbs	525 lbs	275 lbs	\	33.5 ft	1950 lbs	1400 lbs	625 lbs	325 lbs
36.0 ft	-	-	-		'	36.0 ft	1750 lbs	1250 lbs	550 lbs	250 lbs
38.0 ft	-	-	-			38.0 ft	1625 lbs	1125 lbs	475 lbs	225 lbs
40.0 ft	-	-	-			40.0 ft	1475 lbs	1025 lbs	400 lbs	200 lbs
42.0 ft	-	-	-		m	42.0 ft	1350 lbs	925 lbs	350 lbs	150 lbs
43.0 ft	-	-	-	-	胃	43.0 ft	1300 lbs	875 lbs	325 lbs	125 lbs
JIB STRUC	TURAL CAPACITIES @ M	AIN BOOM ANGLE (ALSO DO	NOT EXCEED CAPACITIE	S IN ABOVE CHART)		JIB STRUC	TURAL CAPACITIES @ M	AIN BOOM ANGLE (ALSO DO	NOT EXCEED CAPACITIES	S IN ABOVE CHART)
0°	15°	30°	45°	60°		0°	15°	30°	45°	60°
2200 lbs	2400 lbs	2700 lbs	3000 lbs	3500 lbs		2000 lbs	2100 lbs	2200 lbs	2600 lbs	3400 lbs

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	140 lbs	N/A
HOOK & BALL	100 lbs	100 lbs
JIB, STOWED	0 lbs	N/A
JIB, DEPLOYED	150 lbs	0 lbs



- 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.
- 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 reductrion 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.
- For operating radius not shown, use load rating of the next larger radius.
- 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 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.



VB4400 Series

dimensions

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YB4409-2

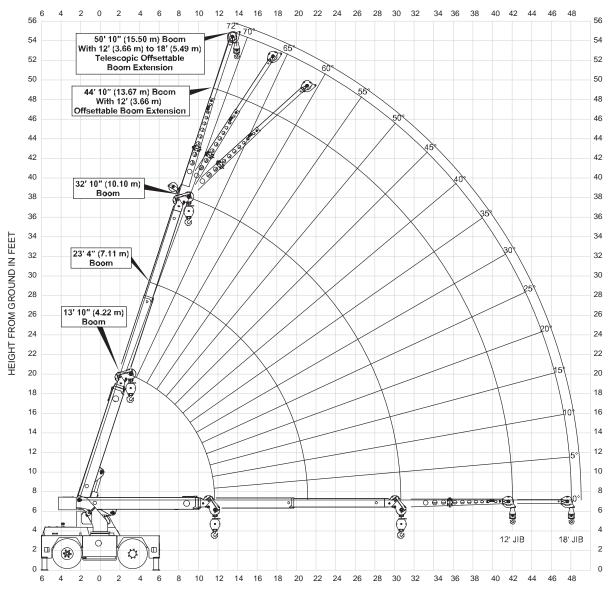
Retracted 13' 10" & Extended 32' 10" (Retracted 4.22 m & Extended 10.01 m) 11' 7.75' (3.5 m) 4' 4" (1.32 m) 11' 5.5" (3.39 m) 2' 2" (0.51 m) 15.5" (394 m) See Insert 1' 6" (0.46 m) 1' 0" (0.30 m) 1' 0" (0.30 m) 3' 4.5" (1.00 m) 5'7" (1.70 m) 5' 8.38" (1.74 m) 5' 8.38" (1.74 m) 5' 6.92<u>"</u> (1.70 m) 11' 11.75' (3.65 m) 3' 2.5" (.98 m) 54.0" (*1.37 m) o° *0° boom head 7' 3" (2.21 m) position can only be used with a down haul block 5' 9.7" (1.77 m) 3' 4.5" (1.03 m) 53.0" (1.34 m) Dimensions are with boom horizontal and the anti-two block bottomed. 2.5" (6.35 cm) (1.60 m) 6' 5" (1.96 m) 9' 2.75" (1.81 m) 10' 2" (3.10 m) 43.5" (1.10 m) 80° Dimensions are with boom horizontal



range diagram

YB4409-2

12



OPERATING RADIUS IN FEET FROM AXIS OF ROTATION

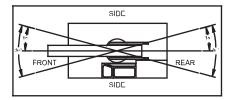


load chart

YB4409-2

			ON OUTRIC	GERS (lbs)		ON RUBI	BER (lbs)
	RADIUS (fl)	F/	R	36	0.	F/R	3601
	(.,,	BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	5.0	18000	14700	18000	14700	11500	9400
	6.0	15700	14400	15000	14400	10000	7500
	8.0	12200	12200	11400	11400	8100	5040
	10.0	10200	10200	9 100	9100	5480	3530
I ≥	12.0	8400	8400	7 6 00	7600	3920	2590
8	14.0	-	7200	-	6500	3040	1970
<u>ĕ</u>	16.0	-	6200	-	5310	2420	1560
MAIN BOOM	18.0	-	5400	-	4340	1970	1250
Σ	20.0	-	4830	-	3610	1640	1020
	22.0	-	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
1	36.0	-	1770	-	1350	430	180
1	38.0	-	1590	-	1200	350	130
<u> </u>	40.0	-	1420	-	1050	280	80
¬	42.0	-	1270	-	930	210	60
1	44.0	-	1200	-	880	190	40
1	46.0	-	1160	-	820	170	20
	48.0	-	1110	-	760	140	0

		JIB STR	JCTURAL	CAPACIT	TES (lbs)		
MAIN BOOM ANGLE		12 FT JIB		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	1 6 00	
45	2300	2200	2000	1 9 00	1750	1500	
40	2000	1900	1800	1700	1 6 00	1400	
35	1775	1675	1 6 00	1525	1450	1350	
30	1 6 00	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		-	



REDUCTION CHART FROM MAIN BOOM RATINGS FROM HATINGS MAIN BLOCK 140 lbs N/A HOOK & BALL 100 lbs 100 lbs JIB, STOWED JIB, DEPLOYED 450 lbs 0 lbs RIGGING CHART 1-PART 0-10000 lbs 2-PART 0-18000 lbs

WIRE ROPE: 9/16 inch diameter

Min. breaking strength 35000 lbs.

- 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.
- 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 outrigggers 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.
- 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.

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

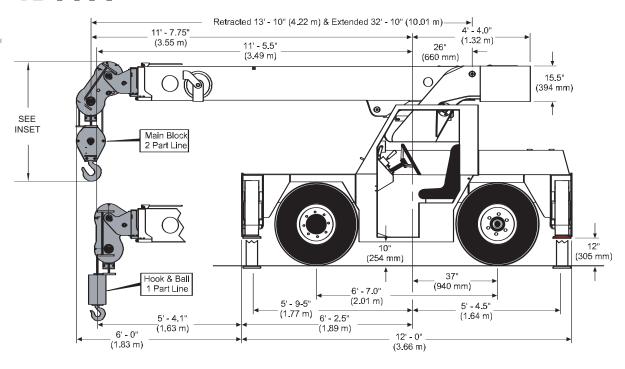
SHADED AREAS ARE GOVERNED BY STRUCTURAL STRENGTH, DO NOT RELY ON TIPPING.

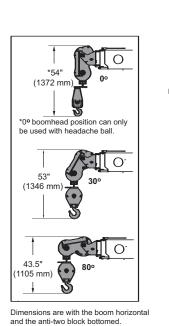
OPERATION OF THIS EQUIPMENT IN EXCESS OF RATING CHARTS AND DISREGARD OF INSTRUCTIONS IS DANGEROUS AND VOIDS WARRANTY.

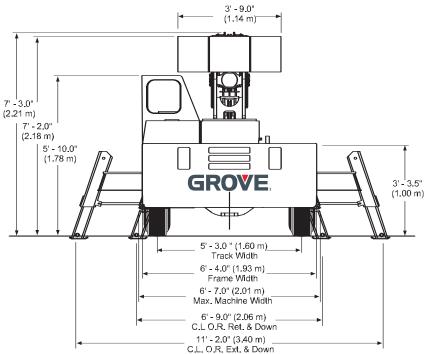
dimensions

YB4411

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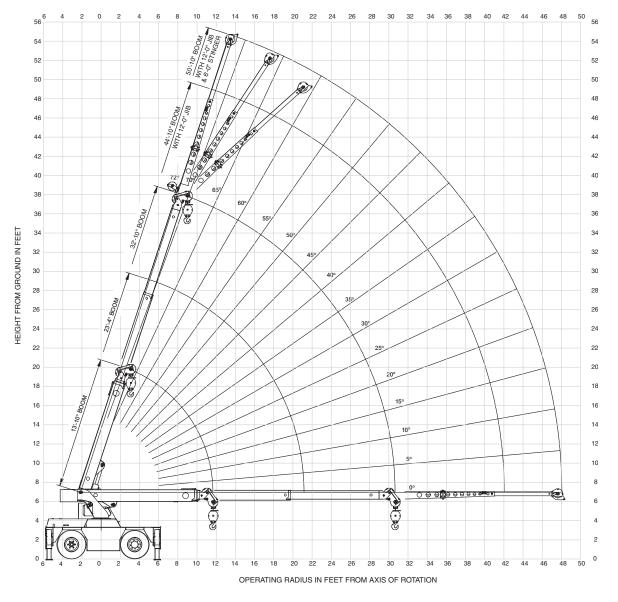


THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



range diagram

YB4411





YB4411

load chart

VB4400 Series

			ON OUTRIG	GERS (lbs)		ON RUBE	BER (lbs)
	RADIUS (ft)		EXTENDED 360° RETRACTED F/R		TED 360°	F/R	360°
	(1.)	BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	4.0	21000	15000	21000	15000	11500	11500
	5.0	18000	14700	18000	14700	11500	9400
	6.0	15700	14400	14400	14400	10000	7800
	8.0	12200	12200	9400	9400	8100	5900
	10.0	10200	10200	6700	6700	6100	4100
_	12.0	8400	8400	5000	5000	4600	3000
Õ	14.0	-	7100	-	3800	3600	2400
MAIN BOOM	16.0	-	6000	-	3100	2900	2000
N N	18.0	-	5000	-	2600	2400	1600
ž	20.0	-	4300	-	2100	2000	1200
	22.0	-	3700	-	1800	1700	1050
	24.0	-	3300	-	1500	1500	950
	26.0	-	2900	-	1300	1300	800
	28.0	-	2600	-	1150	1150	700
	31.0	-	2300	-	1000	900	500
	34.0	-	1975	-	850	700	350
	36.0	-	1775	-	750	600	275
	38.0	-	1575	-	625	500	200
멸	40.0	-	1425	-	525	425	125
∍	42.0	-	1300	-	425	350	75
	44.0	l -	1200	1 -	375	300	0

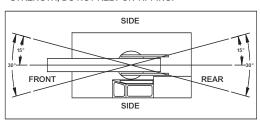
_								
			JIB STF	RUCTURAL	CAPACITIES (lbs)			
	MAIN BOOM		12 FTJIB		18 FTJIB			
	ANGLE (deg)	0 OFFSET	15 OFFSET	30 OFFSET	0 OFFSET	15 OFFSET	30 · OFFSET	
	72	7500	5100	3500	4000	3300	2300	
	70	7000	4800	3400	3750	3100	2200	
	65	5700	4100	3100	3200	2700	2000	
	60	4500	3500	2800	2800	2400	1850	
1	55	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	-	-	

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

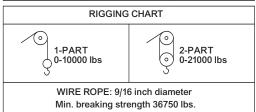
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46.0

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



R	REDUCTION CHART						
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS					
MAIN BLOCK	140 lbs	N/A					
HOOK & BALL	100 lbs	100 lbs					
JIB, STOWED	0 lbs	N/A					
JIB, DEPLOYED	450 lbs	0 lbs					



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

 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.

275

325

- 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.
- 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.

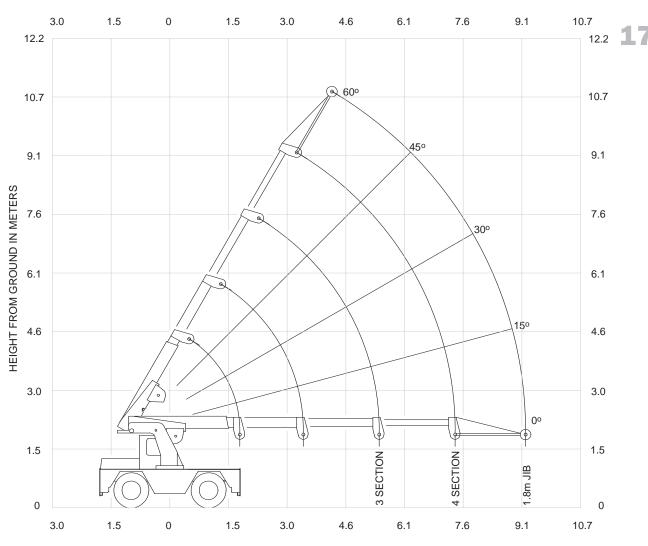
- Ratings on outrigggers are for either outriggers fully extended and down or fully retracted and down. Ratings for outriggers fully retracted and down will apply for any intermediate outrigger setting.
- 5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (100 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.
- 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 bs.
- Do not induce any external side loads to boom or jib.





range diagram

YB4409



OPERATING RADIUS IN METERS FROM AXIS OF ROTATION



DIN/ISO load chart

YB4409

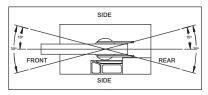
18

	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	CTION BOOM WITH 4TH RETRACTED			4-SECTION BOOM WITH 4TH EXTENDED						
(m)	ON OUTRIG	GGERS (kg)	ON RUBBER (kg)		1	RADIUS (m)	ON OUTRI	ON OUTRIGGERS (kg)		ON RUBBER (kg)	
	F/R	360°	F/R	360°			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		2.4	2400	2400	2400	2380	
3.0	4630	3900	2080	1300	BOOM	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	MAN	4.3	2000	2000	1280	820	
4.9	2580	1800	930	570	Σ	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	\	7.5	1290	940	500	270	
7.9	-	- 1	-	-		7.9	1190	870	460	250	
8.5	-	-	-	-		8.5	1080	780	410	210	
9.1	-	-	-	-	쁰	9.1	970	690	350	170	
9.4	-	-	-	-		9.4	920	660	330	150	

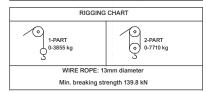
MAIN	JIB STRUCTURAL CAPACITIES (kg)						
BOOM ANGLE (deg)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	4-SECTION BOOM WITH 4TH EXTENDED					
60	1590	1588					
55	1510	1508					
50	1430	1429					
45	1360	1361					
40	1305	1304					
35	1270	1270					
30	1225	1225					
25	1180	1179					
20	1135	1134					
15	1090	1089					
10	1055	1055					
5	1020	1021					
0	1000	998					

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.



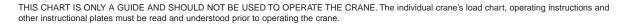
REDUCTION CHART					
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS			
MAIN BLOCK	64 kg	N/A			
HOOK & BALL	45 kg	45 kg			
JIB, STOWED	0 kg	N/A			
JIB, DEPLOYED	68 kg	0 kg			



- 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 suroundings, 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.

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

- 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.
- 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.

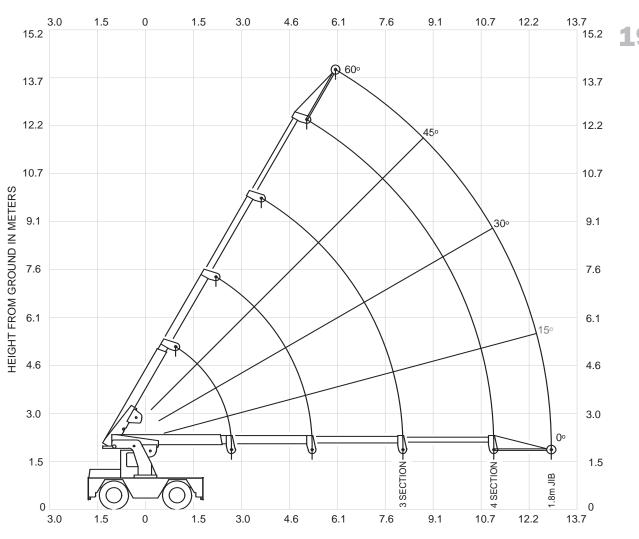




^{*} LIMIT RATINGS TO 5 350 kg WHEN 3RD SECTION IS EXTENDED ANY AMOUNT.

range diagram

YB4409XL



OPERATING RADIUS IN METERS FROM AXIS OF ROTATION

DIN/ISO load chart

YB4409XL

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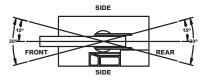
	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED RADIUS 4-SECTION BOOM WITH 4TH EXTENDED							ENDED		
RADIUS (m)	ON OUTRIG	GGERS (kg)	ON RUBI	BER (kg)	1	(m)	ON OUTRIGGERS (kg)		ON RUBBER (kg)	
	F/R	360°	F/R	360°	1		F/R	360°	F/R	360°
1.5	7710	7710	4535	4535	П	1.5	-	-	-	-
1.8	7120	6530	4310	3720	1	1.8	-	-	-	-
2.4	5625	4900	3580	2490	l	2.4	2225	2225	2225	2225
3.0	4625	3855	2400	1670	l	3.0	1950	1950	1950	1880
3.7	3855	3150	1670	1170	l_	3.7	1725	1725	1725	1450
4.3	3220	2550	1200	830	BOOM	4.3	1540	1540	1540	1130
4.9	2720	1930	930	610	18	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	l	7.3	1315	1080	560	340
7.9	1180	820	370	190	l	7.9	1315	930	450	270
8.2	1120	770	340	170	l	8.2	1200	860	400	240
8.5	1070	730	310	140	N.	8.5	1120	800	370	220
9.1	970	650	280	110	I۱	9.1	990	710	310	180
9.8	880	580	240	90	I١	9.8	890	630	270	130
10.2	800	530	220	60	I١	10.2	790	540	230	100
11.0	-	-	-	-	ı١	11.0	700	480	200	60
11.6	-	-	-	-	l	11.6	650	440	180	40
12.2	-	-	-	-	le	12.2	610	410	150	20
12.8	-	-	-	-	ľ	12.8	570	370	130	10
13.1	-	-	-	-	l	13.1	540	350	120	0

MAIN	JIB STRUCTURAL CAPACITIES (kg)					
BOOM ANGLE (deg)	3-SECTION BOOM OR 4-SECTION BOOM WITH 4TH RETRACTED	ECTION BOOM 4-SECTION BOOM				
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	1055 930				
5	1020	920				
0	1000	905				

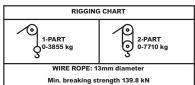
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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 FROM MAIN BOOM JIB RATINGS RATINGS				
MAIN BLOCK	64 kg	N/A			
HOOK & BALL	45 kg	45 kg			
JIB, STOWED	0 kg	N/A			
JIB, DEPLOYED 68 kg 0 kg					



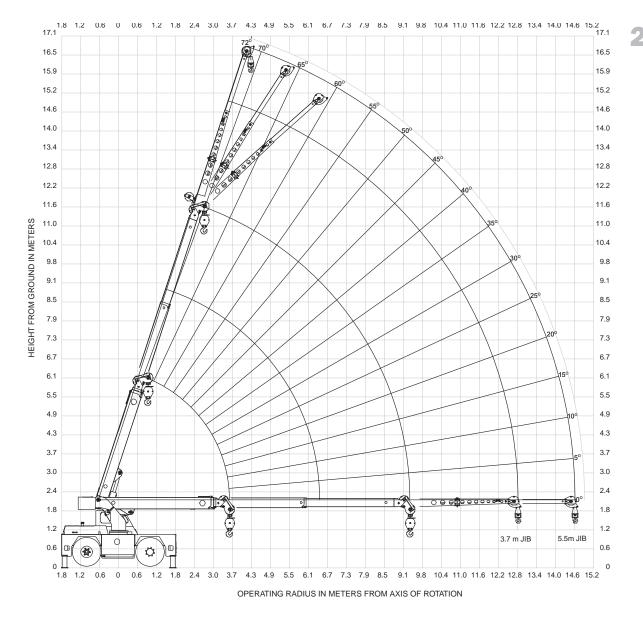
- The rated loads are the maximum lifting capacities as determined by operating radius only. Any combination of boom lengths and angles may be used to obtain operating radius. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, 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 suroundings, climatic conditions, experience of operator and proper training must be taken into account by the operator.
- 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.
- The maximum combined total boom and deck load is 5 443 kgs.
 The maximum deck load only is 6 350 kgs.
- Do not induce any external side loads to boom or jib.



range diagram

YB4409-2





DIN/ISO load chart

YB4409-2

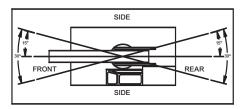
			ON OUTRIG	GERS (kg)		ON RUBBER (kg)	
	RADIUS (m)		R	36	0°	F/R	360°
	. ,	BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	1.5	8160	6670	8160	6670	5220	4260
	1.8	7120	6530	6800	6530	4540	3360
	2.4	5530	5530	5170	5170	3670	2240
	3.0	4630	4630	4130	4130	2440	1550
5	3.7	3810	3810	3450	3450	1730	1130
Į ģ	4.3	-	3270	-	2800	1330	840
l 8	4.9	-	2810	-	2220	1050	660
MAIN BOOM	5.5	-	2450	-	1800	850	520
Σ	6.1	-	2010	-	1490	700	420
	6.7	-	1670	-	1250	570	340
	7.3	-	1430	-	1060	480	280
	7.9	-	1240	-	910	400	220
	8.5	-	1090	-	810	330	170
	9.4	-	920	-	690	250	120
	10.4	-	780	-	590	180	70
	11.0	-	710	-	530	150	40
	11.6	-	630	-	460	110	10
■	12.2	-	560	-	400	80	0
=	12.8	-	490	-	350	50	0
	13.4	-	460	-	320	40	0
	14.0	-	440	-	300	30	0
	14.6	-	430	-	270	20	0

		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		-		

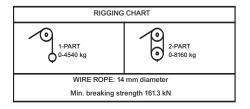
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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			

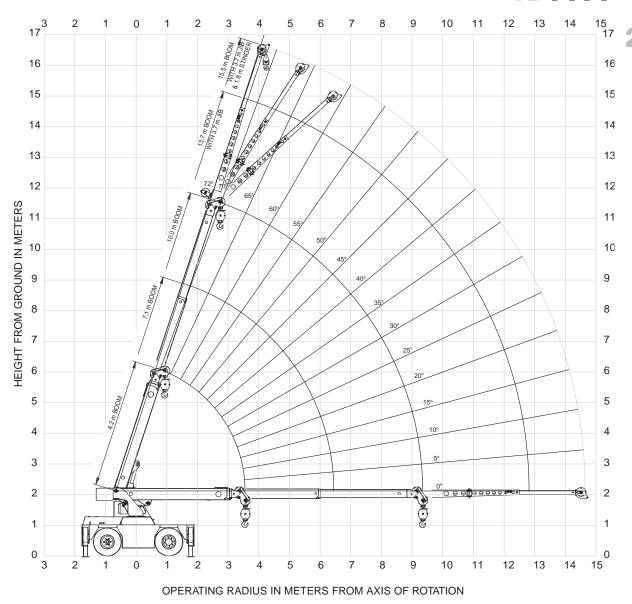


- The rated loads are the maximum lift capacities as determined by operating radius, boom extension and boom angle. The operating radius is the horizontaldistance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- 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.
- 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 outrigggers are for outriggers fully extended.
- 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.
- For operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 5440 kg. The maximum deck load only is 6530 kg.
- Do not induce any external side loads to boom or jib.



range diagram

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DIN/ISO load chart

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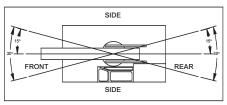
			ON OUTRIG		ON RUBE	BER (kg)	
	RADIUS (m)	EXTENDI RETRAC		RETRACT	RETRACTED 360°		360°
		BOOM RETRACTED	BOOM EXTENDED	BOOM RETRACTED	BOOM EXTENDED	ANY BOOM	ANY BOOM
	1.2	9530	6800	9530	6800	5220	5220
	1.5	8160	6670	8160	6670	5220	4260
	1.8	7120	6530	6530	6530	4540	3540
	2.4	5530	5530	3960	3960	3670	2680
	3.0	4630	4630	2810	2810	2720	1810
_	3.7	3810	3810	2090	2090	2040	1310
o o	4.3	-	3220	-	1570	1590	1040
<u>8</u>	4.9	-	2720	-	1270	1270	820
MAIN BOOM	5.5	-	2270	-	1060	1040	680
È	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
	11.0	-	710	-	270	230	80
	11.6	-	620	-	220	180	40
	12.2	-	560	-	180	150	10
뽁	12.8	-	510	-	130	110	0
	13.4	-	460	-	110	90	0
	14.0	-	420	-	90	80	0
	14.6	-	380	-	80	70	0

		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	-	-		

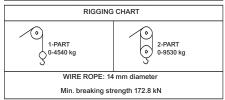
JIB CAPACITY IS LIMITED BY BOTH STRUCTURAL CAPACITY CHART AND MAIN CAPACITY CHART.

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 FROM MAIN BOOM JIB RATINGS 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			



- 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 suroundings, climatic conditions, experience of operator and proper training must be taken into account by the operator.
- 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.

- Ratings on outriggers are withoutriggers 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.
- 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.



notes

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Regional Headquarters Americas

Manitowoc, Wisconsin, USA Tel: +1 920 684 6621 Fax: +1 920 683 6278

Shady Grove, Pennsylvania, USA

Tel: +1 717 597 8121 Fax: +1 717 597 4062

Europe, Middle East, Africa

Ecully, France Tel: +33 472 18 2020 Fax: +33 472 18 2000

Asia - Pacific

Shanghai, China Tel: +86 21 51113579 Fax: +86 21 51113578

Singapore

Tel: +65 6264 1188 Fax: +65 6862 4142

Regional Offices

Americas

Brazil

Alphaville Tel: +55 11 3103 0200

Fax: +55 11 4688 2013

Mexico

Monterrey

Tel: +52 81 8124 0128 Fax: +52 81 8124 0129

Europe, Middle East, Africa Algeria

Hydra

Tel: +21 3 21 48 1173 Fax: +21 3 21 48 1454

Czech Republic

Netvorice

Tel: +420 317 78 9313 Fax: +420 317 78 9314

Baudemont

Tel: +33 385 28 2589 Fax: +33 385 28 0430

Tel: +33 130 31 3150 Fax: +33 130 38 6085

Decines

Tel: +33 472 81 5000 Fax: +33 472 81 5010

Germany

Langenfeld

Tel: +49 21 73 8909-0 Fax: +49 21 73 8909 30

Hungary Budapest

Tel: +36 13 39 8622

Fax: +36 13 39 8622

Italy

Parabiago Tel: +390 331 49 3311

Fax: +390 331 49 3330

Netherlands

Breda

Tel: +31 76 578 3999 Fax: +31 76 578 3978

Poland

Warsaw

Tel: +48 22 843 3824 Fax: +48 22 843 3471

Portugal

Alfena

Tel: +351 229 69 8840 Fax: +351 229 69 8848

Lisbon

Tel: +351 212 109 340 Fax: +351 212 109 349

Russia

Moscow

Tel: +7 495 641 2359 Fax: +7 495 641 2358

U.A.E.

Dubai

Tel: +971 4 3381 861 Fax: +971 4 3382 343

U.K.

Middlesex

Tel: +44 1 895 43 0053 Fax: +44 1 895 45 9500

Sunderland

Tel: +44 191 522 2000 Fax: +44 191 522 2052

Asia - Pacific **Australia**

Melbourne Tel: +61 3 9 336 1300

Fax: +61 3 9 336 1322

Sydney Tel: +61 2 9 896 4433

Fax: +61 2 9 896 3122

China

Beijing

Tel: +86 10 58674761 Fax: +86 10 58674760

Xi'an

Tel: +86 29 87891465 Fax: +86 29 87884504

Korea

Seoul

Tel: +82 2 3439 0400 Fax: +82 2 3439 0405

Philippines

Makati City

Tel: +63 2 844 9437 Fax: +63 2 844 4712

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