

# Grove YB5500 Series

## Product Guide



### Features

- YB5515: 13,6 t (15 USt) capacity three-section boom with 12,5 m (41 ft) outreach
- YB5518: 16,3 t (18 USt) capacity four-section boom with 16,6 m (54 ft 6 in) outreach
- 4,6 m (15 ft) offsettable swingaway extension
- 9072 kg (20,000 lb) deck carrying capacity
- Available with diesel or dual fuel engine



# Features

## Outriggers

The YB5515 is equipped with single-position oblique style outriggers. The YB5518 comes equipped with two-position beam/jack style outriggers.



## Cab

Both models come equipped with a **standard** open air cab shell with overhead safety glass.

An **optional** enclosed cab with hinged door, heater, and defroster is available.



## Steering

**Standard** steering modes on the YB5515 is two-wheel, four-wheel, and crab steer with an option for electronic self-alignment.



**Standard** steering modes on the YB5518 include two-wheel, four-wheel, crab steer and electronic self-alignment



## Cummins engine

The Cummins QSB 3,3 L, Tier III, diesel comes **standard** in both models.

Horsepower rating:

YB5515: 63 kW (85 hp) at 2600 rpm.

YB5518: 73,8 kW (99 hp) at 2600 rpm.



## Boom

A 12,5 m (41 ft) main boom comes **standard** on the YB5515. An **optional** fourth main boom section adds 3,4 m (11 ft) additional boom length.

The YB5518 comes **standard** with a 16,6 m (54 ft 6 in) main boom.

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# Specifications

## Superstructure



### Boom

YB5515: 5,6 m – 12,5 m (18 ft 6 in – 41 ft 0 in) three-section full power boom.

Maximum tip height: 14,1 m (46 ft 3 in)

YB5518: 5,6 m – 16,6 m (18 ft 6 in – 54 ft 6 in) four-section full power boom.

Maximum tip height: 19,0 m (62 ft 6 in)



### \*Optional boom

YB5515: Manual fourth main boom fly section

Maximum tip height: 17,0 m (56 ft 3 in)



### \*Boom extension

4,6 m (15 ft) offsettable swingaway extension



### Boom nose

YB5515: Two sheave non-pivoting boom nose

YB5518: Two sheave, -3-position (0°, + 40°, + 80°)

pivoting boom nose for minimizing head space requirements. Lowers head height 0,4 m (15.9 in) when nose is pivoted fully forward.



### Boom elevation

YB5515: Single double acting hydraulic cylinder with integral holding valve.

YB5518: Two double acting hydraulic cylinders with integral holding valve.

Elevation: 0° to 69° for the YB5515

0° to 80° for the YB5518



### 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 (wireless 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.



### \*Rated capacity limiter (wireless 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 (hardwired LMI)

Digital display of boom angle, boom length, boom radius, capacity, and allows for operator input to set the limits based on 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: YB5515: 2.1 rpm

YB5518: 2.5 rpm



### Hydraulic system

Four section gear pump providing a system pressure of 241,3 bars (3500 psi)

Combined flow: 333,1 Lpm (88.0 gpm)

YB5515: Six-section valve bank mounted in dash with direct mechanical linkage for low effort lever control.

YB5518: 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.

151,4 L (40 gal) hydraulic reservoir with sight level gauge and steel side plating to guard against side impact damage.

# Specifications

## Superstructure (continued)



### Hoist specifications

Piston motor drive with spring applied / hyd. released brake. Equal speed power up and down.

Drum diameter: 0,25m (9.75 in)

Maximum hoist single line pull: 5443 kg (12,000 lb)

Maximum hoist single line speed:

YB5515: 38,4 m/min (126 fpm)

YB5518: 48,2 m/min (158 fpm)

Maximum permissible single line pull:

YB5515: 3402 kg (7500 lb)

(12,7 mm [1/2 in])

YB5518: 4082 kg (9000 lb)

(12,7 mm [1/2 in])

Rope length:

YB5515:

(three-section boom) 73,0 m (240 ft)

(four-section boom) 88,4 m (290 ft)

YB5518: 94,5 m (310 ft)

## Carrier



### Frame

High strength alloy steel constructed with integral outrigger housings; front and rear tie-down lugs. 75 ft<sup>2</sup> carrydeck size with 9072 kg (20,000 lb) carrying capacity. Deck coated with anti-skid treatment.



### Outriggers

YB5515: Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam. Outrigger pad size 222 mm x 254 mm (8.75 in x 10 in).

Maximum pad load: 16 p.s.i.

YB5518: Two-stage hydraulic telescoping beam with oblique type jack on all four corners, provides extended and down and retracted and down lifting capacities. Integral holding valves on both beam and jack.

Outrigger pad size 222 mm x 254 mm (8.75 in x 10 in).

Maximum pad load: 389 p.s.i.



### Outrigger controls

YB5515: Lever controls located on dash panel and operate the beams in pairs from side to side. Level bubble located inside operators compartment.

YB5518: 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)

YB5515: Cummins QSB 3,3 L turbo-charged diesel rated @ 63,0 kW (85 bhp) @ 2600 rpm.

YB5518: Cummins QSB 3,3 L turbo-charged diesel rated @ 73,8 kW (99 bhp) @ 2600 rpm.



### \*Optional engine (0.7 EPA)

G.M. 4,3 L V-6 EFI dual fuel (gasoline / L.P.) rated @ 69,3 kW (93 bhp) @ 2500 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.



### \*Operators control station enclosed

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

Front windshield wiper, heater and defroster are included.

# Specifications

## Carrier (continued)



### Fuel tank capacity

151,4 L (40 gal) all steel construction with steel side plate to guard against side impact.



### Electrical system

One 12V maintenance free battery, 820CCA @ 0°. 63 amp alternator.

### I-●-I Drive

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



### Steer

YB5515: Two-wheel, four-wheel, and crab steer  
YB5518: Two-wheel, four-wheel, and crab steer with electric self alignment.

Outside turning radius:

YB5515/5518:

Two wheel steer: 6,55 m (21 ft 6 in)

Four wheel steer: 3,76 m (12 ft 4 in)



### Transmission

YB5515: I.T.L. synchromesh four-speeds forward and reverse.

YB5518: I.T.L. powershift four-speeds forward and reverse. Stalk mounted shifter on left side of steering column.



### Tires

385/65R 22.5 radial traction tread 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: Provides 1.5° oscillation for use on semi-rough terrain. Axle lock-out must be engaged (locked) whenever picking on rubber or traveling in the crab steer mode. A warning light indicates when the axle lock-outs are engaged.

\*Optional 4° oscillation.



### Lights

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



### Maximum speed

YB5515: 23,3 km/h (14.5 mph)

YB5518: 33,8 km/h (21.0 mph)



### Gradeability (theoretical)

YB5515: 73%....no load

41%.... 9072 kg (20,000 lb) load

YB5518: 68%....no load

40%.... 9072 kg (20,000 lb) load

### GVW

YB5515: 12 742 kg (28,090 lb) three-section boom

12 966 kg (28,584 lb) four-section boom

YB5518: 14 769 kg (32,560 lb)

### Miscellaneous standard equipment

Two sheave, “Quick Reeve” style hookblock; YB5515: 13,6 t (15.0 USt); YB5518: 16,3 t (18.0 USt).

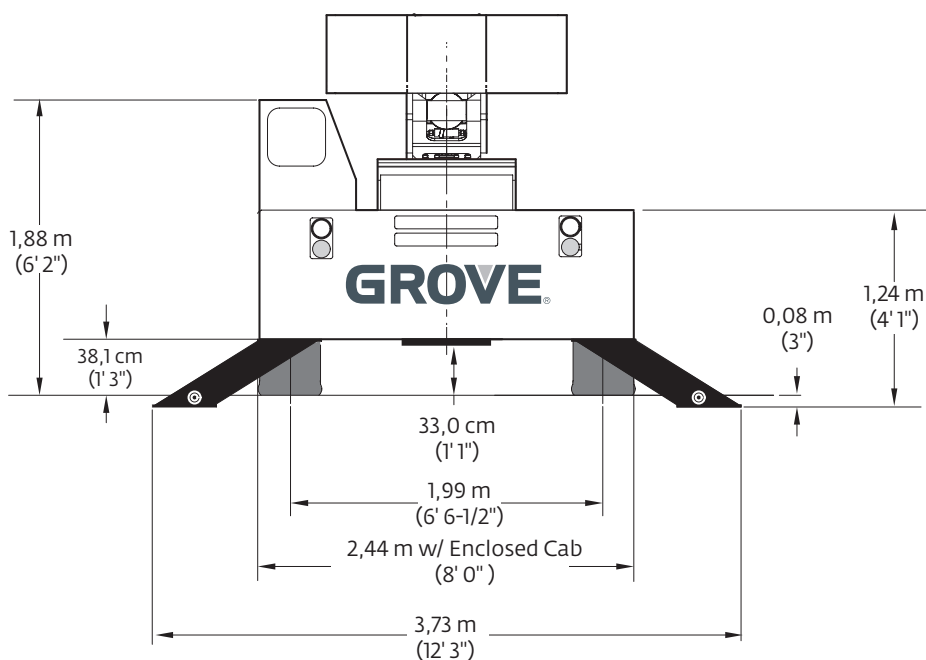
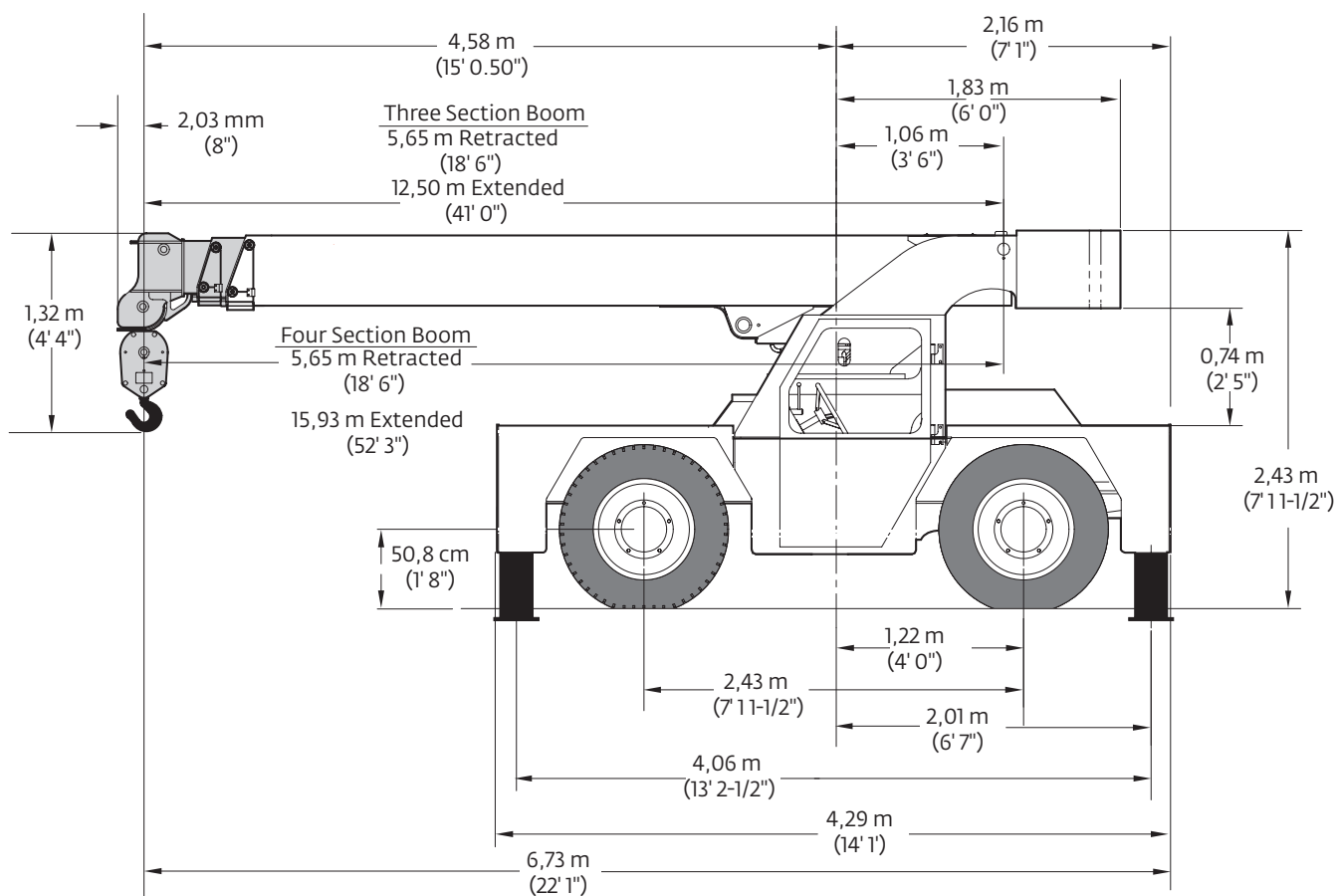
Back-up alarm

Lifting and tie down lugs

Outrigger motion alarm

# Dimensions

## YB5515

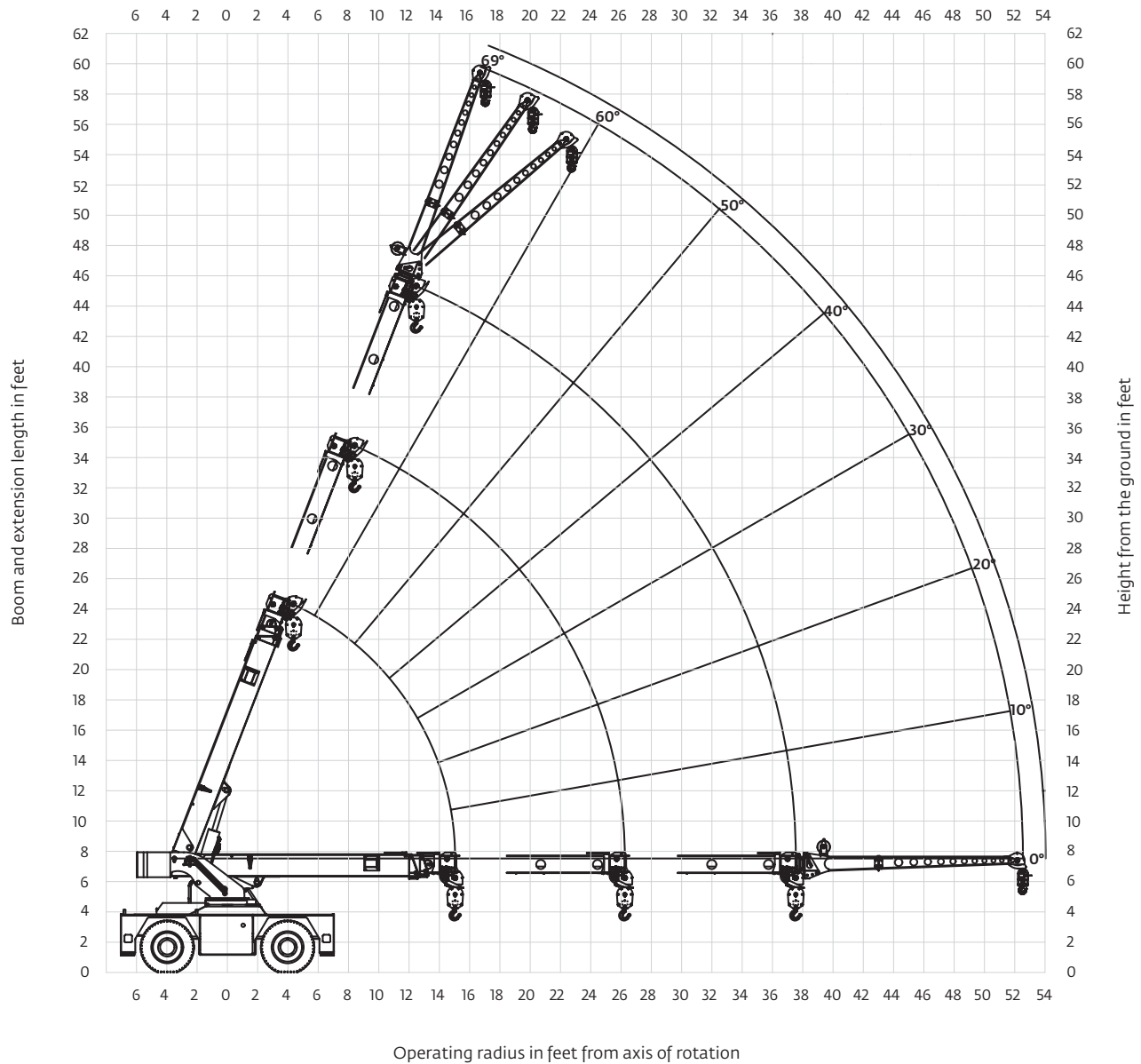


THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

# Range diagram

## YB5515 (three-section boom)

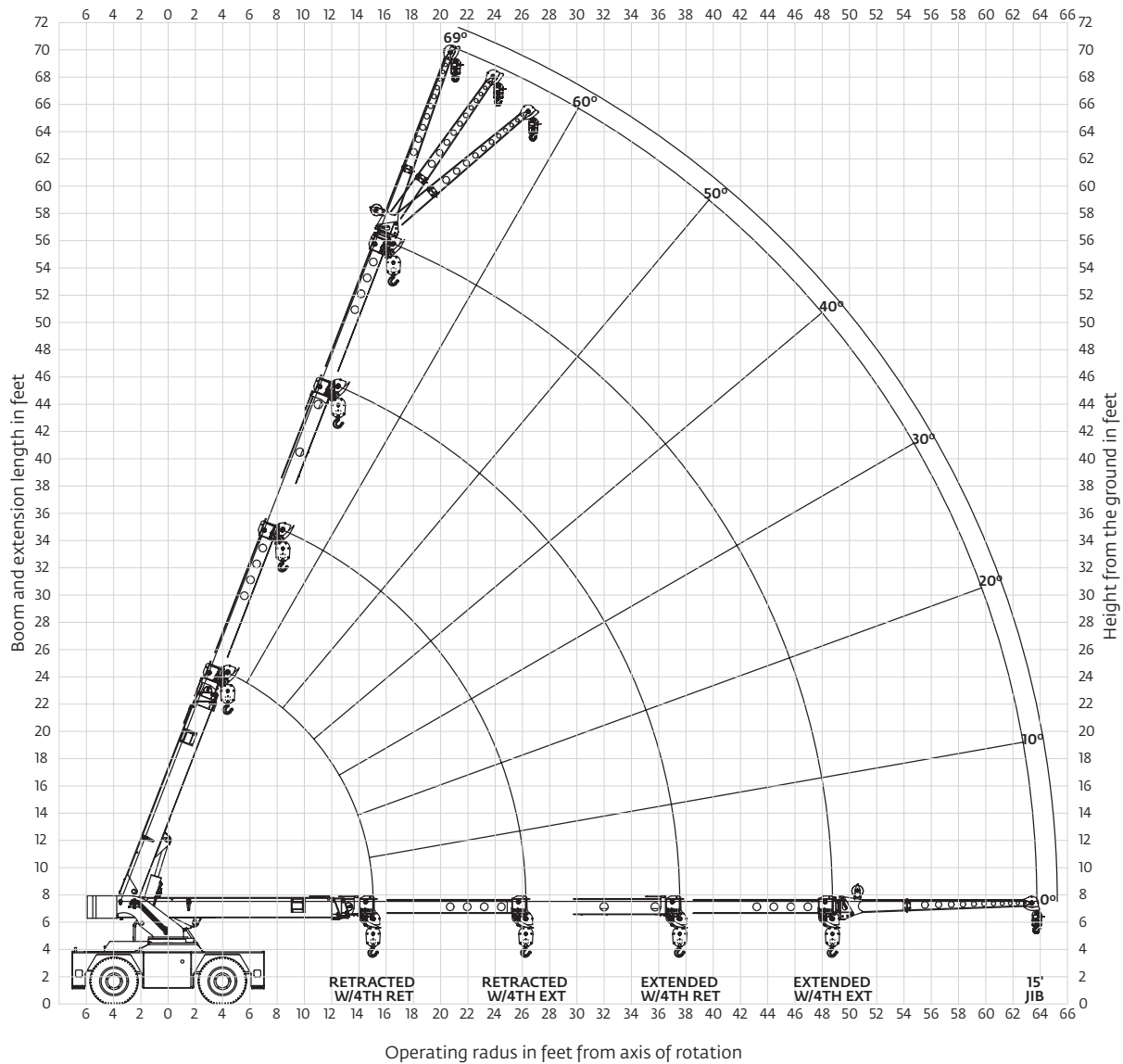


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# Range diagram

## YB5515 (four-section boom)



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# Load chart

## YB5515 (three-section boom)

	RADIUS (ft)	ON OUTRIGGERS (lb)		ON RUBBER (lb)	
		F/R	360°	F/R	360°
MAIN BOOM	6.0	30,000	30,000	17,000	17,000
	8.0	26,200	26,200	13,500	14,600
	10.0	22,300	22,300	10,700	10,880
	12.0	18,600	18,600	8710	8100
	14.0	14,800	14,800	7210	6000
	15.0	13,000	13,000	6600	5250
	16.0	12,200	12,200	6060	4760
	18.0	10,800	10,800	5120	3900
	20.0	9630	9180	4370	3190
	22.0	8640	7480	3710	2660
	24.0	7790	6210	3070	2200
	26.0	7040	5310	2620	1820
	28.0	6420	4740	2260	1530
	30.0	5700	4290	1990	1320
	32.0	5060	3920	1790	1160
	34.0	4510	3580	1610	1040
	36.0	4020	3260	1460	930
	37.5	3700	3060	1370	860
JIB	40.0	3480	2860	1270	800
	42.0	3310	2700	1190	740
	44.0	3130	2560	1120	690
	46.0	2960	2410	1040	640
	48.8	2710	2210	930	570
	52.5	2390	1940	790	480

MAIN BOOM ANGLE (deg)	JIB STRUCTURAL CAPACITIES (lb)		
	0°	15°	30°
69	6000	3900	2800
65	5000	3500	2550
60	4300	3150	2350
55	3800	2850	2200
50	3400	2600	2100
45	3050	2400	2000
40	2800	2250	1950
35	2600	2150	1900
30	2400	2080	1850
25	2300	2050	-
20	2200	2000	-
15	2100	1950	-
10	2050	-	-
5	2020	-	-
0	2000	-	-

### 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 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.

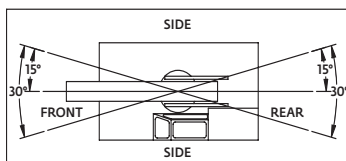
5) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (120 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph on a smooth, hard, level surface with the boom retracted to the shortest length possible and centered over the front.

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

7) The maximum combined total boom and deck load is 16,000 lb. The maximum deck load only is 20,000 lb.

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

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REDUCTION CHART		
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS
MAIN BLOCK	210 lb	N/A
HOOK & BALL	100 lb	100 lb
JIB, STOWED	0 lb	N/A
JIB, DEPLOYED	700 lb	0 lb

RIGGING CHART	
<p>1-PART 0 - 7500 lb</p>	<p>4-PART 0 - 30,000 lb</p>
<p>WIRE ROPE: 1/2 in diameter Minimum breaking strength 26,250 lb</p>	

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## YB5515 (four-section boom)

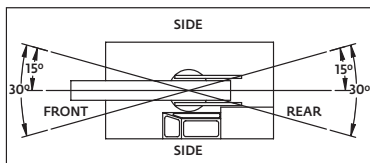
RADIUS (ft)	4TH RETRACTED				RADIUS (ft)	4TH EXTENDED				
	ON OUTRIGGERS (lb)		ON RUBBER (lb)			ON OUTRIGGERS (lb)		ON RUBBER (lb)		
	F/R	360°	F/R	360°		F/R	360°	F/R	360°	
6.0	30,000	30,000	17,000	17,000	MAIN BOOM	6.0	-	-	-	-
8.0	26,200	26,200	13,500	14,600		8.0	11,000	11,000	11,000	11,000
10.0	22,300	22,300	10,700	11,000		10.0	10,700	10,700	10,700	10,700
12.0	18,600	18,600	8710	7650		12.0	9250	9250	9250	9250
14.0	14,800	14,800	7210	5480		14.0	8290	8390	7760	7500
15.0	13,000	13,000	6600	4890		15.0	8200	8200	7150	6080
16.0	12,200	12,200	6060	4500		16.0	8110	8110	6610	5510
18.0	10,800	10,600	4950	3750		18.0	7950	7950	5680	4500
20.0	9630	8630	3980	3080		20.0	7820	7820	4730	3560
22.0	8640	7350	3230	2460		22.0	7710	7710	3980	3000
24.0	7790	6460	2720	1990		24.0	7630	7270	3410	2520
26.0	6800	5700	2360	1610		26.0	7100	6330	2940	2150
28.0	5820	5040	2100	1410		28.0	6590	5420	2550	1840
30.0	5020	4420	1880	1220		30.0	5710	4760	2190	1580
32.0	4400	3950	1650	1070		32.0	5180	4080	1880	1360
34.0	3930	3570	1460	920		34.0	4680	3570	1600	1160
36.0	3510	3190	1280	770		36.0	4250	3190	1370	990
37.5	3210	2890	1180	680	37.5	3830	2970	1240	880	
40.0	2950	2600	1070	610	40.0	3400	2700	1070	740	
42.0	2760	2430	970	550	42.0	3150	2490	960	630	
44.0	2590	2250	890	500	44.0	2890	2300	870	540	
46.0	2430	2090	800	450	46.0	2630	2130	790	470	
48.8	2240	1850	680	380	48.8	2320	1930	710	370	
52.5	2030	1480	500	290	JIB	52.5	2070	1710	590	280
58.0	-	-	-	-		58.0	1720	1380	420	170
63.8	-	-	-	-		63.8	1330	1020	230	60

MAIN BOOM ANGLE (deg)	JIB STRUCTURAL CAPACITIES (lb)					
	4TH RETRACTED			4TH EXTENDED		
	0°	15°	30°	0°	15°	30°
69	6000	3900	2800	5180	3900	2800
65	5000	3500	2550	4970	3500	2550
60	4300	3150	2350	4300	3150	2350
55	3800	2850	2200	3800	2850	2200
50	3400	2600	2100	3400	2600	2100
45	3050	2400	2000	3050	2400	2000
40	2800	2250	1950	2800	2250	1950
35	2600	2150	1900	2600	2150	1900
30	2400	2080	1850	2400	2080	1850
25	2300	2050	-	2300	2050	-
20	2200	2000	-	2200	2000	-
15	2100	1950	-	2100	1950	-
10	2050	-	-	2050	-	-
5	2020	-	-	2020	-	-
0	2000	-	-	2000	-	-

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REDUCTION CHART		
	FROM MAIN BOOM RATINGS	FROM JIB RATINGS
MAIN BLOCK	210 lb	N/A
HOOK & BALL	100 lb	100 lb
JIB, STOWED	0 lb	N/A
JIB, DEPLOYED	700 lb	0 lb

RIGGING CHART	
 1-PART 0 - 7500 lb	 4-PART 0 - 30,000 lb
WIRE ROPE: 1/2 inch diameter Min. breaking strength 26,250 lb	

- 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.
- 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 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.
- Ratings on outriggers are with outriggers fully extended.
- Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (120 psi). Loads on rubber may be transported at a maximum speed of 2.5 mph 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.
- The maximum combined total boom and deck load is 16,000 lb. The maximum deck load only is 20,000 lb.
- Do not induce any external side loads to boom or jib.

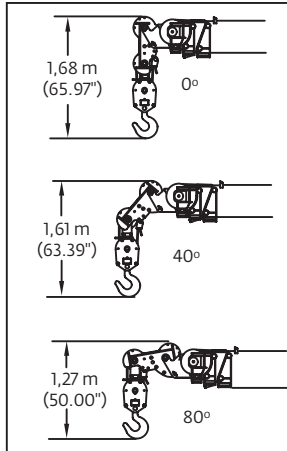
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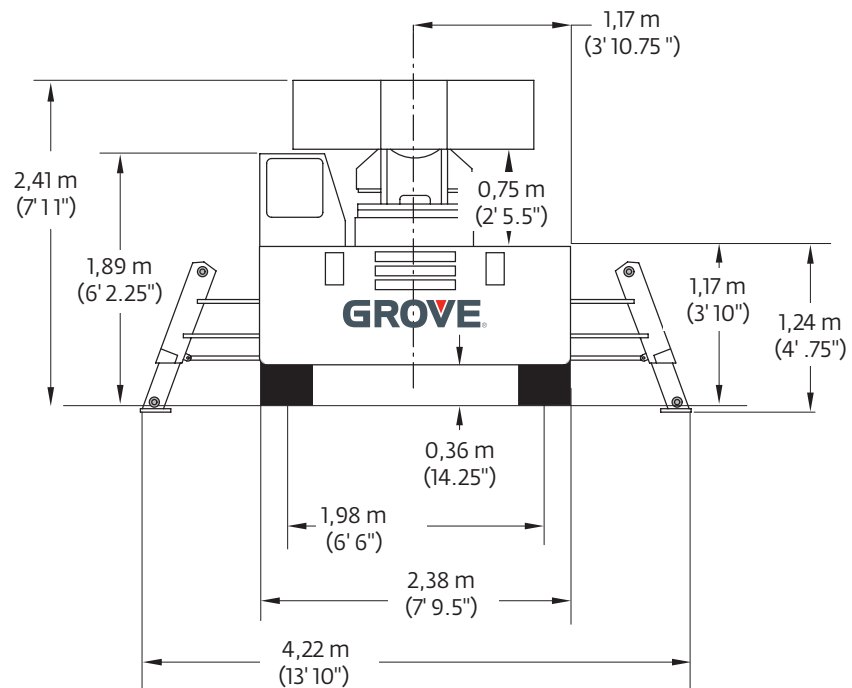
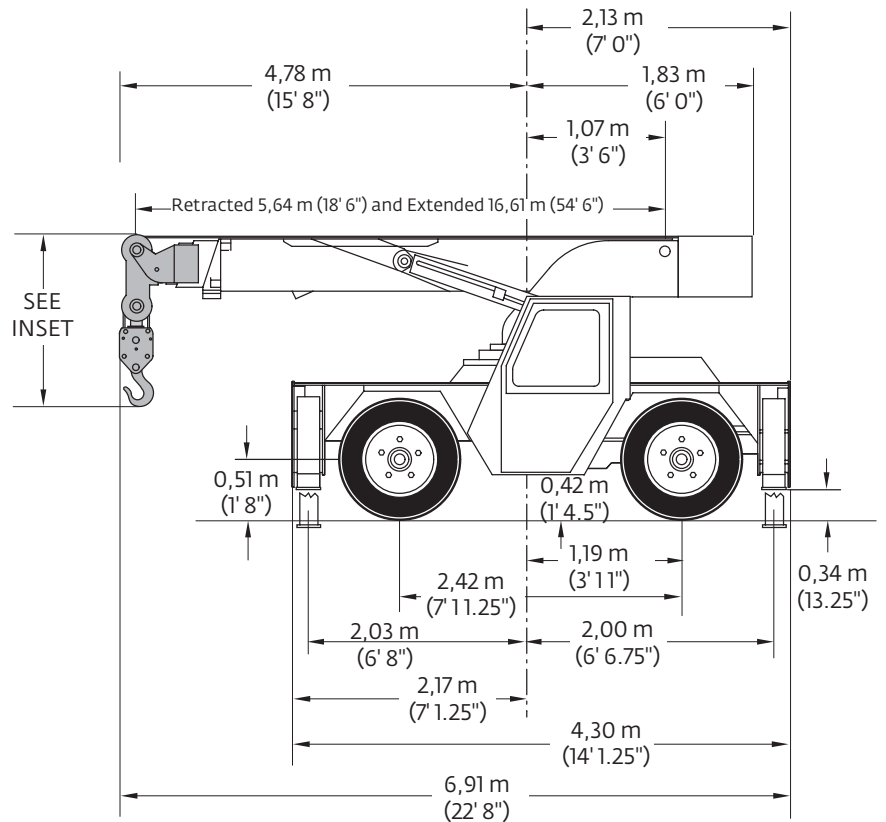
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# Dimensions

## YB5518



Dimensions are with the boom horizontal and the anti-two block bottomed.

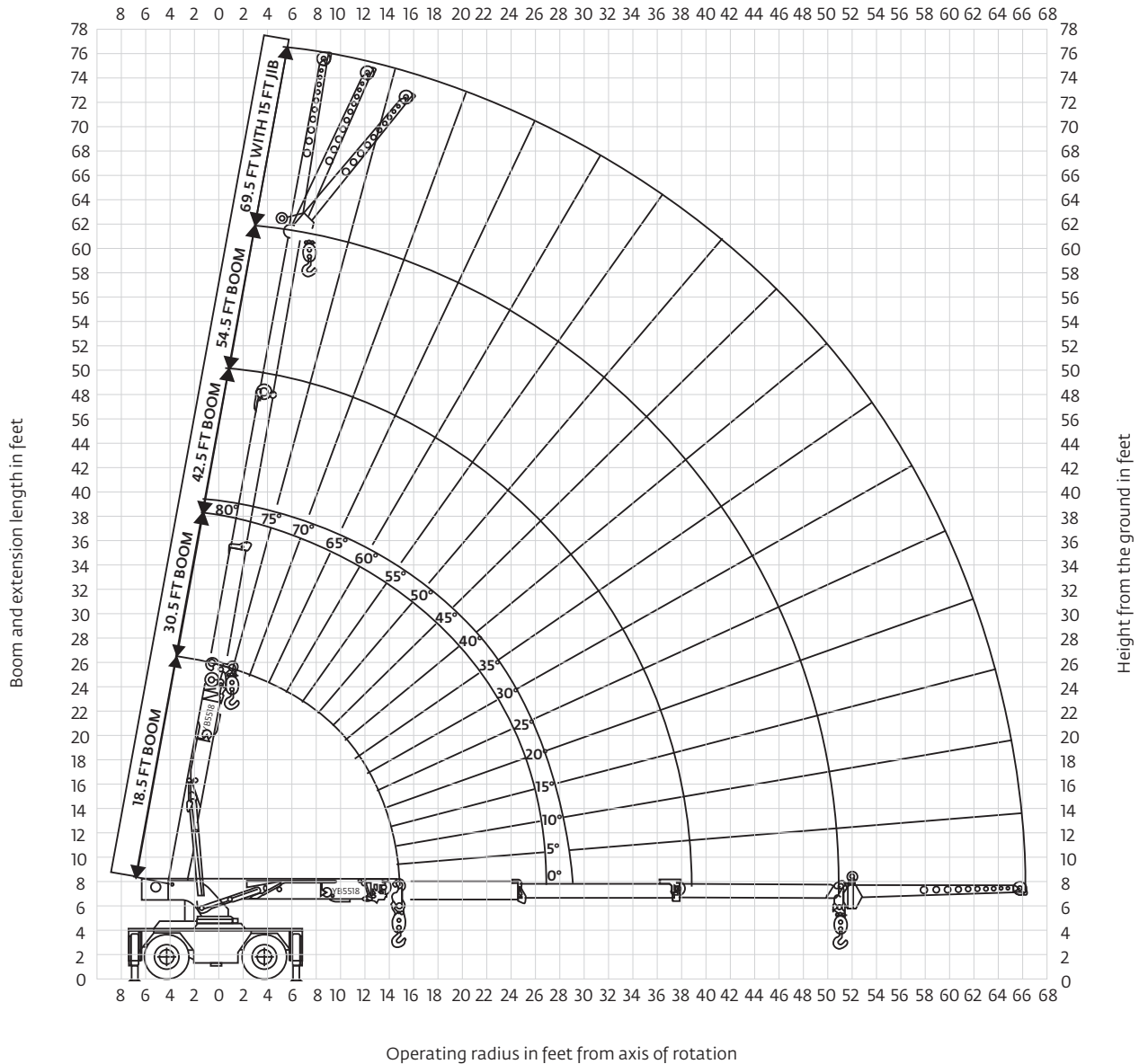


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# Range diagram

## YB5518



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# Load chart

## YB5518

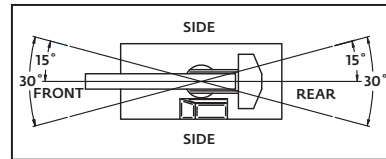
MAIN BOOM LOAD RATINGS ON OUTRIGGERS Extended and Down 360° or Retracted and Down Front/Rear								
Radius (ft)	18.5 ft BOOM		30.5 ft BOOM		42.5 ft BOOM		54.5 ft BOOM	
	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)
6	64	36,000	75	24,500	79	23,700	-	-
8	57	31,500	71	24,500	77	23,000	80	17,400
10	49	24,000	67	24,000	74	21,500	77	15,800
12	39	19,500	63	20,000	71	19,700	75	14,000
14	25	16,200	58	16,800	68	17,000	73	12,600
15.0	0	15,000	56	15,500	66	15,800	72	12,000
16	-	-	53	14,400	65	14,600	71	11,400
18	-	-	48	12,500	62	12,700	69	10,500
20	-	-	43	11,000	59	11,200	66	9,600
22	-	-	37	9,800	55	10,000	64	8,900
24	-	-	29	8,700	52	9,000	61	8,300
26	-	-	18	7,800	48	8,100	59	7,700
27.0	-	-	0	7,400	46	7,700	58	7,500
28	-	-	-	-	44	7,300	56	7,200
30	-	-	-	-	40	6,500	54	6,700
32	-	-	-	-	36	5,700	51	6,000
34	-	-	-	-	30	5,100	48	5,400
36	-	-	-	-	24	4,500	45	4,800
38	-	-	-	-	15	4,000	42	4,300
39.0	-	-	-	-	0	3,900	41	4,000
40	-	-	-	-	-	-	39	3,800
42	-	-	-	-	-	-	35	3,400
44	-	-	-	-	-	-	31	3,100
46	-	-	-	-	-	-	27	2,900
48	-	-	-	-	-	-	21	2,700
51.0	-	-	-	-	-	-	0	2,400

MAIN BOOM ON RUBBER		
Radius (ft)	Any Boom Length	
	Front Rating (lb)	360° Rating (lb)
6	16,000	10,900
8	13,000	8,700
10	11,000	7,400
12	9,100	6,400
14	7,800	5,600
15.0	7,100	5,300
16	6,500	4,900
18	5,600	4,200
20	4,800	3,500
22	4,200	3,000
24	3,600	2,500
26	3,150	2,200
27.0	2,950	2,050
28	2,800	1,900
30	2,450	1,650
32	2,100	1,400
34	1,900	1,200
36	1,750	1,000
38	1,525	850
39.0	1,450	775
40	1,350	725
42	1,150	625
44	1,050	525
46	950	425
48	850	300
51.0	700	200

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.



RATING REDUCTIONS FOR LOAD HANDLING DEVICES INSTALLED (lb)		
	FROM MAIN BOOM	FROM JIB
MAIN BLOCK	230	NOT APPLICABLE
HOOK & BALL	100	100
JIB STOWED	NO REDUCTION	NOT APPLICABLE
JIB DEPLOYED	700	NO REDUCTION

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°								
Radius (ft)	18.5 ft BOOM		30.5 ft BOOM		42.5 ft BOOM		54.5 ft BOOM	
	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lb)	Boom Angle (deg)	Rated Load (lb)
6	64	36,000	75	24,500	79	23,700	-	-
8	57	29,000	71	24,500	77	23,000	80	17,400
10	49	16,000	67	20,600	74	20,000	77	15,800
12	39	11,400	63	12,900	71	12,800	75	13,000
14	25	8900	58	9900	68	10,200	73	10,600
15.0	0	8000	56	8900	66	9300	72	9500
16	-	-	53	8100	65	8500	71	8500
18	-	-	48	6800	62	7200	69	7200
20	-	-	43	5900	49	6200	66	6100
22	-	-	37	5000	55	5200	64	5300
24	-	-	29	4100	52	4500	61	4500
26	-	-	18	3600	48	3800	59	3900
27.0	-	-	0	3400	6	3600	58	3600
28	-	-	-	-	44	3300	56	3300
30	-	-	-	-	40	2900	54	2800
32	-	-	-	-	36	2500	51	2500
34	-	-	-	-	30	2200	48	2200
36	-	-	-	-	24	1900	45	2000
38	-	-	-	-	15	1700	42	1800
39.0	-	-	-	-	0	1600	41	1700
40	-	-	-	-	-	-	39	1600
42	-	-	-	-	-	-	35	1400
44	-	-	-	-	-	-	31	1200
46	-	-	-	-	-	-	27	1000
48	-	-	-	-	-	-	21	900
51.0	-	-	-	-	-	-	0	700

15 FT JIB CAPACITIES ON EXTENDED OUTRIGGERS					
Main Boom Angle (deg)	Jib Offset Angle				
	0°		15°		Any Boom Length
	To 42.5 ft Main Boom	To 54.5 ft Main Boom	To 42.5 ft Main Boom	To 54.5 ft Main Boom	
80	-	-	5000	5000	3500
75	7500	-	4400	4400	3100
70	6100	-	3900	3900	2800
65	5000	4600	3500	3500	2550
60	4300	3800	3150	3150	2350
55	3800	3300	2850	2850	2200
50	3400	2900	2600	2600	2100
45	3050	2600	2400	2400	2000
40	2800	2400	2250	2250	1950
35	2600	2150	2150	2050	1900
30	2400	1930	2080	1850	1830
25	2300	1750	2050	1720	-
20	2200	1600	2000	1590	-
15	2100	1500	1950	1520	-
10	2050	1460	-	-	-
5	2020	1450	-	-	-
0	2000	1440	-	-	-

- The rated loads are the maximum lift capacities as determined by operating radius, boom length 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.
- 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 uniform supporting surface. Practical working loads depend on stability. Hazardous surroundings, climatic conditions, experience 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 above.
- 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.
- Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (120 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. Do not use jib with crane on rubber.
- For operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 16,000 lb the maximum deck load only is 20,000 lb.
- Do not induce any external side loads to boom or jib.

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MAXIMUM PERMISSIBLE SINGLE LINE PULL = 9000 LB

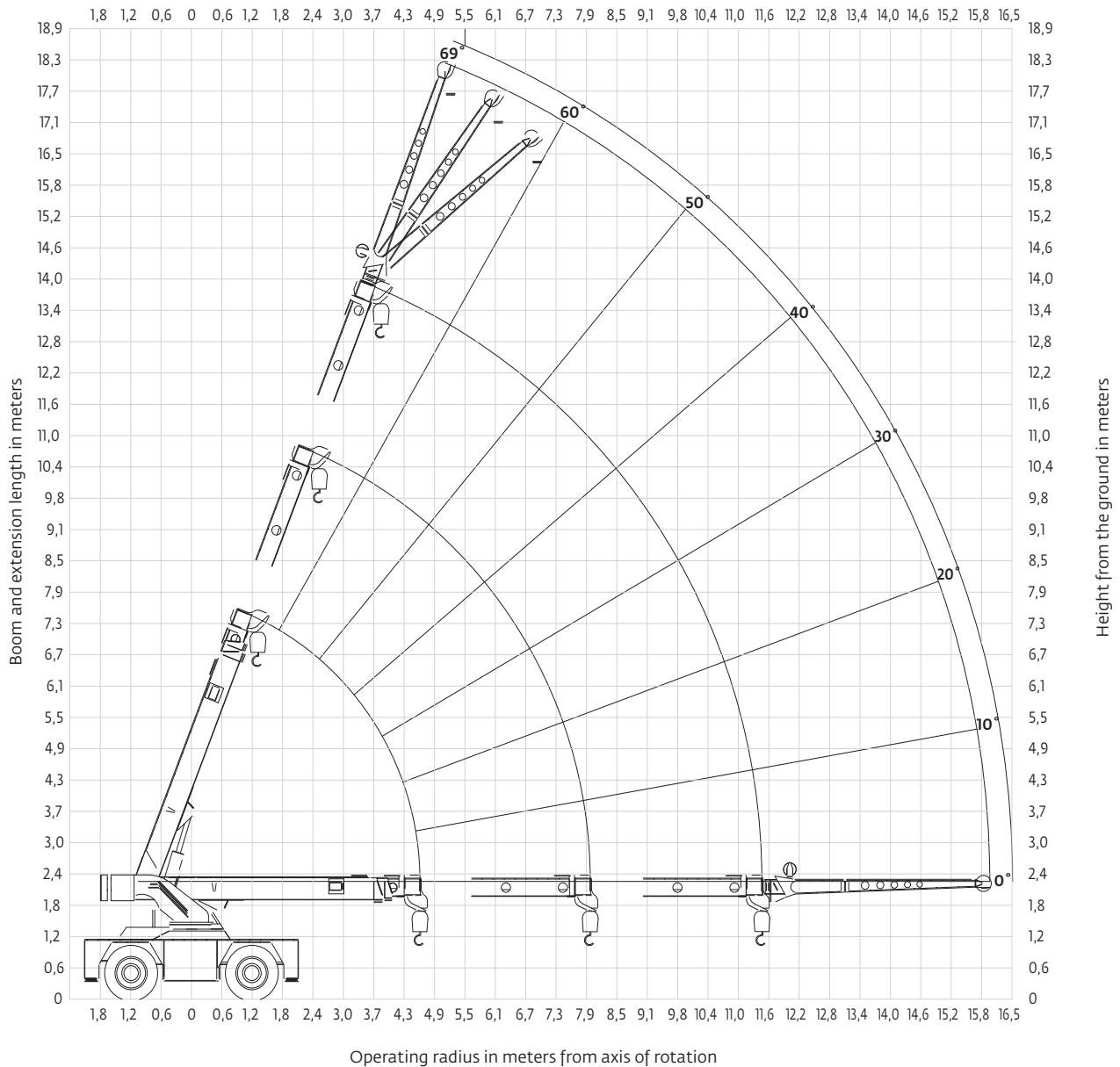
WIRE ROPE: 13 mm Diameter 8 X 25 Galvanized  
Minimum required breaking strength = 37,200 lb

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

## YB5515 (three-section boom)

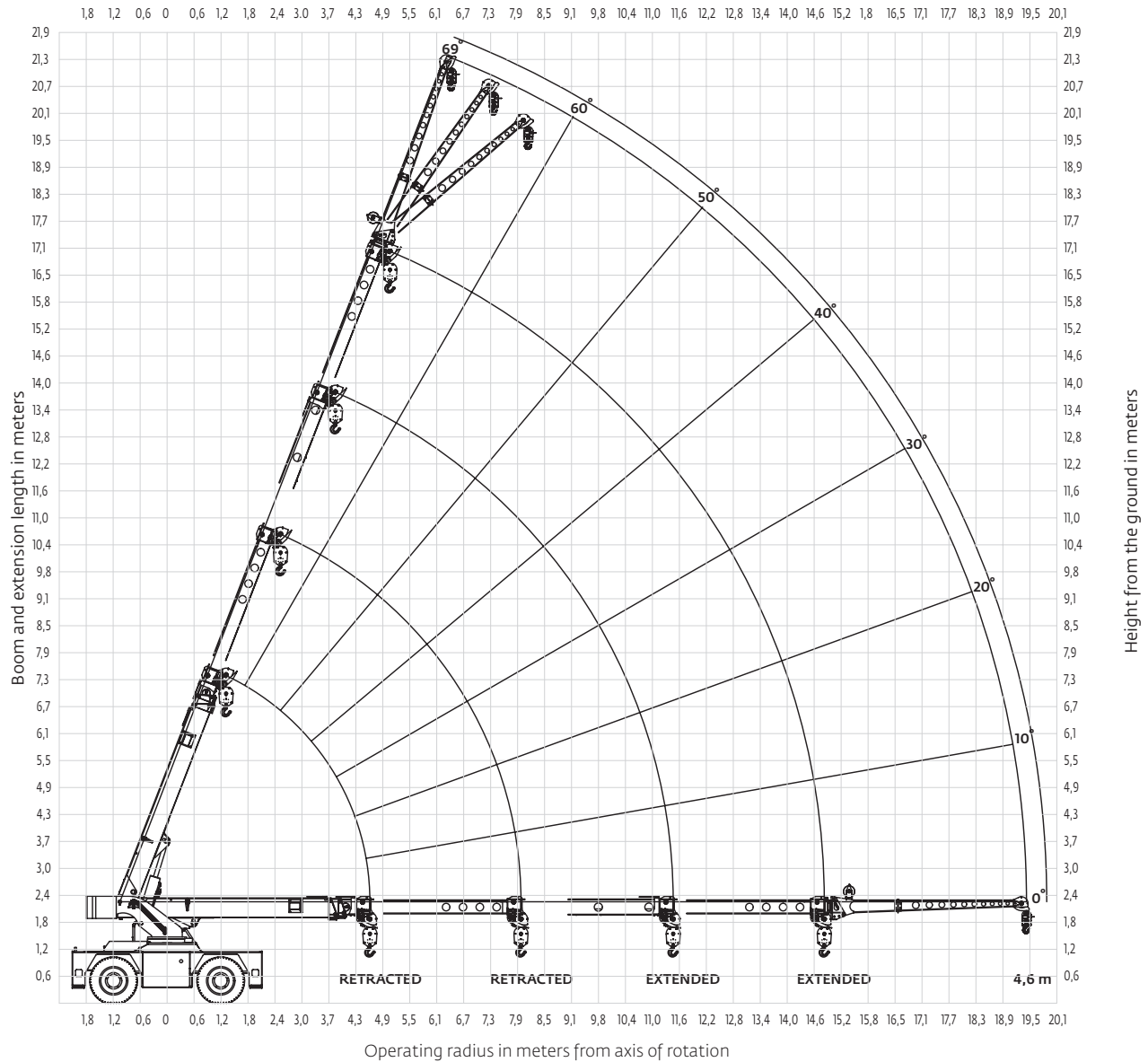


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# DIN/ISO range diagram

## YB5515 (four-section boom)



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# DIN/ISO load chart

## YB5515 (three-section boom)

	RADIUS (m)	ON OUTRIGGERS (kg)		ON RUBBER (kg)	
		F/R	360°	F/R	360°
MAIN BOOM	1,8	13 610	13 610	7710	7710
	2,4	11 880	11 880	6120	6620
	3,0	10 120	10 120	4850	4860
	3,7	8440	8440	3950	3600
	4,3	6710	6710	3270	2650
	4,6	5900	5900	2990	2310
	4,9	5540	5530	2750	2090
	5,5	4900	4750	2320	1700
	6,1	4370	3840	1940	1370
	6,7	3920	3120	1610	1130
	7,3	3460	2570	1320	920
	7,9	3010	2190	1110	750
	8,5	2660	1950	950	620
	9,1	2350	1750	830	530
	9,8	2080	1600	740	450
	10,4	1850	1450	660	400
	11,0	1640	1310	590	350
	11,4	1500	1230	550	320
JIB	12,2	1410	1140	500	290
	12,8	1330	1080	470	260
	13,4	1260	1010	430	240
	14,0	1190	950	400	220
	14,9	1080	870	350	190
	16,0	940	750	280	140

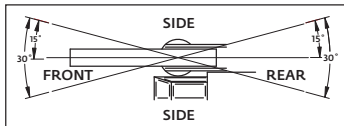
MAIN BOOM ANGLE (deg)	JIB STRUCTURAL CAPACITIES (kg)		
	0°	15°	30°
69	2720	1770	1270
65	2270	1590	1160
60	1950	1430	1070
55	1720	1290	1000
50	1540	1180	950
45	1380	1090	910
40	1270	1020	880
35	1180	980	860
30	1090	940	840
25	1040	930	-
20	1000	910	-
15	950	880	-
10	930	-	-
5	920	-	-
0	910	-	-

### NOTES:

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

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### REDUCTION CHART

	FROM MAIN BOOM RATINGS	FROM JIB RATINGS
MAIN BLOCK	100 kg	N/A
HOOK & BALL	50 kg	50 kg
JIB, STOWED	0 kg	N/A
JIB, DEPLOYED	320 kg	0 kg

### RIGGING CHART

<p>1-PART 0 - 3400 kg</p>	<p>4-PART 0 - 13 610 kg</p>
<p>WIRE ROPE: 13 mm diameter Min. breaking strength 128,4 kN.</p>	

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 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 (8,3 bar). 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 7260 kg. The maximum deck load only is 9070 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.

# DIN/ISO load chart

## YB5515 (four-section boom)

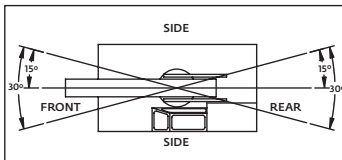
RADIUS (m)	4TH RETRACTED				RADIUS (m)	4TH EXTENDED				MAIN BOOM ANGLE (deg)	JIB STRUCTURAL CAPACITIES (kg)						
	ON OUTRIGGERS (kg)		ON RUBBER (kg)			ON OUTRIGGERS (kg)		ON RUBBER (kg)			4TH RETRACTED			4TH EXTENDED			
	F/R	360°	F/R	360°		F/R	360°	F/R	360°		0°	15°	30°	0°	15°	30°	
1,8	13 610	13 610	7710	7710	MAIN BOOM	1,8	-	-	-	-	69	2720	1770	1270	2350	1770	1270
2,4	11 880	11 880	6120	6120		2,4	5030	5030	5030	5030	65	2270	1590	1160	2250	1590	1160
3,0	10 120	10 120	4860	4890		3,0	4850	4850	4850	4850	60	1950	1430	1070	1950	1430	1070
3,7	8440	8440	3950	3390		3,7	4200	4200	4200	4200	55	1720	1290	1000	1720	1290	1000
4,3	6710	6710	3270	2400		4,3	3760	3760	3520	3320	50	1540	1180	950	1540	1180	950
4,6	5900	5900	2990	2140		4,6	3720	3720	3240	2670	45	1380	1090	910	1380	1090	910
4,9	5540	5540	2670	1960		4,9	3680	3680	3000	2420	40	1270	1020	880	1270	1020	880
5,5	4900	4450	2160	1620		5,5	3610	3610	2530	1960	35	1180	980	860	1180	980	860
6,1	4370	3600	1720	1310		6,1	3550	3550	2060	1530	30	1090	940	840	1090	940	840
6,7	3920	3050	1380	1030		6,7	3500	3500	1720	1280	25	1040	930	-	1040	930	-
7,3	3320	2670	1150	820		7,3	3460	3020	1470	1060	20	1000	910	-	1000	910	-
7,9	2820	2340	990	650		7,9	3180	2620	1250	890	15	950	880	-	950	880	-
8,5	2400	2060	870	560		8,5	2730	2230	1080	750	10	930	-	-	930	-	-
9,1	2050	1800	770	470		9,1	2350	1950	910	630	5	920	-	-	920	-	-
9,8	1790	1600	670	400	9,8	2120	1660	770	530	0	910	-	-	910	-	-	
10,4	1590	1440	580	340	10,4	1910	1440	640	450								
11,0	1410	1270	500	270	11,0	1690	1270	540	370								
11,4	1290	1150	450	230	11,4	1550	1180	480	320								
12,2	1170	1020	400	190	12,2	1360	1070	400	250								
12,8	1090	950	360	170	12,8	1260	970	350	200								
13,4	1020	880	320	150	13,4	1150	890	310	160								
14,0	950	810	280	120	14,0	1040	820	280	130								
14,9	870	700	230	90	14,9	900	740	240	90								
16,0	780	550	150	50	16,0	800	640	190	50								
17,7	-	-	-	-	17,7	650	500	110	0								
19,4	-	-	-	-	19,4	480	350	20	0								

### NOTES:

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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	100 kg	N/A
HOOK & BALL	50 kg	50 kg
JIB, STOWED	0 kg	N/A
JIB, DEPLOYED	320 kg	0 kg

RIGGING CHART	
1-PART 0 - 3400 kg	4-PART 0 - 13 610 kg
WIRE ROPE: 13 mm diameter Min. breaking strength 128,4 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 (8,3 bar). Loads on rubber may be transported at a maximum speed of 1,4 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 7260 kg. The maximum deck load only is 9070 kg.

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

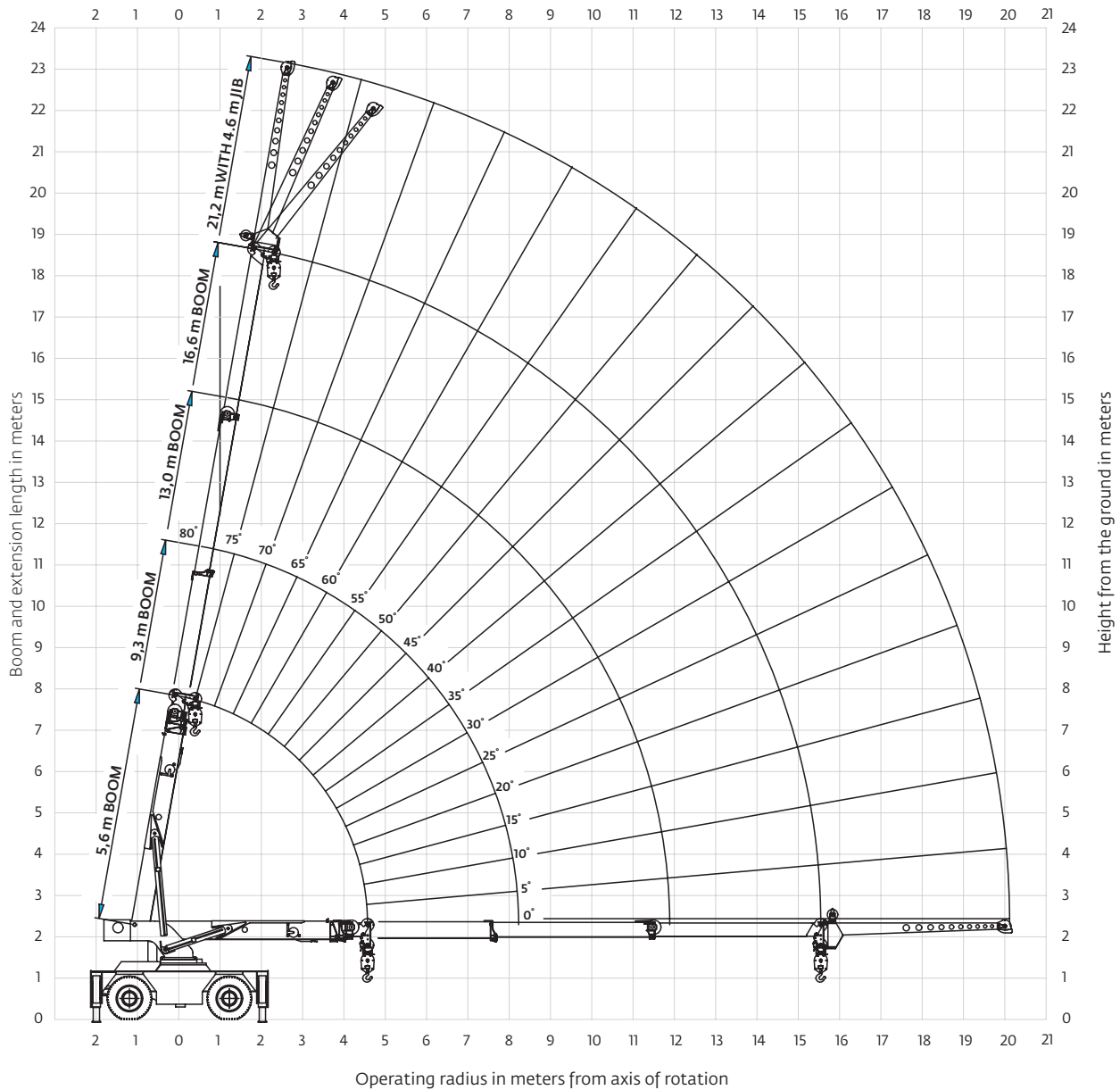
THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.

The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.



# DIN/ISO range diagram

## YB5518



*THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.*

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# DIN/ISO load chart

## YB5518

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Extended and Down 360° or Retracted and Down Front/Rear									
		5,6 m BOOM		9,3 m BOOM		13,0 m BOOM		16,6 m BOOM	
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	
1,8	64	16 330	75	10 560	79	8230	-	-	
2,4	57	14 290	71	10 430	76	8000	80	5860	
3,0	48	10 900	67	10 000	74	7110	77	5800	
3,7	38	8850	63	8880	71	6280	75	5530	
4,3	25	7120	58	7260	68	5610	73	4920	
4,6	0	6390	56	6640	66	5330	72	4660	
4,9	-	-	53	6100	65	5070	71	4420	
5,5	-	-	48	5220	62	4620	68	4020	
6,1	-	-	43	4530	59	4240	66	3670	
6,7	-	-	36	3980	55	3920	64	3380	
7,3	-	-	29	3530	52	3570	61	3130	
7,9	-	-	18	3160	48	3260	59	2910	
8,2	-	-	0	3040	46	3100	58	2820	
8,5	-	-	-	-	44	2960	56	2750	
9,1	-	-	-	-	40	2625	54	2580	
9,8	-	-	-	-	36	2335	51	2390	
10,4	-	-	-	-	30	2050	48	2170	
11,0	-	-	-	-	24	1810	45	1930	
11,6	-	-	-	-	15	1630	42	1725	
11,9	-	-	-	-	0	1550	40	1630	
12,2	-	-	-	-	-	-	39	1540	
12,8	-	-	-	-	-	-	35	1390	
13,4	-	-	-	-	-	-	31	1270	
14,0	-	-	-	-	-	-	26	1150	
14,6	-	-	-	-	-	-	21	1045	
15,5	-	-	-	-	-	-	0	930	

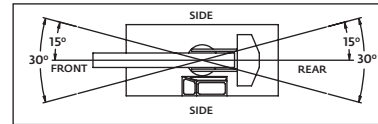
MAIN BOOM ON RUBBER		
Radius (m)	Any Boom Length	
	Front Rating (kg)	360° Rating (kg)
1,8	7260	4950
2,4	5680	3950
3,0	4500	3360
3,7	3620	2880
4,3	3040	2390
4,9	2570	2000
5,5	2190	1690
6,1	1890	1430
6,7	1640	1210
7,3	1420	1030
7,9	1220	870
8,5	1090	740
9,1	950	630
9,8	840	525
10,4	720	430
11,0	610	340
11,6	520	270
12,2	470	215
12,8	400	165
13,4	340	120
14,0	280	80
14,6	230	45
15,5	150	0

Note: For 360° rating on rubber, rear axle locks must be in place.

NOTES:  
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RATING REDUCTIONS FOR LOAD HANDLING DEVICES INSTALLED (kg)		
	FROM MAIN BOOM	FROM JIB
MAIN BLOCK	95	NOT APPLICABLE
HOOK & BALL	43	43
JIB STOWED	NO REDUCTION	NOT APPLICABLE
JIB DEPLOYED	318	NO REDUCTION

MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°								

4,6 m JIB CAPACITIES ON EXTENDED OUTRIGGERS (kg)					
Main Boom Angle (deg)	Jib Offset Angle				
	0°		15°		Any Boom Length
	To 13,0 m Main Boom	To 16,6 m Main Boom	To 13,0 m Main Boom	To 16,6 m Main Boom	
80	-	-	2270	2270	1590
75	3450	-	2000	2000	1410
70	2770	-	1770	1770	1270
65	2270	2090	1590	1590	1160
60	1950	1730	1430	1420	1070
55	1730	1460	1290	1260	1000
50	1540	1225	1180	1100	930
45	1380	1020	1090	940	850
40	1270	870	1020	800	780
35	1180	760	980	700	700
30	1090	680	940	625	630
25	1010	610	930	570	-
20	930	565	910	535	-
15	870	550	890	520	-
10	840	535	-	-	-
5	830	530	-	-	-
0	825	530	-	-	-

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- The rated loads are the maximum lift capacities as determined by operating radius, boom length 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.
- 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 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 above.
- 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.
- Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (8,3 bar). 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. Do not use jib with crane on rubber.
- For operating radius not shown, use load rating of next larger radius.
- The maximum combined total boom and deck load is 7264 kg. The maximum deck load only is 9080 kg.
- Do not induce any external side loads to boom or jib.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 4080 kg

WIRE ROPE: 13 mm dia. 10 x 19 EIPS IWRC BRIGHT  
Min. req'd breaking strength = 15 710 kg

# Symbols glossary



Axles



Counterweight



Grade



Outriggers



Boom



Drive



Heavy duty jib



Radius



Boom elevation



Electrical system



Hoist



Rotation



Boom extension



Engine



Hookblock



Speed



Boom length



Extension



Hydraulic system



Steering



Boom nose



Frame



Lights



Suspension



Brakes



Fuel tank capacity



Oil



Swing



Cab



Gear



Outrigger controls



Tires



Transmission

## Notes





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#### Mexico

Monterrey

#### Chile

Santiago

### Europe, Middle East & Africa

#### Algeria

Hydra

#### Czech Republic

Netvorice

#### France

Baudemont

Cergy

Decines

#### Germany

Langenfeld

#### Hungary

Budapest

#### Italy

Parabiago

#### Netherlands

Breda

#### Poland

Warsaw

### Portugal

Baltar

Lisbon

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Moscow

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Dubai

### U.K.

Gawcott

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Melbourne

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Beijing

Xi'an

#### India

Hyderabad

Pune

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Seoul

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Zhangjiagang

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Charlieu

La Clayette

Moulins

### Germany

Wilhelmshaven

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Pune

### Italy

Niella Tanaro

### Portugal

Baltar

Fânzeres

### Slovakia

Saris

### USA

Manitowoc

Port Washington

Shady Grove

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