

GROVE

YB7700 Series





• 2 models ... YB7722 & YB7722XL

• 22 ton (19.9 mt) capacity 360° on outriggers @ 8.5 ft. (2.6m) radius

• 15 ton (13.6 mt) deck carrying capacity

• 15 ton (13.6 mt) on rubber capacity

YB7722 - 43 ft. (13.1m) 3-section boom

YB7722XL - 67 ft. (20.43m) 5-section boom

• 17 ft. (5.18m) offsettable swingaway extension

• 130 bhp (97.0 kW) Cummins QSB4.5L (Tier III) diesel engine



Features

Specifications

YB7722 / XL

Dimensions

YB7722

Working Range

Load Chart

YB7722XL

Range Diagram

Load Chart

YB7722/XL (metric)

Range Diagram

DIN/ISO Load Chart

Range Diagram

DIN/ISO Load Chart



Industrial Hydraulic Crane

www.manitowoc.com

YB7700 Series

features



- Two position beam – jack style outriggers
- All beams or jacks can be extended or retracted at the same time





- Water-cooled Cummins QSB4.5L Turbo-charged diesel engine rated @ 130 BHP (97.0kW)
- Variable displacement piston pump w/piggyback gear pump.



- 43 ft. (13.1m) 3-section main boom or 67 ft. (20.42m) 5-section main boom
- 4-position pivoting boom head for low head room clearance
- · Quick reeve boom head and hookblock



Standard: Open air cab shell w/overhead safety

glass

Optional: Closed cab with hinged door, heater,

defroster, and glass



Standard: 4-wheel drive and 4-wheel steer and

crab steer with electronic self-

alignment

Standard: 17.5 X 25 bias ply tires



specifications

Superstructure



■ Boom

YB7722: 19 ft. 6 in. - 43 ft. 0 in. (5.9m - 13.1m) three-section full power boom.

Maximum tip height: 51 ft. 8 in. (15.7m)

YB7722XL: 19 ft. 6 in. - 67 ft. 0 in. (5.9m - 20.4m) five-section full power boom.

Maximum tip height: 75 ft. 0 in. (22.8m)

Boom angle indicator mounted on both sides of base section.



*Boom Extension

17 ft. (5.18m) fixed boom extension, offsettable to 30° and 60° via pivoting boom nose.

Maximum tip height: 92 ft. 0 in. (28.0m)



Boom Nose

2 sheave, 4-position (0°, + 30°, + 60°, + 80°) pivoting boom nose for minimizing head space requirements. Lowers head height 23.9 in. (0.60m) when nose is pivoted fully forward.



Boom Elevation

Two double acting hydraulic cylinders with integral holding valve.

Elevation: 0° to 80°



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.

T Swing

Ball bearing swing circle with 360° continuous rotation.

Planetary swing.

Maximum speed: 2.5 rpm



Hydraulic System

Variable displacement piston pump and piggyback gear pump.

Combined flow: 74.0 gpm (280.0 Lpm)

Maximum system operating pressure: 3600 p.s.i.

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

60.0 gallon (227 L) hydraulic reservoir with sight level gauge and steel side plating to guard against side impact damage.



Hoist Specifications

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

Maximum Single Line Pull: 13,800 lb. (6260kg) Maximum Single Line Speed: 320 fpm (97.5m/min) Maximum Permissible Single Line Pull: 11,000 lb (4990kg) (5/8" [16.0mm] XIPS)

Rope Length (Std): 375 ft. (114.3m)

*Denotes optional equipment



B7700 Series

specifications

Carrier



Frame

High strength alloy steel constructed with integral outrigger housings; front and rear tie-down lugs. 60 ft.2 carrydeck size with 30,000 lb (13 608kg) deck only carrying capacity & 20,000 lb (9 072kg) combined with boom load. Deck coated with antiskid treatment.

Outriggers

2- stage hydraulic telescoping beam with vertical jack at the four corners provides extended and down and retracted and down lifting capacities. Integral holding valves on both beam and jack.

🛅 Outrigger Controls

Three 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.

Outrigger pad size: 11.5 in. x 11.5 in. (29.2cmx29.2cm) *Independent outrigger controls available as an option.

Std. Engine

Cummins QSB 4.5L turbo-charged diesel rated @ 130 bhp (97kW) @ 2500 rpm with engine block heater.

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 includes 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

*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.



Fuel Tank Capacity

50 gallon (189 L) all steel construction with steel side plate to guard against side impact. Fuel gauge located on dash panel in operators station.



5 Electrical System

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

4 x 4 - Front and rear axle drive with planetary hubs and limited slip differential.

T Steer

Standard: 3-steering modes:

Front 2-wheel, 4-wheel coordinated, and crab steer w/ electronic self alignment. Rotary switch select on dash panel.

Transmission

Clark powershift 4-speeds forward and reverse. Stalk mounted shifter on left side of steering column.

☐ Tires

17.5 x 25 Bias (std.) *17.5 R 25 radial



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: Provides 3.5° oscillation for use on semi-rough terrain. Axle lock-out switch, on dash panel, to engage / disengage the axle lock-out. Axle lock-out must be engaged (locked) whenever picking on rubber and when traveling in the crab steer mode. A warning light indicates when the axle lock-outs are engaged.

■ Lights

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



|V| Maximum Speed

19.5 MPH (31.3km/h)



Gradeability**

63%....no load

38%....30,000lb (13 608kg) load

G.V.W.

YB7722: 41,270 lb. (18 720kg) YB7722XL: 43,000 lb (19 504kg)

Miscellaneous Standard Equipment

Two sheaves, "Quick Reeve" style 22T (19.9mt) hookblock

Back-up alarm

Dual rearview mirrors

Outrigger motion alarm

Lifting and tie down lugs

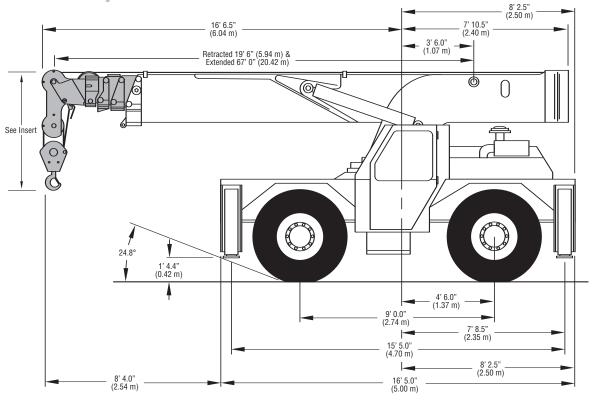
- *Denotes optional equipment
- **Theoretical

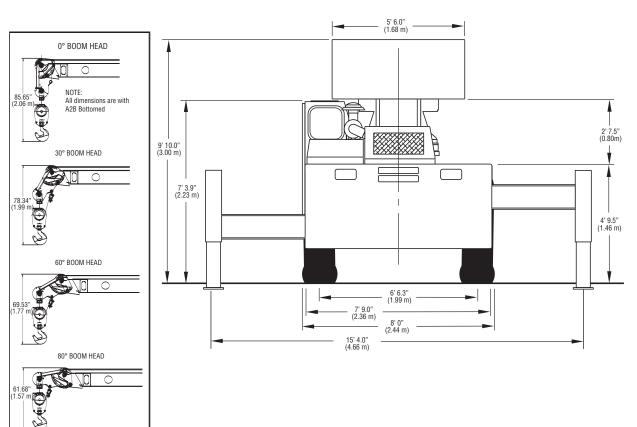


dimensions

5

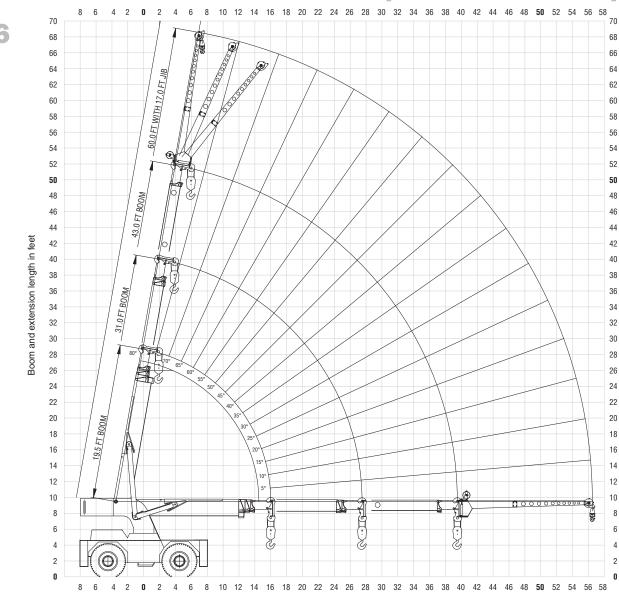
YB7722 / XL





YB7700 Series

YB7722 (3-section boom)



Operating Radius in feet from axis of rotation





load chart

YB7722 (3-section boom)

		Ext	MAIN BOOM LO ended and Down 3				ear					MAIN
	19.5	19.5 ft Boom 20.5-30 ft Boom 31 ft Boom 32-42 ft Boom 43					43 ft	Boom		19.5	ft Boom	20.5-3
Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	F
8.5	58	44000	26500	71	26500	25400	76	25400	8.5	58	31000	2
10	52	40000	31600	68	31600	28000	74	28000	10	52	24000	2
12	44	33800	30500	64	30500	25000	72	25000	12	44	17200	1
14	33	28500	28500	59	28500	22600	69	22600	14	33	13300	1
16	0	24900	24900	55	25700	20000	66	20000	16	0	10200	
18	-	-	22800	50	22800	17900	63	17900	18	-	-	'
20	-	-	20200	45	20200	16100	60	16100	20	-	-	
22	-	-	17800	39	17800	14600	56	14600	22	-	-	:
24	-	-	15360	31	15360	13300	53	13300	24	-	-	-
26	-	-	13250	22	13250	12300	49	12300	26	-	-	:
27.5	-	-	11600	0	11600	11600	47	11600	27.5	-	-	:
30	-	-	-	-	-	9900	42	10500	30	-	-	
32	-	-	-	-	-	8800	37	9800	32	-	-	
34	-	-	-	-	-	7800	32	8700	34	-	-	
36	-	-	-	-	-	7100	26	7800	36	-	-	
39.5	-	-	-	-	-	6400	0	6400	39.5	-	-	

		MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°											
	19.51	t Boom	20.5-30 ft Boom	31 ft	Boom	32-42 ft Boom	43 ft	Boom					
Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)					
8.5	58	31000	26500	71	26500	25400	76	25400					
10	52	24000	22300	68	22300	22000	74	22000					
12	44	17200	16300	64	16300	16300	72	17000					
14	33	13300	12500	59	12500	12500	69	13600					
16	0	10200	9800	55	9800	9800	66	11100					
18	-	-	7900	50	7900	7900	63	9100					
20	- 1	-	6500	45	6500	6500	60	7500					
22	-	-	5300	39	5300	5300	56	6200					
24	-	-	4300	31	4300	4300	53	5200					
26	- 1	-	3500	22	3500	3500	49	4400					
27.5	- 1	-	2900	0	2900	2900	47	3900					
30	- 1	-	-	-	-	2600	42	3200					
32	-	-	-	-	-	2300	37	2700					
34	-	-	-	-	-	1900	32	2300					
36	-	-	-	-	-	1750	26	1900					
39.5	-	-	-	-	-	1400	0	1400					

	MAIN B ON RUI						
		m Length					
- ·	Front	360°					
Radius	Rating	Rating					
(ft)	(lbs)	(lbs)					
6	30000	21000					
8	28000	17900					
10	25000	15000					
12	19600	12400					
14	15600	9900					
16	12700	7700					
18	10300	6300					
20	8300	4900					
22	6800	3900					
24	5800	3100					
26	4900	2500					
28	4200	2100					
30	3700	1800					
32	3300	1550					
34	3000	1300					
36	2700	1100					
38	2500	950					
40	2200	800					

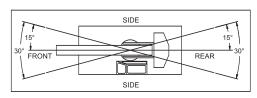
17 F	T JIB CAP. ON	EXT OUTRIGO	SERS (lhe)		
- ''		Jib Offset Angle)		
Main			20 455		
Boom	0 deg	15 deg	30 deg		
Angle	Any	Any	Any		
(deg)	Boom	Boom	Boom		
	Length	Length	Length		
80	-	5000	3500		
75	7500	4400	3100		
70	6100	3900	2800		
65	5000	3500	2550		
60	4300	3150	2350		
55	3800	2850	2200		
50	3400	2600	2100		
45	3050	2400	2000		
40	2800	2250	1950		
35	2600	2150	1900		
30	2400	2080	1830		
25	2300	2050	-		
20	2200	2000	-		
15	2100	1950	-		
10	2050	-	-		
5	2020	-	-		
0	2000	-	-		

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.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 11,000 lbs

HOIST ROPE: 5/8" diameter 6 x 19 XIPS IWRC BRIGHT Min. req'd breaking strength = 38,500 lbs



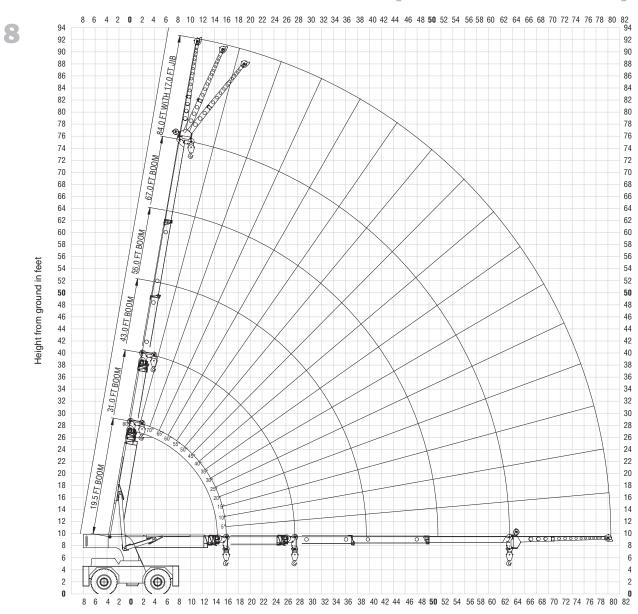
- The rated loads are the maximum lifting capacities as determined by operating radius, boom length, and boom angle. The operating radius is the horizontal distance from a projection of the axis of rotation to the supporting surface, before loading, to the center of vertical hoist line or tackle with load applied.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 1.0 ft of discrete length. For other boom lengths, use appropriate intermediate boom length column.
- 3) For operating radius not shown, use load rating of next larger radius.
- 4) 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 handling must all be taken into account by the operator.

- 5) 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.
- 6) 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.
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (110 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 360° ratings on rubber, rear axle oscillation locks must be in place. Do not use jib with crane on rubber.
- 8) The maximum combined total boom and deck load is 20,000 lbs. The maximum deck load only is 30,000 lbs.
- 9) Do not induce any external side loads to boom or jib.

RATING RED	UCTIONS FO	R LOAD
HANDLING DE	VICES INSTA	LLED (lbs)
	FROM MAIN BOOM	FROM JIB
MAIN BLOCK	400	N/A
HOOK & BALL	100	100
JIB STOWED	0	N/A
JIB DEPLOYED	500	0



YB7722 XL (5-section boom)



Operating radius in feet from axis of rotation

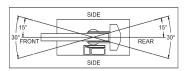


load chart

YB7722 XL (5-section boom)

						MAIN BOOM LOA ded and Down 3				Rear				
	19.51	19.5 ft Boom 20.5-30 ft Boom 31 ft Boom			32-42 ft Boom		Boom	44-54 ft Boom		Boom	56-66 ft Boom	67 ft Boom		
Radius (ft)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)
8.5 10 12 14 16 18 20 22 24 26 27.5 30 32 34 36 38 39.5 42	(deg) 58 52 44 33 0	(lbs) 44000 40000 33800 28500 23700	((bs) 26500 26500 25300 22900 20900 19300 17800 14700 13200	(deg) 71 68 64 59 55 50 45 39 31 22 0	(lbs) 26500 26500 24200 24200 22900 19300 17800 16400 14700	(lbs) 25400 25400 25400 24200 22600 20000 17900 14600 13300 12300 11600 9900 8800 7800 71100 6500 6400	(deg) 76 74 72 69 66 63 60 56 53 49 47 42 37 32 26 18 0	(lbs) 25400 25400 24200 24200 24200 217900 16100 14600 13300 11600 10500 9800 7800 7800 7000 6400	19500 19500 19500 16100 16100 14800 13700 12800 11200 10200 9400 8700 8100 7000 6400 5700	79 78 76 74 71 69 67 64 62 60 58 55 52 49 46 43 41 36	19500 19500 17600 16100 14800 12800 12800 11200 11200 9400 8700 8700 7600 7100 6800 6300	14500 13200 12200 12200 10400 9700 9100 8600 8200 7700 7300 6900 6600 6300 6100 5800	78 77 75 73 71 69 67 66 64 62 60 58 56 53 52 49	14500 13200 12200 11200 10400 9700 8600 8200 7700 6900 6600 6300 6100 5800
44	-	-	-	-	-	-	-	-	5300 4900	32	5800	5600 5300	47 44	5600 5300
46 48	-		_	-	-	_	-	-	4900 4600	28 23	5300 4800	4800	44	5300 5000
50	-	-	-	-	-	-	-	-	4400	16	4400	4400	39	4700
51.5	-	-	-	-	-	-	-	-	4000	0	4000	4000	37	4600
54	-	-	-	-	-	-	-	-	-	-	-	3800	33	4200
56 58	- 1		-	-	-	-	1 1	- 1	-	1 [3600 3400	29 25	3900 3600
60	_		1 1			1 [3200	20	3300
62	-									-	-	3000	14	3000
63.5	-	-	-	-	-	-	-	-	-	-	-	2800	0	2800

RATING REDUCTIONS FOR LOAD									
HANDLING DEVICES INSTALLED (lbs)									
	FROM MAIN BOOM	FROM JIB							
MAIN BLOCK	400	N/A							
HOOK & BALL	100	100							
JIB STOWED	0	N/A							
JIB DEPLOYED	500	0							



- The rated loads are the maximum lifting 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.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 1.0 ft. of discrete length. For other boom lengths, use appropriate intermediate boom length column.
- For operating radius not shown, use load rating of next larger radius.
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- The weights of all load handling devices such as hooks, hook blocks, slings, etc., except for the hoist rope, shall be considered as part of the load. See reduction chart
- 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.
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (110 ps). 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 shorted length possible and centered over front. For 360° ratings on rubber, rear axie oscillation locks must be in place. Do not use jib with crane on rubber.
- The maximum combined total boom and deck load is 20,000 lbs. The maximum deck load only is 30,000 lbs.
- 9) Do not induce any external side loads to boom or jib.

			MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°												
		19.51	t Boom	20.5-30 ft Boom	31 ft	Boom	32-42 ft Boom		Boom	44-54 ft Boom	55 ft	Boom	56-66 ft Boom	67 ft	Boom
	Radius (ft)	Boom	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)	Rated Load (lbs)	Boom Angle (deg)	Rated Load (lbs)
Ī	8.5	58	31000	26500	71	26500	25400	76	25400	19500	79	19500x	-	-	-
	10	52	24000	22300	68	22300	22000	74	22000	19500	78	19500	-	-	- 1
	12	44	17200	16300	64	16300	16300	72	17000	17000	76	17100	14500	78	14500
	14	33	13300	12500	59	12500	12500	69	13600	13600	74	14000	13200	77	13200
	16	0	10200	9800	55	9800	9800	66	11100	11100	71	11200	11200	75	11500
	18	-	-	7900	50	7900	7900	63	9100	9100	69	9300	9300	73	9400
	20	-	-	6500	45	6500	6500	60	7500	7500	67	7800	7700	71	7700
	22	-	-	5300	39	5300	5300	56	6200	6200	64	6600	6500	69	6500
	24	-	-	4300	31	4300	4300	53	5200	5200	62	5600	5600	67	5600
	26	-	-	3500	22	3500	3500	49	4400	4400	60	4800	4800	66	5000
	27.5	-	-	2900	0	2900	2900	47	3900	3900	58	4300	4300	64	4600
	30	-	-	-	-	-	2600	42	3200	3200	55	3600	3600	62	3900
	32	-	-	-	-	-	2300	37	2700	2700	52	3100	3100	60	3400
	34	-	-	-	-	-	1900	32	2300	2300	49	2700	2700	58	2900
	36	-	-	-	-	-	1750	26	1900	1900	46	2300	2300	56	2500
	38	-	-	-	-	-	1500	18	1600	1600	43	2000	2000	53	2100
	39.5	-	-	-	-	-	1400	0	1400	1400	41	1750	1750	52	1850
	42	-	-	-	-	-	-	-	-	1150	36	1450	1450	49	1500
	44	-	-	-	-	-	-	-	-	1000	32	1200	1200	47	1300
	46	-	-	-	-	-	-	-	-	850	28	1000	1000	44	1100
	48	-	-	-	-	-	-	-	-	750	23	850	850	42	950
	50	-	-	-	-	-	-	-	-	650	16	700	700	39	800
	51.5	-	-	-	-	-	-	-	-	600	0	600	600	37	700
	54	-	-	-	-	-	-	-	-	-	-	-	450	33	500
	56	-	-	-	-	-	-	-	-	-	-	-	350	29	350
	58	-	-	-	-	-	-	-	-	-	-	-	250	25	250
	60	-	-	-	-	-	-	-	-	-	-	-	150	20	150
	62	-	-	· ·	-	-	_	-	- 1	-	-	-	50	14	50
	63.5	-	-		-	-	-	-	- 1	-	-	-	-	0	1 - 1

	MAIN BOOM ON RUBBER					
	Any Boo	m Length				
Radius (ft)	Front Rating (lbs)	360° Rating (lbs)				
6 8 10 12 14 16 18 20 22 24 26 30 32 34 36 38 40 42 44 46 55 56 56 58 60 62 63 55	30000 28000 25000 15500 15500 15500 15500 12400 9900 88100 4900 4200 3300 2700 2200 2200 2200 2200 2200 1800 1400 1300 1500 1500 1500 1500 1500 1500 15	21000 17900 15900 12400 9500 74400 6000 74400 6000 3700 2350 2100 1800 1550 1300 1100 950 800 675 555 550 250 250 255 255 255 255 255 25				

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DO NOT RELY ON TIPPING.

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

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 11,000 lbs

WIRE ROPE: 5/8 inch dia. 6 x 19 XIPS IWRC BRIGHT Min. req'd breaking strength = 38,500 lbs

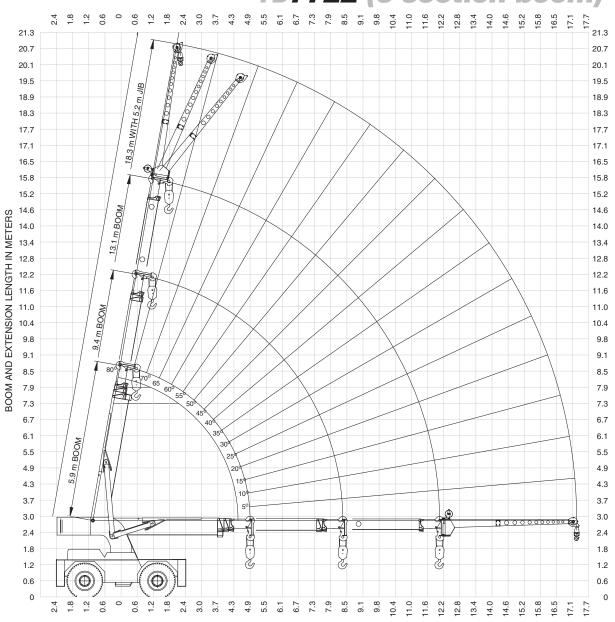
	17 FT JIB CAPACITIES ON EXTENDED OUTRIGGERS												
Main		Jib Offset Angle											
Boom	0	deg	15	deg	30 deg								
Angle (deg)	To 55.0 ft Main Boom	To 67.0 ft Main Boom	To 55.0 ft Main Boom	To 67.0 ft Main Boom	Any Boom Length								
80 75 70 65 60 55 50 45 40 35 30 25 20 15 0	7500 6100 5000 4300 3800 3400 3050 2800 2600 2400 2300 2200 2050 2050 2000	4600 3800 3800 2900 2600 2400 2150 1930 1750 1600 1460 1450	5000 4400 3900 3500 3150 2850 2600 2400 2250 2150 2050 2050 2050	5000 4400 3900 3500 3150 2850 2600 2400 2250 2050 1850 1720 1590 1520	3500 3100 2800 2550 2350 2200 2100 2000 1950 1900 1830								

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.

GROVE

YB7722 (3-section boom)

10



OPERATING RADIUS IN METERS FROM AXIS OF ROTATION



DIN/ISO load chart

YB7722 (3-section boom)

		MAIN BOOM LOAD RATINGS ON OUTRIGGERS Extended and Down 360° or Retracted and Down Front/Rear											
	5.9 m	Boom	6.2-9.1 m Boom	9.4 m	Boom	9.7-12.8 m Boom	13.1 m Boom						
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)					
2.6 3.0 3.7 4.3 4.9 5.5 6.1 6.7 7.3 7.9 8.4 9.1	58 52 44 33 0 - - -	19960 18140 15350 12930 10740 - - - -	14330 14330 13830 12930 10740 10340 8900 7710 6550 5520 4790	71 68 64 59 55 50 45 39 31 22 0	14330 14330 13830 12930 11660 10340 8900 7710 6550 5520 4790	12700 12700 11340 10270 9090 8110 7300 6620 6050 5520 4790 4050	76 74 72 69 66 63 60 56 53 49 47	12700 12700 11340 10270 9090 8110 7300 6620 6050 5560 5150 4630					
9.8 10.4 11.0 12.0		- - -	- - - -		- - -	3580 3160 2880 2580	37 32 26 0	4050 3560 3180 2580					

ı													
		MAIN BOOM LOAD RATINGS ON OUTRIGGERS Retracted and Down 360°											
		5.9 m Boom		6.2-9.1 m Boom	9.4 m	Boom	9.7-12.8 m Boom	13.1 m Boom					
Radius (m)		Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)				
	2.6	6 58 13070		13070	71	13270	12700	76	12700				
	3.0	3.0 52 10110		9360	68	9360	9020	74	9020				
	3.7	44 7190		6800	64	6800	6800	72	7100				
	4.3	33	5520 5210		59	5210	5210	69	5630				
	4.9	0	4230	4050	55	4050	4050	66	4630				
	5.5	-	-	3210	50	3210	3210	63	3730				
	6.1	-	-	2620	45	2620	2620	60	3060				
	6.7	-	-	2100	39	2100	2100	56	2490				
	7.3	-	-	1710	31	1710	1710	53	2060				
	7.9	-	-	1340	22	1340	1340	49	1720				
	8.4	-	-	1080	0	1080	1080	47	1510				
	9.1	-	-	-	-	-	950	42	1200				
	9.8	-	-	-	-	-	820	37	1000				
	10.4	-	-	-	-	-	670	32	820				
	11.0	-	-	-	-	-	590	26	660				
	12.0	-	-	-	l -	-	450	0	450				

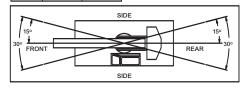
	MAIN BOOM ON RUBBER Any Boom Length Front Rating (kg) 360° Rating (kg) 8120 11340 6800 8890 5470 6990 4340 5570 3320 4520 2680 3620 2070 2940 1620 2480 1260 2070 980 1760 810			
	Any Boor	n Length		
Radius (m)	Rating	Rating		
1.8 2.4 3.0	12700	8120		
3.7				
4.3 4.9				
5.5				
6.1				
6.7 7.3				
7.9				
8.5				
9.1	1530	670		
9.8	1350	550		
10.4	1210	440		
11.0	1080	350		
11.6	960	280		
12.0	900	210		

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.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 4990 kg

WIRE ROPE: 16 mm dia. 6 x 19 XXIPS IWRC BRIGHT Min. req'd breaking strength = 188.4 kN



RATING REDUCTIONS FOR LOAD								
HANDLING DEVICES INSTALLED (kg)								
	FROM MAIN BOOM	FROM JIB						
MAIN BLOCK	180	N/A						
HOOK & BALL	50	50						
JIB STOWED	0	N/A						
JIB DEPLOYED	230	0						

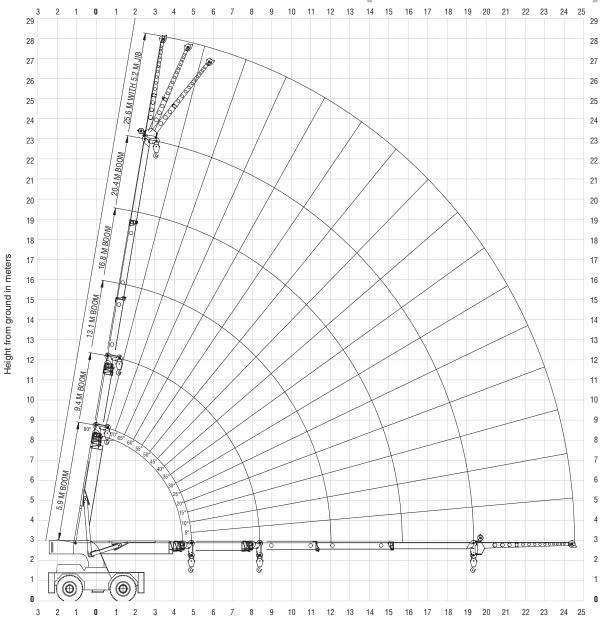
5.2 ו	5.2 m JIB CAP. ON EXT. OUTRIGGERS (kg)									
Main	Jib Offset Angle									
Boom	0 deg	15 deg	30 deg							
Angle (deg)	Any Boom Length	Any Boom Length	Any Boom Length							
80	-	2270	1590							
75	3400	2000	1410							
70	2770	1770	1270							
65	2270	1590	1160							
60	1950	1430	1070							
55	1720	1290	1000							
50	1540	1180	950							
45	1380	1090	910							
40	1270	1020	880							
35	1180	980	860							
30	1090	940	830							
25	1040	930	-							
20	1000	910	-							
15	950	880	-							
10	930	-	-							
5	920	-	-							
0	910	-	-							

- The rated loads are the maximum lifting capacities as determined by operating radius, boom length, and boom angle.
 The operating radius is the horizontal distancefrom 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.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 0.3 m of discrete length.
 For other boom lengths, use appropriate intermediate boom length column.
- For operating radius not shown, use load rating of next larger radius.
- 4) 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 reduction chart.
- 6) 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.
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (7.6 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. For 360° ratings on rubber, rear axle oscillation locks must be in place. Do not use jib with crane on rubber.
- The maximum combined total boom and deck load is 9070 kg. The maximum deck load only is 13610 kg.
- Do not induce any external side loads to boom or jib.



YB7722XL (5-section boom)





Operating radius in meters from axis of rotation





YB7700 Series

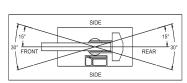
DIN/ISO load chart

YB7722XL (5-section boom)

						MAIN BOOM L								
	5.9 m Boom 6.2-9.1 m Boom 9.4 m Boom			Extended and Down 360° or Retracted and Down Front/Rear 9.7-12.8m Boom			16.8 m Boom		17.1-20.1m Boom	20.4 m Boom				
	Boom	Rated	Rated	Boom	Rated	Rated	Boom	Rated	Rated	Boom	Rated	Rated	Boom	Rated
Radius	Angle	Load	Load	Angle	Load	Load	Angle	Load	Load	Angle	Load	Load	Angle	Load
(m)	(deg)	(kg)	(kg)	(deg)	(kg)	(kg)	(deg)	(kg)	(kg)	(deg)	(kg)	(kg)	(deg)	(kg)
2.6	58	19960	12020	71	12020	11520	76	11520	8850	79	8850	-	-	-
3.0	52	18140	12020	68	12020	11520	74	11520	8850	78	8850		-	-
3.7	44	15330	11480	64	11480	10980	72	10980	7980	76	7980	6580	78	6580
4.3	33	12930	10390	59	10390	10250	69	10250	7300	74	7300	5990	77	5990
4.9	0	10750	9480	55	9480	9070	66	9070	6710	71	6710	5530	75	5530
5.5	-		8750	50	8750	8120	63	8120	6210	69	6210	5080	73	5080
6.1	-	-	7940	45	7940	7300	60	7300	5810	67	5810	4720	71	4720
6.7	-		7440	39	7440	6620	56	6620	5440	64	5440	4400	69	4400
7.3	-	-	6550	31	6550	6030	53	6030	5080	62	5080	4130	67	4130
7.9	-	-	5520	22	5520	5520	49	5580	4810	60	4810	3900	66	3900
8.4	-	-	4790	0	4790	4790	47	5150	4630	58	4630	3720	64	3720
9.1	-	-	-	-		4050	42	4630	4260	55	4260	3490	62	3490
9.8	-	-	-	-	-	3580	37	4050	3950	52	3950	3310	60	3310
10.4	-	-	-	-	-	3160	32	3560	3560	49	3670	3130	58	3130
11.0	-	-		-		2880	26	3180	3180	46	3450	2990	56	2990
11.6	-	-	-	-	-	2600	18	2830	2830	43	3180	2860	53	2860
12.0	-	-		-	-	2580	0	2580	2580	41	2920	2770	52	2770
12.8	-	-	-	-	-	-	-	-	2280	36	2540	2540	49	2630
13.4	-		-	-	-	-	-	-	2120	32	2320	2320	47	2470
14.0	-	-	-	-	-	-	-	-	1960	28	2110	2110	44	2260
14.6	-	-	-	-	-	-	-	-	1810	23	1910	1910	42	2070
15.2	-	-	-	-	-	-	-	-	1710	16	1720	1720	39	1920
15.7	-	-	-	-	-	-	-	-	1550	0	1550	1550	37	1810
16.5	-	-	-	-	-	-	-	-	-	-	-	1470	33	1640
17.1	-	-	-	-	-	-	-	-	-	-	-	1400	29	1510
17.7	-	-	-	-	-	-	-	-	-	-	-	1290	25	1380
18.3	-	-	-	-	-	-	-	-	-	-	-	1220	20	1250
19.4	-	-	-	-	-	-	-	-	-	-	-	1040	0	1040

	MAIN BOOM ON RUBBER					
[Any Boom Length					
	Front	360°				
Radius	Rating	Rating				
(m)	(kg)	(kg)				
1.8	13610	9530				
2.4	12700	8120				
3.0	11340	6800				
3.7	8890	5200				
4.3	6750	4040				
4.9	5460	3140				
5.5	4250	2550				
6.1	3520	1950				
6.7	2920	1520				
7.3	2450	1170				
7.9	2050	930				
8.5	1760	810				
9.1	1530	670				
9.8	1350	550				
10.4	1210	440				
11.0	1080	350				
11.6	960	280				
12.2	850	210				
12.8	760	160				
13.4	660	100				
14.0	570	50				
14.6	500	10				
15.2	440	-				
15.8	370	-				
16.5	330	-				
17.1	280	-				
17.7	240	-				
18.3	200	-				
18.9	170	-				
19.4	130	-				

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RATING RED	RLOAD	
HANDLING DE	VICES INSTAL	LED (kg)
	FROM MAIN BOOM	FROM JIB
MAIN BLOCK	180	N/A
HOOK & BALL	50	50
JIB STOWED	0	N/A
JIB DEPLOYED	230	0

	Retracted and Down 360°													
	5.9 n	n Boom	6.2-9.1 m Boom	9.4 n	n Boom	9.7-12.8m Boom	13.1 r	n Boom	13.4-16.5m Boom	16.8	n Boom	17.1-20.1m Boom	20.4	n Boom
Radius (m)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)	Rated Load (kg)	Boom Angle (deg)	Rated Load (kg)
2.6	58	13070	12020	71	12020	11520	76	11520	8850	79	8850	-		-
3.0	52	10110	9360	68	9360	9020	74	9020	8850	78	8850	-	-	
3.7	44	7190	6800	64	6800	6800	72	7100	7100	76	7130	6580	78	6580
4.3	33	5520	5210	59	5210	5210	69	5630	5630	74	5810	5610	77	5610
4.9	0	4230	4050	55	4050	4050	66	4630	4630	71	4630	4630	75	4720
5.5	-		3210	50	3210	3210	63	3730	3730	69	3810	3810	73	3850
6.1	-	-	2620	45	2620	2620	60	3060	3060	67	3170	3130	71	3130
6.7	- 1	-	2100	39	2100	2100	56	2490	2490	64	2660	2620	69	2620
7.3	-		1710	31	1710	1710	53	2060	2060	62	2230	2230	67	2240
7.9	-	-	1340	22	1340	1340	49	1720	1720	60	1890	1890	66	1970
8.4	- 1	-	1080	0	1080	1080	47	1510	1510	58	1680	1680	64	1780
9.1	-	-	-	-	-	950	42	1200	1200	55	1380	1380	62	1500
9.8	-	-	-	-	-	820	37	1000	1000	52	1160	1160	60	1290
10.4	-	-	-	- 1	-	670	32	820	820	49	990	990	58	1090
11.0	-	-		- 1	-	590	26	660	660	46	830	830	56	910
11.6	-	-	-	- 1	-	490	18	530	530	43	690	690	53	740
12.0	-	-	-	-	-	450	0	450	450	41	590	590	52	630
12.8	-	-	-	-	-	-	-	-	330	36	460	460	49	490
13.4	-	-	-	-	-	-	-	-	280	32	360	360	47	400
14.0	-	-		- 1	-	-	- 1		220	28	270	270	44	320
14.6	-	-	-	- 1	-	-	-	-	170	23	200	200	42	250
15.2	-	-	-	-	-	-	-	-	120	16	140	140	39	180
15.7	-	-	-	-	-	-	-	-	100	0	100	100	37	130
16.5	-	-	-	-	-	-	-	-	-	-	-	30	33	50
17.1	-	-	-	- 1	-		-		-	-	-		29	-
17.7	-	-	-	- 1	-	-	-	-	-	-	-	-	25	-
18.3	-	-	-	-	-	-	-	-	-	-	-	-	20	-
19.4	-	-	-	-	-	-	-	-	-	-	-	-	0	-

MAIN BOOM LOAD RATINGS ON OUTRIGGERS

- The rated loads are the maximum lifting capacities as determined by operating rdius, 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.
- Rated load columns for discrete boom lengths apply when actual boom length is within +/- 0.3 m. of discrete length. For other boom lengths, use appropriate intermediate boom length column.
- For operating radius not shown, use load rating of next larger radius.
- 4) 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 for the hoist rope, shall be considered as part of the load. See reduction chart.
- 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
- 7) Ratings on rubber depend on tire capacity, condition of tires and proper inflation pressure (7.6 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 shorted length possible and centered over front. For 360° ratings on rubber, rear axle oscillation locks must be in place. Do not use jib with crane on rubber.
- 8) The maximum combined total boom and deck load is 9070 kg. The maximum deck load only is 13610 kg.
- Do not induce any external side loads to boom or jib.

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.

MAXIMUM PERMISSIBLE SINGLE LINE PULL = 4990 kg

Min. req'd breaking strength = 188.4 kN

	5.2 m JIB	CAPACITIES ON	EXTENDED OUT	FRIGGERS (kg)	
Main			Jib Offset Angle		
Boom	0	deg	15	deg	30 deg
Angle (deg)	To 16.8 m Main Boom	To 20.4 m Main Boom	To 16.8 m Main Boom	To 20.4 m Main Boom	Any Boom Length
80	-	-	2270	2270	1590
75	3400	-	2000	2000	1410
70	2770		1770	1770	1270
65	2270	2090	1590	1590	1160
60	1950	1720	1430	1430	1070
55	1720	1500	1290	1290	1000
50	1540	1320	1180	1180	950
45	1380	1180	1090	1090	910
40	1270	1090	1020	1020	880
35	1180	980	980	930	860
30	1090	880	940	840	830
25	1040	790	930	780	-
20	1000	730	910	720	-
15	950	680	880	690	-
10	930	660	-	-	-
5	920	660	-	-	-
0	910	650	-	-	-





notes

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YB7700 Series

GROVE

YB7700 Series

notes

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Niella Tanaro

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Slovakia _{Saris}

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

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