

Tadano Rough Terrain Crane

GR-250N

(4-section boom, 2-section full automatic jib, X-type outriggers)

Specifications

Spec. No. GR-250N-4-00101

TADANO LTD.

GR-250N 25 ton wheel crane

1. Specifications

◎ Crane

Crane capacity	9.35m boom	25,000 kg × 3.5 m (8 parts of line)
	16.4m boom	18,000 kg × 5.0 m (6 parts of line)
	23.45m boom	12,500 kg × 6.0 m (4 parts of line)
	30.5m boom	8,000 kg × 9.0 m (4 parts of line)
	8.2m jib	3,300 kg × 72° (1 part of line)
	13.0m jib	2,200 kg × 80° (1 part of line)
	Single top	4,000 kg (1 part of line)
Maximum lifting height	Boom	31.3 m
	Jib	44.2 m
Maximum load radius	Boom	27.9 m
	Jib	33.9 m
Boom length		9.35 m to 30.5 m
Boom telescoping length		21.15 m
Boom extension speed		21.15 m / 80 s
Jib length		8.2 m to 13.0 m
Main winch wire rope hoist up speed		120 m/min (4th layer)
Main winch hook block hoist up speed		15.0 m/min (8 parts of line)
Main winch wire rope hoist up speed (reference)		Standard:120 m/min (4th layer)
		High-speed:160 m/min (4th layer)
Auxiliary winch wire rope hoist up speed		120 m/min (4th layer)
Auxiliary winch hook block hoist up speed		120 m/min (1 part of line)
Auxiliary winch wire rope hoist up speed (reference)		Standard:120 m/min (4th layer)
		High-speed:160 m/min (4th layer)
Boom elevating angle		0° to 84°
Boom raising speed		0° to 84° / 45 s
Slewing angle		360° continuous
Slewing speed		2.6 min ⁻¹ (rpm)
Wire rope	Main	Dia. 16 mm × length 170 m Flame-retardant wire rope
	Auxiliary	Dia. 16 mm × length 98 m Flame-retardant wire rope
Boom		Box-shaped 4-section hydraulic simultaneous telescoping type
Boom telescoping system		1 double-acting direct-pushing hydraulic cylinder
		2 wire-rope boom telescoping systems
Jib type		Quick-turn type (stored alongside and below boom)
		2-section (2-section hydraulic telescoping type)
Single top type		Offset (5° to 60°) Hydraulic stepless tilt type
		Fixed to top boom

Hoisting system	Hydraulic motor driven planetary gear speed reducer Automatic brake High-speed hoist down 2 single winch
Boom elevating system	With pressure compensating flow control valve 1 double-acting direct-pushing hydraulic cylinder
Slewing system	With pressure compensating flow control valve Hydraulic motor driven planetary gear speed reducer Ball bearing Slewing free/lock interchangeable Negative brake
Outriggers	Fully hydraulic X-type (floats mounted integrally) Slide and jacks with independent operation device Maximum extension width 6.6 m Middle extension width 6.1 m, 5.0 m, 3.6 m Minimum extension width 3.1 m
Operation method	Electric operated
Maximum load of outrigger	26.9 t
Power take off	PTO wet multiplate clutch type
Hydraulic pump	Tandem variable piston pump Tandem gear pump
Hydraulic oil tank capacity	380 L
Safety devices	Load moment indicator (LMI) Slewing automatic stop device Elevation slow stop device Anti-two-block device Working range limiter Outrigger extension width detector Level gauge Hook safety latch Hydraulic safety valve Boom telescoping cylinder hydraulic lock Boom elevating cylinder hydraulic lock Jib telescoping cylinder hydraulic lock Power tilt cylinder hydraulic lock Jack cylinder hydraulic lock Slewing lock
Standard equipment	Full automatic air conditioner with dehumidifier Hydraulic oil temperature gauge Loudspeaker AM/FM radio Oil cooler Visual drum rotation indicator Operating pedals ISO layout: for boom telescoping and auxiliary winch hook block Tadano layout: for boom elevating and boom telescoping Radio controller for work preparation Telematics Fuel consumption monitor Eco mode Hydraulic oil clogging alarm
Accessories	Wood blocks (4 pcs.) Aluminum pads (4 pcs.)

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Vehicle name/model		Tadano YDS-T012
Engine	Model	Cummins QSB6.7-4C
	Type	(with turbocharger, intake air cooling, urea SCR system)
	Displacement	Water-cooled, 4-cycle, 6 cylinder direct injection diesel engine
	Maximum output	6.690 L
	Maximum torque	201 kW{273PS} / 2,000 min ⁻¹ (rpm)
Torque converter		990 N·m (100.9 kgf·m) / 1,500 min ⁻¹ (rpm)
Transmission		3-element 1-section (with automatic lockup mechanism)
		Automatic and manual transmission
		Power shift type (wet multiplate clutch)
		3 forward and 1 reverse speeds (with Hi/Low settings)
Speed Reducer		Axle two-stage deceleration
Driving method		2WD (4×2) / 4WD (4×4) switching
Front axle system		Full-floating type
Rear axle system		Full-floating type
Suspension	Front wheels	Hydropneumatic suspension (with hydraulic lock cylinder)
	Rear wheels	Hydropneumatic suspension (with hydraulic lock cylinder)
Steering		Fully hydraulic power steering
Brakes	Main brake	Hydro-pneumatic disk brakes
	Parking brake	Air drive shaft internal expanding spring brake
	Auxiliary brake	Permanent-magnetic retarder
		Exhaust brake
		Auxiliary operating brake
Frame		Welded box-shaped structure
Batteries		12V-120Ah × 2 (24V)
Fuel tank capacity		300 L
Urea water tank		38 L
Tires	Front wheels	385/95R25 170E ROAD
	Rear wheels	385/95R25 170E ROAD
Cab		Crew capacity: 1 person
		With interior fittings
		Rubber mounting type (high-damping rubber) - FB8952
		Liquid-sealed rubber mounting type (viscous) FB8953 -
		Fully adjustable seat
		(with headrest, armrest, seat belt)
		Adjustable handle (tilt, telescoping)
		Intermittent front and ceiling wipers (with washers)
		Power windows
		Side visors
Safety devices		Emergency steering device
		Suspension lock unit
		Rear wheel steering lock device
		Engine over-run alarm
		Over-shift prevention device
		Parking brake alarm
		Boom left/right side cameras
		Radiator fluid level warning device
		Hydraulic oil leak warning device
Standard equipment		Electromotive retractable mirror with heater
		Overview video display
		Immobilizer
		Tire chocks
		LED headlamps
		Human alert

© Dimensions when traveling

Overall length		11,530 mm
Overall width		2,620 mm
Overall height		3,475 mm
Wheel base		3,880 mm
Wheel track	Front wheels	2,170 mm
	Rear wheels	2,170 mm

© Weight

Gross vehicle load		25,595 kg
	Front axle load	12,800 kg
	Rear axle load	12,795 kg

© Running performance

Maximum speed		49 km/h
Gradability	(tanθ)	0.57
Minimum turning radius		5.1 m (4-wheel steering) 8.5 m (2-wheel steering)

© Options

Winch drum monitoring camera
Remote control searchlight
AML external warning lamp
Position lamps
Marker lamps
External auditory alarms
Centralized lubrication system
Halogen headlamps

- This model has received a “Basic running conditions - weight: A” certificate of conformance under the Newly Developed Vehicle Certificate System, but the actual running conditions will be decided based on the calculations of the road administrator for each route.

2. Rated lifting capacity table

2-(1) When using outriggers

[Boom]

Unit (t)				
Maximum outrigger extension (6.6 m) —360 degrees—				
Boom length Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	18.0	12.5	
3.0 m	25.0	18.0	12.5	
3.5 m	25.0	18.0	12.5	8.0
4.0 m	23.5	18.0	12.5	8.0
4.5 m	21.5	18.0	12.5	8.0
5.0 m	19.6	18.0	12.5	8.0
5.5 m	17.8	17.0	12.5	8.0
6.0 m	16.3	16.0	12.5	8.0
6.5 m	15.1	15.0	12.25	8.0
7.0 m		14.0	11.5	8.0
8.0 m		11.4	10.2	8.0
9.0 m		9.3	9.0	8.0
10.0 m		7.8	7.6	7.15
11.0 m		6.5	6.65	6.4
12.0 m		5.55	5.8	5.6
13.0 m		4.75	5.0	4.9
13.5 m		4.45	4.65	4.6
14.0 m			4.35	4.4
15.0 m			3.85	3.9
16.0 m			3.4	3.45
17.0 m			3.0	3.05
18.0 m			2.65	2.7
19.0 m			2.35	2.4
20.0 m			2.1	2.15
20.5 m			2.0	2.05
21.0 m				1.95
22.0 m				1.75
24.0 m				1.4
26.0 m				1.1
27.9 m				0.9
A (°)	0 to 84			

Unit (t)				
Outrigger middle extension (6.1 m) —side—				
Boom length Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	18.0	12.5	
3.0 m	25.0	18.0	12.5	
3.5 m	25.0	18.0	12.5	8.0
4.0 m	23.5	18.0	12.5	8.0
4.5 m	21.5	18.0	12.5	8.0
5.0 m	19.6	18.0	12.5	8.0
5.5 m	17.8	17.0	12.5	8.0
6.0 m	16.3	16.0	12.5	8.0
6.5 m	15.0	15.0	12.25	8.0
7.0 m		13.5	11.5	8.0
8.0 m		10.45	10.2	8.0
9.0 m		8.35	8.6	8.0
10.0 m		6.85	7.1	7.1
11.0 m		5.75	6.0	6.0
12.0 m		4.9	5.1	5.15
13.0 m		4.2	4.4	4.45
13.5 m		3.9	4.1	4.15
14.0 m			3.8	3.9
15.0 m			3.35	3.4
16.0 m			2.95	3.0
17.0 m			2.6	2.65
18.0 m			2.3	2.35
19.0 m			2.05	2.1
20.0 m			1.85	1.85
20.5 m			1.75	1.75
21.0 m				1.65
22.0 m				1.5
24.0 m				1.2
26.0 m				0.95
27.8 m				0.75
A (°)	0 to 84			

A: Boom angle range (without load)

[Boom]

Unit (t)				
Outrigger middle extension (5.0 m) —side—				
Boom length Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	18.0	12.5	
3.0 m	25.0	18.0	12.5	
3.5 m	25.0	18.0	12.5	8.0
4.0 m	23.5	18.0	12.5	8.0
4.5 m	21.2	18.0	12.5	8.0
5.0 m	18.0	18.0	12.5	8.0
5.5 m	14.6	15.1	12.5	8.0
6.0 m	12.2	12.8	12.5	8.0
6.5 m	10.35	11.0	11.25	8.0
7.0 m		9.65	9.85	8.0
8.0 m		7.5	7.75	7.6
9.0 m		6.05	6.25	6.4
10.0 m		4.95	5.15	5.3
11.0 m		4.15	4.35	4.45
12.0 m		3.5	3.7	3.8
13.0 m		3.0	3.15	3.25
13.5 m		2.8	2.9	3.0
14.0 m			2.7	2.8
15.0 m			2.35	2.4
16.0 m			2.05	2.1
17.0 m			1.75	1.85
18.0 m			1.55	1.6
19.0 m			1.35	1.4
20.0 m			1.2	1.2
20.5 m			1.1	1.1
21.0 m				1.05
22.0 m				0.9
24.0 m				0.65
A (°)	0 to 84			33 to 84

Unit (t)				
Outrigger middle extension (3.6 m) —side—				
Boom length Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	18.0	12.5	
3.0 m	25.0	18.0	12.5	
3.5 m	20.0	18.0	12.5	8.0
4.0 m	15.4	16.0	12.5	8.0
4.5 m	12.1	12.9	12.5	8.0
5.0 m	9.9	10.65	10.8	8.0
5.5 m	8.25	8.95	9.2	8.0
6.0 m	7.0	7.65	7.95	8.0
6.5 m	6.0	6.6	6.9	6.8
7.0 m		5.75	6.05	6.0
8.0 m		4.5	4.75	4.75
9.0 m		3.6	3.8	3.9
10.0 m		2.9	3.1	3.2
11.0 m		2.4	2.55	2.65
12.0 m		1.95	2.1	2.2
13.0 m		1.6	1.75	1.85
13.5 m		1.45	1.6	1.7
14.0 m			1.45	1.55
15.0 m			1.2	1.3
16.0 m			1.0	1.05
17.0 m			0.8	0.85
18.0 m			0.65	0.7
19.0 m			0.5	0.55
A (°)	0 to 84		26 to 84	48 to 84

A: Boom angle range (without load)

[Boom]

Unit (t)

Outrigger minimum extension (3.1 m) —side—				
Boom length Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	18.0	16.0	12.5	
3.0 m	18.0	16.0	12.5	
3.5 m	14.5	16.0	12.5	8.0
4.0 m	11.6	12.0	12.5	8.0
4.5 m	9.3	10.0	10.2	8.0
5.0 m	7.6	8.4	8.6	8.0
5.5 m	6.4	7.1	7.3	7.3
6.0 m	5.4	6.1	6.3	6.3
6.5 m	4.7	5.3	5.5	5.5
7.0 m		4.6	4.85	4.9
8.0 m		3.6	3.8	3.8
9.0 m		2.8	3.05	3.05
10.0 m		2.3	2.45	2.5
11.0 m		1.8	2.0	2.05
12.0 m		1.5	1.6	1.65
13.0 m		1.2	1.3	1.35
13.5 m		1.0	1.2	1.25
14.0 m			1.05	1.1
15.0 m			0.85	0.9
16.0 m			0.65	0.7
17.0 m			0.5	0.55
A (°)	0 to 84		37 to 84	53 to 84

A: Boom angle range (without load)

[Jib (30.5 m boom)]

Maximum outrigger extension (6.6 m) —360 degrees—																
Jib Length	30.5 m boom + 8.2 m jib								30.5 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	4.5	3.3	7.0	2.3	9.1	1.7	10.0	1.1	5.6	2.2	9.6	1.3	12.9	0.85	14.2	0.65
80	7.5	3.3	9.9	2.3	11.8	1.7	12.5	1.1	9.1	2.2	12.9	1.3	15.7	0.85	17.0	0.62
78	9.0	3.3	11.3	2.3	13.1	1.7	13.6	1.1	10.8	2.1	14.5	1.3	17.1	0.85	18.2	0.61
76	10.5	3.3	12.6	2.3	14.3	1.7	14.8	1.1	12.3	1.95	15.9	1.25	18.4	0.85	19.4	0.61
74	11.8	3.3	13.9	2.3	15.5	1.65	15.9	1.1	13.8	1.85	17.3	1.2	19.6	0.85	20.6	0.6
72	13.3	3.3	15.2	2.3	16.6	1.65	16.9	1.1	15.3	1.7	18.6	1.15	20.9	0.85	21.6	0.6
70	14.6	3.25	16.4	2.3	17.7	1.6	18.0	1.1	16.7	1.65	19.9	1.15	22.1	0.85	22.7	0.6
68	15.8	3.0	17.7	2.25	18.8	1.55	19.0	1.1	18.1	1.55	21.2	1.1	23.2	0.85	23.7	0.6
65	17.5	2.55	19.3	2.05	20.3	1.55	20.5	1.1	20.1	1.45	23.0	1.05	24.8	0.84	25.2	0.6
60	20.2	1.85	21.9	1.65	23.0	1.5	22.8	1.1	23.4	1.3	26.1	0.99	27.5	0.81	27.5	0.6
55	22.7	1.3	24.3	1.2	25.1	1.15			26.3	1.05	28.9	0.91	29.8	0.79		
53	23.7	1.15	25.2	1.05	25.9	1.0			27.4	0.95	29.8	0.85	30.7	0.79		
50	25.2	0.95	26.5	0.88	27.1	0.86			28.9	0.74	31.1	0.67	31.8	0.66		
47	26.5	0.75	27.8	0.69	28.1	0.68			30.4	0.57	32.4	0.52	32.8	0.52		
45	27.3	0.63	28.5	0.58	28.8	0.58			31.3	0.47	33.2	0.43	33.5	0.43		
40	29.5	0.38	30.3	0.35												
A(°)	39 to 84				44 to 84		59 to 84		44 to 84						59 to 84	

Outrigger middle extension (6.1 m) —side—																
Jib Length	30.5 m boom + 8.2 m jib								30.5 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	4.5	3.3	7.0	2.3	9.1	1.7	10.0	1.1	5.6	2.2	9.6	1.3	12.9	0.85	14.2	0.65
80	7.5	3.3	9.9	2.3	11.8	1.7	12.5	1.1	9.1	2.2	12.9	1.3	15.7	0.85	17.0	0.62
78	9.0	3.3	11.3	2.3	13.1	1.7	13.6	1.1	10.8	2.1	14.5	1.3	17.1	0.85	18.2	0.61
76	10.5	3.3	12.6	2.3	14.3	1.7	14.8	1.1	12.3	1.95	15.9	1.25	18.4	0.85	19.4	0.61
74	11.8	3.3	13.9	2.3	15.5	1.65	15.9	1.1	13.8	1.85	17.3	1.2	19.6	0.85	20.6	0.6
72	13.3	3.3	15.2	2.3	16.6	1.65	16.9	1.1	15.3	1.7	18.6	1.15	20.9	0.85	21.6	0.6
70	14.6	3.25	16.4	2.3	17.7	1.6	18.0	1.1	16.7	1.65	19.9	1.15	22.1	0.85	22.7	0.6
68	15.8	2.9	17.7	2.25	18.8	1.55	19.0	1.1	18.1	1.55	21.2	1.1	23.2	0.85	23.7	0.6
65	17.3	2.3	19.3	2.0	20.3	1.55	20.5	1.1	20.1	1.45	23.0	1.05	24.8	0.84	25.2	0.6
60	20.1	1.6	21.8	1.4	22.9	1.35	22.8	1.1	23.4	1.3	26.1	0.99	27.5	0.81	27.5	0.6
55	22.7	1.1	24.2	1.0	25.0	0.98			26.2	0.91	28.7	0.78	29.8	0.77		
53	23.7	0.97	25.1	0.87	25.9	0.86			27.2	0.76	29.7	0.66	30.6	0.65		
50	25.1	0.74	26.4	0.66	27.0	0.66			28.8	0.57	31.0	0.49	31.7	0.49		
47	26.5	0.55	27.7	0.49	28.1	0.49			30.2	0.4	32.3	0.34	32.8	0.34		
45	27.4	0.43	28.5	0.39	28.7	0.39			31.1	0.31						
A(°)	44 to 84						59 to 84		44 to 84		46 to 84				59 to 84	

R: load radius W: rated lifting capacity A: Boom angle range (without load)

[Jib (30.5 m boom)]

Outrigger middle extension (5.0 m) —side—																
Jib Length	30.5 m boom + 8.2 m jib								30.5 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	4.5	3.3	7.0	2.3	9.1	1.7	10.0	1.1	5.6	2.2	9.6	1.3	12.9	0.85	14.2	0.65
80	7.5	3.3	9.9	2.3	11.8	1.7	12.5	1.1	9.1	2.2	12.9	1.3	15.7	0.85	17.0	0.62
78	9.0	3.3	11.3	2.3	13.1	1.7	13.6	1.1	10.8	2.1	14.5	1.3	17.1	0.85	18.2	0.61
76	10.5	3.3	12.6	2.3	14.3	1.7	14.8	1.1	12.3	1.95	15.9	1.25	18.4	0.85	19.4	0.61
74	11.8	3.3	13.9	2.3	15.5	1.65	15.9	1.1	13.8	1.85	17.3	1.2	19.6	0.85	20.6	0.6
72	13.1	3.0	15.2	2.3	16.6	1.65	16.9	1.1	15.3	1.7	18.6	1.15	20.9	0.85	21.6	0.6
70	14.2	2.45	16.3	2.05	17.7	1.6	18.0	1.1	16.7	1.65	19.9	1.15	22.1	0.85	22.7	0.6
68	15.3	2.05	17.3	1.7	18.8	1.5	19.0	1.1	18.1	1.55	21.2	1.1	23.2	0.85	23.7	0.6
65	17.0	1.55	18.9	1.3	20.2	1.2	20.5	1.1	19.9	1.25	23.0	1.0	24.8	0.84	25.2	0.6
60	19.8	0.98	21.5	0.86	22.6	0.8	22.7	0.8	22.9	0.81	25.8	0.67	27.3	0.61	27.5	0.6
55	22.4	0.55	23.9	0.48	24.8	0.45			25.7	0.42	28.3	0.33	29.6	0.31		
53	23.5	0.41	24.9	0.34	25.6	0.32										
A(°)	52 to 84						59 to 84		54 to 84						59 to 84	

Outrigger middle extension (3.6 m) —side—																
Jib Length	30.5 m boom + 8.2 m jib								30.5 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	4.5	3.3	7.0	2.3	9.1	1.7	10.0	1.1	5.6	2.2	9.6	1.3	12.9	0.85	14.2	0.65
80	7.5	3.3	9.9	2.3	11.8	1.7	12.5	1.1	9.1	2.2	12.9	1.3	15.7	0.85	17.0	0.62
78	9.0	3.3	11.3	2.3	13.1	1.7	13.6	1.1	10.8	2.1	14.5	1.3	17.1	0.85	18.2	0.61
76	10.3	3.0	12.6	2.25	14.3	1.7	14.8	1.1	12.3	1.95	15.9	1.25	18.4	0.85	19.4	0.61
74	11.4	2.35	13.7	1.85	15.4	1.5	15.9	1.1	13.8	1.85	17.3	1.2	19.6	0.85	20.6	0.6
72	12.6	1.85	14.7	1.45	16.4	1.2	16.9	1.1	15.0	1.45	18.5	1.05	20.9	0.85	21.6	0.6
70	13.8	1.45	15.9	1.15	17.4	1.0	18.0	1.0	16.3	1.15	19.7	0.85	22.0	0.72	22.7	0.6
68	14.8	1.1	17.0	0.91	18.4	0.79	18.8	0.79	17.5	0.88	20.8	0.66	23.0	0.56	23.7	0.55
65	16.5	0.74	18.5	0.61	19.9	0.52	20.2	0.52	19.3	0.56	22.5	0.42	24.6	0.35	25.0	0.34
A(°)	64 to 84								64 to 84							

R:load radius W: rated lifting capacity A: Boom angle range (without load)

[Jib (23.45 m boom)]

Maximum outrigger extension (6.6 m) —360 degrees—																
Jib Length	23.45 m boom + 8.2 m jib								23.45 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	3.1	3.3	5.7	2.3	7.8	1.7	8.9	1.1	4.2	2.2	8.4	1.3	11.7	0.85	13.3	0.65
80	5.5	3.3	7.9	2.3	9.9	1.7	10.7	1.1	7.2	2.2	11.0	1.3	14.0	0.85	15.4	0.62
78	6.6	3.3	9.0	2.3	10.9	1.7	11.6	1.1	8.5	2.1	12.2	1.3	15.0	0.85	16.3	0.61
76	7.7	3.3	10.0	2.3	11.8	1.7	12.5	1.1	9.8	1.95	13.4	1.25	16.0	0.85	17.2	0.61
74	8.9	3.3	11.1	2.3	12.7	1.7	13.3	1.1	11.1	1.85	14.5	1.2	17.0	0.85	18.1	0.6
72	9.9	3.3	12.0	2.3	13.6	1.7	14.2	1.1	12.3	1.7	15.6	1.15	18.0	0.85	19.0	0.6
70	11.0	3.3	13.0	2.3	14.5	1.7	15.0	1.1	13.5	1.65	16.8	1.15	18.9	0.85	19.8	0.6
68	12.0	3.3	14.0	2.3	15.4	1.7	15.8	1.1	14.7	1.55	17.8	1.1	19.8	0.85	20.5	0.6
65	13.6	3.3	15.4	2.3	16.6	1.7	16.9	1.1	16.5	1.45	19.3	1.05	21.1	0.85	21.6	0.6
60	15.9	2.9	17.6	2.3	18.6	1.7	18.7	1.1	19.1	1.3	21.7	1.0	23.2	0.85	23.4	0.6
55	18.1	2.25	19.6	2.0	20.4	1.7			21.6	1.2	23.9	0.98	25.1	0.85		
53	18.9	2.05	20.3	1.8	21.1	1.7			22.5	1.15	24.8	0.97	25.8	0.85		
50	20.0	1.75	21.4	1.6	22.0	1.6			23.9	1.1	26.0	0.95	26.7	0.85		
47	21.2	1.55	22.4	1.45	22.9	1.45			25.1	1.05	27.1	0.94	27.6	0.85		
45	21.9	1.4	23.0	1.3	23.4	1.3			25.9	1.05	27.8	0.93	28.2	0.85		
40	23.5	1.15	24.5	1.05					27.9	0.91	29.4	0.86				
35	25.0	0.97	25.8	0.91					29.6	0.75	30.6	0.72				
30	26.3	0.82	26.8	0.78					31.0	0.64	31.6	0.61				
25	27.3	0.72	27.7	0.68					32.1	0.54	32.4	0.52				
20	28.1	0.63							33.0	0.46						
15	28.7	0.57							33.6	0.42						
10	29.1	0.56							33.9	0.42						
5	29.2	0.56							33.9	0.42						
A(°)	4 to 84		24 to 84		44 to 84		59 to 84		4 to 84		24 to 84		44 to 84		59 to 84	

R: load radius W: rated lifting capacity A: Boom angle range (without load)

[Jib (23.45 m boom)]

Outrigger middle extension (6.1 m) —side—																
Jib Length	23.45 m boom + 8.2 m jib								23.45 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	3.2	3.3	5.7	2.3	7.8	1.7	8.9	1.1	4.2	2.2	8.4	1.3	11.7	0.85	13.3	0.65
80	5.5	3.3	7.9	2.3	9.9	1.7	10.7	1.1	7.2	2.2	11.0	1.3	14.0	0.85	15.4	0.62
78	6.6	3.3	9.0	2.3	10.9	1.7	11.6	1.1	8.5	2.1	12.2	1.3	15.0	0.85	16.3	0.61
76	7.7	3.3	10.0	2.3	11.8	1.7	12.5	1.1	9.8	1.95	13.4	1.25	16.0	0.85	17.2	0.61
74	8.9	3.3	11.1	2.3	12.7	1.7	13.3	1.1	11.1	1.85	14.5	1.2	17.0	0.85	18.1	0.6
72	9.9	3.3	12.0	2.3	13.6	1.7	14.2	1.1	12.3	1.7	15.6	1.15	18.0	0.85	19.0	0.6
70	11.0	3.3	13.0	2.3	14.5	1.7	15.0	1.1	13.5	1.65	16.8	1.15	18.9	0.85	19.8	0.6
68	12.0	3.3	14.0	2.3	15.4	1.7	15.8	1.1	14.7	1.55	17.8	1.1	19.8	0.85	20.5	0.6
65	13.6	3.3	15.4	2.3	16.6	1.7	16.9	1.1	16.5	1.45	19.3	1.05	21.1	0.85	21.6	0.6
60	15.9	2.9	17.6	2.3	18.6	1.7	18.7	1.1	19.1	1.3	21.7	1.0	23.2	0.85	23.4	0.6
55	18.0	2.15	19.6	1.8	20.4	1.7			21.6	1.2	23.9	0.98	25.1	0.85		
53	18.8	1.95	20.3	1.65	21.1	1.7			22.5	1.15	24.8	0.97	25.8	0.85		
50	20.0	1.65	21.4	1.45	22.0	1.45			23.9	1.1	26.0	0.95	26.7	0.85		
47	21.1	1.45	22.4	1.25	22.9	1.25			25.1	1.0	27.1	0.94	27.6	0.85		
45	21.8	1.3	23.0	1.15	23.4	1.15			25.9	0.95	27.8	0.93	28.2	0.85		
40	23.5	1.05	24.5	0.94					27.8	0.75	29.3	0.75				
35	25.0	0.86	25.7	0.77					29.5	0.61	30.6	0.61				
30	26.2	0.7	26.8	0.64					30.9	0.48	31.6	0.48				
25	27.3	0.58	27.6	0.52					32.1	0.38	32.4	0.38				
20	28.1	0.48							33.0	0.3						
15	28.7	0.41														
10	29.1	0.37														
5	29.2	0.37														
A(°)	4 to 84		24 to 84		44 to 84		59 to 84		19 to 84		24 to 84		44 to 84		59 to 84	

R: load radius W: rated lifting capacity A: Boom angle range (without load)

[Jib (23.45 m boom)]

Outrigger middle extension (5.0 m) —side—																
Jib Length	23.45 m boom + 8.2 m jib								23.45 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	3.2	3.3	5.7	2.3	7.8	1.7	8.9	1.1	4.2	2.2	8.4	1.3	11.7	0.85	13.3	0.65
80	5.5	3.3	7.9	2.3	9.9	1.7	10.7	1.1	7.2	2.2	11.0	1.3	14.0	0.85	15.4	0.62
78	6.6	3.3	9.0	2.3	10.9	1.7	11.6	1.1	8.5	2.1	12.2	1.3	15.0	0.85	16.3	0.61
76	7.7	3.3	10.0	2.3	11.8	1.7	12.5	1.1	9.8	1.95	13.4	1.25	16.0	0.85	17.2	0.61
74	8.9	3.3	11.1	2.3	12.7	1.7	13.3	1.1	11.1	1.85	14.5	1.2	17.0	0.85	18.1	0.6
72	9.9	3.3	12.0	2.3	13.6	1.7	14.2	1.1	12.3	1.7	15.6	1.15	18.0	0.85	19.0	0.6
70	11.0	3.3	13.0	2.3	14.5	1.7	15.0	1.1	13.5	1.65	16.8	1.15	18.9	0.85	19.8	0.6
68	12.0	3.3	14.0	2.3	15.4	1.7	15.8	1.1	14.7	1.55	17.8	1.1	19.8	0.85	20.5	0.6
65	13.4	2.65	15.4	2.25	16.6	1.7	16.9	1.1	16.5	1.45	19.3	1.05	21.1	0.85	21.6	0.6
60	15.7	1.85	17.5	1.65	18.6	1.5	18.7	1.1	19.1	1.3	21.7	1.0	23.2	0.85	23.4	0.6
55	17.8	1.35	19.4	1.2	20.3	1.1			21.6	1.05	23.9	0.92	25.1	0.85		
53	18.6	1.15	20.2	1.05	21.0	1.0			22.4	0.96	24.7	0.81	25.8	0.77		
50	19.8	0.98	21.3	0.9	21.9	0.86			23.7	0.78	25.9	0.67	26.7	0.64		
47	21.0	0.81	22.3	0.74	22.8	0.72			24.9	0.63	27.0	0.55	27.6	0.53		
45	21.7	0.7	22.9	0.65	23.3	0.64			25.7	0.55	27.6	0.47	28.1	0.47		
40	23.4	0.5	24.4	0.47					27.6	0.37	29.2	0.32				
35	24.8	0.3														
A(°)	34 to 84		39 to 84		44 to 84		59 to 84		39 to 84				44 to 84		59 to 84	

Outrigger middle extension (3.6 m) —side—																
Jib Length	23.45 m boom + 8.2 m jib								23.45 m boom + 13.0 m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle (°)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
84	3.2	3.3	5.7	2.3	7.8	1.7	8.9	1.1	4.2	2.2	8.4	1.3	11.7	0.85	13.3	0.65
80	5.5	3.3	7.9	2.3	9.9	1.7	10.7	1.1	7.2	2.2	11.0	1.3	14.0	0.85	15.4	0.62
78	6.6	3.3	9.0	2.3	10.9	1.7	11.6	1.1	8.5	2.1	12.2	1.3	15.0	0.85	16.3	0.61
76	7.7	3.3	10.0	2.3	11.8	1.7	12.5	1.1	9.8	1.95	13.4	1.25	16.0	0.85	17.2	0.61
74	8.9	3.3	11.1	2.3	12.7	1.7	13.3	1.1	11.1	1.85	14.5	1.2	17.0	0.85	18.1	0.6
72	9.9	3.1	12.0	2.3	13.6	1.7	14.2	1.1	12.3	1.7	15.6	1.15	18.0	0.85	19.0	0.6
70	10.9	2.55	13.0	1.95	14.5	1.65	15.0	1.1	13.5	1.65	16.8	1.15	18.9	0.85	19.8	0.6
68	11.8	2.1	13.9	1.65	15.3	1.4	15.8	1.1	14.7	1.55	17.8	1.1	19.8	0.85	20.5	0.6
65	13.2	1.55	15.2	1.25	16.5	1.1	16.9	1.1	16.3	1.2	19.3	0.95	21.1	0.8	21.6	0.6
60	15.5	0.99	17.3	0.83	18.4	0.73	18.6	0.73	18.8	0.73	21.5	0.6	23.1	0.51	23.4	0.51
55	17.6	0.58	19.3	0.49	20.2	0.43			21.1	0.41	23.6	0.33				
53	18.5	0.45	20.0	0.38	20.9	0.33			22.1	0.3						
A(°)	52 to 84						59 to 84		52 to 84		54 to 84		59 to 84			

R: load radius W: rated lifting capacity A: Boom angle range (without load)

Precautions when using outriggers

1. The rated lifting capacities assume that the crane is set horizontally on firm ground, and include the weight of the lifting devices and main winch hook block (220 kg) when working with the boom and the weight of the lifting devices and auxiliary hook block (60 kg) when working with the jib. The values above the bold line are based on the structural strength while those below are based on the crane stability factor.
2. The load radius is based on the actual figure including the boom deflection, so always use the load radius as the standard when working with the boom.
3. Jib rated lifting capacity table differs depending on whether or not boom length exceeds 23.45 m.
4. When performing jib lifting, use boom angle as the standard. Furthermore, load radius values are calculated values, assuming that the jib is attached to a 23.45 or 30.5 m boom, and actual load radius may differ.
5. The rated lifting capacity for the single top is the value obtained by subtracting 160 kg from the boom rated lift operation capacity, and includes the weight of the lifting devices and auxiliary winch hook block (60 kg), and must not exceed 4.0 t.
6. High-speed hoist down should only be used when only the hook block is being lowered. Also, sudden lever operations should be avoided.
7. The standard number of parts of line on the hook block for each boom length are as shown in the chart below.

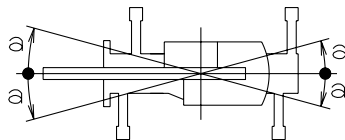
However, when using other number of parts of line, the load per line must not exceed 3.6 t for main winch wire rope or 4.0 t for auxiliary winch wire rope.

Boom length	9.35 m	16.4 m	23.45 m	30.5 m	Jib, single top
Number of parts	8	6	4	4	1

8. When using the jib, the wire rope number of parts of line is 1.
9. The lifting capacity in the over-side area differs depends on the extension width of the outriggers. Perform work within the capacity according to the extension width.

The lifting capacity for the over-front and over-rear areas is the rated lifting capacity of the "maximum outriggers extension," but the range (angle α) in the over-front and over-rear areas depends on outrigger extension width in use.

Extension width	Middle extension (6.1 m)	Middle extension (5.0 m)	Middle extension (3.6 m)	Middle extension (3.1 m)
Angle α°	45	25	15	10



2-(2) When on-rubber

Unit (t)

	When stopped						When travelling (1.6 km/h or less)					
Boom length	9.35 m		16.4 m		23.45 m		9.35 m		16.4 m		23.45 m	
Load radius	Front	360 degrees	Front	360 degrees	Front	360 degrees	Front	360 degrees	Front	360 degrees	Front	360 degrees
3.0 m	14.0	8.3	9.0	7.3			10.0	6.5	7.5	5.1		
3.5 m	14.0	6.8	9.0	7.3	6.5	4.5	10.0	5.2	7.5	5.1	5.5	3.2
4.0 m	12.5	5.3	9.0	5.85	6.5	4.5	9.0	4.2	7.5	4.4	5.5	3.2
4.5 m	10.9	4.3	9.0	4.75	6.5	4.5	8.2	3.4	7.5	3.7	5.5	3.2
5.0 m	9.55	3.5	8.2	4.0	6.5	4.0	7.4	2.8	7.0	3.1	5.5	3.2
5.5 m	8.3	2.8	7.4	3.3	6.1	3.4	6.7	2.4	6.2	2.7	5.15	2.8
6.0 m	7.2	2.3	6.6	2.8	5.65	2.9	5.9	1.9	5.5	2.3	4.8	2.4
6.5 m	6.25	1.8	5.9	2.35	5.25	2.5	5.1	1.5	4.9	1.9	4.45	2.05
7.0 m			5.25	1.95	4.85	2.15			4.35	1.6	4.15	1.8
8.0 m			4.1	1.4	4.1	1.6			3.4	1.1	3.5	1.4
9.0 m			3.25	0.95	3.5	1.2			2.7	0.7	2.95	1.0
10.0 m			2.6	0.6	3.0	0.85			2.15		2.45	0.65
11.0 m			2.1		2.55	0.55			1.7		2.05	
12.0 m			1.7		2.2				1.35		1.7	
13.0 m			1.35		1.85				1.1		1.45	
13.5 m			1.15		1.7				1.0		1.3	
14.0 m					1.55						1.2	
15.0 m					1.3						1.0	
16.0 m					1.05						0.85	
17.0 m					0.85						0.7	
18.0 m					0.65						0.55	
19.0 m					0.5							
A (°)	0 to 78		43 to 78	25 to 78	57 to 78		0 to 78		48 to 78	31 to 78	60 to 78	

A: Boom angle range (without load)

Precautions when on-rubber

1. The rated lifting capacities assume that the crane is set horizontally on firm ground, the tires are at the standard pressure (900 kPa {9.00 kgf/cm²}) and the suspension cylinders are fully retracted, and include the weight of the lifting devices and main winch hook block (220 kg) when working with the boom.

The values above the thick line are based on the structural strength while those below are based on the crane stability factor. When performing actual work, use after considering the ground and operating conditions, etc.

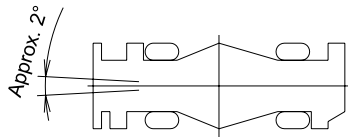
2. The load radius is based on the actual figure including boom and tire deflection, so always use the load radius as the standard.
3. The standard number of parts of line on the hook block for each boom length are as shown in the chart below.

However, when using other number of parts of line, the load per line must not exceed 3.6 t for main winch wire rope or 4.0 t for auxiliary winch wire rope.

Boom length	9.35 m	16.4 m	23.45 m	Single top
Number of parts	4	4	4	1

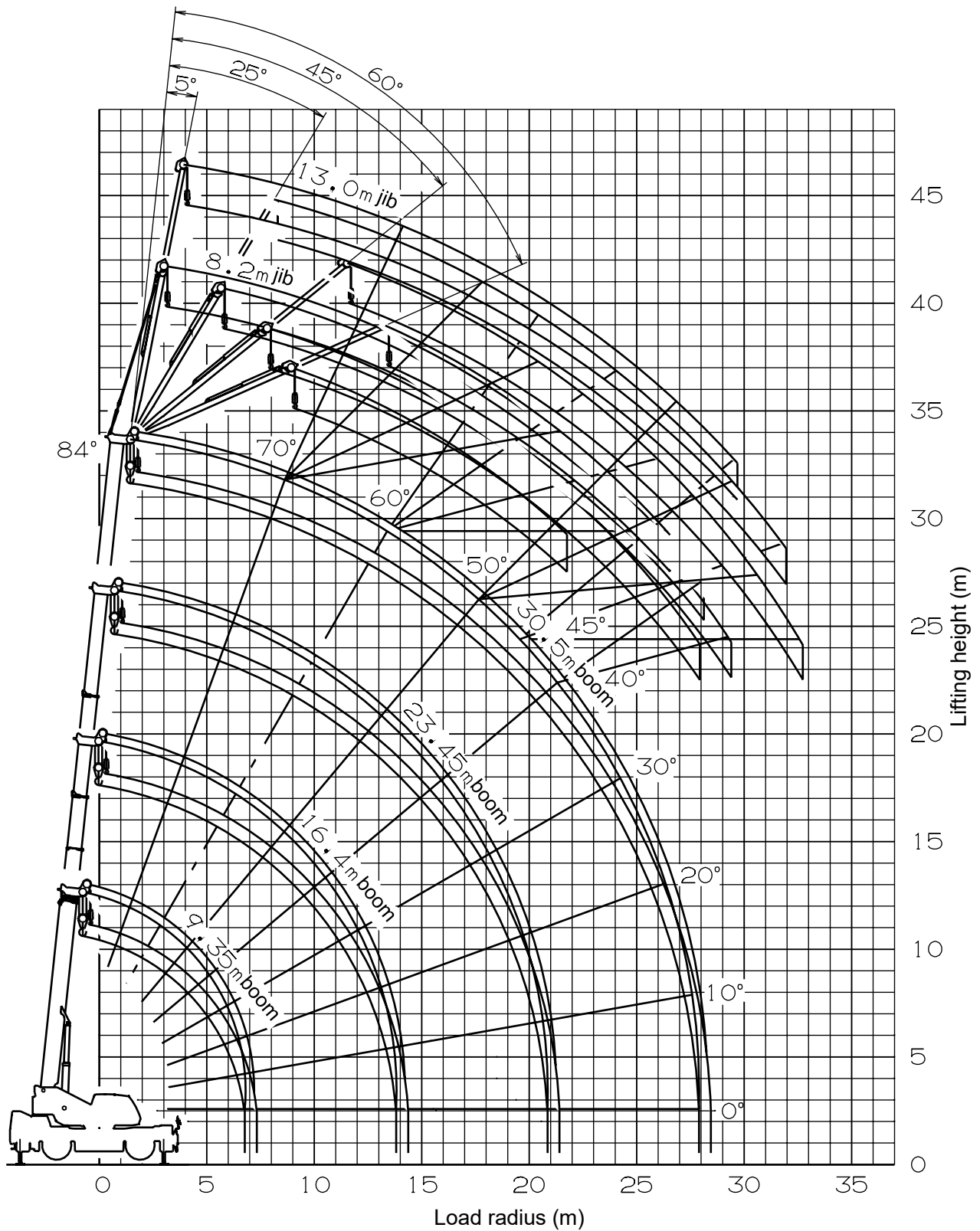
4. Do not perform high-speed unwinding with a boom longer than 23.45 m or a jib.
5. Only perform crane operations in the front area while the AML "front position symbol" is lit.

The front area is when the boom is within 2° of the front of the carrier.



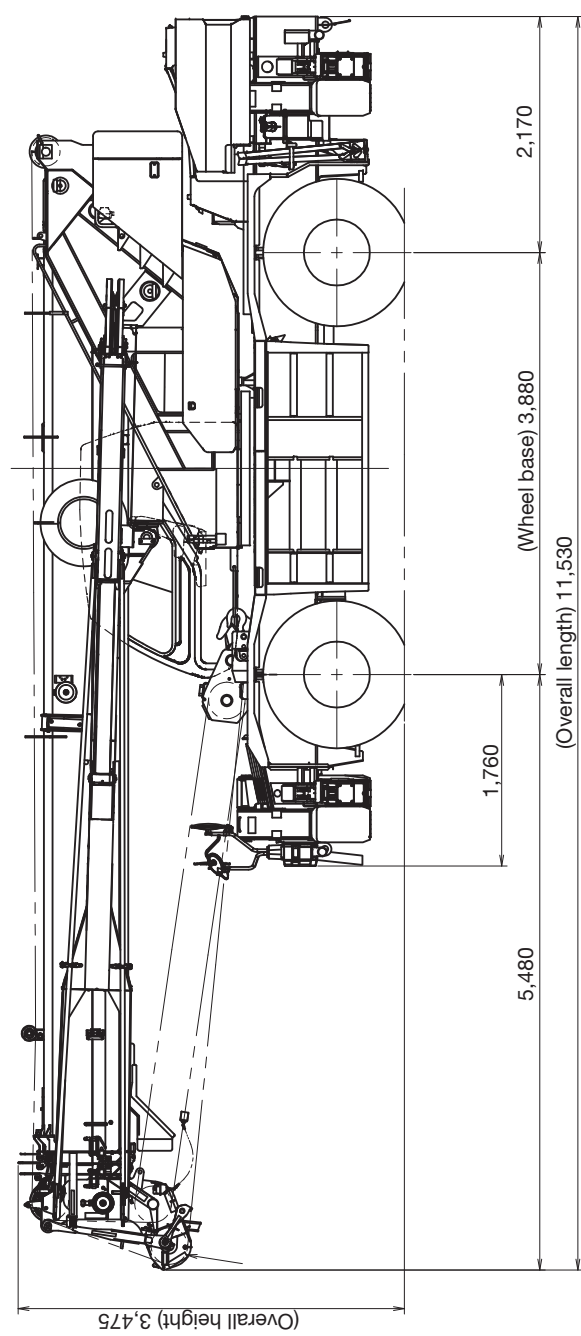
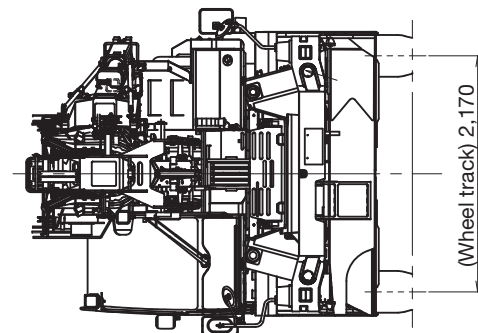
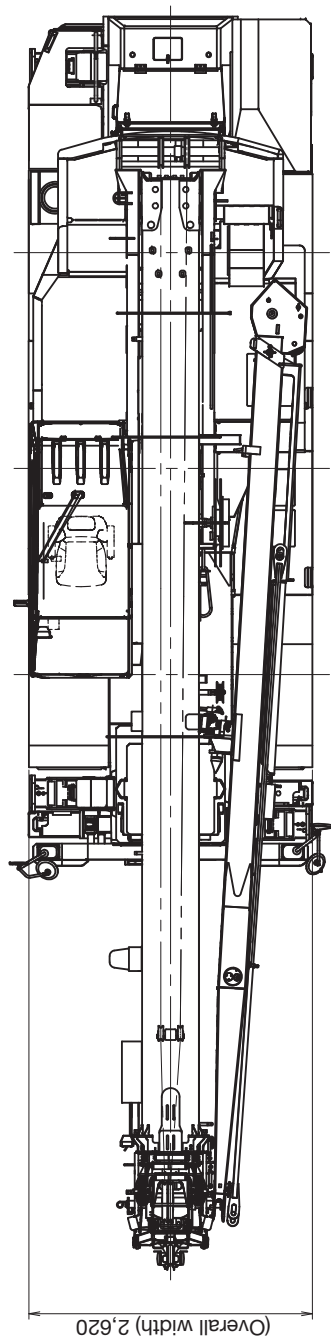
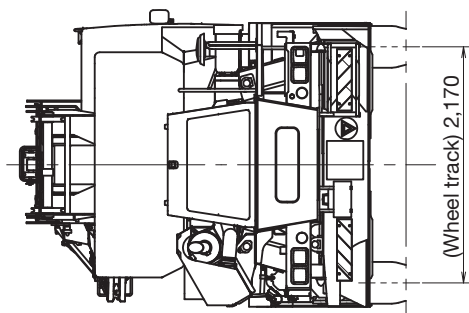
6. The rated lifting capacity for the single top is the value obtained by subtracting 160 kg from the boom rated lifting capacity, and includes the weight of the lifting devices and auxiliary winch hook block (60 kg), and must not exceed 4.0 t.
7. Perform pick and carry with the " drive mode selector " switch set to "4WD low speed traveling" and the gearshift switch set to first gear.
8. Perform pick and carry with the slewing brake on, the load close to the ground so it will not swing, and at a speed of 1.6 km or lower. In particular, abrupt steering, starting or braking must be avoided.
9. Do not perform crane operations while performing pick and carry.

3. Working range chart



- Note
1. The above drawing does not include boom deflection.
 2. The above drawing shows outrigger maximum (6.6 m) extension.

4. Dimensions



*AML external warning lamp, Searchlight, Marker lamps, Position lamps are optional equipment.