

CRANE SPECIFICATION

TADANO TR-250M

COMPREHENSIVE LIFTING SOLUTIONS

We look forward to providing a full heavy lift engineering and crane solution for your next project. Our heavy lift engineers and on site personnel are experienced in managing and organising highly de-manding lift requirements.

Contact us to discuss your lifting requirements and a free quote.

BRISBANE (HQ)

07 3907 5800 37 Paringa Rd, Murarrie, QLD, 4172

BALLINA

02 6686 7748 5 Convair Ave, Ballina, NSW, 2478

GLADSTONE

07 4829 5219 7 Morgan St, Gladstone, QLD, 4680

ROMA

07 4622 5522 8 Wormwell Drive, Roma QLD 4455

TOWNSVILLE

07 4779 4088 16 Mackley St, Garbutt QLD 4814

RICHLANDS

07 3907 5800 462 Boundary Rd, Richlands QLD 4077

ROCKHAMPTON

07 4939 1095 39-42 Johnson St, Park Hurst, QLD, 4702

BILOELA

07 4939 1095 67 Dawson Hwy, Biloela QLD 4715

SUNSHINE COAST

0409 595 618 562 Maroochydore Rd, Kunda Park, QLD, 4556

MACKAY

07 4952 6998 135 Diesel Drive, Paget QLD 4740

ROUGH TERRAIN CRANE

TR-250M

JAPANESE SPECIFICATIONS

TR

OUTLINE	SPEC. NO.
4-section Boom, 2-staged Power Tilt Jib X-type Outrigger	TR-250M-7-00101

Control No. JA-01

TR-250M

CRANE SPECIFICATIONS

CRANE CAPACITY

9.5m	Boom	25,000kg	at 3.5m	(8part-line)
16.5m	Boom	19,000kg	at 4.0m	(6part-line)
23.5m	Boom	12,500kg	at 5.0m	(4part-line)
30.5m	Boom	7,000kg	at 8.0m	(4part-line)
8.0m	Jib	3,000kg	at 72 °	(1part-line)
13.0m	Jib	2,000kg	at 76 °	(1part-line)
Single t	ор	3,500kg		(1part-line)

MAX.LIFTING HEIGHT

Boom 31.3m .lib 44 2m

MAX.WORKING RADIUS

Boom 28.0m 35.0m

BOOM LENGTH 9.5m - 30.5m

BOOM EXTENSION

21 0m

BOOM EXTENSION SPEED

21 0m/90s

JIB LENGTH

8.0m, 13.0m

MAIN WINCH SINGLE LINE WINDING SPEED

120m/min (4th layer)

MAIN WINCH HOOK SPEED

15.0m/min (8 part-line)

AUXILIARY WINCH SINGLE LINE WINDING SPEED

120m/min (4th layer)

AUXILIARY WINCH HOOK SPEED

120m/min (1 part-line)

BOOM ELEVATION ANGLE

BOOM ELEVATION SPEED

0 °- 83 945s

SWING ANGLE

360 °continue

SWING SPEED

2.6min-1 (rpm)

WIRE ROPE

Main Winch

16mm x 170m (Diameter x Length)

Spin-resistant wire rope

Auxiliary Winch

16mm x 98m (Diameter x Length)

Spin-resistant wire rope

BOOM

4-section hydraulically telescoping boom of hexagonal box construction

(stage 2: sequential; stages 3,4: synchronized)

BOOM EXTENSION

2 double-acting hydraulic cylinders

1 wire rope type telescoping device

Quick-turn type (2-staged type which stores alongside below the base boom section and extendible from under the boom (with 2nd stage being a pull-out type))

Hydraulic non-stage offset (5 °- 45 °) type

SINGLE TOP

Single sheave. Mounted on main boom head for single line work.

HOIST

Driven by hydraulic motor and via spur gear reducer.

With free-fall device.

Automatic brake (with foot brake for free-fall device)

2 single winches

With flow regulator valve with pressure compensation

BOOM ELEVATION

1 double-acting hydraulic cylinder

With flow regulator valve with pressure compensation

SWING

Hydraulic motor driven planetary gear reducer

Swing bearing

Swing free/lock changeover type

Negative brake

OUTRIGGERS

Fully hydraulic X-type (floats mounted integrally) Slides and jacks each provided with independent operation device.

Fully extended width 6.3m

Middle extended width

5.9m, 5.0m, 3.6m

Minimum extended width 3.1m

OPERATION METHOD

Hydraulic pilot valve operation

MAX. VERTICAL LOAD CAPACITY OF OUTRIGGER

26.8t

POWER TAKE-OFF

PTO wet multi-plate clutch

HYDRAULIC PUMPS

2 variable piston pumps

2 gear pumps

HYDRAULIC OIL TANK CAPACITY

380 liters

SAFETY DEVICES

Automatic moment limiter (AML) Swing automatic stop device

Elevation slow down and stop device

Over-winding cutout device

Working area control device

Free-fall interlock device

Outrigger extension width detector

Winch drum lock

Level gauge

Hook safety latch

Hydraulic safety valve

Telescopic counterbalance valve

Elevation counterbalance valve

Power tilt counterbalance valve

Jack pilot check valve

Swing lock

EQUIPMENT

Air-conditioner with dehumidifier

Hydraulic oil temperature indication lamp

Radio

Oil cooler

Visual-type winch drum rotation indicator

Operation pedals

ISO arrangement: for telescoping/auxiliary hoisting TADANO arrangement: for elevating/telescoping

Television (option)

CARRIER SPECIFICATIONS

ENGINE

MITSUBISHI 6M60 - TLE2A Model

(with turbo charger and air cooler)

Type 4-cycle, 6-cylinder, direct-injection, water-cooled

diesel engine

Piston displacement 7,545cc

Max. output 200kW {272PS} at 2,700min-1{rpm} Max. torque 785N·m {80.0kgf·m} at 1,400min {rpm}

TORQUE CONVERTER

3-element, 1-stage unit (with automatic lock-up mechanism)

TRANSMISSION

Automatic and manual transmission

Power shift type (wet multi-plate clutch)

4 forward and 1 reverse speeds (with Hi/Low settings)

Axle dual-ratio reduction

DRIVE

2-wheel drive (4X2) / 4-wheel drive (4X4) selection

FRONT AXLE

Full floating type

REAR AXLE

Full floating type

SUSPENSION

Front

Hydro-pneumatic suspension (with hydraulic lock cylinder)

Hydro-pneumatic suspension (with hydraulic lock cylinder)

STEFRING

Fully hydraulic power steering

With reverse steering correction mechanism

BRAKE SYSTEM

Service Brake

Hydro-pneumatic disk brake

Parking Brake

Mechanically operated, internal expanding duo-servo shoe type acting on drum at transmission case rear.

Auxiliary Brake

Hydrodynamic retarder

Electro-pneumatic operated exhaust brake

Auxiliary braking device for operations

FRAME

Welded box-shaped structure

ELECTRIC SYSTEM

12 V DC. 2 batteries of 24V (120Ah)

FUEL TANK CAPACITY

300 liters

TIRES

Front 385/95R25 170E ROAD 385/95R25 170E ROAD

Rear

CAB One-man type

With interior equipment

Liquid filled rubber mounted type

Fully adjustable foldable seat

(with headrest, armrest and seat belt)

Adjustable handle (tilt, telescoping)

Intermittent type windshield/roof wiper (with washer)

Power window

Side visor

SAFETY DEVICES

Emergency steering device Suspension lock device

Rear wheel steering lock device

Engine over-run alarm

Overshift prevention device

Parking brake alarm

Powered mirror for right side of boom

Monitor TV for left side of boom

EQUIPMENT

Centralized oiling device

Electric mirror

GENERAL DATA

DIMENSIONS

Overall length 11,130mm Overall width 2 620mm Overall height 3,455mm Wheel base 3.500mm Tread Front 2,170mm 2.170mm Rear

WEIGHTS

Gross vehicle weight

Total 26,495kg Front 13,250kg 13,245kg Rear

PERFORMANCE

Max. traveling speed 49km/h Gradeability (tan 0.57

Min. turning radius 5.0m (4-wheel steering)

8.4m (2-wheel steering)

Note:

This crane is covered by Class C Conditions under the Basic Running Conditions of the Road Traffic Act.

TOTAL RATED LOADS

(1) With outriggers set [BOOM]

Unit:ton

Unit:ton

UIIICIOII										
Outrig	Outriggers fully extended (6.3m) -360 °-									
A B	9.5m	16.5m	23.5m	30.5m						
2.5m	25.0	19.0	12.5							
3.0m	25.0	19.0	12.5							
3.5m	25.0	19.0	12.5	7.0						
4.0m	23.0	19.0	12.5	7.0						
4.5m	21.2	18.0	12.5	7.0						
5.0m	19.4	16.7	12.5	7.0						
5.5m	17.8	15.6	11.85	7.0						
6.0m	16.3	14.6	11.2	7.0						
6.5m	15.1	13.8	10.6	7.0						
7.0m	13.7	13.0	10.1	7.0						
8.0m		10.55	9.1	7.0						
9.0m		8.5	8.2	6.4						
10.0m		7.05	7.4	5.9						
11.0m		5.85	6.4	5.35						
12.0m		4.95	5.5	4.9						
13.0m		4.2	4.75	4.5						
14.0m		3.6	4.1	4.15						
15.0m			3.6	3.85						
16.0m			3.15	3.45						
17.0m			2.8	3.05						
18.0m			2.45	2.7						
19.0m			2.15	2.45						
20.0m			1.9	2.2						
21.0m			1.7	1.95						
22.0m				1.75						
24.0m				1.4						
26.0m				1.15						
28.0m				0.95						
a (°)		0 ~	- 83							

Unition											
Outrigg	Outriggers middle extended (5.9m) -Over sides-										
B A	9.5m	16.5m	23.5m	30.5m							
2.5m	25.0	19.0	12.5								
3.0m	25.0	19.0	12.5								
3.5m	25.0	19.0	12.5	7.0							
4.0m	23.0	19.0	12.5	7.0							
4.5m	21.2	18.0	12.5	7.0							
5.0m	19.4	16.7	12.5	7.0							
5.5m	17.8	15.6	11.85	7.0							
6.0m	16.3	14.6	11.2	7.0							
6.5m	15.1	13.8	10.6	7.0							
7.0m	13.0	12.6	10.1	7.0							
8.0m		9.7	9.1	7.0							
9.0m		7.7	8.2	6.4							
10.0m		6.3	7.0	5.9							
11.0m		5.2	6.0	5.35							
12.0m		4.35	5.1	4.9							
13.0m		3.7	4.35	4.5							
14.0m		3.15	3.8	4.05							
15.0m			3.3	3.6							
16.0m			2.85	3.15							
17.0m			2.5	2.75							
18.0m			2.2	2.45							
19.0m			1.95	2.2							
20.0m			1.7	1.95							
21.0m			1.5	1.75							
22.0m				1.55							
24.0m				1.2							
26.0m				0.95							
27.9m				0.75							
a (°)	(°) 0 ~ 83										

A= Boom length B= Working radius a= Boom angle range (for the unladen condition)

[BOOM]

Unit-ton

Unit:ton

Unit:ton										
Outriggers middle extended (5.0m) -Over sides-										
B A	9.5m	16.5m	23.5m	30.5m						
2.5m	25.0	19.0	12.5							
3.0m	25.0	19.0	12.5							
3.5m	25.0	19.0	12.5	7.0						
4.0m	23.0	19.0	12.5	7.0						
4.5m	21.2	18.0	12.5	7.0						
5.0m	18.4	16.7	12.5	7.0						
5.5m	15.4	15.0	11.85	7.0						
6.0m	13.0	12.6	11.2	7.0						
6.5m	11.2	10.8	10.6	7.0						
7.0m	9.5	9.4	10.1	7.0						
8.0m		7.3	8.0	7.0						
9.0m		5.85	6.5	6.4						
10.0m		4.75	5.4	5.6						
11.0m		3.9	4.55	4.8						
12.0m		3.3	3.85	4.15						
13.0m		2.75	3.3	3.55						
14.0m		2.3	2.85	3.1						
15.0m			2.45	2.7						
16.0m			2.1	2.35						
17.0m			1.8	2.1						
18.0m			1.55	1.8						
19.0m			1.35	1.6						
20.0m			1.15	1.4						
21.0m			0.95	1.2						
22.0m				1.05						
24.0m				0.75						
26.0m				0.5						
			_							
a (°)			20~83							

Unit:ton_										
Outrigg	gers middle	e extended	(3.6m) -O	ver sides–						
A B	9.5m	16.5m	23.5m	30.5m						
2.5m	25.0	19.0	12.5							
3.0m	25.0	19.0	12.5							
3.5m	20.5	19.0	12.5	7.0						
4.0m	16.0	15.7	12.5	7.0						
4.5m	12.8	12.6	12.5	7.0						
5.0m	10.7	10.5	11.0	7.0						
5.5m	9.05	8.8	9.4	7.0						
6.0m	7.7	7.6	8.2	7.0						
6.5m	6.6	6.5	7.25	7.0						
7.0m	5.8	5.6	6.4	6.5						
8.0m		4.4	5.05	5.3						
9.0m		3.4	4.05	4.35						
10.0m		2.7	3.3	3.65						
11.0m		2.15	2.75	3.05						
12.0m		1.7	2.3	2.6						
13.0m		1.3	1.9	2.2						
14.0m		1.0	1.6	1.85						
15.0m			1.3	1.55						
16.0m			1.05	1.3						
17.0m			0.85	1.05						
18.0m			0.65	0.9						
19.0m			0.5	0.7						
20.0m				0.55						
a (°)	0~	83	20~83	42~83						

A= Boom length B= Working radius a= Boom angle range (for the unladen condition)

[BOOM]

Unit:ton

Unit:ton									
Outrigge	rs minimur	n extended	(3.1m) -O	ver sides–					
A B	9.5m	16.5m	23.5m	30.5m					
2.5m	18.0	14.2	12.2						
3.0m	18.0	14.2	12.2						
3.5m	14.5	14.2	12.2	7.0					
4.0m	11.6	11.25	12.2	7.0					
4.5m	9.5	9.15	10.05	7.0					
5.0m	7.9	7.65	8.45	7.0					
5.5m	6.75	6.45	7.25	7.0					
6.0m	5.75	5.5	6.25	6.5					
6.5m	5.0	4.75	5.45	5.7					
7.0m	4.25	4.1	4.8	5.0					
8.0m		3.0	3.8	4.0					
9.0m		2.2	3.0	3.2					
10.0m		1.6	2.4	2.6					
11.0m		1.1	1.9	2.1					
12.0m		0.7	1.5	1.7					
13.0m			1.1	1.4					
14.0m			0.8	1.1					
15.0m				0.8					
16.0m				0.6					
a (°)	0~83	21~83	40~83	54~83					

A= Boom length B= Working radius a= Boom angle range (for the unladen condition)

[JIB]

Unit:ton

			Out	rigger	s fully	exter	ıded	(6.3m	.)		-3	60 °
С		30.5r	n Boon	1 + 8.0	m Jib		30.5m Boom + 13.0m Jib					
D		5 °	2	5°	4	5°		5°	2	5°	45 °	
E (°)	B (m)	M	B (m)	M	B (m)	M	B (m)	М	B (m)	М	B (m)	M
83	4.3	3.0	6.9	2.1	8.9	1.6	5.7	2.0	10.0	1.2	13.0	0.8
76	9.5	3.0	11.8	2.1	13.5	1.6	11.7	2.0	15.5	1.2	18.1	0.8
72	12.3	3.0	14.4	2.1	15.9	1.6	14.6	1.75	18.4	1.1	20.5	0.8
70	13.6	2.8	15.6	2.1	17.0	1.6	16.1	1.65	19.7	1.05	21.8	0.8
65	16.6	2.35	18.5	1.8	19.7	1.5	19.6	1.4	22.8	0.95	24.5	0.78
60	19.6	2.0	21.2	1.55	22.1	1.35	22.8	1.2	25.8	0.9	27.0	0.75
55	22.2	1.45	23.7	1.35	24.4	1.2	25.9	1.05	28.5	0.85	29.4	0.74
50	24.6	1.05	26.0	1.0	26.5	0.95	28.6	0.85	31.0	0.75	31.5	0.7
45	26.9	0.75	28.1	0.7	28.3	0.7	31.1	0.6	33.1	0.55	33.3	0.55
40	29.0	0.55	29.9	0.5			33.3	0.4	35.0	0.4		
35	30.8	0.38	31.6	0.35								
a (°)		34 -	- 83		44 -	~ 83		39 <i>-</i>	~ 83		44	~ 83

Unit:ton

			Outri	ggers	middl	e exte	nded	(5.91	n)	-(Over s	ides–
С		30.5r	n Boon	1 + 8.0	m Jib		30.5m Boom + 13.0m Jib					
D		5 °	2	5°	4	5 °		5°	25°		45°	
E (°)	B (m)	M	B (m)	M	B (m)	M	B (m)	М	B (m)	M	B (m)	M
83	4.3	3.0	6.9	2.1	8.9	1.6	5.7	2.0	10.0	1.2	13.0	0.8
76	9.5	3.0	11.8	2.1	13.5	1.6	11.7	2.0	15.5	1.2	18.1	0.8
72	12.3	3.0	14.4	2.1	15.9	1.6	14.6	1.75	18.4	1.1	20.5	0.8
70	13.6	2.8	15.6	2.1	17.0	1.6	16.1	1.65	19.7	1.05	21.8	0.8
65	16.6	2.35	18.5	1.8	19.7	1.5	19.6	1.4	22.8	0.95	24.5	0.78
60	19.5	1.85	21.2	1.55	22.1	1.35	22.8	1.2	25.8	0.9	27.0	0.75
55	22.1	1.3	23.7	1.15	24.4	1.1	25.9	1.05	28.5	0.85	29.4	0.74
50	24.5	0.9	25.9	0.85	26.5	0.8	28.6	0.7	30.9	0.6	31.5	0.6
45	26.8	0.6	28.0	0.55	28.3	0.55	31.0	0.5	33.0	0.4	33.3	0.4
40	28.9	0.4	29.9	0.35			33.3	0.3				
a (°)		39 <i>-</i>	~ 83		44 -	- 83	39 -	~ 83		44 -	- 83	

 $\begin{array}{lll} B= Working \ radius & C= Jib \ length & D= Jib \ offset \\ E= Boom \ angle & M= Total \ rated \ loads \\ a= Boom \ angle \ range \ (for \ the \ unladen \ condition) \end{array}$

[JIB]

Unit:ton

			Outri	ggers	middl	e exte	nded	(5.0r	n)	-(Over si	ides–	
С		30.5r	n Boon	1 + 8.0	m Jib			30.5m	Boom	+ 13.0	m Jib		
D		5 °	2	5°	4:	5°	į	5 °	2	5°	4.	45°	
E (°)	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	
83	4.3	3.0	6.9	2.1	8.9	1.6	5.7	2.0	10.0	1.2	13.0	0.8	
76	9.5	3.0	11.8	2.1	13.5	1.6	11.7	2.0	15.5	1.2	18.1	0.8	
72	12.3	3.0	14.4	2.1	15.9	1.6	14.6	1.75	18.4	1.1	20.5	0.8	
70	13.6	2.8	15.6	2.1	17.0	1.6	16.1	1.65	19.7	1.05	21.8	0.8	
65	16.5	2.0	18.5	1.7	19.7	1.5	19.6	1.4	22.8	0.95	24.5	0.78	
60	19.3	1.3	21.0	1.15	22.1	1.1	22.7	1.0	25.8	0.9	27.0	0.75	
55	21.8	0.8	23.5	0.75	24.3	0.75	25.7	0.65	28.4	0.6	29.4	0.5	
50	24.3	0.5	25.8	0.45	26.4	0.45	28.3	0.4	30.8	0.35	31.4	0.3	
a (°)			49 -	- 83					49 -	- 83			

Unit:ton

		(Outrig	gers n	ım ext	tended	1 (3.6	6m)	-(Over s	ides–	
С		30.5r	n Boon	ı + 8.0	m Jib			30.5m	1 Boom	+ 13.0	m Jib	
D		5 °	2	5°	4.	5 °	;	5 °	2	5°	45 °	
E (°)	B (m)	M	B (m)	M	B (m)	M	B (m)	М	B (m)	M	B (m)	M
83	4.4	3.0	6.9	2.1	8.9	1.6	5.7	2.0	10.0	1.2	13.0	0.8
76	9.5	3.0	11.8	2.1	13.5	1.6	11.7	2.0	15.5	1.2	18.1	0.8
72	12.0	2.2	14.3	1.8	15.9	1.6	14.6	1.75	18.4	1.1	20.5	0.8
70	13.2	1.8	15.4	1.5	16.9	1.35	15.9	1.4	19.7	1.05	21.8	0.8
65	16.1	1.0	18.1	0.9	19.4	0.8	19.1	0.8	22.6	0.65	24.4	0.55
60	18.9	0.5	20.7	0.45	21.8	0.4	22.2	0.4	25.3	0.35	26.8	0.3
a (°)			59 -	- 83					59 -	~ 83		

 $\begin{array}{lll} B=\mbox{Working radius} & C=\mbox{ Jib length} & D=\mbox{ Jib offset} \\ E=\mbox{ Boom angle} & M=\mbox{ Total rated loads} \\ a=\mbox{ Boom angle range (for the unladen condition)} \end{array}$

PRECAUTIONS TO BE TAKEN WHEN THE OUTRIGGERS ARE EXTENDED:

- 1. The total rated loads shown are for the case where the crane is set horizontally on firm level ground. They include the weights of the slings and hooks (main hook: 260kg, 12t hook: 170kg, auxiliary hook: 60kg).
 - The values above the bold lines are based on the crane strength while those below are based on the crane stability.
- 2. Since the working radii are based on the actual values including the deflection of the boom, operations should be performed in accordance with the working radii.
- 3. Jib operations should be performed in accordance with the boom angle, irrespective of the boom length. The working radii are reference values for the case where the jib is mounted on a 30.5m boom.
- 4. The total rated load for the single top shall be the value obtained by subtracting the weight of the hook mounted on the boom from the total rated load of the boom and must not exceed 3.5t.
- 5. As a rule, free-fall operation should be performed only when lowering the hook alone. If a hoisted load must be lowered by free-fall operation, the load must be kept below 1/5th of the total rated load and sudden braking operations must be avoided.
- 6. The table below shows the standard number of part lines for each boom length. When using with other than this number of part lines, the load per line should not exceed 3.17t for the main winch, and 3.5t for the auxiliary winch...

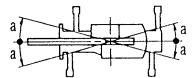
Α	9.5m	16.5m	23.5m	30.5m	J
Н	8	6	4	4	1

A= Boom length H= No. of part-lines

J= Jib/Single top

7. The hoisting performance for the "Over sides" range will differ according to the extended width of the outriggers. Operations should be performed in accordance with the performance corresponding to the extended width. Also, although the hoisting performances for the "Over front" and "Over rear" ranges are equivalent to those of the outriggers fully extended" condition, the front and rear ranges (angle a) will differ according to the width to outriggers are extended in the left and right directions.

Extended width	Middle extended (5.9m)	Middle extended (5.0m)	Middle extended (3.6m)	Minimum extended (3.1m)
Angle a °	35	25	15	5



(2) Without outriggers

Unit:ton

	Stationary				Creep (travelling at 1.6km/h or less)							
B (m)	9.5m Boom 16.5m		n Boom 23.5m Boom		9.5m Boom		16.5m Boom		23.5m Boom			
	K	G	K	G	K	G	K	G	K	G	K	G
3.0	14.0	9.0	9.0	7.3			10.5	7.0	7.5	5.1		
3.5	14.0	7.6	9.0	7.3	6.5	4.5	10.5	6.2	7.5	5.1	5.5	3.2
4.0	12.5	6.3	9.0	5.85	6.5	4.5	9.5	5.3	7.5	4.9	5.5	3.2
4.5	10.9	5.2	9.0	4.75	6.5	4.5	8.7	4.4	7.5	3.95	5.5	3.2
5.0	9.55	4.3	8.2	4.0	6.5	4.3	8.0	3.6	7.0	3.3	5.5	3.2
5.5	8.3	3.6	7.4	3.3	6.1	3.7	6.9	3.0	6.2	2.7	5.15	3.1
6.0	7.2	3.0	6.6	2.8	5.65	3.2	5.9	2.5	5.5	2.3	4.8	2.7
6.5	6.25	2.5	5.9	2.35	5.25	2.75	5.1	2.1	4.9	1.9	4.45	2.3
7.0	5.2	2.0	5.25	1.95	4.85	2.4	4.3	1.7	4.35	1.6	4.15	2.0
8.0			4.1	1.4	4.1	1.8			3.4	1.1	3.5	1.5
9.0			3.25	0.95	3.5	1.4			2.7	0.7	2.95	1.1
10.0			2.6	0.6	3.0	1.05			2.15		2.45	0.8
11.0			2.1		2.55	0.75			1.7		2.05	0.6
12.0			1.7		2.2				1.35		1.7	
13.0			1.35		1.85				1.1		1.45	
14.0			1.0		1.55				0.8		1.2	
15.0					1.3						1.0	
16.0					1.05						0.85	
17.0					0.85						0.7	
18.0					0.65						0.55	
19.0					0.5							
a (°)		0~77		42 ~ 77	26 ~ 77	56 ~ 77		0~77		48 ~ 77	31 ~ 77	57 ~ 77

B= Working radius K= Front G= 360 ° a= Boom angle range (for the unladen condition)

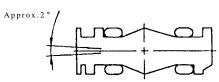
PRECAUTIONS TO BE TAKEN WHEN THE OUTRIGGERS ARE NOT MOUNTED:

- 1. The total rated loads shown are for the case where the tire air pressure on firm level ground is as specified (900kPa {9.00kgf/cm²}) and the suspension-lock cylinder is retracted as much as possible. They include the weights of the slings and hooks (main hook: 260kg, 12t hook: 170kg, auxiliary hook: 60kg).
 - The values above the bold lines are based on the crane strength while those below are based on the crane stability. The foundation, working conditions, etc. should be taken into consideration for actual work.
- 2. Since the working radii are based on the actual values including the deflection of the boom and the tires, operations should be performed in accordance with the working radii.
- 3. The table below shows the standard number of part lines for each boom length. When using with other than this number of part lines, the load per line should not exceed 3.17t for the main winch, and 3.5t for the auxiliary winch.

А	9.5m	16.5m	23.5m	Single top
Н	6	4	4	1

A= Boom length H= No. of part-lines

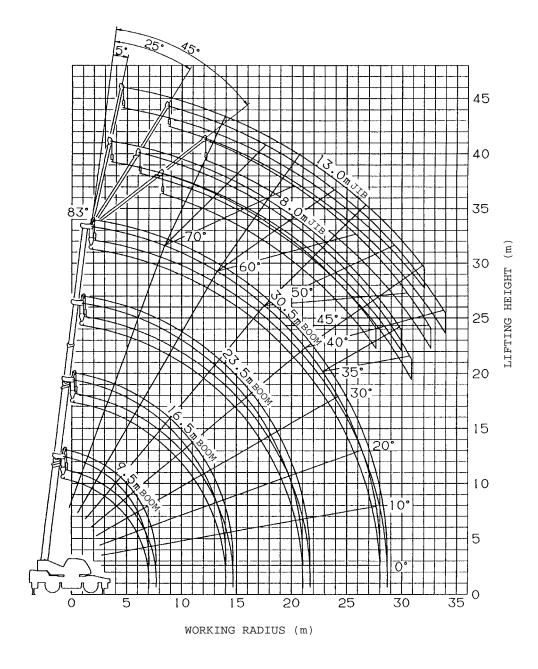
- 4. "Over front" crane operations should be performed only when the AML "over-front area indicator lamp" is lit. The boom must be kept inside a 2 ° area over front of the carrier when performing "Over front" crane operations without the outriggers.
- 5. The total rated load for the single top shall be the value obtained by subtracting the weight of the hook mounted on



the boom from the total rated load of the boom and must not exceed 3.5t.

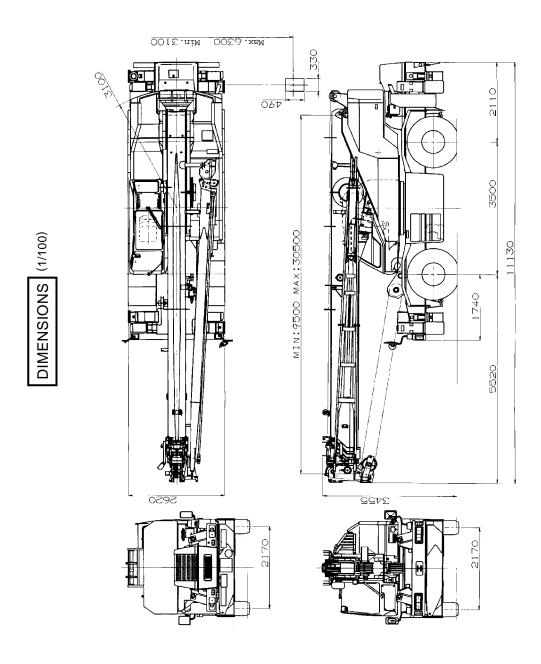
- Free-fall operations should not be performed without outriggers.Booms over 23.5m in length and jibs should not be used without outriggers.
- The "Drive Mode Selection" switch should be set to "4-wheel / Lo" for creeping while hoisting a load and the shift lever should be set to first.
- 8. When creeping while hoisting a load, the swing brake should be applied, the load should be kept as close to the ground as possible but not touching the ground and the speed should be kept at 1.6km/h or less. In particular, any abrupt steering, starting or braking must be avoided.
- 9. Crane operations should not be performed when creeping while hoisting a load.

WORKING RADIUS - LIFTING HEIGHT



NOTES:

- 1. The deflection of the boom is not incorporated in the figure above. 2. The figure above is for the case where the outriggers are fully extended (360 °).



MEMO
