

ALL TERRAIN CRANE

AR-1000M

JAPANESE SPECIFICATIONS

CARRIER MODEL	SPEC. NO.
FAUN RTF100-4	AR-1000M-1-90101

AR

Control No. JA-02

AR-1000M

CRANE SPECIFICATIONS

CRANE CAPACITY

11.7m	Boom	100,000kg	at 2.8m	(17 part-line)
20.0m	Boom	45,000kg	at 5.5m	(7 part-line)
28.3m	Boom	30,000kg	at 5.0m	(5 part-line)
36.7m	Boom	17,000kg	at 9.0m	(4 part-line)
45.0m	Boom	11,500kg	at 11.0m	(4 part-line)
9.0m	Jib	6,500kg	at 78°	(1 part-line)
14.0m	Jib	3,500kg	at 73°	(1 part-line)
19.0m	Jib	2,500kg	at 79°	(1 part-line)

MAX. LIFTING HEIGHT

Boom	45.5m
Jib	64.0m

MAX. WORKING RADIUS

Boom	42.0m
Jib	47.0m

BOOM LENGTH

11.7m – 45.0m

BOOM EXTENSION

33.3m

BOOM EXTENSION SPEED

33.3m / 85s

JIB LENGTH

9.0 – 19.0m

MAIN WINCH SINGLE LINE SPEED

High range:	106m/min	(4th layer)
Low range:	53m/min	(4th layer)

MAIN WINCH HOOK SPEED

High range:	6.2m/min	(17part-line)
Low range:	2.9m/min	(17part-line)

AUXILIARY WINCH SINGLE LINE SPEED

High range:	106m/min	(4th layer)
Low range:	53m/min	(4th layer)

AUXILIARY WINCH HOOK SPEED

High range:	106m/min	(1part-line)
Low range:	53m/min	(1part-line)

BOOM ELEVATION ANGLE

-2° – 82°

BOOM ELEVATION SPEED

-2° – 82° / 45s

SWING ANGLE

360° continue

SWING SPEED

2.0 rpm

WIRE ROPE

Main Winch

20mm × 245m (Diameter×Length)
Spin-resistant wire rope

Auxiliary Winch

20mm × 140m (Diameter×Length)
Spin-resistant wire rope

HOOK

100t hook	(17 part-line)
45t hook	(7 part-line)
6.5t hook	(1 part-line)

BOOM

5-section hydraulically telescoping boom of box
2-telescoping method changeover type

Telescoping method I

stages 2, 3: synchronized,
stages 4, 5: synchronized

Telescoping method II

stages 2 - 5: synchronized

BOOM EXTENSION

3 double-acting hydraulic cylinders

1 wire rope type telescoping device

With flow regulator valve with pressure compensation

JIB

Staged swing-around boom extensions.

3-section hydraulically synchronously telescoping boom

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

SINGLE TOP

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

HOIST

Hydraulic motor driven planetary gear reducer

Automatic brake

2 single winches

With flow regulator valve with pressure compensation

BOOM ELEVATION

1 double-acting hydraulic cylinders

With flow regulator valve with pressure compensation

SWING

Hydraulic motor driven planetary gear reducer

Swing bearing

Manual switch brake

Swing free/lock changeover type

OUTRIGGERS

Fully hydraulic H-type

Slides and jacks each provided with independent operation device.

Full extended width 7.2m

Middle extended width 6.36m, 4.9m, 3.6m

Slide storing float

MAX. OUTRIGGER LOAD

80t

ENGINE FOR CRANE

Model NISSAN DIESEL NE6T

Type 4-cycle, 6 in-line cylinder, direct-injection,
water-cooled diesel engine.

Piston Displacement 7,412cc

Max. Output 180PS at 2,200rpm

Max. Torque 69kg·m at 1,500rpm

HYDRAULIC PUMPS

2 variable high pressure piston pumps and 2 high pressure gear pumps

HYDRAULIC OIL TANK CAPACITY

820 liters

SAFETY DEVICES

Automatic moment limiter (AML)

Multiple display

With working range limiting function

Outrigger extension width automatic detector (individual detection)

Weight combination automatic detector

Swing range controller

Swing automatic stop device

Boom elevation slow down and stop device

Over-winding cutout

Level gauge

Hook safety latch

Cable follower

Winch drum lock

Hydraulic safety valve

Telescopic counterbalance valve

Elevation counterbalance valve

Jack pilot check valve

EQUIPMENTS

Counterweight dismount device

Jib extension device

Hook movement amount indicator

Swing frame dismount device

AML external indication lamp

Boom angle indicator

Oil cooler

Crane cab air conditioner

FM radio

Hot and cool boxes

Lunch table

OPTIONAL EQUIPMENT

Swing alarm

Drum monitor

CARRIER SPECIFICATIONS

MANUFACTURER

FAUN GmbH

CARRIER MODEL

RTF 100-4

ENGINE

Model OM402LA (Benz)

Type 4-cycle V8-cylinder, direct-injection,
turbo diesel engine with inter cooler

Piston displacement 12,763cc

Max. output 381PS at 2,100rpm

Max. torque 173kg·m at 1,000 - 1,500rpm

TRANSMISSION

Power shift type

6-forward and 1-reverse speeds

Sub reducer provided.

CLUTCH

Torque converter provided.

Automatic lock-up mechanism provided.

REDUCER

8×4

8×8 ... Off load (with defrock mechanism)

AXLE (all axles)

Full floating

SUSPENSION (all axles)

Hydraulic pneumatic suspension

Stroke: +150mm/-120mm

STEERING

Type: Left-side handle

Fully hydraulic power steering

2 circuits

Emergency power steering

Mode: Normal (4 front wheels)

Clamp (8 wheels)

Crab (8 wheels)

Rear steering (4 rear wheels)

BRAKE SYSTEM

Service Brake

Air brake on all wheels

2 circuits

Parking Brake

Spring brake, acting on the 2nd, 3rd, 4th axles (6 wheels)

Emergency Brake

Works by applying the parking brake

Auxiliary Brake

Electrical retarder

ELECTRIC SYSTEM

24V DC 2 batteries of 12V-170Ah

FUEL TANK CAPACITY

400 liters

CAB

Two-man type

TIRES

Front 16.00 R25 (all wheels)

Rear 11.00-25 (all wheels)

STANDARD EQUIPMENTS

Car air conditioner

FM radio

Mad guard

Centralized lubrication unit

OPTIONAL EQUIPMENT

Bed for napping

GENERAL DATA

DIMENSIONS (CARRIER ONLY)

Overall length 10,635mm

Overall width 2,780mm

Overall height 2,765mm

Wheel base 1,990mm + 2,305mm + 1,700mm = 5,995mm

Tread 2,315mm

WEIGHTS (CARRIER ONLY)

Gross vehicle weight

Total 28,100kg (Cab two-man type)

Front

16,100kg

Rear

12,000kg

PERFORMANCE (CARRIER ONLY)

Max. traveling speed 70.0km/h

Gradeability (tan θ) 0.52

Min. turning radius

4-wheel steering 11.3m

8-wheel steering 7.0m

TOTAL RATED LOADS

[BOOM]
Performance A

Unit: ton

A B (m)	11.7m		20.0m		28.3m		36.7m		45.0m
2.8	100.0	45.0	17.0						
3.0	93.0	45.0	17.0						
3.5	80.0	45.0	17.0	30.0	17.0				
4.0	70.0	45.0	17.0	30.0	17.0				
4.5	61.6	45.0	17.0	30.0	17.0	17.0	17.0		
5.0	55.2	45.0	17.0	30.0	17.0	17.0	17.0	11.5	
5.5	49.3	45.0	17.0	28.5	17.0	17.0	17.0	11.5	
6.0	45.1	43.8	17.0	26.9	17.0	17.0	17.0	11.5	
6.5	41.0	40.7	17.0	25.5	17.0	17.0	17.0	11.5	
7.0	37.8	38.0	17.0	24.0	17.0	17.0	16.6	11.5	
8.0	32.2	32.5	17.0	21.3	17.0	17.0	15.3	11.5	
9.0	27.8	28.1	17.0	19.1	17.0	17.0	14.2	11.5	
10.0		24.5	17.0	17.2	17.0	15.4	13.2	11.5	
11.0		21.5	17.0	15.5	16.2	14.1	12.2	11.5	
12.0		18.4	17.0	14.2	15.4	13.1	11.4	11.0	
14.0		13.9	15.1	12.0	13.6	11.2	10.0	9.7	
16.0		10.8	11.9	10.2	12.1	9.6	8.9	8.4	
18.0				8.6	10.1	8.2	8.0	7.4	
20.0				6.8	8.3	7.1	7.3	6.5	
22.0				5.2	6.9	6.2	6.5	5.7	
24.0				4.0	5.8	5.4	5.8	5.1	
26.0				3.0	4.8	4.3	5.0	4.6	
28.0						3.4	4.1	4.0	
30.0						2.7	3.4	3.5	
32.0						2.1	2.8	2.9	
34.0						1.6	2.2	2.3	
36.0								1.8	
38.0								1.4	
40.0								1.1	
42.0								0.8	
θ (°)	0 ~ 82	0 ~ 82	0 ~ 82	0 ~ 82	0 ~ 82	0 ~ 82	0 ~ 82	10 ~ 82	
Boom stage telescoping condition (%)									
Telescoping method	I, II	I	II	I	II	I	II	I, II	
2nd boom	0	50	25	100	50	100	75	100	
3rd boom	0	50	25	100	50	100	75	100	
4th boom	0	0	25	0	50	50	75	100	
5th boom	0	0	25	0	50	50	75	100	

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

Performance B

Unit:ton

$\begin{matrix} \text{A} \\ \text{B (m)} \end{matrix}$	11.7m	20.0m		28.3m		36.7m		45.0m
2.8	90.0	45.0	17.0					
3.0	85.0	45.0	17.0					
3.5	73.2	45.0	17.0	30.0	17.0			
4.0	64.0	45.0	17.0	30.0	17.0			
4.5	56.8	45.0	17.0	30.0	17.0	17.0	17.0	
5.0	50.8	45.0	17.0	30.0	17.0	17.0	17.0	11.5
5.5	45.5	45.0	17.0	28.5	17.0	17.0	17.0	11.5
6.0	41.7	42.0	17.0	26.9	17.0	17.0	17.0	11.5
6.5	38.0	38.2	17.0	25.5	17.0	17.0	17.0	11.5
7.0	34.9	35.2	17.0	24.0	17.0	17.0	16.6	11.5
8.0	29.5	29.8	17.0	21.3	17.0	17.0	15.3	11.5
9.0	24.6	25.0	17.0	19.1	17.0	17.0	14.2	11.5
10.0		20.5	17.0	17.2	17.0	15.4	13.2	11.5
11.0		17.2	17.0	15.5	16.2	14.1	12.2	11.5
12.0		14.6	15.8	14.2	15.4	13.1	11.4	11.0
14.0		10.8	12.0	10.8	12.5	11.2	10.0	9.7
16.0		8.1	9.3	8.2	9.8	9.5	8.9	8.4
18.0				6.2	7.8	7.5	8.0	7.4
20.0				4.5	6.3	5.9	6.5	6.5
22.0				3.2	5.1	4.6	5.3	5.4
24.0				2.1	4.0	3.6	4.3	4.4
26.0				1.3	3.1	2.7	3.3	3.5
28.0						1.9	2.5	2.8
30.0						1.3	1.9	2.1
32.0						0.8	1.3	1.6
34.0							0.9	1.2
36.0								0.8
$\theta (^{\circ})$	0~82	0~82	0~82	0~82	0~82	18~82	0~82	33~82
Boom stage telescoping condition (%)								
Telescoping method	I, II	I	II	I	II	I	II	I, II
2nd boom	0	50	25	100	50	100	75	100
3rd boom	0	50	25	100	50	100	75	100
4th boom	0	0	25	0	50	50	75	100
5th boom	0	0	25	0	50	50	75	100

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

Performance C

Unit:ton

A B (m)	11.7m		20.0m		28.3m		36.7m		45.0m
2.8	73.0	45.0	17.0						
3.0	70.2	45.0	17.0						
3.5	63.7	45.0	17.0	30.0	17.0				
4.0	58.1	45.0	17.0	30.0	17.0				
4.5	53.3	45.0	17.0	30.0	17.0	17.0	17.0		
5.0	49.0	45.0	17.0	30.0	17.0	17.0	17.0	11.5	
5.5	45.3	45.0	17.0	28.5	17.0	17.0	17.0	11.5	
6.0	42.0	42.4	17.0	26.9	17.0	17.0	17.0	11.5	
6.5	39.1	39.4	17.0	25.5	17.0	17.0	17.0	11.5	
7.0	36.5	36.8	17.0	24.0	17.0	17.0	16.6	11.5	
8.0	32.2	32.5	17.0	21.3	17.0	17.0	15.3	11.5	
9.0	27.8	28.1	17.0	19.1	17.0	17.0	14.2	11.5	
10.0		23.3	17.0	17.2	17.0	15.4	13.2	11.5	
11.0		19.5	17.0	15.5	16.2	14.1	12.2	11.5	
12.0		16.5	17.0	14.2	15.4	13.1	11.4	11.0	
14.0		12.3	13.5	12.0	13.6	11.2	10.0	9.7	
16.0		9.3	10.5	9.4	11.0	9.6	8.9	8.4	
18.0				7.3	8.8	8.2	8.0	7.4	
20.0				5.5	7.2	6.8	7.3	6.5	
22.0				4.0	5.9	5.5	6.1	5.7	
24.0				2.9	4.8	4.3	5.0	5.1	
26.0				2.0	3.7	3.3	4.1	4.2	
28.0						2.5	3.2	3.3	
30.0						1.8	2.5	2.6	
32.0						1.3	1.9	2.0	
34.0						0.8	1.5	1.5	
36.0								1.1	
38.0								0.7	
$\theta (^{\circ})$	0~82	0~82	0~82	0~82	0~82	0~82	0~82	26~82	
Boom stage telescoping condition (%)									
Telescoping method	I, II	I	II	I	II	I	II	I, II	
2nd boom	0	50	25	100	50	100	75	100	
3rd boom	0	50	25	100	50	100	75	100	
4th boom	0	0	25	0	50	50	75	100	
5th boom	0	0	25	0	50	50	75	100	

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

Performance D

Unit: ton

$\begin{matrix} \text{A} \\ \text{B (m)} \end{matrix}$	11.7m	20.0m		28.3m		36.7m		45.0m
2.8	72.0	45.0	17.0					
3.0	69.3	45.0	17.0					
3.5	62.7	45.0	17.0	30.0	17.0			
4.0	57.1	45.0	17.0	30.0	17.0			
4.5	52.3	45.0	17.0	30.0	17.0	17.0	17.0	
5.0	48.0	45.0	17.0	30.0	17.0	17.0	17.0	11.5
5.5	44.3	44.6	17.0	28.5	17.0	17.0	17.0	11.5
6.0	41.0	41.4	17.0	26.9	17.0	17.0	17.0	11.5
6.5	38.0	38.4	17.0	25.5	17.0	17.0	17.0	11.5
7.0	34.9	35.2	17.0	24.0	17.0	17.0	16.6	11.5
8.0	27.5	28.0	17.0	21.3	17.0	17.0	15.3	11.5
9.0	21.6	22.1	17.0	19.1	17.0	17.0	14.2	11.5
10.0		17.9	17.0	17.2	17.0	15.4	13.2	11.5
11.0		14.7	16.1	14.8	16.2	14.1	12.2	11.5
12.0		12.3	13.6	12.3	14.2	13.1	11.4	11.0
14.0		8.8	10.1	8.8	10.5	10.2	10.0	9.7
16.0		6.4	7.6	6.4	8.1	7.7	8.3	8.4
18.0				4.5	6.3	5.9	6.5	6.6
20.0				3.0	4.9	4.5	5.1	5.2
22.0				1.8	3.7	3.3	4.0	4.1
24.0				0.9	2.8	2.3	3.0	3.1
26.0					2.0	1.5	2.2	2.3
28.0						0.9	1.5	1.6
30.0							1.0	1.1
$\theta (^{\circ})$	0~82	0~82	0~82	18~82	0~82	33~82	27~82	45~82
Boom stage telescoping condition (%)								
Telescoping method	I, II	I	II	I	II	I	II	I, II
2nd boom	0	50	25	100	50	100	75	100
3rd boom	0	50	25	100	50	100	75	100
4th boom	0	0	25	0	50	50	75	100
5th boom	0	0	25	0	50	50	75	100

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

Performance E

Unit:ton

A B (m)	11.7m		20.0m		28.3m		36.7m		45.0m
2.8	62.0	45.0	17.0						
3.0	60.5	45.0	17.0						
3.5	54.8	45.0	17.0	30.0	17.0				
4.0	50.0	45.0	17.0	30.0	17.0				
4.5	45.8	45.0	17.0	30.0	17.0	17.0	17.0		
5.0	42.1	42.4	17.0	30.0	17.0	17.0	17.0	11.5	
5.5	38.9	39.2	17.0	28.5	17.0	17.0	17.0	11.5	
6.0	36.0	36.3	17.0	26.9	17.0	17.0	17.0	11.5	
6.5	33.5	33.8	17.0	25.5	17.0	17.0	17.0	11.5	
7.0	30.4	30.9	17.0	24.0	17.0	17.0	16.6	11.5	
8.0	23.7	24.2	17.0	21.3	17.0	17.0	15.3	11.5	
9.0	19.1	19.5	17.0	19.1	17.0	17.0	14.2	11.5	
10.0		16.0	17.0	16.1	17.0	15.4	13.2	11.5	
11.0		13.4	14.6	13.5	15.2	14.1	12.2	11.5	
12.0		11.3	12.5	11.4	13.0	12.7	11.4	11.0	
14.0		8.2	9.3	8.3	9.9	9.5	10.0	9.7	
16.0		5.9	7.0	6.0	7.6	7.3	7.9	8.0	
18.0				4.2	6.0	5.6	6.2	6.3	
20.0				2.8	4.7	4.2	4.9	5.0	
22.0				1.7	3.5	3.1	3.8	3.9	
24.0				0.8	2.6	2.2	2.9	3.0	
26.0					1.9	1.4	2.1	2.2	
28.0						0.8	1.4	1.6	
30.0							0.9	1.0	
$\theta (^{\circ})$	0 ~ 82	0 ~ 82	0 ~ 82	18 ~ 82	0 ~ 82	33 ~ 82	27 ~ 82	44 ~ 82	
Boom stage telescoping condition (%)									
Telescoping method	I, II	I	II	I	II	I	II	I, II	
2nd boom	0	50	25	100	50	100	75	100	
3rd boom	0	50	25	100	50	100	75	100	
4th boom	0	0	25	0	50	50	75	100	
5th boom	0	0	25	0	50	50	75	100	

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

Performance F

Unit:ton

A B (m)	11.7m			20.0m		28.3m		36.7m		45.0m
2.8	53.0	45.0	17.0							
3.0	51.7	45.0	17.0							
3.5	46.8	45.0	17.0	30.0	17.0					
4.0	42.6	42.9	17.0	30.0	17.0					
4.5	39.0	39.3	17.0	30.0	17.0	17.0	17.0			
5.0	35.9	36.2	17.0	30.0	17.0	17.0	17.0	11.5		
5.5	31.0	31.5	17.0	28.5	17.0	17.0	17.0	11.5		
6.0	26.4	26.9	17.0	26.9	17.0	17.0	17.0	11.5		
6.5	22.9	23.3	17.0	23.4	17.0	17.0	17.0	11.5		
7.0	20.0	20.5	17.0	20.6	17.0	17.0	16.6	11.5		
8.0	15.7	16.1	17.0	16.2	17.0	17.0	15.3	11.5		
9.0	12.6	12.9	14.2	13.0	14.7	14.3	14.2	11.5		
10.0		10.5	11.7	10.6	12.2	11.9	12.5	11.5		
11.0		8.6	9.8	8.7	10.3	10.0	10.6	10.7		
12.0		7.1	8.3	7.2	8.8	8.5	9.1	9.2		
14.0		4.7	6.0	4.8	6.5	6.1	6.7	6.8		
16.0		2.9	4.2	3.0	4.8	4.4	5.0	5.1		
18.0				1.6	3.4	3.0	3.7	3.8		
20.0					2.3	2.0	2.6	2.8		
22.0					1.4		1.7	1.9		
$\theta (^{\circ})$	0~82	0~82	0~82	43~82	29~82	50~82	48~82	58~82		
Boom stage telescoping condition (%)										
Telescoping method	I, II	I	II	I	II	I	II	I, II		
2nd boom	0	50	25	100	50	100	75	100		
3rd boom	0	50	25	100	50	100	75	100		
4th boom	0	0	25	0	50	50	75	100		
5th boom	0	0	25	0	50	50	75	100		

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

Performance G

Unit:ton

$\begin{matrix} \text{A} \\ \text{B (m)} \end{matrix}$	11.7m	20.0m		28.3m		36.7m		45.0m
2.8	53.0	45.0	17.0					
3.0	51.0	45.0	17.0					
3.5	46.1	45.0	17.0	30.0	17.0			
4.0	41.9	42.2	17.0	30.0	17.0			
4.5	34.4	35.0	17.0	30.0	17.0	17.0	17.0	
5.0	28.0	28.5	17.0	28.6	17.0	17.0	17.0	11.5
5.5	23.2	23.7	17.0	23.8	17.0	17.0	17.0	11.5
6.0	19.6	20.1	17.0	20.2	17.0	17.0	17.0	11.5
6.5	16.8	17.3	17.0	17.4	17.0	17.0	17.0	11.5
7.0	14.5	15.0	16.3	15.1	16.9	16.6	16.6	11.5
8.0	11.1	11.5	12.7	11.6	13.3	13.0	13.7	11.5
9.0	8.6	8.9	10.2	9.0	10.7	10.4	11.1	11.2
10.0		7.0	8.2	7.1	8.8	8.4	9.1	9.2
11.0		5.5	6.7	5.6	7.2	6.9	7.5	7.6
12.0		4.1	5.5	4.2	6.0	5.7	6.3	6.4
14.0		2.1	3.5	2.2	4.1	3.7	4.4	4.5
16.0			2.0		2.6	2.2	2.9	3.0
$\theta (^{\circ})$	0~82	35~82	23~82	55~82	50~82	61~82	61~82	67~82
Boom stage telescoping condition (%)								
Telescoping method	I, II	I	II	I	II	I	II	I, II
2nd boom	0	50	25	100	50	100	75	100
3rd boom	0	50	25	100	50	100	75	100
4th boom	0	0	25	0	50	50	75	100
5th boom	0	0	25	0	50	50	75	100

A = Boom length

B = Working radius

 θ = Boom angle range (for the unladen condition)

[JIB]

Performance A

Unit: ton

C D	9.0 m						14.0 m						19.0 m					
	5°		25°		45°		5°		25°		45°		5°		25°		45°	
	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M
E (°)																		
82	7.6	6.5	10.1	4.2	11.9	3.0	8.7	3.5	13.0	2.4	16.0	1.5	10.1	2.5	15.7	1.1	20.1	0.7
80	9.8	6.5	12.1	4.2	13.8	3.0	11.0	3.5	15.1	2.4	18.0	1.5	12.7	2.5	18.0	1.1	22.1	0.7
79	10.8	6.5	13.1	4.2	14.8	3.0	12.2	3.5	16.2	2.4	19.0	1.5	13.9	2.5	19.1	1.1	23.2	0.7
78	11.9	6.5	14.1	4.2	15.7	3.0	13.3	3.5	17.2	2.4	19.9	1.5	15.1	2.45	20.3	1.1	24.2	0.7
75	14.8	5.7	17.0	4.0	18.5	2.95	16.6	3.5	20.3	2.25	22.8	1.5	18.5	2.1	23.5	1.0	27.1	0.68
73	16.7	5.2	18.8	3.85	20.3	2.9	18.8	3.5	22.3	2.15	24.7	1.5	20.7	1.9	25.6	0.97	29.1	0.67
70	19.4	4.35	21.5	3.55	22.9	2.8	22.0	3.3	25.2	2.0	27.4	1.5	24.1	1.7	28.7	0.91	31.9	0.66
68	21.2	3.85	23.2	3.2	24.5	2.75	23.9	3.0	27.0	1.9	29.1	1.47	26.2	1.55	30.7	0.88	33.7	0.65
65	23.8	3.3	25.7	2.75	26.9	2.5	26.7	2.5	29.8	1.8	31.6	1.42	29.3	1.4	33.6	0.84	36.3	0.64
63	25.4	2.95	27.3	2.5	28.5	2.3	28.5	2.25	31.5	1.75	33.3	1.4	31.3	1.3	35.5	0.81	37.9	0.63
60	27.9	2.55	29.7	2.2	30.7	2.05	31.2	1.95	34.1	1.6	35.6	1.35	34.3	1.2	38.2	0.78	40.3	0.62
58	29.4	2.3	31.2	2.0	32.1	1.85	32.9	1.75	35.6	1.45	37.1	1.34	36.2	1.15	39.9	0.76	41.8	0.62
55	31.7	1.85	33.3	1.7	34.2	1.65	35.3	1.5	37.9	1.25	39.1	1.2	39.0	1.05	42.4	0.73	44.0	0.62
53	33.1	1.6	34.7	1.5	35.4	1.45	36.9	1.35	39.4	1.15	40.5	1.1	40.7	1.0	44.0	0.72	45.2	0.62
50	35.2	1.2	36.6	1.1	37.2	1.05	39.2	1.05	41.5	0.95	42.3	0.85	43.2	0.9	45.9	0.7	47.0	0.62
48	36.5	0.9	37.8	0.8	38.4	0.75	40.5	0.75	42.7	0.65			44.7	0.7	46.8	0.55		
45	38.3	0.5																
θ (°)	4	4 ~ 8	2	4	7 ~ 8	2	4	7 ~ 8	2	4	7 ~ 8	2	4	7 ~ 8	2	4	7 ~ 8	2

B = Working radius C = Jib length D = Jib offset E = Boom angle M = Total rated loads

θ = Boom angle range (for the unladen condition)

Performance B

Unit:ton

C D E (°)	9.0 m						14.0 m						19.0 m					
	5°		25°		45°		5°		25°		45°		5°		25°		45°	
	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M
82	7.6	6.5	10.1	4.2	11.9	3.0	8.7	3.5	13.0	2.4	16.0	1.5	10.1	2.5	15.7	1.1	20.1	0.7
80	9.8	6.5	12.1	4.2	13.8	3.0	11.0	3.5	15.1	2.4	18.0	1.5	12.7	2.5	18.0	1.1	22.1	0.7
79	10.8	6.5	13.1	4.2	14.8	3.0	12.2	3.5	16.2	2.4	19.0	1.5	13.9	2.5	19.1	1.1	23.2	0.7
78	11.9	6.5	14.1	4.2	15.7	3.0	13.3	3.5	17.2	2.4	19.9	1.5	15.1	2.45	20.3	1.1	24.2	0.7
75	14.8	5.7	17.0	4.0	18.5	2.95	16.6	3.5	20.3	2.25	22.8	1.5	18.5	2.1	23.5	1.0	27.1	0.68
73	16.7	5.2	18.8	3.85	20.3	2.9	18.8	3.5	22.3	2.15	24.7	1.5	20.7	1.9	25.6	0.97	29.1	0.67
70	19.4	4.35	21.5	3.55	22.9	2.8	22.0	3.3	25.2	2.0	27.4	1.5	24.1	1.7	28.7	0.91	31.9	0.66
68	21.2	3.85	23.2	3.2	24.5	2.75	23.9	3.0	27.0	1.9	29.1	1.47	26.2	1.55	30.7	0.88	33.7	0.65
65	23.8	3.3	25.7	2.75	26.9	2.5	26.7	2.5	29.8	1.8	31.6	1.42	29.3	1.4	33.6	0.84	36.3	0.64
63	25.4	2.95	27.3	2.5	28.5	2.3	28.5	2.25	31.5	1.75	33.3	1.4	31.3	1.3	35.5	0.81	37.9	0.63
60	27.7	2.15	29.6	1.95	30.6	1.8	31.2	1.95	34.1	1.6	35.6	1.35	34.3	1.2	38.2	0.78	40.1	0.62
58	29.2	1.6	31.0	1.45	31.9	1.35	32.7	1.4	35.5	1.2	37.0	1.1	36.2	1.15	39.9	0.76	41.3	0.62
θ (°)	5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2		5 7 ~ 8 2	

B = Working radius C = Jib length D = Jib offset E = Boom angle M = Total rated loads

 θ = Boom angle range (for the unladen condition)

Performance C

Unit: ton

C D	9.0 m						14.0 m						19.0 m					
	5°		25°		45°		5°		25°		45°		5°		25°		45°	
E (°)	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M
82	7.6	6.5	10.1	4.2	11.9	3.0	8.7	3.5	13.0	2.4	16.0	1.5	10.1	2.5	15.7	1.1	20.1	0.7
80	9.8	6.5	12.1	4.2	13.8	3.0	11.0	3.5	15.1	2.4	18.0	1.5	12.7	2.5	18.0	1.1	22.1	0.7
79	10.8	6.5	13.1	4.2	14.8	3.0	12.2	3.5	16.2	2.4	19.0	1.5	13.9	2.5	19.1	1.1	23.2	0.7
78	11.9	6.5	14.1	4.2	15.7	3.0	13.3	3.5	17.2	2.4	19.9	1.5	15.1	2.45	20.3	1.1	24.2	0.7
75	14.8	5.7	17.0	4.0	18.5	2.95	16.6	3.5	20.3	2.25	22.8	1.5	18.5	2.1	23.5	1.0	27.1	0.68
73	16.7	5.2	18.8	3.85	20.3	2.9	18.8	3.5	22.3	2.15	24.7	1.5	20.7	1.9	25.6	0.97	29.1	0.67
70	19.4	4.35	21.5	3.55	22.9	2.8	22.0	3.3	25.2	2.0	27.4	1.5	24.1	1.7	28.7	0.91	31.9	0.66
68	21.2	3.85	23.2	3.2	24.5	2.75	23.9	3.0	27.0	1.9	29.1	1.47	26.2	1.55	30.7	0.88	33.7	0.65
65	23.8	3.3	25.7	2.75	26.9	2.5	26.7	2.5	29.8	1.8	31.6	1.42	29.3	1.4	33.6	0.84	36.3	0.64
63	25.4	2.95	27.3	2.5	28.5	2.3	28.5	2.25	31.5	1.75	33.3	1.4	31.3	1.3	35.5	0.81	37.9	0.63
60	27.9	2.55	29.7	2.2	30.7	2.05	31.2	1.95	34.1	1.6	35.6	1.35	34.3	1.2	38.2	0.78	40.3	0.62
58	29.4	2.2	31.2	2.0	32.1	1.85	32.9	1.75	35.6	1.45	37.1	1.34	36.2	1.15	39.9	0.76	41.8	0.62
55	31.5	1.45	33.2	1.3	34.0	1.25	35.2	1.3	37.9	1.2	39.1	1.1	39.0	1.05	42.4	0.73	44.0	0.62
53	32.9	1.05	34.5	0.9	35.2	0.85	36.7	0.9	39.2	0.75	40.3	0.7	40.6	0.8	44.0	0.68	45.4	0.6
50	34.9	0.5																
θ (°)	4	9 ~ 8	2	5	2 ~ 8	2	5	2 ~ 8	2	5	2 ~ 8	2	5	2 ~ 8	2	5	2 ~ 8	2

B = Working radius C = Jib length D = Jib offset E = Boom angle M = Total rated loads

θ = Boom angle range (for the unladen condition)

Performance D

C		9.0 m						14.0 m						19.0 m						Unit:ton
		5°		25°		45°		5°		25°		45°		5°		25°		45°		
D		B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	
E (°)		B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	
82		7.6	6.5	10.1	4.2	11.9	3.0	8.7	3.5	13.0	2.4	16.0	1.5	10.1	2.5	15.7	1.1	20.1	0.7	
80		9.8	6.5	12.1	4.2	13.8	3.0	11.0	3.5	15.1	2.4	18.0	1.5	12.7	2.5	18.0	1.1	22.1	0.7	
79		10.8	6.5	13.1	4.2	14.8	3.0	12.2	3.5	16.2	2.4	19.0	1.5	13.9	2.5	19.1	1.1	23.2	0.7	
78		11.9	6.5	14.1	4.2	15.7	3.0	13.3	3.5	17.2	2.4	19.9	1.5	15.1	2.45	20.3	1.1	24.2	0.7	
75		14.8	5.7	17.0	4.0	18.5	2.95	16.6	3.5	20.3	2.25	22.8	1.5	18.5	2.1	23.5	1.0	27.1	0.68	
73		16.7	5.2	18.8	3.85	20.3	2.9	18.8	3.5	22.3	2.15	24.7	1.5	20.7	1.9	25.6	0.97	29.1	0.67	
70		19.4	4.35	21.5	3.55	22.9	2.8	22.0	3.3	25.2	2.0	27.4	1.5	24.1	1.7	28.7	0.91	31.9	0.66	
68		21.2	3.85	23.2	3.2	24.5	2.75	23.9	3.0	27.0	1.9	29.1	1.47	26.2	1.55	30.7	0.88	33.7	0.65	
65		23.6	2.8	25.6	2.45	26.9	2.25	26.7	2.5	29.8	1.8	31.6	1.42	29.3	1.4	33.6	0.84	36.3	0.64	
63		25.1	2.05	27.1	1.8	28.2	1.65	28.3	1.85	31.4	1.5	33.2	1.34	31.3	1.3	35.5	0.81	37.9	0.63	
θ (°)		6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	6 2 ~ 8 2	

B = Working radius C = Jib length D = Jib offset E = Boom angle M = Total rated loads

 θ = Boom angle range (for the unladen condition)

Performance E

Unit:ton

C D	9.0 m						14.0 m						19.0 m					
	5°		25°		45°		5°		25°		45°		5°		25°		45°	
	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M
E (°)																		
82	7.6	6.5	10.1	4.2	11.9	3.0	8.7	3.5	13.0	2.4	16.0	1.5	10.1	2.5	15.7	1.1	20.1	0.7
80	9.8	6.5	12.1	4.2	13.8	3.0	11.0	3.5	15.1	2.4	18.0	1.5	12.7	2.5	18.0	1.1	22.1	0.7
79	10.8	6.5	13.1	4.2	14.8	3.0	12.2	3.5	16.2	2.4	19.0	1.5	13.9	2.5	19.1	1.1	23.2	0.7
78	11.9	6.5	14.1	4.2	15.7	3.0	13.3	3.5	17.2	2.4	19.9	1.5	15.1	2.45	20.3	1.1	24.2	0.7
75	14.8	5.7	17.0	4.0	18.5	2.95	16.6	3.5	20.3	2.25	22.8	1.5	18.5	2.1	23.5	1.0	27.1	0.68
73	16.7	5.2	18.8	3.85	20.3	2.9	18.8	3.5	22.3	2.15	24.7	1.5	20.7	1.9	25.6	0.97	29.1	0.67
70	19.4	4.35	21.5	3.55	22.9	2.8	22.0	3.3	25.2	2.0	27.4	1.5	24.1	1.7	28.7	0.91	31.9	0.66
68	21.2	3.85	23.2	3.2	24.5	2.75	23.9	3.0	27.0	1.9	29.1	1.47	26.2	1.55	30.7	0.88	33.7	0.65
65	23.5	2.55	25.5	2.25	26.8	2.05	26.6	2.3	29.8	1.8	31.6	1.42	29.3	1.4	33.6	0.84	36.3	0.64
63	25.0	1.85	27.0	1.6	28.2	1.45	28.2	1.65	31.3	1.35	33.2	1.2	31.3	1.3	35.5	0.81		
θ (°)	6.2~8.2		6.2~8.2		6.2~8.2		6.2~8.2		6.2~8.2		6.2~8.2		6.2~8.2		6.2~8.2		6.4~8.2	

Performance F

Unit:ton

C D	9.0 m						14.0 m						19.0 m					
	5°		25°		45°		5°		25°		45°		5°		25°		45°	
	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M	B (m)	M
E (°)																		
82	7.6	6.5	10.1	4.2	11.9	3.0	8.7	3.5	13.0	2.4	16.0	1.5	10.1	2.5	15.7	1.1	20.1	0.7
80	9.8	6.5	12.1	4.2	13.8	3.0	11.0	3.5	15.1	2.4	18.0	1.5	12.7	2.5	18.0	1.1	22.1	0.7
79	10.8	6.5	13.1	4.2	14.8	3.0	12.2	3.5	16.2	2.4	19.0	1.5	13.9	2.5	19.1	1.1	23.2	0.7
78	11.9	6.5	14.1	4.2	15.7	3.0	13.3	3.5	17.2	2.4	19.9	1.5	15.1	2.45	20.3	1.1	24.2	0.7
75	14.8	5.7	17.0	4.0	18.5	2.95	16.6	3.5	20.3	2.25	22.8	1.5	18.5	2.1	23.5	1.0	27.1	0.68
73	16.6	4.75	18.8	3.85	20.3	2.9	18.8	3.5	22.3	2.15	24.7	1.5	20.7	1.9	25.6	0.97	29.1	0.67
70	19.0	2.85	21.2	2.4	22.6	2.15	21.6	2.55	25.2	2.0	27.4	1.5	24.1	1.7	28.7	0.91		
θ (°)	6.9~8.2		6.9~8.2		6.9~8.2		6.9~8.2		6.9~8.2		6.9~8.2		6.9~8.2		6.9~8.2		7.2~8.2	

B = Working radius C = Jib length D = Jib offset E = Boom angle M = Total rated loads

θ = Boom angle range (for the unladen condition)

NOTES:

1. The total rated loads shown are for the case when the outriggers are set horizontally on firm ground. The values are based on the crane strength.
2. The weights of the slings and hooks (950kg for a 100-ton capacity hook, 530kg for a 45-ton capacity hook, 170kg for a 6.5-ton capacity) are included in the total rated loads shown.
3. The total rated load is based on the actual working radius including the deflection of the boom.
4. The table below shows the classification of Performances A to G of the total rated load chart.

Counterweight Outrigger extended width	1 4. 0 t	6. 8 t
7. 2 m	A	B
6. 3 6 m	C	D
4. 9 m	E	F
3. 6 m	F *	G *

* Shows the performance of the boom.

5. The chart below shows the standard number of part lines for each boom length. The load for each rope should not exceed 6.5 tons for both the main winch and auxiliary winch.

A	11. 7m	20. 0m	28. 3m	36. 7m	45. 0m	J
H	(17)13	7	5	4	4	1

The value in the brackets is for the case where an attachment is used.

A = Boom length H = No. of part-line J = Jib / Single top

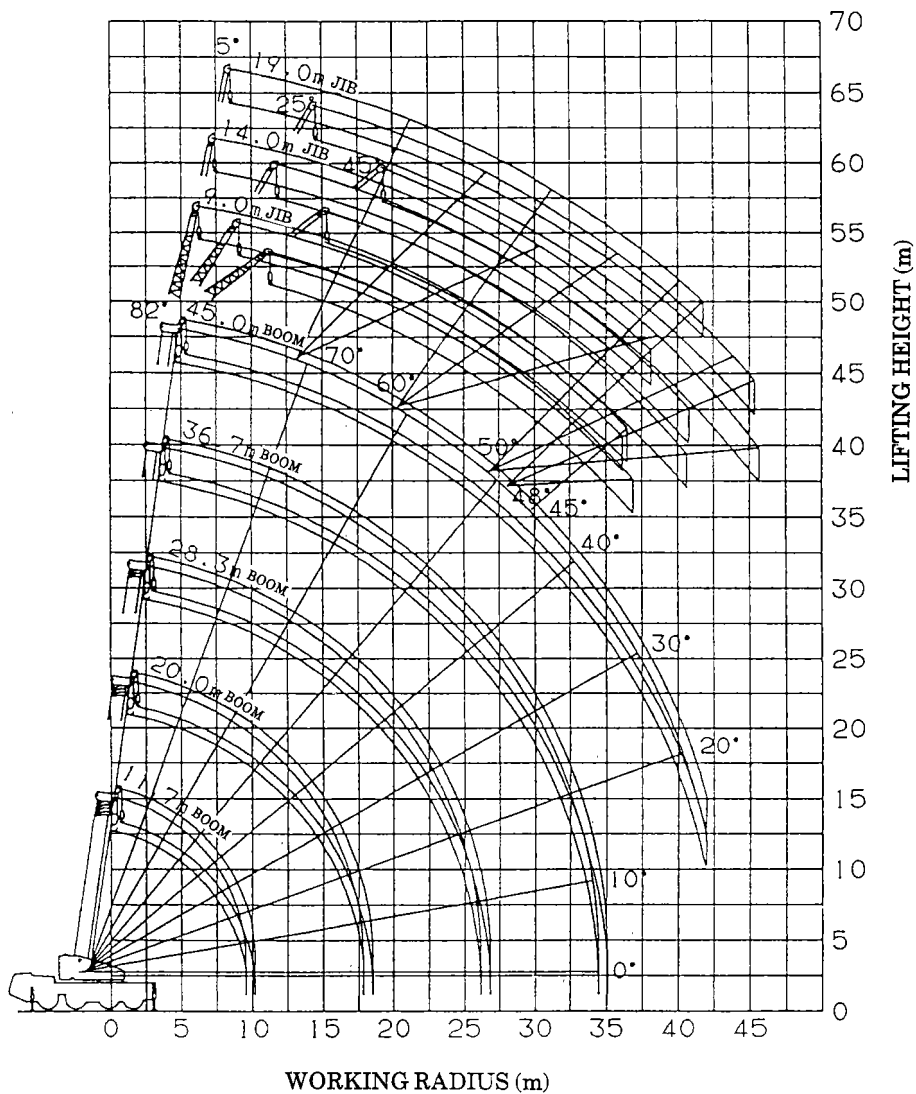
6. The total rated loads for the single top is the same as that of the boom and must not exceed 6.5 tons . However,when hooks, slings, etc are mounted on the boom, one should work with the total rated load obtained by subtracting the weights of the hooks, slings, etc. mounted on the boom from the total rated load of the boom.
7. Jib operation should be performed on the basis of the boom angle. The working radii in the above chart are reference values for the case where a jib is mounted on a 45.0m boom.
8. The jib should be operated with the boom "telescoping method I " .

WORKING RADIUS - LIFTING HEIGHT

Performance A

With 14.0t counterweight

Outriggers fully extended

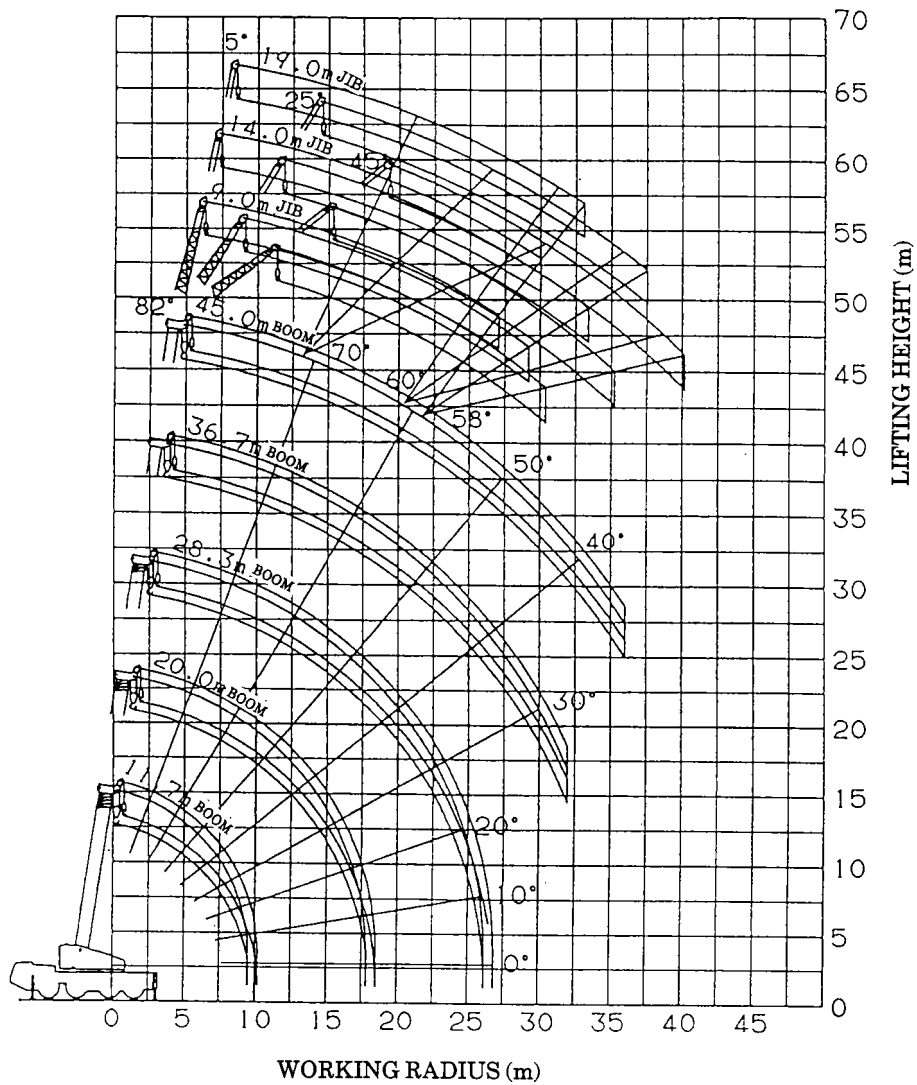


NOTES:

1. The deflection of the boom is not incorporated in the figure above.
2. The above figure is for the boom "telescoping method 1"

Performance B

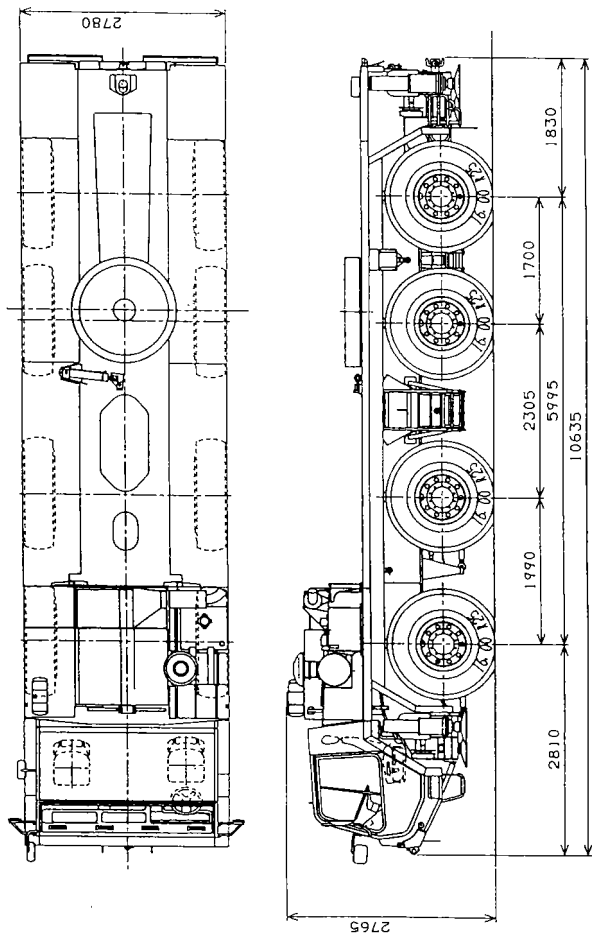
With 6.8t counterweight
Outriggers fully extended



NOTES:

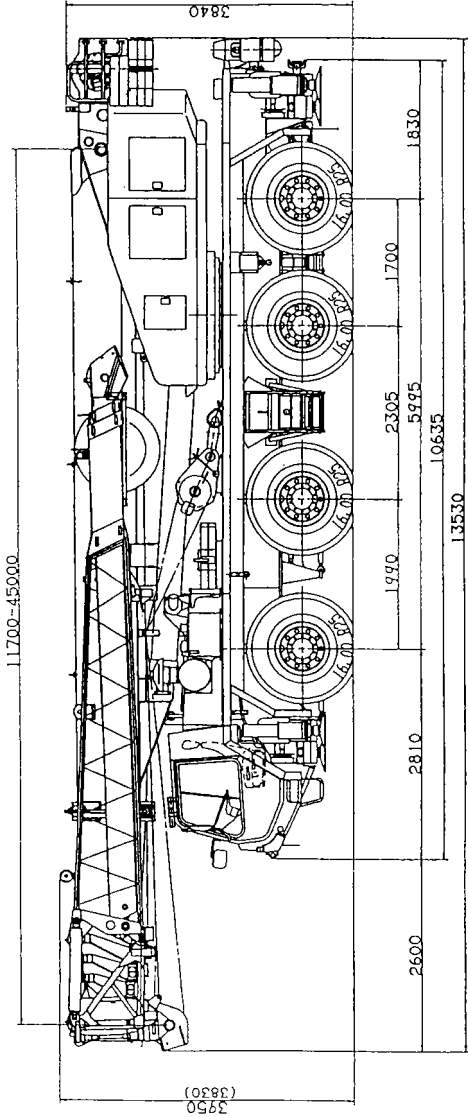
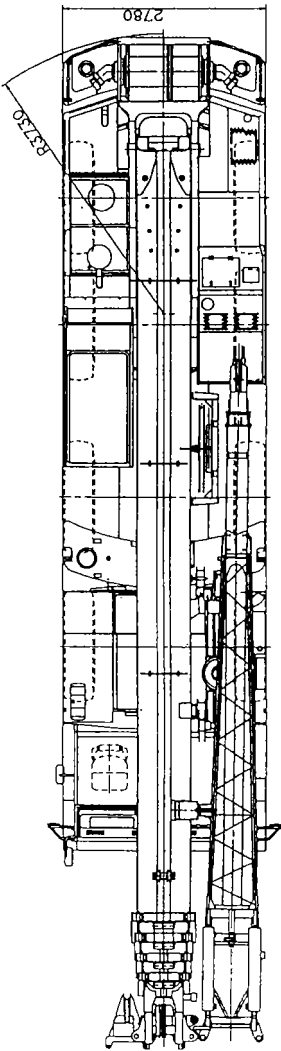
1. The deflection of the boom is not incorporated in the figure above.
2. The above figure is for the boom "telescoping method I".

DIMENSIONS (1/100)
[On public thoroughfare traveling condition]



DIMENSIONS (1/100)

[On-site traveling condition]



(NOTE) The total height figures are for the standard traveling condition and those in brackets are for when the vehicle height has been lowered.