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 boon 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

A / B (m)	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
θ (°)	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
θ (°)	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

A / B (m)	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
θ (°)	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
θ (°)	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
θ (°)	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

A / B (m)	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
θ (°)	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	9.0 m						14.0 m						19.0 m					
D	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	2.3	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 (°)	44～82		47～82		47～82		47～82		47～82		49～82		47～82		47～82		49～82	

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	9.0 m						14.0 m						19.0 m					
D	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	27.7	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	9.0 m						14.0 m						19.0 m					
D	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 (°)	49～82		52～82		52～82		52～82		52～82		52～82		52～82		52～82		52～82	

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

Unit:ton

C	9.0 m						14.0 m						19.0 m					
D	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	23.6	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	

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	9.0 m						14.0 m						19.0 m					
D	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	23.5	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 (°)	62～82		62～82		62～82		62～82		62～82		62～82		62～82		62～82		64～82	

Performance F

Unit:ton

C	9.0 m						14.0 m						19.0 m					
D	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	16.6	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 (°)	69～82		69～82		69～82		69～82		69～82		69～82		69～82		69～82		72～82	

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	14.0 t	6.8 t
7.2 m	A	B
6.36 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.

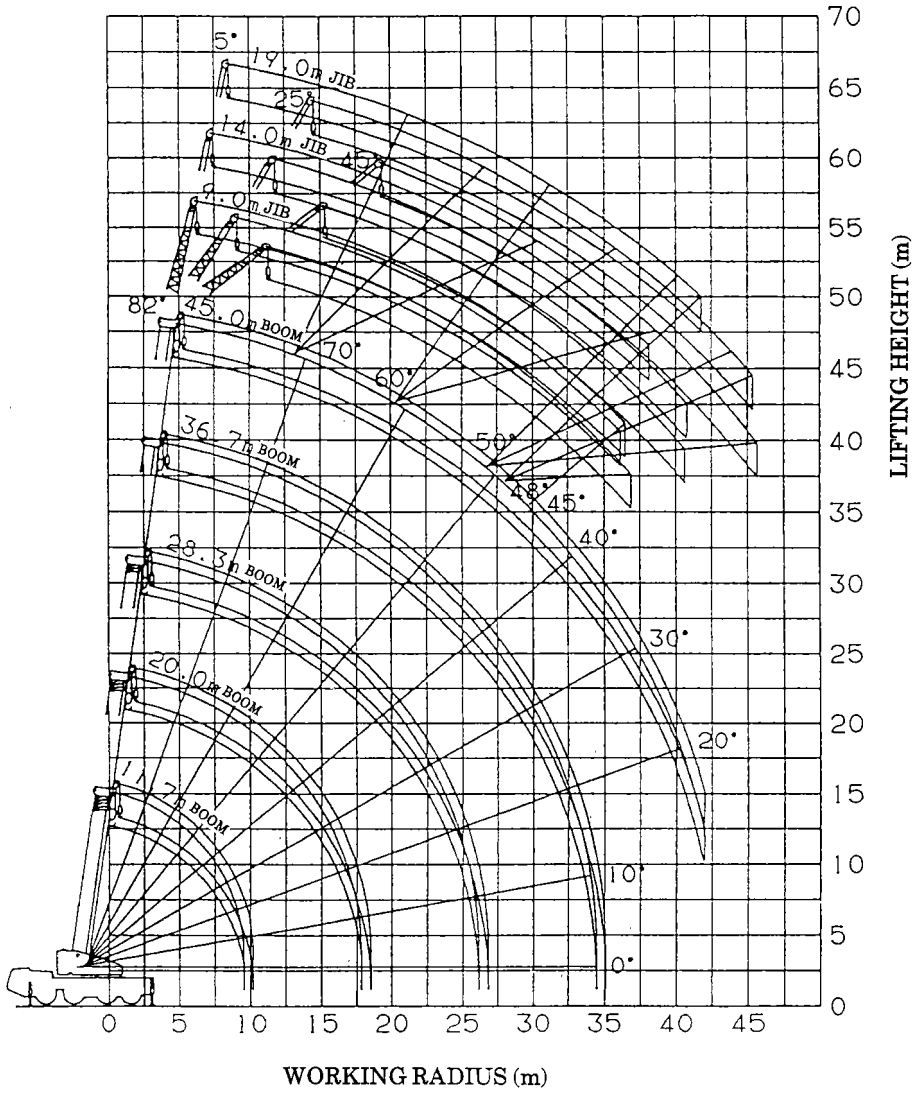
A = Boom length H = No. of part-line J = Jib / Single top

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

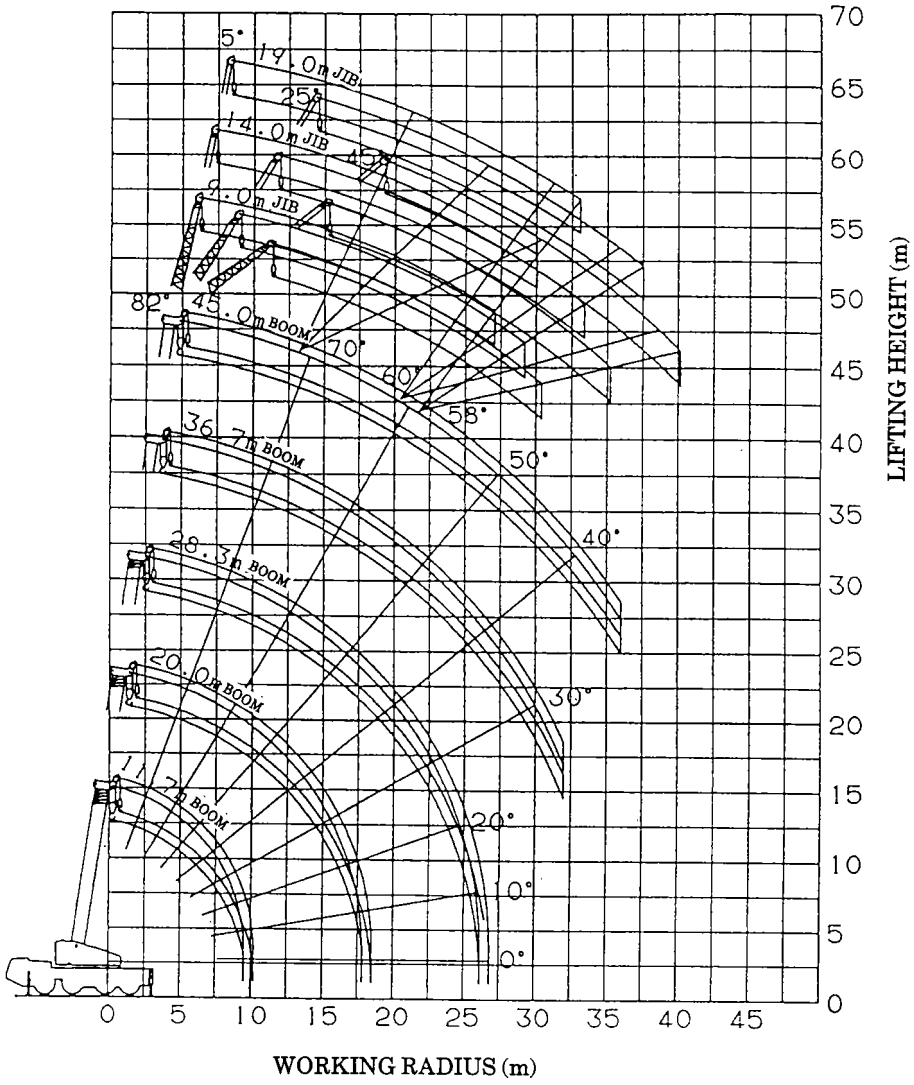


NOTES:

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

Performance B

With 6.8t counterweight
Outriggers fully extended

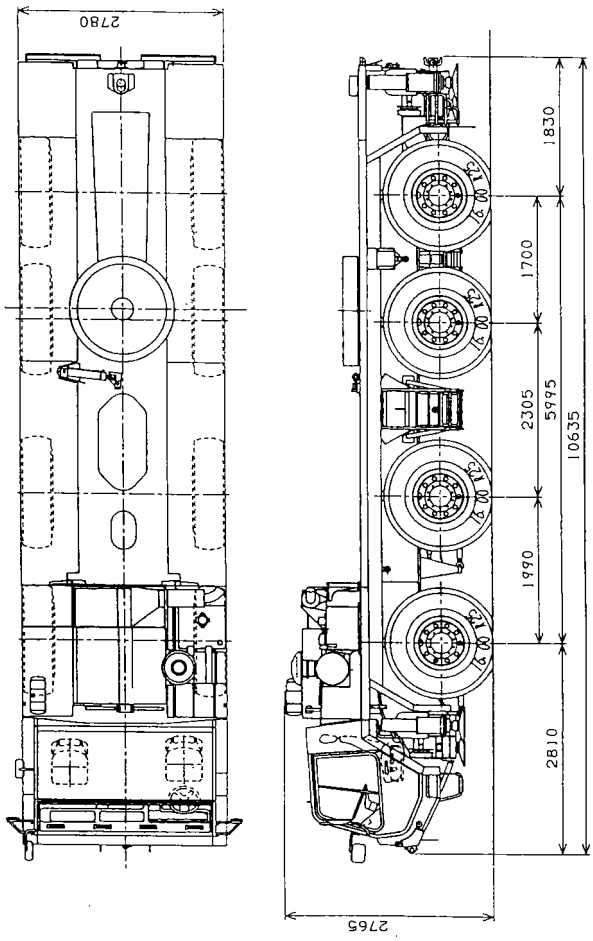


NOTES:

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

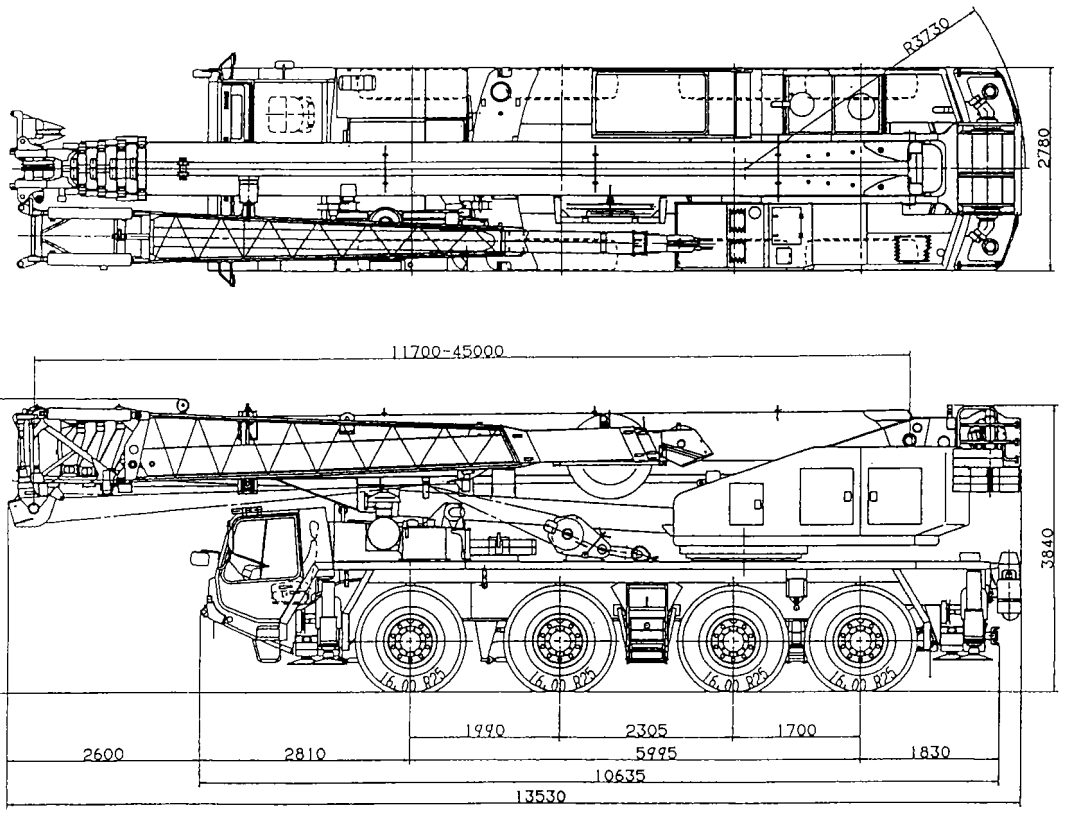
DIMENSIONS (1/100)

[On public thorougfare 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.