

# ALL TERRAIN CRANE

GA

**GA-700N**

## *JAPANESE SPECIFICATIONS*

CARRIER MODEL	SPEC. NO.
NISSAN KL-AU552WN	GA-700N-1-10102

Control No. GA-700N-1-10102 / JA-02

# GA-700N

## CRANE SPECIFICATIONS

### CRANE CAPACITY

11.5m	Boom	70,000kg	at 3.0m	(14part-line)
19.6m	Boom	40,000kg	at 5.0m	( 8part-line)
27.8m	Boom	24,000kg	at 6.0m	( 5part-line)
35.9m	Boom	15,000kg	at 8.0m	( 4part-line)
39.9m	Boom	8,000kg	at 12.0m	( 4part-line)
44.0m	Boom	8,000kg	at 12.0m	( 4part-line)
10.7m	Jib	4,500kg	at 78 °	( 1part-line)
14.4m	Jib	2,800kg	at 76 °	( 1part-line)
18.0m	Jib	1,700kg	at 73 °	( 1part-line)

### MAX.LIFTING HEIGHT

Boom	44.0m
Jib	62.0m

### MAX.WORKING RADIUS

Boom	36.0m
Jib	42.3m

### BOOM LENGTH

11.5m – 44.0m

### BOOM EXTENSION

32.5m

### BOOM EXTENSION SPEED

32.5m/105s

### JIB LENGTH

10.7m – 18.0m

### MAIN WINCH SINGLE LINE WINDING SPEED

High speed: 145m/min Low speed: 95m/min (4th layer)

### MAIN WINCH HOOK SPEED

High speed: 10.3m/min Low speed: 6.7m/min  
(14 part-line)

### AUXILIARY WINCH SINGLE LINE WINDING SPEED

High speed: 145m/min Low speed: 95m/min (4th layer)

### AUXILIARY WINCH HOOK SPEED

High speed: 145m/min Low speed: 95m/min  
(1 part-line)

### BOOM ELEVATION ANGLE

-2.0 °- 83.0 °

### BOOM ELEVATION SPEED

-2.0 °- 83.0 747s

### SWING ANGLE

360 °continue

### SWING SPEED

1.7min<sup>-1</sup>(rpm)

### WIRE ROPE

Main Winch

20mm x 236m (Diameter x Length)  
Spin-resistant wire rope

Auxiliary Winch

20mm x 134m (Diameter x Length)  
Spin-resistant wire rope

### HOOK

70t	hook	(14part-line)
50t	hook	(10part-line)
5.5t	hook	( 1part-line)

### BOOM

5-section hydraulically telescoping boom of box construction

Two telescoping methods selection type

Telescoping method I

(stages 2,3: synchronized; stages 4,5: synchronized)

Telescoping method II

(Stage 3: alone, stages 4, 5: synchronized, stage 2: alone)

### BOOM EXTENSION

3 double-acting hydraulic cylinders

1 wire rope type telescoping device

With flow regulator valve with pressure compensation

### JIB

Folding type which stores alongside the boom

2-section hydraulically telescoping boom

Hydraulic non-stage offset (5 °- 60 °) type

### SINGLE TOP

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

### HOIST

Driven by hydraulic variable motor and via planetary gear reducer.

Automatic brake

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

Manual switch brake

Swing free/lock changeover type

### OUTRIGGERS

Fully hydraulic H-type (Floats mounted integrally)

Slides and jacks each provided with independent operation device.

Fully extended width 7.8m

Middle extended width 7.2m, 5.3m, 4.1m

### FRONT JACK

Hydraulic type

### MAX. VERTICAL LOAD CAPACITY OF OUTRIGGER

60t

### ENGINE FOR CRANE

Transmission P. T. O

### 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)

With working range limiting function

Outrigger extension automatic detector (individual detection)

Weight combination automatic detector

Swing range controller

Swing automatic stop device

Boom elevation slow down and stop device

With a boom retraction slow down and stop device

Over-winding cutout device

Level gauge

Hook safety latch

Cable follower

Winch drum lock

Swing lock

Hydraulic safety valve

Telescopic counterbalance valve

Elevation counterbalance valve

Jack pilot check valve

Front jack grounding detector

Front jack overload warning device

### EQUIPMENT

Separately transported counterweight

Counterweight dismount/mount device

Jib extension device

Oil cooler

Air conditioner (Hot water type)

FM radio

Hot and cool boxes

AML external indication lamp

Winch drum rotation indicator

### OPTIONAL EQUIPMENT

Drum monitor

TV tuner

Swing alarm

Loudspeaker

## CARRIER SPECIFICATIONS

### MANUFACTURER

Nissan Diesel Motor Co., Ltd.

### CARRIER MODEL

KL-AU552WN

### ENGINE

Model RH8

Type 4-cycle, V8-cylinder, direct-injection,  
water-cooled diesel engine

Piston displacement 21.205 liters

Max. output 294kW (400PS) at 2,200rpm

Max. torque 1,393N-m (142kgf-m) at 1,200rpm

### CLUTCH

Dry single plate coil spring type

Hydraulic air boosting device

### TRANSMISSION

7-forward and 1-reverse speeds

Synchronous mesh type (2nd speed – 7th speed)

### DRIVING METHOD

8 x 4

### Final reduction gear type

2 stage speed reduction type with hub reduction

### FRONT AXLE

Reverse Elliot (square cross section)

### REAR AXLE

Full floating reverse Elliot type

### SUSPENSION (all axles)

Hydraulic pneumatic suspension

Stroke: ±100mm

### STEERING

Type: Right-side handle

Semi-integral power steering

Mode: Normal (4 front wheels)

Clamp (8 wheels)

Crab (8 wheels)

Rear steering (4 rear wheels)

### BRAKE SYSTEM

Service Brake

2 system air and internal expanding type/8 wheel  
braking

Parking Brake

Spring brake (gradual control type)

Auxiliary Brake

Electro-pneumatic operated exhaust and  
compression pressure release type engine brake

Emergency Brake

Spring brake

### ELECTRIC SYSTEM

24 V DC. 2 batteries of 12V-115F51 (96Ah)

### FUEL TANK CAPACITY

300 liters

### CAB

One-man type

### TIRES

385/95R25 170E ROAD (all wheels)

### STANDARD EQUIPMENT

Car heater

Tachometer

Electric tachograph

FM radio

Mud guard

Centralized lubrication unit

Power window

Electric mirror with heater

Fog lamp

### OPTIONAL EQUIPMENT

Car air conditioner

## GENERAL DATA

### DIMENSIONS

Overall length	13,800mm
Overall width	2,830mm
Overall height	3,650mm
Wheel base	1,500mm + 4,550mm + 1,500mm = 7,550mm
Front:	2,300mm
Rear:	2,300mm

### WEIGHTS

Gross vehicle weight

Total 44,995kg

Front: 22,635kg

Rear: 22,360kg

### PERFORMANCE

Max. traveling speed 70km/h

Min. traveling speed 1.3km/h

Gradeability (tan ) 0.52

Min. turning radius

4-wheel steering 11.5m

8-wheel steering 8.4m

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

<b>TOTAL RATED LOADS</b>
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[BOOM]

Performance A (Counterweight 5.6 t, Outrigger extension width 7.8 m)

Unit: ton

Working radius / Boom length	11.5m		19.6m		27.8m		35.9m		39.9m	44.0m
	3.0	70.0	40.0	24.0						
3.5	61.4	40.0	24.0	24.0	12.0					
4.0	54.6	40.0	24.0	24.0	12.0					
4.5	48.2	40.0	24.0	24.0	12.0	15.0	8.0			
5.0	43.1	40.0	24.0	24.0	12.0	15.0	8.0			
5.5	38.9	39.0	24.0	24.0	12.0	15.0	8.0	8.0		
6.0	35.3	35.4	24.0	24.0	12.0	15.0	8.0	8.0		
6.5	32.2	32.3	24.0	22.5	12.0	15.0	8.0	8.0	8.0	
7.0	29.5	29.6	23.7	21.1	12.0	15.0	8.0	8.0	8.0	
7.5	27.2	27.3	22.5	19.8	12.0	15.0	8.0	8.0	8.0	
8.0	25.2	25.3	21.4	18.7	12.0	15.0	8.0	8.0	8.0	
9.0	21.7	21.8	19.5	16.7	12.0	14.7	8.0	8.0	8.0	
10.0		17.9	17.9	15.1	12.0	13.3	8.0	8.0	8.0	
11.0		14.7	15.4	13.7	11.8	12.1	8.0	8.0	8.0	
12.0		12.2	13.0	12.3	10.9	11.0	7.6	8.0	8.0	
14.0		8.8	9.7	8.9	9.3	9.3	6.6	7.2	7.7	
16.0		6.6	7.2	6.6	8.1	7.6	5.8	6.3	6.8	
18.0				4.9	6.6	5.9	5.1	5.6	6.1	
20.0				3.7	5.3	4.6	4.6	5.0	5.2	
22.0				2.6	4.3	3.6	4.1	4.5	4.2	
24.0				1.7	3.5	2.8	3.7	3.7	3.4	
26.0						2.1	3.4	3.0	2.7	
28.0						1.5	2.8	2.5	2.1	
30.0						1.0	2.4	2.0	1.6	
32.0							2.0	1.5	1.1	
34.0							1.7	1.1	0.7	
36.0								0.8		
( ° )	0 ~ 83	0 ~ 83	0 ~ 83	0 ~ 83	0 ~ 83	0 ~ 83	0 ~ 83	20 ~ 83	38 ~ 83	
Boom stage telescoping condition (telescoping rate %)										
Telescoping method	I, II	I	II	I	II	I	II	II	I, II	
2nd boom	0	50	0	100	0	100	0	50	100	
3rd boom	0	50	100	100	100	100	100	100	100	
4th boom	0	0	0	0	50	50	100	100	100	
5th boom	0	0	0	0	50	50	100	100	100	

## [BOOM]

Performance B (Counterweight 1.1 t, Outrigger extension width 7.8 m)  
(Counterweight 5.6 t, Outrigger extension width 7.2 m)

Unit: ton

Working radius \ Boom length	11.5m		19.6m		27.8m		35.9m		44.0m
	3.0	65.0	40.0	24.0					
3.5	60.0	40.0	24.0	24.0	12.0				
4.0	52.7	40.0	24.0	24.0	12.0				
4.5	47.0	40.0	24.0	24.0	12.0	15.0	8.0		
5.0	41.6	40.0	24.0	24.0	12.0	15.0	8.0		
5.5	37.4	37.5	24.0	24.0	12.0	15.0	8.0		
6.0	33.9	34.0	24.0	24.0	12.0	15.0	8.0		
6.5	31.0	31.0	24.0	22.5	12.0	15.0	8.0	8.0	
7.0	28.4	28.4	23.7	21.1	12.0	15.0	8.0	8.0	
7.5	26.1	26.2	22.5	19.8	12.0	15.0	8.0	8.0	
8.0	23.6	23.8	21.4	18.7	12.0	15.0	8.0	8.0	
9.0	18.0	18.2	19.1	16.7	12.0	14.7	8.0	8.0	
10.0		14.4	15.2	14.5	12.0	13.3	8.0	8.0	
11.0		11.7	12.4	11.7	11.8	12.1	8.0	8.0	
12.0		9.6	10.3	9.7	10.9	10.9	7.6	8.0	
14.0		6.7	7.4	6.7	8.6	7.9	6.6	7.7	
16.0		4.8	5.4	4.8	6.6	5.8	5.8	6.4	
18.0				3.4	5.2	4.4	5.1	5.0	
20.0				2.3	4.0	3.3	4.6	3.9	
22.0				1.5	3.2	2.5	3.7	3.0	
24.0				0.8	2.5	1.8	3.0	2.3	
26.0						1.2	2.4	1.8	
28.0						0.7	2.0	1.3	
30.0							1.6		
32.0							1.2		
34.0							1.0		
( ° )	0 ~ 83	0 ~ 83	0 ~ 83	0 ~ 83	0 ~ 83	36 ~ 83	0 ~ 83	50 ~ 83	
Boom stage telescoping condition (telescoping rate %)									
Telescoping method	I, II	I	II	I	II	I	II	I, II	
2nd boom	0	50	0	100	0	100	0	100	
3rd boom	0	50	100	100	100	100	100	100	
4th boom	0	0	0	0	50	50	100	100	
5th boom	0	0	0	0	50	50	100	100	

## [BOOM]

Performance C (Counterweight 5.6 t, Outrigger extension width 5.3 m)  
(Counterweight 1.1 t, Outrigger extension width 7.2 m)

Unit: ton

Working radius Boom length	11.5 m	19.6 m		27.8 m		35.9 m		44.0 m
	3.0	54.2	40.0	24.0				
3.5	48.2	40.0	24.0	24.0	12.0			
4.0	43.2	40.0	24.0	24.0	12.0			
4.5	39.0	39.1	24.0	24.0	12.0			
5.0	35.4	35.5	24.0	24.0	12.0	15.0	8.0	
5.5	32.0	32.2	24.0	24.0	12.0	15.0	8.0	
6.0	26.4	26.6	24.0	24.0	12.0	15.0	8.0	
6.5	22.3	22.5	23.4	22.5	12.0	15.0	8.0	8.0
7.0	19.2	19.3	20.2	19.3	12.0	15.0	8.0	8.0
7.5	16.7	16.8	17.6	16.8	12.0	15.0	8.0	8.0
8.0	14.6	14.7	15.5	14.8	12.0	15.0	8.0	8.0
9.0	11.5	11.6	12.3	11.6	12.0	12.8	8.0	8.0
10.0		9.3	10.0	9.3	11.3	10.5	8.0	8.0
11.0		7.6	8.2	7.6	9.5	8.7	8.0	8.0
12.0		6.2	6.9	6.2	8.0	7.3	7.6	7.9
14.0		4.1	4.8	4.1	5.9	5.2	6.5	5.8
16.0		2.6	3.2	2.5	4.5	3.7	5.0	4.3
18.0				1.4	3.4	2.5	3.9	3.2
20.0					2.4	1.6	3.1	2.2
22.0					1.7		2.3	
24.0					1.1		1.7	
26.0							1.2	
28.0							0.8	
( ° )	0 ~ 83	0 ~ 83	0 ~ 83	46 ~ 83	0 ~ 83	55 ~ 83	36 ~ 83	63 ~ 83
Boom stage telescoping condition (telescoping rate %)								
Telescoping method	I, II	I	II	I	II	I	II	I, II
2nd boom	0	50	0	100	0	100	0	100
3rd boom	0	50	100	100	100	100	100	100
4th boom	0	0	0	0	50	50	100	100
5th boom	0	0	0	0	50	50	100	100

## [BOOM]

Performance D (Counterweight 5.6 t, Outrigger extension width 4.1 m)  
 (Counterweight 1.1 t, Outrigger extension width 5.3 m)  
 (Counterweight 5.6 t, Front jack not used, Over front)

Unit: ton

Working radius \ Boom length	11.5 m		19.6m		27.8 m		35.9m		44.0 m
	3.0	47.5	40.0	24.0					
3.5	42.2	40.0	24.0	24.0	12.0				
4.0	37.8	37.9	24.0	24.0	12.0				
4.5	31.3	31.4	24.0	24.0	12.0				
5.0	25.0	25.2	24.0	24.0	12.0	15.0	8.0		
5.5	20.6	20.8	21.7	20.8	12.0	15.0	8.0		
6.0	17.3	17.5	18.3	17.5	12.0	15.0	8.0		
6.5	14.8	14.9	15.7	15.0	12.0	15.0	8.0	8.0	
7.0	12.8	12.9	13.6	12.9	12.0	14.1	8.0	8.0	
7.5	11.1	11.2	11.9	11.2	12.0	12.4	8.0	8.0	
8.0	9.7	9.8	10.5	9.9	11.8	11.0	8.0	8.0	
9.0	7.5	7.6	8.3	7.6	9.6	8.8	8.0	8.0	
10.0		5.8	6.5	5.9	7.8	7.0	8.0	7.7	
11.0		4.5	5.2	4.5	6.4	5.6	7.0	6.2	
12.0		3.3	4.1	3.3	5.3	4.5	5.9	5.1	
14.0		1.6	2.3		3.7	2.8	4.2	3.5	
16.0			1.1		2.4		3.1		
18.0					1.5		2.1		
20.0							1.4		
( ° )	0 ~ 83	38 ~ 83	0 ~ 83	62 ~ 83	46 ~ 83	66 ~ 83	54 ~ 83	71 ~ 83	
Boom stage telescoping condition (telescoping rate %)									
Telescoping method	I, II	I	II	I	II	I	II	I, II	
2nd boom	0	50	0	100	0	100	0	100	
3rd boom	0	50	100	100	100	100	100	100	
4th boom	0	0	0	0	50	50	100	100	
5th boom	0	0	0	0	50	50	100	100	

[BOOM]

Performance E

(Counterweight 1.1 t, Outrigger extension width 4.1 m)  
 (Counterweight 1.1 t, Front jack not used, Over front)

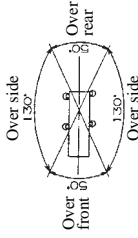
Boom length Working radius	Unit: ton				
	11.5m	19.6m	27.8m	35.9m	44.0m
3.0	46.4	40.0	24.0		
3.5	41.2	40.0	24.0	12.0	
4.0	34.3	34.5	24.0	12.0	
4.5	26.1	26.3	24.0	12.0	
5.0	20.8	20.9	21.0	15.0	8.0
5.5	17.0	17.1	18.0	15.0	8.0
6.0	14.2	14.3	15.1	14.3	15.0
6.5	12.0	12.1	12.9	12.1	13.4
7.0	10.2	10.3	11.1	10.4	12.0
7.5	8.8	8.9	9.6	8.9	11.0
8.0	7.6	7.7	8.4	7.8	9.7
9.0	5.8	5.9	6.5	5.9	7.8
10.0		4.5	5.1	4.5	6.3
11.0		3.3	4.0	5.1	4.4
12.0		2.3	3.0	4.2	4.8
14.0				2.8	3.4
( ° )	0 ~ 83	47 ~ 83	47 ~ 83	66 ~ 83	57 ~ 83
Telescoping method	I, II	I, II	I, II	I, II	I, II
2nd boom	0	50	0	100	0
3rd boom	0	50	100	100	100
4th boom	0	0	0	50	100
5th boom	0	0	0	50	100
( ° )	0 ~ 83	47 ~ 83	47 ~ 83	66 ~ 83	57 ~ 83
Telescoping method	I, II	I, II	I, II	I, II	I, II
2nd boom	0	50	0	100	0
3rd boom	0	50	100	100	100
4th boom	0	0	0	50	100
5th boom	0	0	0	50	100

Performance F

(Counterweight 5.6 t, Outrigger extension width 2.23 m)  
 (Counterweight 1.1 t, Outrigger extension width 2.23 m)

Boom length Working radius	Unit: ton	
	11.5m	
3.5	5.0	
4.0	5.0	
4.5	5.0	
5.0	5.0	
5.5	5.0	
6.0	4.0	
6.5	3.0	
7.0	2.0	
7.5	1.5	
8.0	1.0	
9.0	0.5	
( ° )	24 ~ 67	
Note 2)	0 ~ 83*	
Boom stage telescoping condition (telescoping rate %)		
Telescoping method	I, II	
2nd boom	0	
3rd boom	0	
4th boom	0	
5th boom	0	

Note 1)  
 When even one of the extension widths of the four outriggers is 2.23 m, Performance F will be applied to the whole circumference.  
 Note 2)  
 Only when the swing direction is over front/over rear, the elevating range with \* mark will be applied.





[BOOM]

Performance A (Counterweight 5.6 t, Outrigger extension width 7.8 m)

Jib length Offset Boom angle(°)	44.0 m boom + 10.7 m jib			44.0 m boom + 14.4 m jib			Unit:ton						
	5°	25°	45°	60°	5°	25°		45°	60°				
83	6.1	4.5	9.1	8.3	11.5	12.6	2.3	7.0	2.8	11.2	11.9	14.6	1.1
82	7.2	4.5	10.2	8.0	12.5	13.5	2.05	8.3	2.8	12.4	13.6	17.6	1.0
81	8.5	4.5	11.4	2.9	13.5	14.5	2.05	9.4	2.8	13.6	15.0	17.1	1.0
80	9.7	4.5	12.5	2.85	14.6	15.5	2.0	10.9	2.8	15.0	16.5	19.8	0.95
78	11.9	4.5	14.7	2.7	16.6	17.3	1.95	13.4	2.8	17.1	18.5	21.9	0.95
76	14.0	4.3	16.7	2.55	18	19.1	1.9	15.6	2.8	19.2	21.1	24.6	0.95
75	15.1	4.05	17.7	2.5	19.5	20.0	1.9	17.7	2.65	20.2	22.6	26.1	0.95
73	17.2	3.6	19.6	2.4	21.3	21.6	1.85	18.9	2.45	22.1	24.5	28.0	0.9
70	20.1	3.05	22.4	2.2	23.9	24.1	1.8	21.9	2.15	25.0	27.0	30.5	0.9
68	22.0	2.7	24.2	2.05	25.5	25.6	1.75	23.9	2.0	27.0	29.5	33.2	0.9
65	24.7	2.3	26.7	1.8	28.0	28.0	1.6	26.8	1.8	29.7	32.5	36.1	0.9
63	26.3	2.05	28.3	1.65	29.5	29.4	1.5	28.6	1.65	31.2	34.9	39.0	0.9
60	28.7	1.66	30.6	1.4	31.8	31.8	1.35	31.1	1.4	33.9	38.1	42.0	0.9
58	30.1	1.24	32.0	1.13	33.3	33.3	1.09	32.6	1.08	35.4	39.6	43.1	0.9
55	32.3	0.8	34.1	0.68	35.3	35.3	0.65	34.8	0.67	37.6	41.1	44.2	0.9
53	33.8	0.49											
(°)	52~83	54~83	54~83	54~83	54~83	54~83	59~83	54~83	54~83	54~83	54~83	54~83	59~83

Jib length Offset Boom angle(°)	44.0 m boom + 18.0 m jib			0.65			
	5°	25°	45°		60°		
83	7.7	1.7	13.0	1.25	7.6	19.4	0.65
82	9.1	1.7	14.3	1.2	18.8	20.5	0.65
81	10.4	1.7	15.7	1.15	20.0	21.5	0.65
80	11.8	1.7	17.2	1.15	21.1	22.6	0.65
78	14.1	1.7	19.5	1.05	23.2	24.7	0.65
76	16.6	1.7	21.8	1.0	25.2	26.5	0.6
75	17.9	1.7	22.8	1.0	26.2	27.1	0.6
73	20.4	1.7	24.7	0.95	28.1	28.8	0.6
70	23.7	1.5	27.8	0.85	30.9	31.3	0.6
68	25.9	1.4	29.9	0.85	32.6	32.8	0.6
65	28.9	1.25	32.9	0.8	35.1	35.2	0.6
63	30.9	1.2	34.6	0.75	36.7	36.8	0.6
60	33.8	1.1	37.3	0.75	39.0	38.9	0.6
58	35.3	0.95	39.0	0.7	40.4	40.6	0.6
55	37.9	0.86	41.3	0.43	42.3	43.8	0.6
53							
(°)	54~83	54~83	54~83	54~83	59~83	59~83	59~83

[JIB]

**Performance B** (Counterweight 1.1 t, Outrigger extension width 7.8 m)  
(Counterweight 5.6 t, Outrigger extension width 7.2 m)

Unit: ton

Jib length Offset	44.0 m boom + 10.7 m jib				44.0 m boom + 14.4 m jib								
	5 °	25 °	45 °	60 °	5 °	25 °	45 °	60 °					
Boom angle( ° )	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads					
83	6.1	4.5	9.1	11.5	2.3	12.6	7.0	2.8	1.9	15	146	6	1.1
82	7.2	4.5	10.2	12.5	2.05	13.5	8.3	2.8	1.75	15	151	7	1.0
81	8.5	4.5	11.4	13.5	2.05	14.5	9.4	2.8	1.7	15	161	7	1.0
80	9.7	4.5	12.5	14.6	2.0	15.5	10.9	2.8	1.65	1	17	8	0.95
78	11.9	4.5	14.7	16.6	1.95	17.3	13.4	2.8	1.5	1	19	8	0.95
76	14.0	4.3	16.7	18.5	1.9	19.1	15.6	2.8	1.45	1	21	6	0.95
75	15.1	4.05	17.7	19.5	1.9	20.0	16.7	2.65	1.4	1	23	3	0.95
73	17.2	3.5	19.6	21.3	1.85	21.6	18.9	2.45	1.3	1	25	0	0.9
70	20.1	3.05	22.4	23.9	1.8	24.1	21.9	2.15	1.3	1	28	5	0.9
68	21.9	2.87	24.2	25.5	1.75	25.6	23.9	2.0	1.25	1	30	2	0.9
65	24.2	1.56	26.5	28.0	1.3	28.0	26.4	1.35	1.0	1	35	5	0.9
63	25.7	1.12	27.9	29.5	0.95	29.4	28.0	0.96	0.84	1	37	0	0.82
60	28.0	0.59	30.2	31.5	0.49	31.5	30.4	0.48	0.49	1	38	9	0.36
( ° )	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83	59 ~ 83

Jib length Offset	44.0 m boom + 18.0 m jib						
	5 °	25 °	45 °	60 °			
Boom angle( ° )	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads			
83	7.7	1.7	13.0	1.25	17.6	0.8	19.4
82	9.1	1.7	14.3	1.2	18.8	0.8	20.5
81	10.4	1.7	15.7	1.15	20.0	0.75	21.5
80	11.8	1.7	17.2	1.15	21.1	0.75	22.6
78	14.1	1.7	19.5	1.05	23.2	0.75	24.7
76	16.6	1.7	21.8	1.0	25.2	0.7	26.5
75	17.9	1.7	22.8	1.0	26.2	0.7	27.1
73	20.4	1.7	24.7	0.95	28.1	0.7	28.8
70	23.7	1.5	27.8	0.85	30.9	0.65	31.3
68	25.9	1.4	29.9	0.85	32.6	0.65	32.8
65	28.9	1.19	32.9	0.8	35.1	0.6	35.2
63	30.5	0.84	34.6	0.7	36.7	0.6	36.8
60	33.1	0.4					
( ° )	59 ~ 83	62 ~ 83	62 ~ 83	62 ~ 83			

0.65  
0.65  
0.65  
0.65  
0.65  
0.6  
0.6  
0.6  
0.6  
0.6  
0.6

[JIB]

**Performance C** (Counterweight 5.6 t, Outrigger extension width 5.3 m)  
(Counterweight 1.1 t, Outrigger extension width 7.2 m)

Unit: ton

Jib length Offset	44.0 m boom + 10.7 m jib				44.0 m boom + 14.4 m jib						
	5°	25°	45°	60°	5°	25°	45°	60°			
Boom angle(°)	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads			
83	6.1	4.5	3.3	11.5	12.6	2.0	7.0	2.8	1.9	1.1	
82	7.2	4.5	0.2	12.5	13.5	1.8	8.3	2.8	12.4	1.75	1.6
81	8.5	4.5	1.4	13.5	14.5	1.8	9.4	2.8	13.6	1.7	1.0
80	9.7	4.5	2.5	14.6	15.5	1.75	10.9	2.8	15.0	1.65	0.95
78	11.9	4.5	4.7	16.6	19.5	1.75	13.4	2.8	17.9	1.51	0.95
76	14.0	4.3	6.7	18.9	19.1	1.7	15.6	19.2	1.2	1.05	0.95
75	15.1	4.05	7.7	19.5	20.0	1.7	16.7	20.2	1.05	1.05	0.95
73	17.2	3.59	9.6	21.3	21.6	1.7	18.9	2.45	22.2	1.0	0.9
70	19.9	2.18	12.3	23.9	24.1	1.55	21.7	1.88	25.2	1.1	0.9
68	21.3	1.47	15.8	25.5	25.6	1.04	23.3	1.25	27.1	1.1	0.9
(°)	67~83	67~83	67~83	67~83	67~83	67~83	67~83	69~83	69~83	69~83	69~83

Jib length Offset	44.0 m boom + 18.0 m jib						
	5°	25°	45°	60°			
Boom angle(°)	Working radius(m)	Total rated loads	Working radius(m)	Total rated loads			
83	7.7	1.7	1.0	1.25	17.6	0.8	19.4
82	9.1	1.7	4.3	1.2	18.8	0.8	20.5
81	10.4	1.7	6.7	1.15	20.0	0.75	21.5
80	11.8	1.7	9.2	1.15	21.1	0.75	22.6
78	14.1	1.7	11.5	1.05	23.2	0.75	24.7
76	16.6	1.7	13.8	1.0	25.2	0.7	26.5
75	17.9	1.7	16.1	1.0	26.2	0.7	27.1
73	20.4	1.7	18.4	0.95	28.1	0.7	28.8
70	23.7	1.5	20.7	0.85	30.9	0.65	31.3
(°)	69~83	69~83	69~83	69~83	69~83	69~83	69~83

0.65  
0.65  
0.65  
0.65  
0.6  
0.6  
0.6  
0.6

<b>TOTAL RATED LOADS</b>
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1. The total rated loads shown are for the case where the outriggers are set horizontally on firm level ground. The values above the bold lines are based on the crane strength while those below are based on the crane stability.
2. The weights of the slings and hooks (70t hook: 600kg, 50t hook: 500kg, 5.5t hook: 140kg) 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 F of the total rated load.

Counterweight Outrigger extension width	5.6t	1.1t
7.8m	A(D*)	B(E*)
7.2m	B(D*)	C(E*)
5.3m	C(D*)	D*(E*)
4.1m	D*(D*)	E*(E*)
2.23m	F*(F*)	F*(F*)

- Performances with \* are only for the boom performance.
- When the front jack is not used, over-front area will have the performance shown in ( ).
- Performance F shall apply to the 11.5 m boom.

5. The table below shows the standard number of part lines for each boom length.  
The load per line should not exceed 5.0 t for the main winch and 5.5 t for the auxiliary winch.

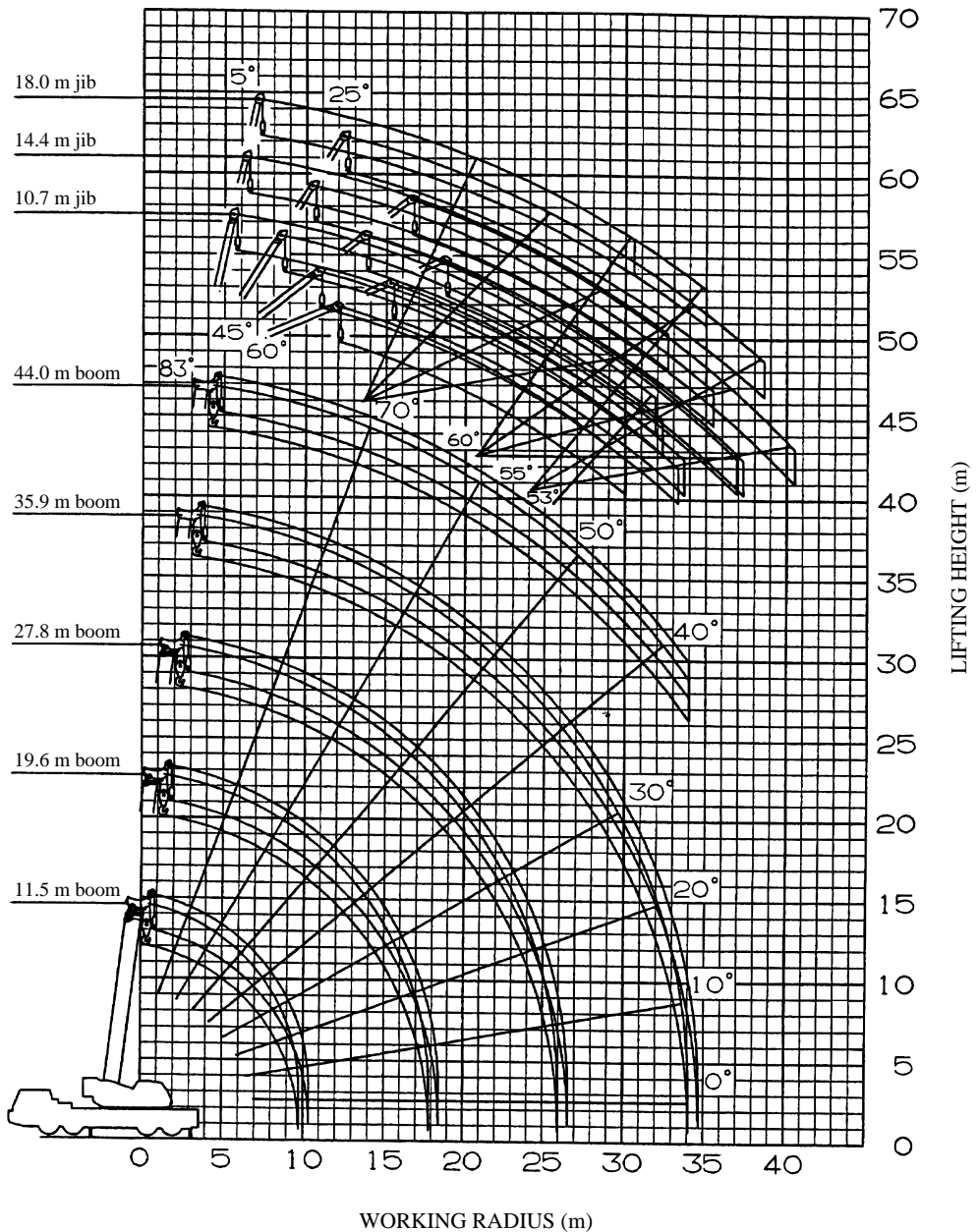
Boom length	11.5m	19.6m	27.8m	35.9m	39.9m	44.0m	Jib/Single top
Number of part lines	(14) 10	8	5	4	4	4	1

A value in ( ) is for when the attachment and the single top are used.

6. The total rated load for the single top shall be the value obtained by subtracting the weight of the hook mounted to the boom from the total rated load of the boom and must not exceed 5.5t.
7. Jib operation should be performed on the basis of the boom angle.  
The working radii are reference values for the case where a jib is mounted to a 44.0 m boom.
8. Mark in the total rated load chart shows the boom angle range (under no load)
9. The jib should be operated with the boom "telescoping method I".
10. When the maximum instantaneous velocity is 10m/s or more, stop crane operation.

**WORKING RADIUS - LIFTING HEIGHT**

Performance A



**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]

