

CREVO 500

GR-500N

JAPANESE SPECIFICATIONS

Reference Only

| OUTLINE | SPEC. NO. |
|--|-----------------|
| 6-section Boom, 2-staged Power Tilt Jib H-type Outrigger | GR-500N-1-00102 |

GR-500N-1

CRANE SPECIFICATIONS

| | | | | |
|------------|------|----------|----------|---------------|
| 9.7m | Boom | 51,000kg | at 3.0m | (12part-line) |
| 16.0m | Boom | 30,000kg | at 4.5m | (8part-line) |
| 22.3m | Boom | 20,000kg | at 5.0m | (5part-line) |
| 28.6m | Boom | 12,000kg | at 8.0m | (4part-line) |
| 34.9m | Boom | 11,000kg | at 7.0m | (4part-line) |
| 38.05m | Boom | 9,000kg | at 9.0m | (4part-line) |
| 41.2m | Boom | 7000kg | at 10.0m | (1part-line) |
| 8.0m | Jib | 3,500kg | at 74° | (1part-line) |
| 12.7m | Jib | 2,500kg | at 74° | (1part-line) |
| Single top | | 4,500kg | | |

MAX.LIFTING HEIGHT

| | |
|------|-------|
| Boom | 42.2m |
| Jib | 55.2m |

MAX.WORKING RADIUS

| | |
|------|-------|
| Boom | 34.0m |
| Jib | 38.6m |

BOOM LENGTH

9.7m - 41.2m

BOOM EXTENSION

31.5m

BOOM EXTENSION SPEED

31.5m/120s

JIB LENGTH

8.0m, 12.7m

MAIN WINCH SINGLE LINE WINDING SPEED

125m/min (5th layer)

MAIN WINCH HOOK SPEED

10.4M/min (12 part-line)

AUXILIARY WINCH SINGLE LINE WINDING SPEED

110m/min (5th layer)

AUXILIARY WINCH HOOK SPEED

110m/min (1 part-line)

BOOM ELEVATION ANGLE

0° - 83.5°

BOOM ELEVATION SPEED

0° - 83.5°/62s

SWING ANGLE

360° continue

SWING SPEED

2.2rpm

WIRE ROPE

Main Winch

18mm x 224m (Diameter x Length)

Spin-resilant wire rope

Auxiliary Winch

18mm x 120m (Diameter x Length)

Spin-resistant wire rope

BOOM

6-section hydraulically telescoping boom
(stages 2,3: synchronized; stages 4,5,6: synchronized)

BOOM EXTENSION

3 double-acting hydraulic cylinders
2 wire rope type telescoping devices

JIB

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°- 60°) type

SINGLE TOP

Single sheave Mounted on main boom head for single line work

HOIST

Driven by hydraulic motor and via bevel 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

2 double-acting hydraulic cylinders

With flow regulator valve with pressure compensation

SWING

Hydraulic motor driven planetary gear reducer

Swing bearing

High/Low speed selection

Swing free/lock changeover type

Negative brake

OUTRIGGERS

Fully hydraulic HI-type (floats mounted integrally)

Slides and jacks each provided with independent operation device.

Fully extended width 7.4 m

Middle extended width 6.8m, 5.5m, 4.1m,

Minimum extended width 2.55m

OPERATION METHOD

Hydraulic pilot valve operation

MAX. VERTICAL LOAD CAPACITY OF OUTRIGGER

38.3t

POWER TAKE-OFF

PTO wet multi-plate clutch

HYDRAULIC PUMPS

2 variable piston pumps

3gear pumps

HYDRAULIC OIL TANK CAPACITY

570 liters

SAFETY DEVICES

Automatic moment limiter(AML)

Multi-display indication

Swing automatic 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 lift 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

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|-------------------------------|
| CARRIER SPECIFICATIONS |
|-------------------------------|

ENGINE

Model NISSAN 2A-GE13C
 (with turbo charger)
 Type 4-cycle, 6-cylinder, direct-injection, water-cooled diesel engine
 Piston displacement 13,074cc
 Max. output 272kw (370PS) at 2,000rpm
 Max. torque 1,470N.m (150kgf-m) at 1,100rpm

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)

REDUCER

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)

Rear

Hydro-pneumatic suspension (with hydraulic lock cylinder)

STEERING

Fully hydraulic power steering

With reverse steering correction mechanism

BRAKE SYSTEM

Service Brake

Air over Hydro.pneumatic brake disk brake

Parking Brake

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

Auxiliary Brake

Flow type retarder

Electro-pneumatic operated exhaust brake

Auxiliary braking device for operations

FRAME

Welded box-shaped structure

ELECTRIC SYSTEM

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

FUEL TANK CAPACITY

300 liters

TIRES

Front 505/95R25 183E ROAD

Rear 505/95R25 183E ROAD

CAB

One-man type

With interior equipment

Liquid filled rubber mounted type

Fully adjustable foldable seat

(with headrest and seat belt)

Adjustable handle (titt, 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

Overshitt prevention device

Parking brake alarm

Powered mirror for right side of boom

Monitor TV for left side of boom

EQUIPMENT

Centralized oiling device

| |
|---------------------|
| GENERAL DATA |
|---------------------|

DIMENSIONS

| | |
|----------------|----------|
| Overall length | 11,850mm |
| Overall width | 2,960mm |
| Overall height | 3,710mm |
| Wheel base | 4,850mm |
| Tread Front | 2,380mm |
| Tread Rear | 2,380mm |

WEIGHTS

| | |
|----------------------|----------|
| Gross vehicle weight | |
| Total | 37,795kg |
| Front | 18,895kg |
| Rear | 18,900kg |

PERFORMANCE

| | |
|------------------------------|---|
| Max. traveling speed | 49km/h |
| Gradeability (tan Θ) | 0.57 |
| Min.turning radius | 6.3m (4-wheel steering) 10.8m (2-wheel steering) |

Note:

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

[TOTAL RATED LOADS]

(1) With outriggers set

[BOOM]

Unit: ton

| | | Outriggers fully extended (7.4m) | | | | -360°- | | | |
|--------|----------|----------------------------------|----------|-------|-------|---------|---------|--|--|
| A B | 9.7m | 16.0m | 22.3m | 28.6m | 34.9m | 38.05m | 41.2m | | |
| 2.5m | 51.0 | 30.0 | 20.0 | 12.5 | | | | | |
| 3.0m | 51.0 | 30.0 | 20.0 | 12.5 | | | | | |
| 3.5m | 45.0 | 30.0 | 20.0 | 12.5 | 11.0 | | | | |
| 4.0m | 39.5 | 30.0 | 20.0 | 12.5 | 11.0 | 9.0 | | | |
| 4.5m | 35.5 | 30.0 | 20.0 | 12.5 | 11.0 | 9.0 | | | |
| 5.0m | 32.0 | 29.0 | 20.0 | 12.5 | 11.0 | 9.0 | 7.0 | | |
| 5.5m | 29.0 | 27.0 | 20.0 | 12.5 | 11.0 | 9.0 | 7.0 | | |
| 6.0m | 26.5 | 25.0 | 19.2 | 12.5 | 11.0 | 9.0 | 7.0 | | |
| 6.5m | 24.0 | 23.2 | 18.0 | 12.5 | 11.0 | 9.0 | 7.0 | | |
| 7.0m | | 21.3 | 17.0 | 12.5 | 11.0 | 9.0 | 7.0 | | |
| 8.0m | | 18.2 | 15.0 | 12.5 | 11.0 | 9.0 | 7.0 | | |
| 9.0m | | 15.0 | 13.4 | 11.5 | 10.2 | 9.0 | 7.0 | | |
| 10.0m | | 12.3 | 11.9 | 10.5 | 9.3 | 8.5 | 7.0 | | |
| 11.0m | | 10.2 | 9.9 | 9.6 | 8.5 | 7.8 | 6.8 | | |
| 12.0m | | 8.5 | 8.25 | 8.8 | 7.8 | 7.2 | 6.4 | | |
| 13.0m | | 7.1 | 6.9 | 7.9 | 7.1 | 6.6 | 6.0 | | |
| 14.0m | | | 5.9 | 6.9 | 6.6 | 6.1 | 5.6 | | |
| 16.0m | | | 4.3 | 5.2 | 5.7 | 5.3 | 4.9 | | |
| 18.0m | | | 3.0 | 4.0 | 4.5 | 4.6 | 4.3 | | |
| 20.0m | | | | 3.1 | 3.5 | 3.7 | 3.85 | | |
| 22.0m | | | | 2.35 | 2.75 | 3.0 | 3.1 | | |
| 24.0m | | | | 1.7 | 2.1 | 2.35 | 2.5 | | |
| 26.0m | | | | | 1.65 | 1.85 | 2.0 | | |
| 28.0m | | | | | 1.25 | 1.4 | 1.55 | | |
| 30.0m | | | | | 0.9 | 1.0 | 1.2 | | |
| 32.0m | | | | | | 0.7 | 0.9 | | |
| 34.0m | | | | | | | 0.6 | | |
| a (°) | 0~83.5 | | | | | 16~83.5 | 26~83.5 | | |
| F | 51t hook | | 25t hook | | | | | | |

A= Boom Length

B= Working radius

F= Standard hook

a= Boom angle range (for the unladen condition)

[BOOM]

Unit: ton

| | | Outriggers middle extended (6.8m) | | | | -Over Sides- | |
|--------|----------|-----------------------------------|----------|-------|---------|--------------|---------|
| A B | 9.7m | 16.0m | 22.3m | 28.6m | 34.9m | 38.05m | 41.2m |
| 2.5m | 51.0 | 30.0 | 20.0 | 12.5 | | | |
| 3.0m | 50.0 | 30.0 | 20.0 | 12.5 | | | |
| 3.5m | 43.0 | 30.0 | 20.0 | 12.5 | 11.0 | | |
| 4.0m | 38.0 | 30.0 | 20.0 | 12.5 | 11.0 | 9.0 | |
| 4.5m | 34.1 | 30.0 | 20.0 | 12.5 | 11.0 | 9.0 | |
| 5.0m | 30.7 | 29.0 | 20.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 5.5m | 27.7 | 27.0 | 20.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 6.0m | 25.3 | 25.0 | 19.2 | 12.5 | 11.0 | 9.0 | 7.0 |
| 6.5m | 23.0 | 23.2 | 18.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 7.0m | | 21.3 | 17.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 8.0m | | 16.4 | 15.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 9.0m | | 13.0 | 12.7 | 11.5 | 10.2 | 9.0 | 7.0 |
| 10.0m | | 10.6 | 10.3 | 10.5 | 9.3 | 8.5 | 7.0 |
| 11.0m | | 8.7 | 8.5 | 9.5 | 8.5 | 7.8 | 6.8 |
| 12.0m | | 7.2 | 7.1 | 8.1 | 7.8 | 7.2 | 6.4 |
| 13.0m | | 6.1 | 6.0 | 6.9 | 7.1 | 6.6 | 6.0 |
| 14.0m | | | 5.1 | 6.0 | 6.4 | 6.1 | 5.6 |
| 16.0m | | | 3.65 | 4.5 | 4.9 | 5.1 | 4.9 |
| 18.0m | | | 2.55 | 3.3 | 3.8 | 4.05 | 4.2 |
| 20.0m | | | | 2.5 | 3.0 | 3.2 | 3.35 |
| 22.0m | | | | 1.8 | 2.3 | 2.5 | 2.65 |
| 24.0m | | | | 1.2 | 1.75 | 1.9 | 2.05 |
| 26.0m | | | | | 1.25 | 1.45 | 1.6 |
| 28.0m | | | | | 0.85 | 1.05 | 1.2 |
| 30.0m | | | | | 0.5 | 0.7 | 0.85 |
| 32.0m | | | | | | | 0.5 |
| a (°) | 0~83.5 | | | | 21~83.5 | 26~83.5 | 34~83.5 |
| F | 51t hook | | 25t hook | | | | |

A= Boom Length

B= Working radius

F= Standard hook

a= Boom angle range (for the unladen condition)

[BOOM]

Unit: ton

| | | Outriggers middle extended (5.5m) | | | | -Over Sides- | |
|--------|----------|-----------------------------------|----------|---------|---------|--------------|---------|
| A B | 9.7m | 16.0m | 22.3m | 28.6m | 34.9m | 38.05m | 41.2m |
| 2.5m | 45.0 | 30.0 | 20.0 | 12.5 | | | |
| 3.0m | 45.0 | 30.0 | 20.0 | 12.5 | | | |
| 3.5m | 41.0 | 30.0 | 20.0 | 12.5 | 11.0 | | |
| 4.0m | 36.8 | 30.0 | 20.0 | 12.5 | 11.0 | 9.0 | |
| 4.5m | 33.2 | 30.0 | 20.0 | 12.5 | 11.0 | 9.0 | |
| 5.0m | 30.2 | 27.0 | 20.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 5.5m | 25.9 | 24.0 | 20.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 6.0m | 21.4 | 21.0 | 19.2 | 12.5 | 11.0 | 9.0 | 7.0 |
| 6.5m | 18.2 | 18.0 | 17.0 | 12.5 | 11.0 | 9.0 | 7.0 |
| 7.0m | | 15.2 | 15.1 | 12.5 | 11.0 | 9.0 | 7.0 |
| 8.0m | | 11.9 | 11.6 | 12.0 | 11.0 | 9.0 | 7.0 |
| 9.0m | | 9.5 | 9.15 | 10.2 | 10.0 | 9.0 | 7.0 |
| 10.0m | | 7.65 | 7.35 | 8.35 | 8.7 | 8.5 | 7.0 |
| 11.0m | | 6.25 | 6.0 | 7.0 | 7.3 | 7.6 | 6.8 |
| 12.0m | | 5.15 | 4.9 | 5.85 | 6.3 | 6.5 | 6.4 |
| 13.0m | | 4.2 | 4.0 | 5.0 | 5.5 | 5.6 | 5.6 |
| 14.0m | | | 3.25 | 4.2 | 4.7 | 4.9 | 5.0 |
| 16.0m | | | 2.05 | 3.0 | 3.5 | 3.7 | 3.8 |
| 18.0m | | | 1.15 | 2.1 | 2.6 | 2.75 | 2.9 |
| 20.0m | | | | 1.35 | 1.9 | 2.05 | 2.25 |
| 22.0m | | | | 0.7 | 1.25 | 1.5 | 1.7 |
| 24.0m | | | | | 0.8 | 1.0 | 1.2 |
| 26.0m | | | | | | 0.6 | 0.8 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| a (°) | 0~83.5 | | | 23~83.5 | 36~83.5 | 43~83.5 | 48~83.5 |
| F | 51t hook | | 25t hook | | | | |

A= Boom Length

B= Working radius

F= Standard hook

a= Boom angle range (for the unladen condition)

[JIB]

Unit: ton

| Outriggers fully extended (7.4m) -360°- | | | | | | | | | | | | | | | | |
|--|-----------|------|-------|------|-------|------|-----------|------|-----------|------|-------|------|-------|------|-----------|------|
| C D E(°) | 8.0m | | | | | | | | 12.7m | | | | | | | |
| | 5° | | 25° | | 45° | | 60° | | 5° | | 25° | | 45° | | 60° | |
| | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) |
| 83.5 | 5.6 | 3.5 | 8.3 | 2.4 | 10.2 | 1.6 | 11.0 | 1.0 | 6.6 | 2.5 | 10.5 | 1.4 | 13.4 | 0.9 | 15.3 | 0.5 |
| 76 | 12.9 | 3.5 | 15.1 | 2.4 | 16.6 | 1.6 | 17.1 | 1.0 | 14.9 | 2.5 | 18.3 | 1.4 | 20.7 | 0.9 | 21.6 | 0.5 |
| 74 | 14.8 | 3.5 | 16.8 | 2.4 | 18.3 | 1.6 | 18.6 | 1.0 | 17.0 | 2.5 | 20.2 | 1.4 | 22.4 | 0.9 | 23.2 | 0.5 |
| 72 | 16.6 | 3.35 | 18.5 | 2.4 | 19.8 | 1.6 | 20.0 | 1.0 | 19.0 | 2.4 | 22.0 | 1.35 | 24.1 | 0.9 | 24.6 | 0.5 |
| 70 | 18.3 | 3.0 | 20.2 | 2.4 | 21.3 | 1.6 | 21.5 | 1.0 | 20.8 | 2.2 | 23.6 | 1.25 | 25.7 | 0.85 | 26.1 | 0.5 |
| 68 | 20.0 | 2.7 | 21.8 | 2.2 | 22.9 | 1.6 | 22.8 | 1.0 | 22.5 | 2.0 | 25.3 | 1.2 | 27.2 | 0.85 | 27.4 | 0.5 |
| 65 | 22.1 | 2.3 | 23.9 | 1.9 | 25.0 | 1.55 | 24.8 | 1.0 | 25.0 | 1.8 | 27.7 | 1.1 | 29.4 | 0.8 | 29.5 | 0.5 |
| 60 | 25.7 | 1.75 | 27.4 | 1.5 | 28.4 | 1.35 | 28.1 | 1.0 | 28.9 | 1.4 | 31.5 | 1.0 | 32.8 | 0.75 | 32.8 | 0.5 |
| 55 | 29.0 | 1.3 | 30.6 | 1.2 | 31.3 | 1.1 | | | 32.6 | 1.1 | 35.0 | 0.85 | 36.0 | 0.75 | | |
| 53 | 30.3 | 1.05 | 31.7 | 0.95 | 32.5 | 0.95 | | | 34.0 | 0.85 | 36.2 | 0.75 | 37.1 | 0.65 | | |
| 50 | 32.1 | 0.65 | 33.4 | 0.6 | 34.0 | 0.6 | | | 35.9 | 0.55 | 38.0 | 0.45 | 38.6 | 0.4 | | |
| a (°) | 49 ~ 83.5 | | | | | | 59 ~ 83.5 | | 49 ~ 83.5 | | | | | | 59 ~ 83.5 | |

Unit: ton

| Outriggers fully extended (6.8m) -Over Sides- | | | | | | | | | | | | | | | | |
|--|-----------|------|-------|------|-------|------|-----------|------|-----------|------|-------|------|-------|------|-----------|------|
| C D E(°) | 8.0m | | | | | | | | 12.7m | | | | | | | |
| | 5° | | 25° | | 45° | | 60° | | 5° | | 25° | | 45° | | 60° | |
| | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) |
| 83.5 | 5.6 | 3.5 | 8.3 | 2.4 | 10.2 | 1.6 | 11.0 | 1.0 | 6.6 | 2.5 | 10.5 | 1.4 | 13.4 | 0.9 | 15.3 | 0.5 |
| 76 | 12.9 | 3.5 | 15.1 | 2.4 | 16.6 | 1.6 | 17.1 | 1.0 | 14.9 | 2.5 | 18.3 | 1.4 | 20.7 | 0.9 | 21.6 | 0.5 |
| 74 | 14.8 | 3.5 | 16.8 | 2.4 | 18.3 | 1.6 | 18.6 | 1.0 | 17.0 | 2.5 | 20.2 | 1.4 | 22.4 | 0.9 | 23.2 | 0.5 |
| 72 | 16.6 | 3.35 | 18.5 | 2.4 | 19.8 | 1.6 | 20.0 | 1.0 | 19.0 | 2.4 | 22.0 | 1.35 | 24.1 | 0.9 | 24.6 | 0.5 |
| 70 | 18.3 | 3.0 | 20.2 | 2.4 | 21.3 | 1.6 | 21.5 | 1.0 | 20.8 | 2.2 | 23.6 | 1.25 | 25.7 | 0.85 | 26.1 | 0.5 |
| 68 | 20.0 | 2.7 | 21.8 | 2.2 | 22.9 | 1.6 | 22.8 | 1.0 | 22.5 | 2.0 | 25.3 | 1.2 | 27.2 | 0.85 | 27.4 | 0.5 |
| 65 | 22.1 | 2.3 | 23.9 | 1.9 | 25.0 | 1.55 | 24.8 | 1.0 | 25.0 | 1.8 | 27.7 | 1.1 | 29.4 | 0.8 | 29.5 | 0.5 |
| 60 | 25.7 | 1.75 | 27.4 | 1.5 | 28.4 | 1.35 | 28.1 | 1.0 | 28.9 | 1.4 | 31.5 | 1.0 | 32.8 | 0.75 | 32.8 | 0.5 |
| 55 | 29.0 | 1.3 | 30.6 | 1.2 | 31.3 | 1.1 | | | 32.6 | 1.1 | 35.0 | 0.85 | 36.0 | 0.75 | | |
| 53 | 30.3 | 1.05 | 31.7 | 0.95 | 32.5 | 0.95 | | | 34.0 | 0.85 | 36.2 | 0.75 | 37.1 | 0.65 | | |
| a (°) | 52 ~ 83.5 | | | | | | 59 ~ 83.5 | | 52 ~ 83.5 | | | | | | 59 ~ 83.5 | |

B= Working radius C = Jib length D = Jib offset
E= Boom angle M = Total rated loads
a= Boom angle range (for the unladen condition)

[JIB]

Unit: ton

| Outriggers fully extended (5.5m) | | | | | | | | | | -Over Sides- | | | | | | | |
|----------------------------------|-----------|------|-------|------|-------|------|-------|------|-----------|--------------|-------|------|-------|------|-------|------|--|
| C D | 8.0m | | | | | | | | 12.7m | | | | | | | | |
| | 5° | | 25° | | 45° | | 60° | | 5° | | 25° | | 45° | | 60° | | |
| E(°) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | |
| 83.5 | 5.6 | 3.5 | 8.3 | 2.4 | 10.2 | 1.6 | 11.0 | 1.0 | 6.6 | 2.5 | 10.5 | 1.4 | 13.4 | 0.9 | 15.3 | 0.5 | |
| 76 | 12.9 | 3.5 | 15.1 | 2.4 | 16.6 | 1.6 | 17.1 | 1.0 | 14.9 | 2.5 | 18.3 | 1.4 | 20.7 | 0.9 | 21.6 | 0.5 | |
| 74 | 14.8 | 3.5 | 16.8 | 2.4 | 18.3 | 1.6 | 18.6 | 1.0 | 17.0 | 2.5 | 20.2 | 1.4 | 22.4 | 0.9 | 23.2 | 0.5 | |
| 72 | 16.6 | 3.35 | 18.5 | 2.4 | 19.8 | 1.6 | 20.0 | 1.0 | 19.0 | 2.4 | 22.0 | 1.35 | 24.1 | 0.9 | 24.6 | 0.5 | |
| 70 | 18.3 | 3.0 | 20.2 | 2.4 | 21.3 | 1.6 | 21.5 | 1.0 | 20.8 | 2.2 | 23.6 | 1.25 | 25.7 | 0.85 | 26.1 | 0.5 | |
| 68 | 19.7 | 2.35 | 21.6 | 2.05 | 22.9 | 1.6 | 22.8 | 1.0 | 22.4 | 1.95 | 25.3 | 1.2 | 27.2 | 0.85 | 27.4 | 0.5 | |
| 65 | 21.8 | 1.65 | 23.7 | 1.45 | 24.9 | 1.3 | 24.8 | 1.0 | 24.7 | 1.4 | 27.7 | 1.1 | 29.4 | 0.8 | 29.5 | 0.5 | |
| 62 | 23.9 | 1.1 | 25.6 | 0.95 | 26.8 | 0.85 | 26.9 | 0.8 | 26.8 | 0.85 | 29.8 | 0.7 | 31.4 | 0.65 | 32.8 | 0.5 | |
| 60 | 25.2 | 0.7 | 27.0 | 0.6 | 28.0 | 0.6 | 28.1 | 0.55 | 28.2 | 0.55 | | | | | | | |
| a (°) | 59 ~ 83.5 | | | | | | | | 61 ~ 83.5 | | | | | | | | |

Unit: ton

| Outriggers fully extended (4.1m) | | | | | | | | | | -Over Sides- | | | | | | | |
|----------------------------------|-----------|------|-------|------|-------|------|-------|------|-----------|--------------|-------|------|-------|------|-------|------|--|
| C D | 8.0m | | | | | | | | 12.7m | | | | | | | | |
| | 5° | | 25° | | 45° | | 60° | | 5° | | 25° | | 45° | | 60° | | |
| E(°) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | B (m) | M(t) | |
| 83.5 | 5.6 | 3.5 | 8.3 | 2.4 | 10.2 | 1.6 | 11.0 | 1.0 | 6.6 | 2.5 | 10.5 | 1.4 | 13.4 | 0.9 | 15.3 | 0.5 | |
| 76 | 12.9 | 3.5 | 15.1 | 2.4 | 16.6 | 1.6 | 17.1 | 1.0 | 14.9 | 2.5 | 18.3 | 1.4 | 20.7 | 0.9 | 21.6 | 0.5 | |
| 74 | 14.6 | 2.9 | 16.8 | 2.4 | 18.3 | 1.6 | 18.6 | 1.0 | 16.8 | 2.35 | 20.2 | 1.4 | 22.4 | 0.9 | 23.2 | 0.5 | |
| 72 | 16.1 | 2.1 | 18.3 | 1.75 | 19.8 | 1.6 | 20.0 | 1.0 | 18.5 | 1.75 | 21.9 | 1.3 | 24.1 | 0.9 | 24.6 | 0.5 | |
| 70 | 17.6 | 1.5 | 19.7 | 1.25 | 21.1 | 1.1 | 21.5 | 1.0 | 20.0 | 1.2 | 23.4 | 0.9 | 25.6 | 0.75 | 26.1 | 0.5 | |
| 68 | 19.1 | 1.0 | 21.2 | 0.85 | 22.5 | 0.75 | 22.8 | 0.7 | 21.6 | 0.8 | | | | | | | |
| a (°) | 67 ~ 83.5 | | | | | | | | 69 ~ 83.5 | | | | | | | | |

B= Working radius C = Jib length D = Jib offset
E= Boom angle M = Total rated loads
a= Boom angle range (for the unladen condition)

PRECAUTIONS TO BE TAKEN WHEN THE OUTRIGGERS ARE EXTENDED:

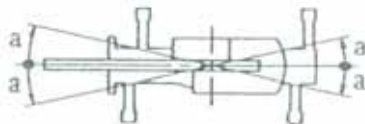
1. The total rated loads shown are for the case where the crane is set horizontally on firm level ground They include the weights of the slings and hooks (51t hook: 460kg, 25t hook: 300kg, auxiliary hook: 100kg)
The values above the bold lines are based on the crane strength while those below are based on the crane stability.
2. Since the total rated loads are based on the actual working radii 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 to a 41.2m boom.
4. 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 4.5t.
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. The load per line should not exceed 4.25t for the main winch and 4.5t for the auxiliary winch.

| | | | | | | | | |
|---|------|-------|-------|-------|-------|--------|-------|------------|
| A | 9.7m | 16.0m | 22.3m | 28.6m | 34.9m | 38.05m | 41.2m | Single Top |
| H | 12 | 8 | 6 | 4 | 4 | 4 | 4 | 1 |

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

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 which the outriggers are extended in the left and right directions,

| Extended width | Middle extended (6.8m) | Middle extended (5.5m) | Middle extended (4.1m) | Minimum extended (2.55m) |
|----------------|------------------------|------------------------|------------------------|--------------------------|
| Angle a° | 45 | 35 | 25 | 10 |



(2) Without outriggers

Unit: ton

| B A (m) | Stationary | | | | | | Creep (travelling at 1.6km/h or less) | | | | | |
|---------------|------------|------|------------|-------|------------|------|---------------------------------------|-------|------------|-------|------------|------|
| | 9.7m Boom | | 16.0m Boom | | 22.3m Boom | | 9.7m Boom | | 16.0m Boom | | 22.3m Boom | |
| | K | G | K | G | K | G | K | G | K | G | K | G |
| 3.0 | 20.0 | 12.5 | 15.0 | 10.0 | | | 14.5 | 8.0 | 10.5 | 6.5 | | |
| 3.5 | 20.0 | 12.5 | 15.0 | 10.0 | | | 14.5 | 8.0 | 10.5 | 6.5 | | |
| 4.0 | 20.0 | 11.0 | 15.0 | 10.0 | 11.0 | 5.5 | 14.5 | 8.0 | 10.5 | 6.5 | 8.0 | 4.5 |
| 4.5 | 18.0 | 9.0 | 15.0 | 8.5 | 11.0 | 5.5 | 12.9 | 6.8 | 10.5 | 6.5 | 8.0 | 4.5 |
| 5.5 | 16.0 | 7.4 | 15.0 | 7.0 | 11.0 | 5.5 | 11.5 | 5.8 | 10.5 | 5.3 | 8.0 | 4.5 |
| 5.5 | 14.3 | 6.2 | 14.0 | 5.7 | 11.0 | 5.3 | 10.3 | 4.8 | 10.5 | 4.4 | 8.0 | 4.1 |
| 6.0 | 12.8 | 5.2 | 13.0 | 4.8 | 11.0 | 4.4 | 9.3 | 4.0 | 10.0 | 3.7 | 8.0 | 3.55 |
| 6.5 | 11.7 | 4.35 | 12.0 | 4.05 | 10.0 | 3.7 | 8.6 | 3.35 | 9.3 | 3.15 | 8.0 | 3.05 |
| 7.0 | | | 11.0 | 3.4 | 9.2 | 3.0 | | | 8.5 | 2.7 | 7.4 | 2.55 |
| 8.0 | | | 9.0 | 2.3 | 7.7 | 2.0 | | | 7.0 | 1.85 | 6.4 | 1.65 |
| 9.0 | | | 7.0 | 1.3 | 6.4 | 1.0 | | | 5.9 | 1.1 | 5.4 | 0.95 |
| 10.0 | | | 5.7 | | 5.4 | | | | 4.8 | | 4.5 | |
| 11.0 | | | 4.7 | | 4.5 | | | | 3.9 | | 3.7 | |
| 12.0 | | | 4.0 | | 3.8 | | | | 3.3 | | 3.1 | |
| 13.0 | | | 3.4 | | 3.2 | | | | 2.8 | | 2.6 | |
| 14.0 | | | | | 2.7 | | | | | | 2.2 | |
| 16.0 | | | | | 1.8 | | | | | | 1.5 | |
| 18.0 | | | | | 1.0 | | | | | | 0.85 | |
| a (°) | 0~78 | | 39~78 | 22~78 | 60~78 | 0~78 | | 45~78 | 22~78 | 63~78 | | |
| F | 25t hook | | | | | | 25t hook | | | | | |

A= Boom Length B= Working radius F= Standard hook

a= Boom angle range (for the unladen condition)

K=Front G=360°

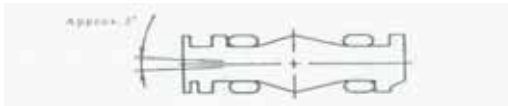
PRECAUTIONS TO BE TAKEN WHEN THE OUTRIGGERS ARE NOT MOUNTED:

- The total rated loads shown are for the case where the tire air pressure on firm level ground is as specified 800kPa (8.00kg/cm²) and the suspension-lock cylinder is retracted as much as possible. They include the weights of the slings and hooks (51t hook: 460kg., 25t hook: 300 kg, auxiliary hook: 100 kg)
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
- 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.
- The table below shows the standard number of part lines for each boom length. The load per line should not exceed 4.25t for the main winch and 39.2kN 4.25t the auxiliary winch.

| | | | | |
|---|------|-------|-------|------------|
| A | 9.7m | 16.0m | 22.3m | Single Top |
| H | 6 | 4 | 4 | 1 |

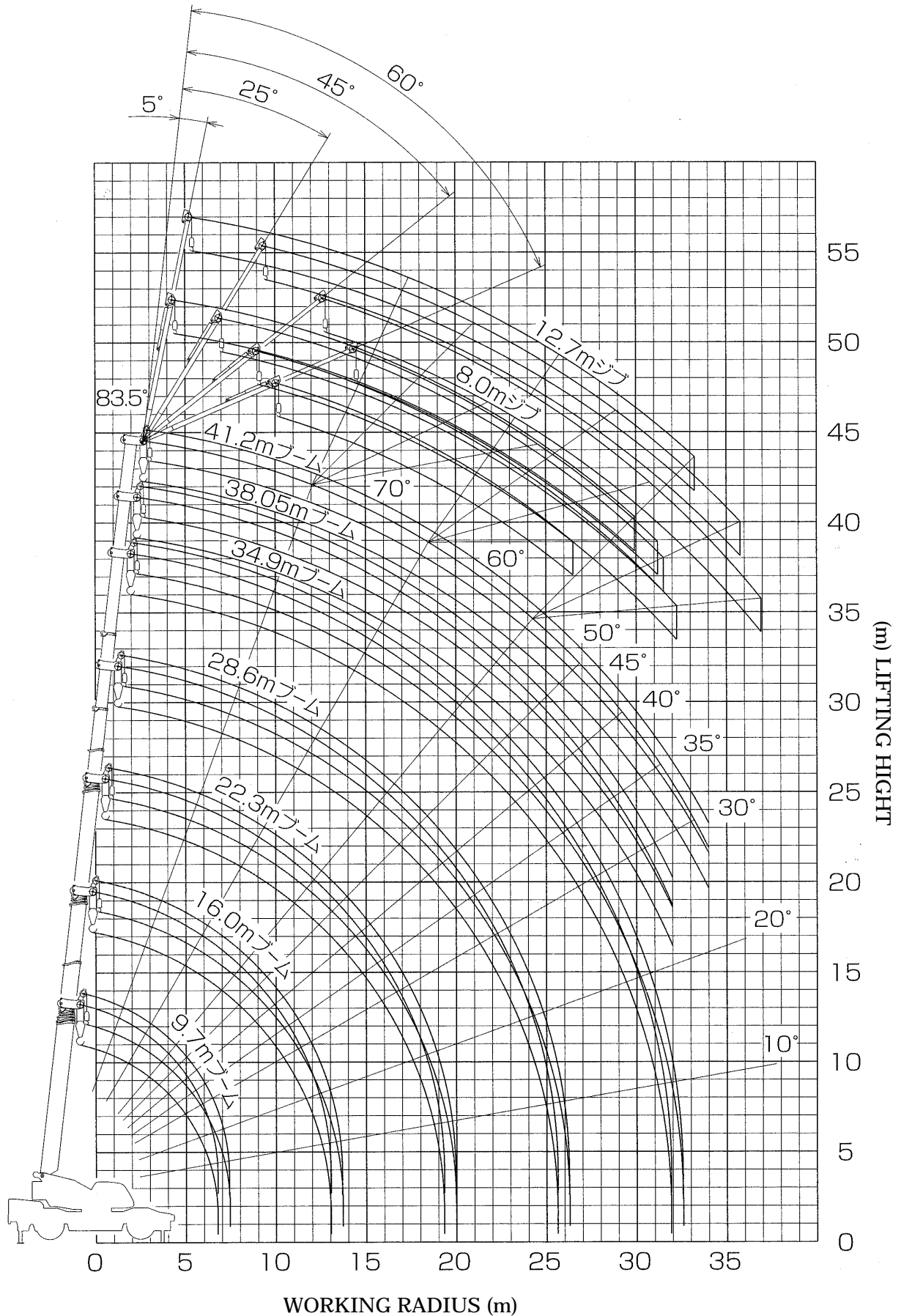
A=Boom length
B=No. of part-line

- "Over front" crane operations should be performed only when 'Over front' is displayed on the standard display. The boom must be kept inside a 2° area over front of the carrier when performing "Over front" crane operations without the outriggers.



- 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 4.5t.
- Free-tail operations should not be performed without outriggers.
Booms over 22.3m 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 first.
- 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,
- Crane operations should not be performed when creeping while hoisting a load.

WORKING RADIUS - LIFTING HEIGHT

**NOTE:**

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°)

DIMENTION

(1/100)

