SPEC. SHEET No. TM-50Z-4-002/EX-02 [TM-ZR503]
SPEC. SHEET No. TM-50Z-4-302/EX-02 [TM-ZR503(H)]
DATE December, 1999

#### TADANO CARGO CRANE

#### CRANE SPECIFICATIONS

CRANE CAPACITY 3,230 kg at 3.7 m (4-part lines) BOOM 3-sectioned, fully hydraulic telescoping boom of pentagonal box construction Retracted length --- 3.47 m Extended length --- 8.31 m Extending speed ——— 4.84 m / 18 s Elevation ———— Elevated by a double-acting hydraulic cylinder Elevating speed ———  $1^{\circ}$  to  $78^{\circ}$  / 12 s Boom point — 2 sheaves WINCH Hydraulic motor driven Spur gear speed reduction, provided with mechanical brake Single line pull --- 7.94 kN{810 kgf} Single line speed — 76 m/min. (at 4th layer) Wire rope diameter × length ---- $8 \text{ mm} \times 56 \text{ m}$ breaking strength --- 43.1 kN{4.39 tf} construction  $7 \times 7 + 6 \times WS(26)$ Hook block 2 sheaves

<u>HOOK STOWING DEVICE</u> Mechanically stowed beneath boom top portion [TM-ZR503(H) only]

SPEC. SHEET No. TM-50Z-4-002/EX-02 [TM-ZR503] SPEC. SHEET No. TM-50Z-4-302/EX-02 [TM-ZR503(H)]

SWING Hydraulic motor driven Worm gear speed reduction Continuous

360° full circle swing on ball bearing slew ring

Automatic swing lock

Swing speed 2.5 min<sup>-1</sup> {rpm}

OUTRIGGERS Manually extended sliders and hydraulically extended jacks

Integral with crane frame Power up and down

Extended width ——— Min. 2,200 mm

Mid. 3,000 mm

Max. 3,800 mm

HYDRAULICS Hydraulic pump Single gear pump

Hydraulic motors ————— Axial piston type for winch

Axial piston type for swing

Control valves ———— Multiple control valves with integral

safety valve

SAFETY DEVICES Load meter

Load indicator

Over-winding alarm

Hoisting limiter [TM-ZR503(H) only]

P.T.O. indicator lamp

Hook safety latch

Level gauge

Hydraulic safety valves, check valves and holding valves

<u>CRANE MASS</u> Approx. 1,645 kg (includes standardized mounting parts)

NOTE: Operating speeds of the crane are guaranteed under the

condition that the pump delivery is 60 L/min.

#### RATED LIFTING CAPACITIES IN KIROGRAMS

| A               | 3.47 m |
|-----------------|--------|
|                 | 5.91 m |
| В               | 8.31 m |
| 3.7 m and below | 3, 230 |
| 4.5 m           | 2, 580 |
| 5.0 m           | 2, 280 |
| 5.5 m           | 2, 030 |
| 6.0 m           | 1,830  |
| 6.5 m           | 1, 680 |
| 7.0 m           | 1, 550 |
| 7.5 m           | 1, 430 |
| 8.09m           | 1, 280 |

A : Boom Length

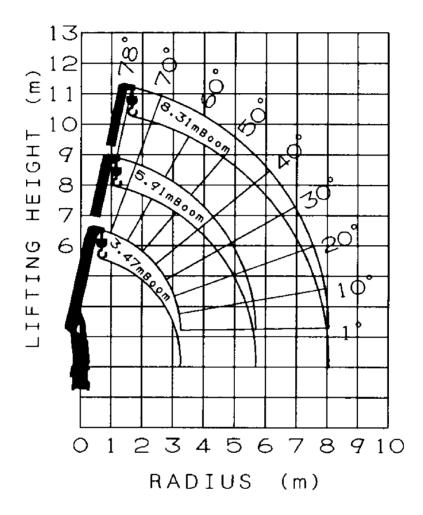
B: Load radius

#### NOTES:

- 1. The mass of the hook (30 kg), slings and all similarly used load handling devices must be added to the mass of the load.
- 2. The above numerical values of rated lifting capacities are based on crane strength only.

The rated lifting capacities based on stability may lower than those in the above table depending on the loading conditions and the types of the chassis.

### WORKING RANGE

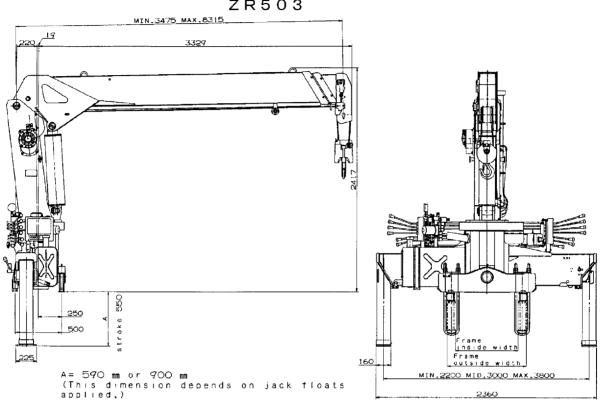


### NOTE:

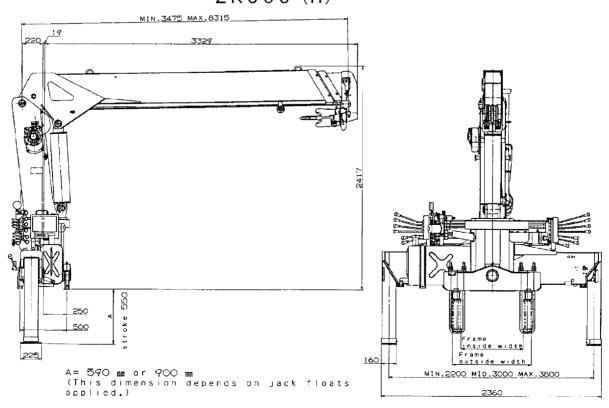
The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.

### DIMENSIONS

### ZR503



## ZR503 (H)



# GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass)

12,000 to 25,000 kg

P.T.O. torque

157 N·m{16 kgf·m} min.

P.T.O. revolution

Approx. 270 to 2,800 min<sup>-1</sup>{rpm}

Width for crane mounting

Approx. 750 mm min.

Frame

Weight distribution and frame strength should be calculated for each truck

Frame width range (inside to outside)

Approx. 610 to 960 mm

Frame height (ground to frame top)

Approx. 1,235 mm max.

(Height of crane mounting base can be changed by combination of jack floats and crane bases)