

#### TADANO CARGO CRANE

# MODEL: TM-ZT503

#### CRANE SPECIFICATIONS

<u>CRANE CAPACITY</u> 5,050 kg at 2.5 m (5-part line)

BOOM Three-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 ----- 3 sheaves

WINCH Hydraulic motor driven Spur gear speed reduction, provided

with mechanical brake

Single line pull ----- 9.90 kN{1,010 kgf}

Single line speed ----- 66 m/min.(at 4th layer)

Wire rope

Diameter x length ----- 8 mm x 67 m

Breaking strength ----- 50.1 kN{5,100 kgf}

Construction ----- 7 x 7 + 6 x WS(26)

Hook block ----- 2 sheaves

<u>SLEWING</u> Hydraulic motor driven Worm gear speed reduction

Continuous 360° full circle slewing on ball bearing slew ring

Automatic slewing lock

slewing 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

<u>HYDRAULICS</u> Hydraulic pump ----- Single gear pump

Hydraulic motors ----- Axial piston type for winch

Axial piston type for slewing

Control valves ----- Multiple control valves with integral

safety valve

Oil tank capacity ----- Approx. 90 L

SAFETY DEVICES Load meter

Load indicator

Over-winding alarm Hook safety latch

Hydraulic safety valves, check valves and holding valves

Level gauge

<u>CRANE MASS</u> Approx. 1,600 kg (except mounting parts)

NOTE :Operating speeds of the crane are guaranteed under the condition that the pump delivery is 60 L/min.

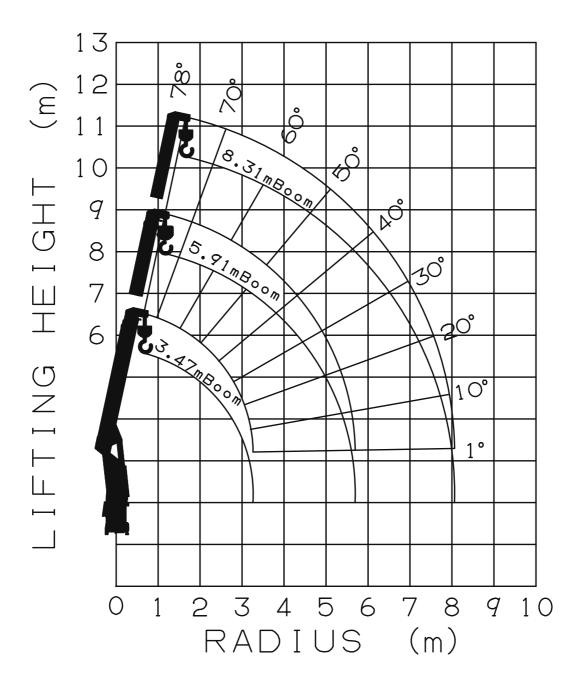
### RATED LIFTING CAPACITIES IN KILOGRAMS

Crane Strength Rated Capacities

Load Radius	3.47 m Boom	Load Radius	5.91 m Boom	Load Radius	8.31 m Boom
2.5 m and below	5,050	2.95 m and below	4,050	3.8 m and below	3,130
2.95 m	4,050	3.8 m	3,130	4.1 m	2,930
3.25 m	3,700	4.1 m	2,930	4.5 m	2,580
		4.5 m	2,580	5.0 m	2,280
		5.0 m	2,280	5.5 m	2,030
		5.69 m	1,950	6.0 m	1,830
				6.5 m	1,680
				7.0 m	1,550
				7.5 m	1,430
				8.09m	1,280

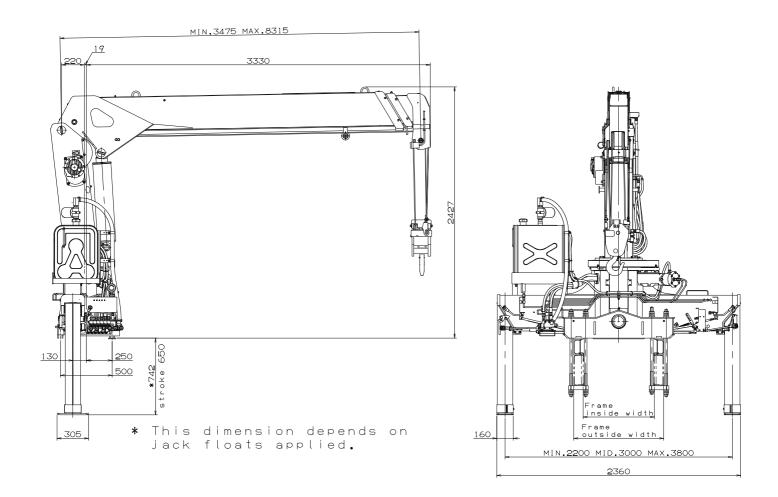
- NOTES: 1. The above numerical values of total rated loads are based on crane strength only. The total rated loads based on stability may lower than those in the above table depending on the loading conditions and the types of the chassis.
  - 2. Rated Lifting Capacities in these tables depend on condition that crane is set level on firm level ground.
  - 3. The mass of hook block (50kg), slings and all similarly used load lifting devices must be added to the mass of the load.
  - 4. For boom lengths not shown, use the rated lifting capacity of next longer boom.

### **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**



## GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass)	- 15,000 kg or more			
P.T.O. torque	- 170 N⋅m{17.4 kgf⋅m} min.			
P.T.O. revolution	- Approx. 1,200 min <sup>-1</sup> {rpm} max.			
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 940 mm				
Frame height (ground to frame top) Approx. 1,290 mm max.				
	(Height of crane mounting base can be changed			
	by combination of jack floats and crane bases)			