

SPEC. SHEET No. TM-30Z-4-002/EX-01 [TM-ZR303]
SPEC. SHEET No. TM-30Z-4-302/EX-01 [TM-ZR303(H)]
DATE February, 1999

TADANO CARGO CRANE

MODEL : ☐ TM-ZR303
☐ TM-ZR303 (H) ----- with hook stowing device

CRANE SPECIFICATIONS

CRANE CAPACITY 3,030 kg at 2.6 m (4-part lines)

BOOM 3-sectioned, fully hydraulic telescoping boom of pentagonal box construction

Retracted length.....3.27 m
Extended length.....7.7 m
Extending speed.....4.43 m / 12 s
ElevationElevated by a double-acting hydraulic cylinder
Elevating speed.....1° to 78° / 7.5 s
Boom point.....2 sheaves

WINCH Hydraulic motor driven Spur gear speed reduction, provided with mechanical brake

Single line pull.....7.45 kN{760 kgf}
Single line speed.....76 m/min (at 4th layer)
Wire rope
diameter × length.....
8 mm × 51 m
breaking strength...43.1 kN{4.39 tf}
construction.....7 × 7 + 6 × WS(26)
Hook block.....2 sheaves

HOOK STOWING DEVICE Mechanically stowed beneath boom top portion
[TM-ZR303(H) only]

SWING Hydraulic motor driven Worm gear speed reduction Continuous
 360° full circle swing on ball bearing slew ring
 Automatic swing lock
 Swing speed..... $2.5 \text{ min}^{-1}\{\text{rpm}\}$

OUTRIGGERS Manually extended sliders and hydraulically extended jacks
 Integral with crane frame Power up and down
 Extended width.....Min. 2,000 mm
 Mid. 2,700 mm
 Max. 3,400 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-ZR303(H) only]
 P.T.O indicator lamp
 Hook safety latch
 Hydraulic safety valves, check valves and holding valves
 Level gauge

CRANE MASS Approx. 1,125 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 KILOGRAMS

B \ A	3.27 m 5.5 m	B \ A	7.7 m
2.6 m and below	3,030	2.7 m and below	2,330
3.0 m	2,480	3.2 m	2,030
3.5 m	2,030	3.5 m	1,780
4.0 m	1,730	4.0 m	1,480
4.5 m	1,530	4.5 m	1,280
5.0 m	1,330	5.0 m	1,130
5.3 m	1,280	5.5 m	1,030
		6.0 m	930
		6.5 m	830
		7.0 m	730
		7.5 m	680

A : Boom length

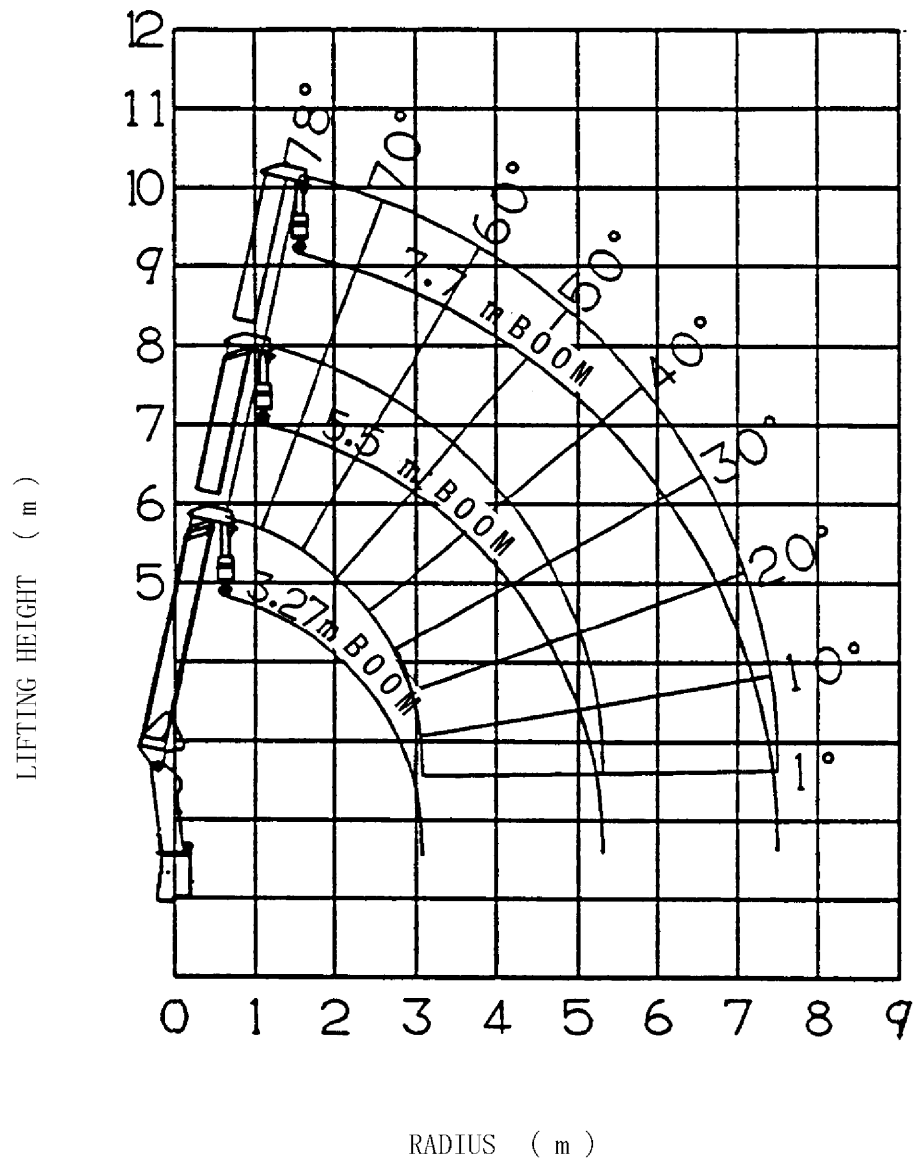
B : Load radius

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

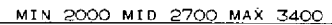
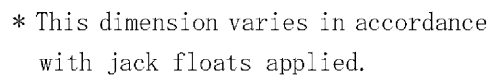


NOTE:

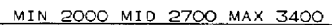
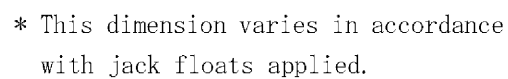
The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.

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GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass).....

7,500 to 10,000 kg

P.T.O. torque.....127 N·m{13 kgf·m} min.

P.T.O. revolution.....Approx. 300 to 3,000 min⁻¹{rpm}

Width for crane mounting...Approx. 660 mm min.

Frame.....Weight distribution and frame strength
should be calculated for each truck

Frame width range (inside to outside)...

Approx. 610 to 865 mm

Frame height (ground to frame top).....

Approx. 1,030 mm max.

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