

SPEC. SHEET No. TM-30Z-5-03454/R-03DATESeptember, 2010

TADANO CARGO CRANE

MODEL: TM-ZE304HS

CRANE SPECIFICATIONS

CRANE CAPACITY	3,000 kg at 2.5 m (4-part lines)
BOOM	Four-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction Retracted length 3.34 m Extended length 10.0 m Extending speed 6.66 m / 14 s Elevation Elevated 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 pull7.35 kN {750 kgf} Single line speed76 m/min.(at 4th layer) Wire rope Diameter x length 8 mm x 63 m Breaking strength 43.1 kN {4.39 tf} Construction7 x 7 + 6 x WS(26) Hook block2 sheaves
HOOK STOWING DEVICE	Mechanically stowed beneath boom top portion

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<u>SWING</u>	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 ⁻¹ {rpm}			
OUTRIGGERS	Manually extended sliders and hydraulically extended jacks Integral with crane frame Power up and down Extension width Min. 2,000 mm Mid. 2,700 mm Full 3,400 mm			
<u>HYDRAULICS</u>	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 Oil tank capacity approx. 31 L			
SAFETY DEVICES	AML(Automatic Moment Limiter) Load indication Load moment ratio to rated load indication Warning alarm Over load limiter WHL(Working Height Limiter) Load meter Load indicator Over-unwinding prevention Terminal for emergency stop switch Over-winding alarm Hoisting limiter P.T.O indicator lamp Hook safety latch Hydraulic safety valves, check valves and holding valves Level gauge			
CRANE MASS	Approx. 1,265 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 **Crane Strength Rated Capacities**

3.34 m / 5.57 r		57 m Boom	Lood	7.78 m Boom		10.0 m Boom		
Load Radius	Extension width of outriggers				Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers
Full		Minimum		Full		Full		
2.3 m and below	3,000	1,400	2.7 m and below	2,300	4.0 m and below	1,000		
2.5 m	3,000	1,170	3.2 m	2,000	5.0 m	850		
3.0 m	2,450	900	3.5 m	1,800	6.0 m	720		
3.5 m	2,050	650	4.0 m	1,600	7.0 m	620		
4.0 m	1,750	550	4.5 m	1,450	8.0 m	550		
4.5 m	1,550	450	5.0 m	1,300	9.0 m	480		
5.0 m	1,350	350	5.5 m	1,200	9.8 m	450		
5.37m	1,250	300	6.0 m	1,100				
			6.5 m	1,000				
			7.0 m	920				
			7.58m	850				
	-				-			

NOTES : 1. Capacities in above tables include slings and similarly used load handling devices, and they must be added to the mass of the load. They don't, however, include the mass of hook block (30kg)

2. 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.

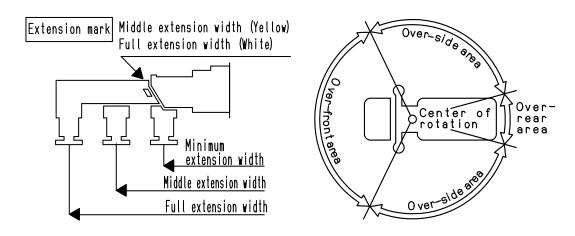
Table A Load		3.34 m / 5.57 m Boom		Load	7.78 m Boom	Load	10.0 m Boom
	Radius		n width of ggers	Radius	Extension width of outriggers	Radius	Extension width of outriggers
		Full	Minimum		Full		Full
	2.3 m and below	3,000	1,300	2.7 m and below	2,300	4.0 m and below	1,000
	2.6 m	2,550	1,050	3.2 m	1,620	5.0 m	700
	3.0 m	1,850	800	3.5 m	1,350	6.0 m	500
	3.5 m	1,350	600	4.0 m	1,050	7.0 m	400
	4.0 m	1,050	500	4.5 m	850	8.0 m	300
	4.5 m	850	400	5.0 m	700	9.0 m	250
	5.0 m	700	300	5.5 m	600	9.8 m	220
	5.37m	650	300	6.0 m	500		
				6.5 m	450		
				7.0 m	400		
				7.58m	350		
Tabla C		0.04 / 5 /					10.0 m
Table C	Lood	3.34 m / 5.8	57 m Boom		7.78 m Boom	Land	10.0 m Boom
Table C	Load		57 m Boom n width of	Load	7.78 m Boom Extension width	Load	Boom Extension width
Table C	Load Radius	Extension outrig	n width of ggers		7.78 m Boom Extension width of outriggers	Load Radius	Boom Extension width of outriggers
Table C	Radius	Extension	n width of	Load Radius	7.78 m Boom Extension width	Radius	Boom Extension width
Table C	Radius 2.3 m and below	Extension outric Full 3,000	n width of ggers Minimum 1,400	Load Radius 2.7 m and below	7.78 m Boom Extension width of outriggers Full 2,300	Radius 4.0 m and below	Boom Extension width of outriggers Full 1,000
Table C	Radius 2.3 m	Extension outric Full 3,000 3,000	n width of ggers Minimum 1,400 1,170	Load Radius 2.7 m and below 3.2 m	7.78 m Boom Extension width of outriggers Full 2,300 1,800	Radius 4.0 m and below 5.0 m	Boom Extension width of outriggers Full 1,000 800
Table C	Radius 2.3 m and below 2.5 m 3.0 m	Extension outric Full 3,000 3,000 2,050	n width of ggers Minimum 1,400 1,170 900	Load Radius 2.7 m and below	7.78 m Boom Extension width of outriggers Full 2,300 1,800 1,550	Radius 4.0 m and below	Boom Extension width of outriggers Full 1,000 800 600
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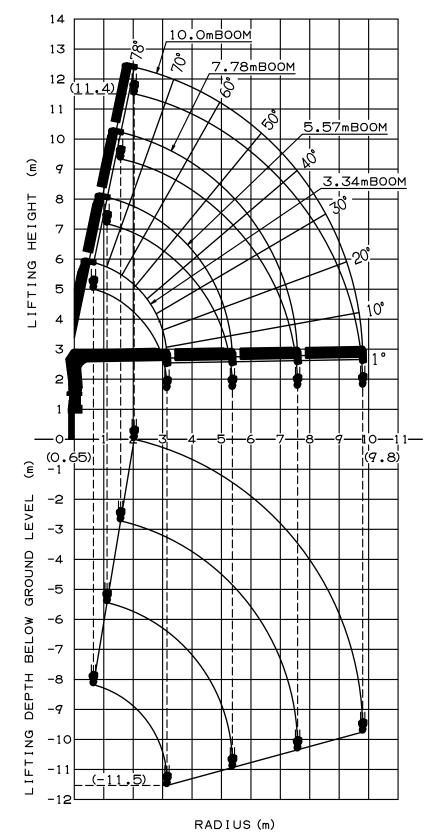
Empty Chassis Rated Capacities

Table D	Lood	3.34 m / 5.57 m Boom		Load	7.78 m Boom	Load Radius	10.0 m Boom
	Load Radius		Extension width of outriggers		Extension width of outriggers		Extension width of outriggers
		Full	Minimum		Full		Full
	2.3 m and below	3,000	1,400	2.7 m and below	2,300	4.0 m and below	1,000
	2.5 m	3,000	1,170	3.2 m	2,000	5.0 m	850
	3.0 m	2,450	900	3.5 m	1,800	6.0 m	720
	3.5 m	2,050	650	4.0 m	1,600	7.0 m	620
	4.0 m	1,750	550	4.5 m	1,450	8.0 m	550
	4.5 m	1,550	450	5.0 m	1,300	9.0 m	480
	5.0 m	1,350	350	5.5 m	1,200	9.8 m	450
	5.37m	1,250	300	6.0 m	1,100		
				6.5 m	1,000		
				7.0 m	920		
				7.58m	850		

NOTES : 1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.

- 2. Capacities in these tables include slings and similarly used load handling devices, and they must be added to the mass of the load. They don't, however, include the mass of hook block (30kg).
- 3. For boom lengths not shown, use the rated lifting capacity of next longer boom.
- 4. When outriggers are extended to middle extension width, use the rated lifting capacities for outriggers are extended to minimum extension width .
- 5. For boom lengths longer than 5.57m, extend outriggers to full extension width.
- 6. When the boom length is 7.78m, a half of the *□* mark on lateral face of the 3rd boom section is exposed out of the 2nd boom section.
- 7. Empty Chassis Rated Capacities table A ,C and D depend on the types of chassis.
- Empty Chassis Rated Capacities are shown for over-side areas and over-rear area. These capacities for over-front area may lowered depending on the types of chassis.



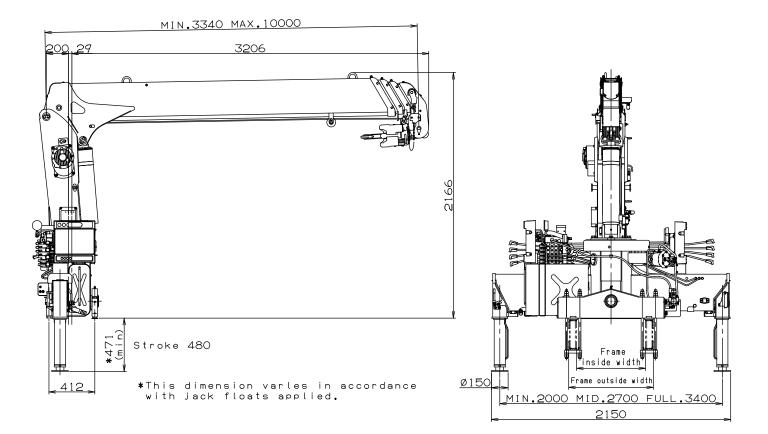


WORKING RANGE

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



GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass)	- 8,000 to 11,000 kg
P.T.O. torque	190 N-m {19.4 kgf-m} min.
P.T.O. revolution	Approx. 300 to 1,900 min ⁻¹ {rpm}
Width for crane mounting	Approx. 640 mm min.
Frame	- Weight distribution and frame strength
	should be calculated for each truck
Frame width range (inside to outside)	- Approx. 610 to 860 mm
Frame height (ground to frame top)	- Approx. 1,070 mm max.
	(Height of crane mounting base can be
	changed by combination of jack floats and
	crane bases)