

TADANO CARGO CRANE

MODEL: TM-ZE304HRS

CRANE SPECIFICATIONS

CRANE CAPACITY 3,030 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

<u>WINCH</u> 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 x length ---- 8 mm x 63 m

Breaking strength ---- 43.1 kN{4.39 tf}

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

Hook block -----2 sheaves

HOOK STOWING DEVICE Mechanically stowed beneath boom top portion

<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

RADIO CONTROLLER Model: RCS-F (Approved by NCC LP0002)

Control functions of boom telescoping, hoisting up and down, boom elevating, swing, acceleration, speed mode selection, Hook-in, Hook-out, horn and emergency stop

Frequency ----- 5 frequencies in 433 MHz band

Operating power supply

Transmitter ----- 6V DC, Dry battery R6P(SUM-3) x 4

Control unit ----- 24V DC, Vehicle battery

Transmitter mass ---- Approx. 569 g (includes batteries)

<u>SAFETY DEVICES</u> 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

Emergency stop switch on radio controller

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

l and	3.34 m / 5.57 m Boom		- Load Radius	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	3,030	1,430	2.7 m and below	2,330	4.0 m and below	1,030
2.5 m	3,030	1,200	3.2 m	2,030	5.0 m	880
3.0 m	2,480	930	3.5 m	1,830	6.0 m	750
3.5 m	2,080	680	4.0 m	1,630	7.0 m	650
4.0 m	1,780	580	4.5 m	1,480	8.0 m	580
4.5 m	1,580	480	5.0 m	1,330	9.0 m	510
5.0 m	1,380	380	5.5 m	1,230	9.8 m	480
5.37m	1.280	330	6.0 m	1,130		
			6.5 m	1,030		
			7.0 m	950		
			7.58m	880		

- NOTES: 1. The mass of hook block (30kg), slings and all similarly used load handling devices must be added to the mass of the load.
 - 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.

Empty Chassis Rated Capacities

Table A

Land	3.34 m / 5.57 m Boom		- Load Radius	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	3,030	1,330	2.7 m and below	2,330	4.0 m and below	1,030
2.6 m	2,580	1,080	3.2 m	1,650	5.0 m	730
3.0 m	1,880	830	3.5 m	1,380	6.0 m	530
3.5 m	1,380	630	4.0 m	1,080	7.0 m	430
4.0 m	1,080	530	4.5 m	880	8.0 m	330
4.5 m	880	430	5.0 m	730	9.0 m	280
5.0 m	730	330	5.5 m	630	9.8 m	250
5.37m	680	330	6.0 m	530		
			6.5 m	480		
			7.0 m	430		
			7.58m	380		

Table C

Load Radius	3.34 m / 5.57 m Boom		- Load Radius	7.78 m Boom	Load Radius	10.0 m Boom
	Extension width of outriggers			Extension width of outriggers		Extension width of outriggers
	Full	Minimum		Full		Full
2.3 m and below	3,030	1,430	2.7 m and below	2,330	4.0 m and below	1,030
2.5 m	3,030	1,200	3.2 m	1,830	5.0 m	830
3.0 m	2,080	930	3.5 m	1,580	6.0 m	630
3.5 m	1,580	680	4.0 m	1,230	7.0 m	480
4.0 m	1,230	580	4.5 m	980	8.0 m	400
4.5 m	980	480	5.0 m	830	9.0 m	350
5.0 m	830	380	5.5 m	730	9.8 m	330
5.37m	780	330	6.0 m	630		

<u>6.5 m</u> 7.0 m

7.58m

500

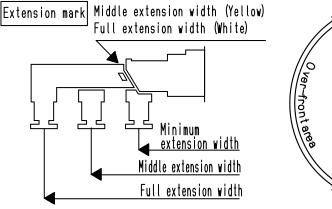
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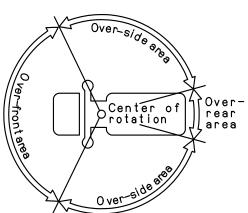
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Table D

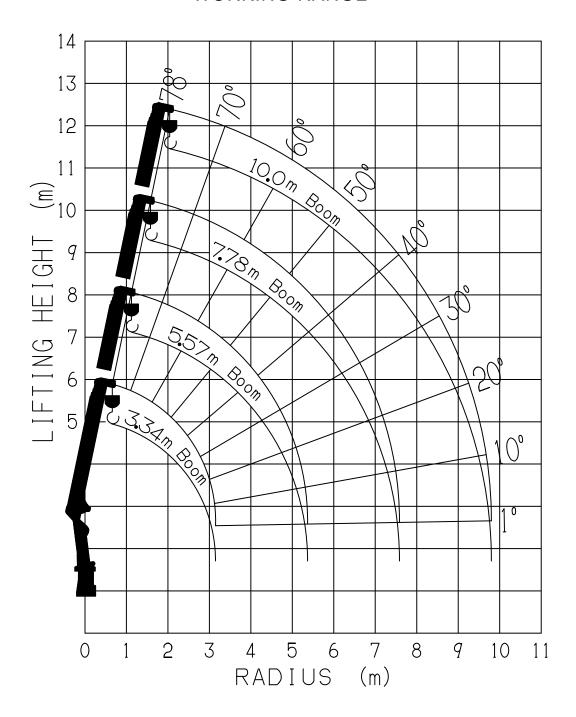
	3.34 m / 5.57 m Boom Extension width of outriggers		Load Radius	7.78 m	Load Radius	10.0 m
Load Radius				Boom Extension width		Boom Extension width
				of outriggers		of outriggers
	Full	Minimum		Full		Full
2.3 m and below	3,030	1,430	2.7 m and below	2,330	4.0 m and below	1,030
2.5 m	3,030	1,200	3.2 m	2,030	5.0 m	880
3.0 m	2,480	930	3.5 m	1,830	6.0 m	750
3.5 m	2,080	680	4.0 m	1,630	7.0 m	650
4.0 m	1,780	580	4.5 m	1,480	8.0 m	580
4.5 m	1,580	480	5.0 m	1,330	9.0 m	510
5.0 m	1,380	380	5.5 m	1,230	9.8 m	480
5.37m	1,280	330	6.0 m	1,130		
			6.5 m	1,030		
			7.0 m	950		
			7.58m	880		

- NOTES: 1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.
 - 2. The mass of hook block (30 kg), slings and all similarly used load handling devices must be added to the mass of load.
 - 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 7.78 m, 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.
 - 8. 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.





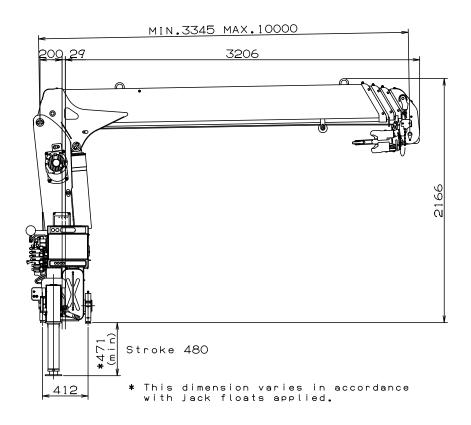
WORKING RANGE

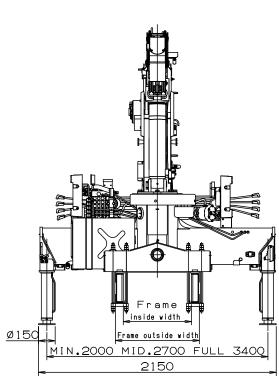


NOTE:

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