

TADANO CARGO CRANE

MODEL: TM-ZE305MH

CRANE SPECIFICATIONS

CRANE CAPACITY 3,030 kg at 2.3 m (4-part lines)

BOOM Five-sectioned, fully powered partly synchronized telescoping

boom of pentagonal box construction

Retracted length ----- 3.52 m Extended length -----12.3 m

Extending speed ----- 8.78 m / 18 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 and cable follower

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

Construction ----- $7 \times 7 + 6 \times WS$ (26)

Hook block -----2 sheaves

HOOK STOWING DEVICE Mechanically stowed beneath boom top portion

Specifications are subject to change without notice.

<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⁻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

Max. 3,400 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. 31 L

SAFETY DEVICES Load meter

Load indicator

Over-winding alarm Anti-two-block device P.T.O indicator lamp Hook safety latch

Hydraulic safety valves, check valves and holding valves

Level gauge

<u>CRANE MASS</u> Approx. 1,375 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

Load Radius	3.52 m / 5.75 m Boom	Load Radius	7.95 m Boom	Load Radius	10.1 m Boom	Load Radius	12.3 m Boom
2.3 m and below	3,030	2.7 m and below	2,330	4.0 m and below	1,030	4.5 m and below	760
2.5 m	2,830	3.0 m	2,130	5.0 m	880	5.0 m	700
3.0 m	2,430	3.5 m	1,830	6.0 m	730	6.0 m	580
3.5 m	2,030	4.0 m	1,630	7.0 m	630	7.0 m	500
4.0 m	1,730	4.5 m	1,480	8.0 m	580	8.0 m	430
4.5 m	1,480	5.0 m	1,330	9.0 m	510	9.0 m	380
5.0 m	1,330	5.5 m	1,150	9.92 m	480	10.0 m	330
5.55 m	1,150	6.0 m	1,050			11.0 m	300
		6.5 m	950			12.1 m	280
		7.0 m	850				
		7.75 m	730				

- NOTES: 1. The mass of hook block (30kg), slings and all similarly used load lifting 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

	3.52 m / 5.75 m Boom			7.95 m Boom		10.1 m Boom		12.3 m Boom
Load Radius	Extension width of outriggers		Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum
2.3 m and below	3,030	1,280	2.7 m and below	2,230	4.0 m and below	1,030	4.5 m and below	760
2.5 m	2,780	1,180	3.0 m	1,850	5.0 m	650	5.0 m	630
3.0 m	1,880	780	3.5 m	1,330	6.0 m	480	6.0 m	480
3.5 m	1,330	630	4.0 m	1,030	7.0 m	380	7.0 m	380
4.0 m	1,030	480	4.5 m	830	8.0 m	300	8.0 m	300
4.5 m	830	380	5.0 m	680	9.0 m	230	9.0 m	230
5.0 m	680	330	5.5 m	580	9.92 m	200	10.0 m	200
5.55 m	580	280	6.0 m	480			11.0 m	180
			6.5 m	430			12.1 m	130
			7.0 m	380				
			7.75 m	330				

Table C

Table C								
	3.52 m / 5.75 m Boom			7.95 m Boom		10.1 m Boom		12.3 m Boom
Load Radius	Extension of outr	on width riggers	Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum
2.3 m and below	3,030	1,380	2.7 m and below	2,230	4.0 m and below	1,030	4.5 m and below	760
2.5 m	2,780	1,230	3.0 m	2,030	5.0 m	780	5.0 m	630
3.0 m	2,080	880	3.5 m	1,530	6.0 m	580	6.0 m	480
3.5 m	1,530	680	4.0 m	1,180	7.0 m	430	7.0 m	400
4.0 m	1,180	530	4.5 m	980	8.0 m	350	8.0 m	350
4.5 m	980	430	5.0 m	780	9.0 m	300	9.0 m	280
5.0 m	830	380	5.5 m	680	9.92 m	280	10.0 m	250
5.55 m	680	280	6.0 m	580			11.0 m	230
			6.5 m	480			12.1 m	200
			7.0 m	430				

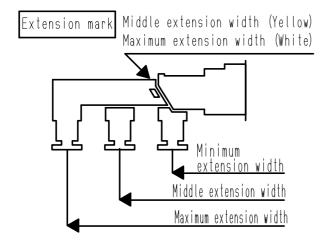
380

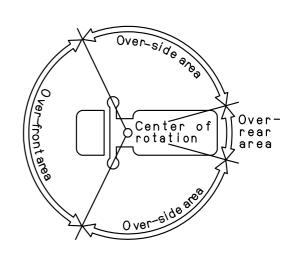
7.75 m

Table D

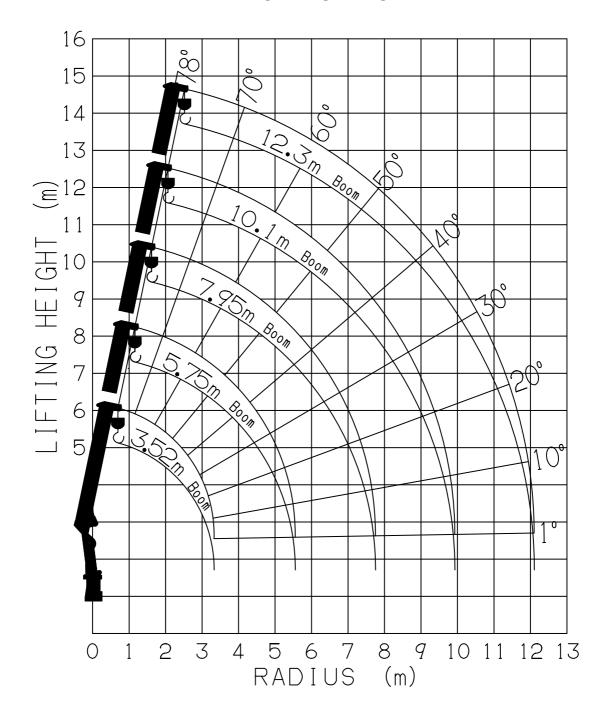
Table D								
	3.52 m / 5.75 m Boom			7.95 m Boom		10.1 m Boom		12.3 m Boom
Load Radius		n width of ggers	Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers	Load Radius	Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum
2.3 m and below	3,030	1,380	2.7 m and below	2,330	4.0 m and below	1,030	4.5 m and below	760
2.5 m	2,830	1,230	3.0 m	2,130	5.0 m	880	5.0 m	700
3.0 m	2,430	880	3.5 m	1,830	6.0 m	730	6.0 m	580
3.5 m	2,030	680	4.0 m	1,630	7.0 m	630	7.0 m	500
4.0 m	1,730	530	4.5 m	1,480	8.0 m	580	8.0 m	430
4.5 m	1,480	430	5.0 m	1,330	9.0 m	510	9.0 m	380
5.0 m	1,330	380	5.5 m	1,150	9.92 m	480	10.0 m	330
5.55 m	1,150	280	6.0 m	1,050			11.0 m	300
			6.5 m	950			12.1 m	280
			7.0 m	850				
			7.75 m	730				

- 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 lifting devices must be added to the mass of the 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 5.75 m, extend outriggers to maximum extension width.
 - 6. When the boom length is 10.1 m, a half of the $\ \ \ \ \ \$ mark on lateral face of the 4th boom section is exposed out of the 3rd 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.



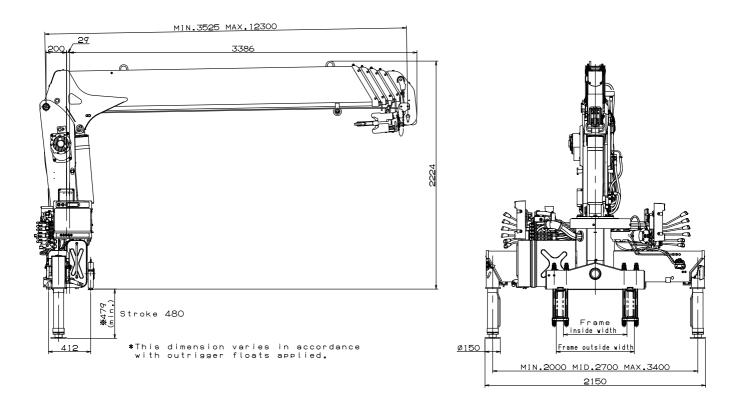


WORKING RANGE



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

Gross vehicle mass (including crane mass) 8,00	00 to 14,500 kg
P.T.O. torque190	N-m {19.4 kgf-m} min.
P.T.O. revolution App	prox. 300 to 1,900 min ⁻¹ {rpm}
Width for crane mounting App	orox. 640 mm min.
FrameWei	ight distribution and frame strength
sho	ould be calculated for each truck
Frame width range (inside to outside) App	prox. 610 to 860 mm
Frame height (ground to frame top) App	orox. 1,070 mm max.
(He	ight of crane mounting base can be
cha	nged by combination of jack floats and
crar	ne bases)