

TADANO CARGO CRANE

MODEL : **TM-ZE295MH** ----- with hook stowing device

CRANE SPECIFICATIONS

<u>CRANE CAPACITY</u>	3,030 kg at 1.4 m (4-part lines)
<u>BOOM</u>	Five-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction Retracted length ----- 3.13 m Extended length ----- 10.8 m Extending speed ----- 7.67 m / 15.5 s Elevation ----- Elevated by a double-acting hydraulic cylinder Elevating speed ----- 1° to 76° / 6 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 ----- 68 m/min (at 4th layer) Wire rope Diameter x length --- 8 mm x 66 m Breaking strength ---43.1 kN {4.39 tf} Construction ----- 7 x 7 + 6 x WS(26) Hook block ----- 2 sheaves
<u>HOOK STOWING DEVICE</u>	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}
<u>OUTRIGGERS</u>	Manually extended sliders and hydraulically extended jacks Integral with crane frame Power up and down Extension width ----- Min. 1,720 mm Mid. 2,900 mm, 2,400 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. 22 L
<u>SAFETY DEVICES</u>	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. 1,125 kg (includes standardized mounting parts)

NOTE : Operating speeds of the crane are guaranteed under the condition that the pump delivery is 53 L/min.

RATED LIFTING CAPACITIES IN KILOGRAMS

Crane Strength Rated Capacities

Load Radius	3.13 m / 5.07 m Boom	Load Radius	7.0 m Boom	Load Radius	8.9 m Boom	Load Radius	10.8 m Boom
1.45 m and below	3,030	2.2 m and below	1,880	3.0 m and below	980	4.0 m and below	580
2.0 m	2,180	2.5 m	1,680	3.5 m	900	4.5 m	530
2.5 m	1,730	3.0 m	1,430	4.0 m	830	5.0 m	480
3.0 m	1,430	3.5 m	1,180	5.0 m	680	6.0 m	400
3.5 m	1,230	4.0 m	1,030	6.0 m	580	7.0 m	330
4.0 m	1,080	4.5 m	880	7.0 m	480	8.0 m	280
4.5 m	930	5.0 m	780	8.0 m	380	9.0 m	250
4.87m	830	5.5 m	680	8.7 m	350	10.0m	230
		6.0 m	630			10.6m	210
		6.8 m	530				

- 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

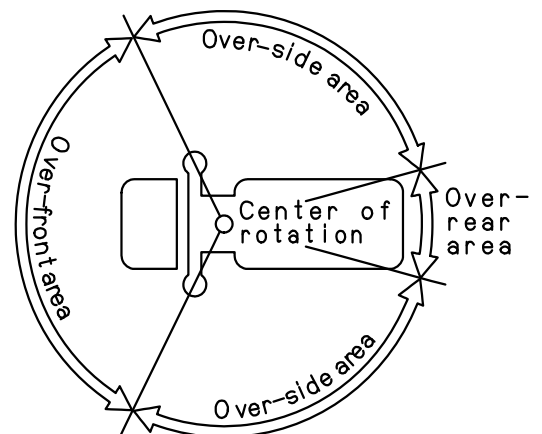
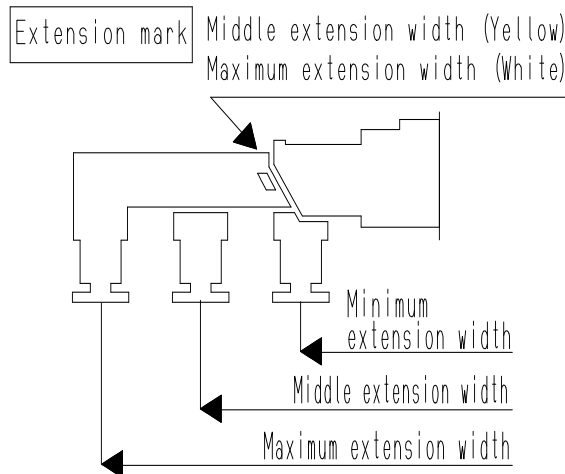
Table C

Load Radius	3.13 m / 5.07 m Boom		Load Radius	7.0 m Boom	Load Radius	8.9 m Boom	Load Radius	10.8 m Boom
	Extension width of outriggers			Extension width of outriggers		Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum
1.4 m and below	3,030	1,580	2.2 m and below	1,730	3.0 m and below	930	4.0 m and below	480
2.0 m	2,130	980	2.5 m	1,530	3.5 m	830	4.5 m	430
2.5 m	1,730	630	3.0 m	1,280	4.0 m	730	5.0 m	380
3.0 m	1,330	480	3.5 m	980	5.0 m	480	6.0 m	300
3.5 m	980	330	4.0 m	780	6.0 m	380	7.0 m	260
4.0 m	780	280	4.5 m	630	7.0 m	280	8.0 m	230
4.5 m	630	230	5.0 m	480	8.0 m	230	9.0 m	200
4.87m	550	200	5.5 m	430	8.7 m	200	10.0m	180
			6.0 m	380			10.6m	150
			6.8 m	300				

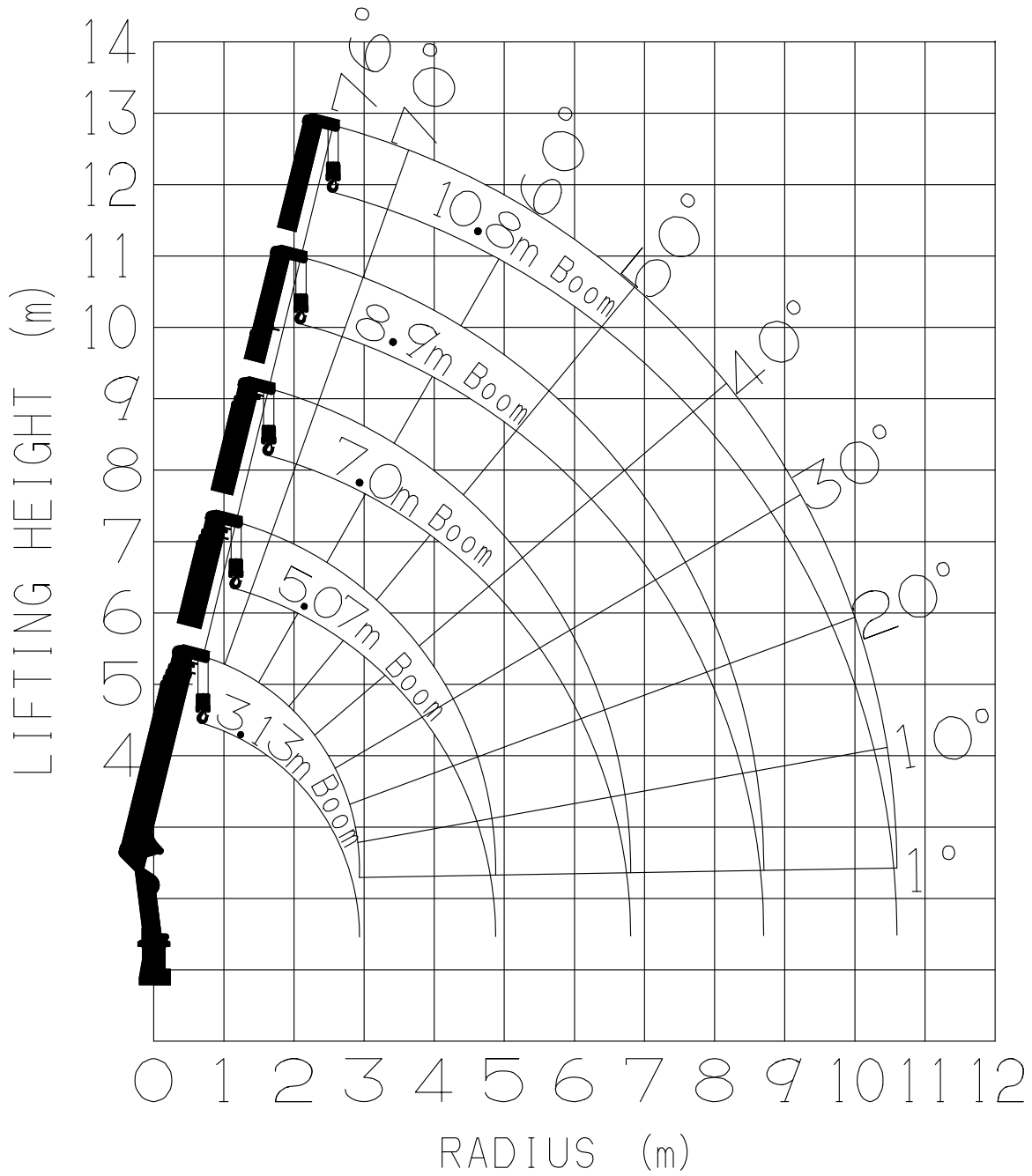
Table D

Load Radius	3.13 m / 5.07 m Boom		Load Radius	7.0 m Boom	Load Radius	8.9 m Boom	Load Radius	10.8 m Boom
	Extension width of outriggers			Extension width of outriggers		Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum
1.45 m and below	3,030	1,580	2.2 m and below	1,880	3.0 m and below	980	4.0 m and below	580
2.0 m	2,180	980	2.5 m	1,680	3.5 m	900	4.5 m	530
2.5 m	1,730	630	3.0 m	1,430	4.0 m	830	5.0 m	480
3.0 m	1,430	480	3.5 m	1,180	5.0 m	680	6.0 m	400
3.5 m	1,230	330	4.0 m	1,030	6.0 m	580	7.0 m	330
4.0 m	1,080	280	4.5 m	880	7.0 m	480	8.0 m	280
4.5 m	930	230	5.0 m	780	8.0 m	380	9.0 m	250
4.87m	830	200	5.5 m	680	8.7 m	350	10.0m	230
			6.0 m	630			10.6m	210
			6.8 m	530				

- 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 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 5.07m, extend outriggers to maximum extension width.
 6. When the boom length is 8.9 m, a half of the \sphericalangle mark on lateral face of the 4th boom section is exposed out of the 3rd boom section.
 7. Empty Chassis Rated Capacities table 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 be lowered depending on the types of chassis.

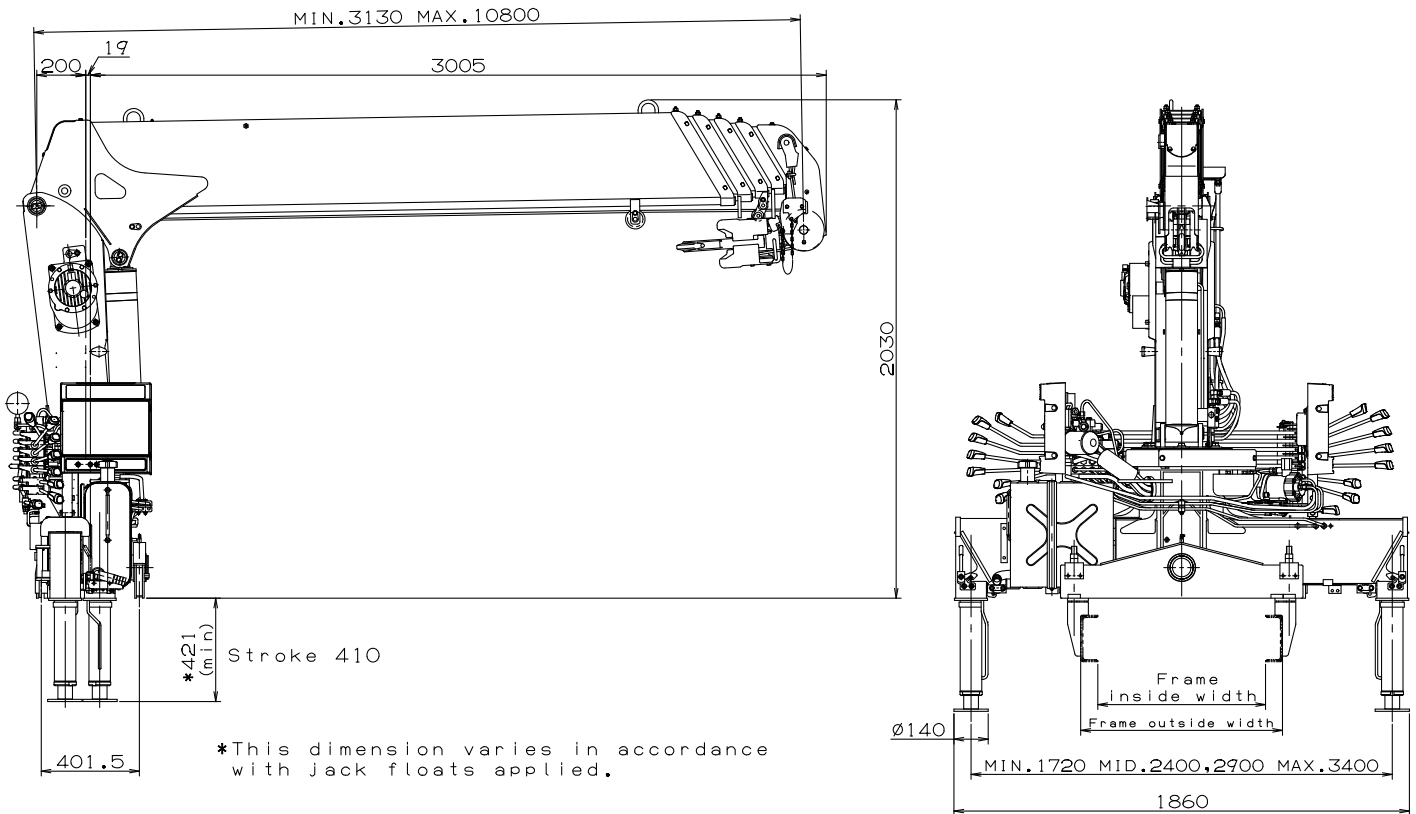


WORKING RANGE



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) ----- 4,500 to 8,000 kg

P.T.O. torque ----- 140 N-m {14.3 kgf-m} min.

P.T.O. revolution ----- Approx. 300 to 1,700 min⁻¹ {rpm}

Width for crane mounting ----- Approx. 605 mm min.

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

Frame width range (inside to outside) ----- Approx. 680 to 860 mm

Frame height (ground to frame top) ----- Approx. 1,010 mm max.

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