TADANO

SPEC. SHEET No. TM-30Z-6-03457/R-01
DATE May, 2020

TADANO CARGO CRANE

MODEL : TM-ZE306HS

CRANE SPECIFICATIONS

CRANE CAPACITY	3,000 kg at 2.4 m (4-part lines)
BOOM	Six-sectioned, fully powered partly synchronized telescoping boom of heptagonal box construction Retracted length --------- 3.65 m Extended length ---------- 14.6 m Extending speed --------- 10.95 m / 19 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 and cable follower Single line pull ---------- 7.35 kN{750 kgf} Single line speed -------- 76 m/min (at 4th layer) Wire rope Diameter x length ------ 8 mm x 85 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

Specifications are subject to change without notice.

SLEWING
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

REAR OUTRIGGERS (Locally provided)
Maximum extension width ---- Not less than 2,800 mm

HYDRAULICS
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
AML(Automatic Moment Limiter)
Load indication
Load moment ratio to rated load indication
Warning alarm
Over load limiter (stop)
WHL(Working Height Limiter)
Load meter
Load indicator
Over-unwinding prevention
Terminal for emergency stop switch
Over-winding alarm
Anti-two-block device
Hook safety latch
Hydraulic safety valves, check valves and holding valves
Level gauge

CRANE MASS
Approx. 1,470 kg (with standardized mounting parts included)

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	3.65 m / 5.87 m Boom	Load Radius	8.07 m Boom	Load Radius	10.25m Boom	Load Radius	12.4 m Boom	Load Radius	14.6 m Boom
2.4 m and below	3,000	2.7 m and below	2,300	4.0 m and below	1,100	5.0 m and below	850	4.9 m and below	400
2.5 m	2,800	3.0 m	2,170	5.0 m	1,020	6.0 m	700	6.0 m	350
3.0 m	2,350	3.5 m	1,900	6.0 m	850	7.0 m	600	7.0 m	300
3.5 m	1,950	4.0 m	1,670	7.0 m	720	8.0 m	500	8.0 m	270
4.0 m	1,670	4.5 m	1,450	8.0 m	620	9.0 m	450	9.0 m	250
4.5 m	1,450	5.0 m	1,270	9.0 m	570	10.0 m	370	10.0 m	230
5.0 m	1,270	5.5 m	1,120	10.05m	470	11.0 m	350	11.0 m	210
5.67m	1,070	6.0 m	1,000			12.2 m	300	12.0 m	190
		6.5 m	900					13.0 m	170
		7.0 m	800					14.4 m	150
		7.87m	670						

NOTES : 1. Capacities in above tables include slings and similarly used load lifting 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, the types of the chassis and extension width of outriggers.

Empty Chassis Rated Capacities

Table A

Load Radius	3.65 m / 5.87 m Boom		Load Radius	8.07 m Boom	Load Radius	10.25m Boom	Load Radius	12.4 m Boom	Load Radius	14.6 m Boom
	Extension width of outriggers			Extension width of outriggers		Extension width of outriggers		Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum		Maximum
2.4 m and below	3,000	1,300	2.7 m and below	2,300	4.0 m and below	1,100	5.0 m and below	800	4.9 m and below	400
2.5 m	2,750	1,200	3.0 m	2,050	5.0 m	800	6.0 m	550	6.0 m	350
3.0 m	2,150	850	3.5 m	1,650	6.0 m	550	7.0 m	400	7.0 m	300
3.5 m	1,700	650	4.0 m	1,320	7.0 m	400	8.0 m	300	8.0 m	250
4.0 m	1,320	500	4.5 m	1,050	8.0 m	300	9.0 m	250	9.0 m	220
4.5 m	1,050	400	5.0 m	850	9.0 m	250	10.0 m	190	10.0 m	190
5.0 m	850	300	5.5 m	670	10.05m	200	11.0 m	150	11.0 m	150
5.67m	650	220	6.0 m	550			12.2 m	120	12.0 m	120
			6.5 m	470					13.0 m	100
			7.0 m	400					14.4 m	70
			7.87m	320						

Table C

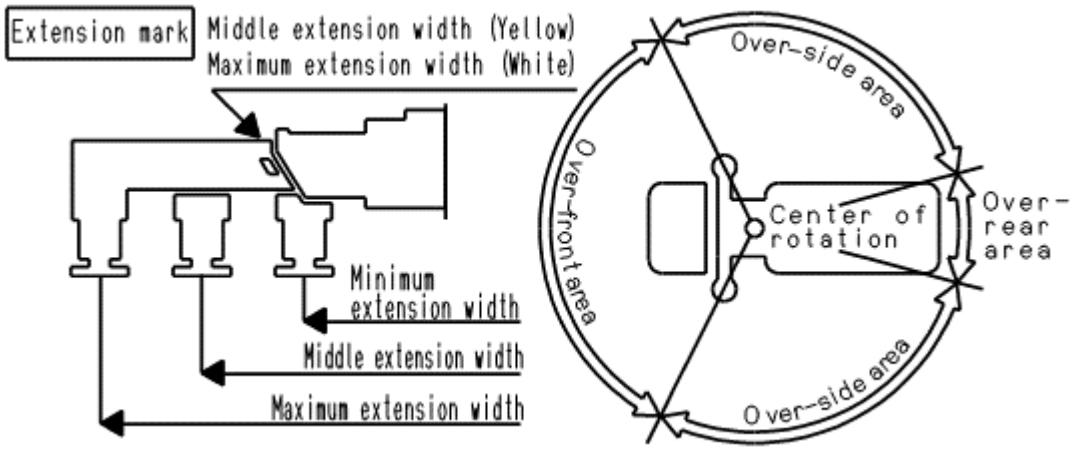
Load Radius	3.65 m / 5.87 m Boom		Load Radius	8.07 m Boom	Load Radius	10.25m Boom	Load Radius	12.4 m Boom	Load Radius	14.6 m Boom
	Extension width of outriggers			Extension width of outriggers		Extension width of outriggers		Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum		Maximum
2.4 m and below	3,000	1,550	2.7 m and below	2,300	4.0 m and below	1,100	5.0 m and below	850	4.9 m and below	400
2.5 m	2,800	1,450	3.0 m	2,100	5.0 m	900	6.0 m	700	6.0 m	350
3.0 m	2,350	1,020	3.5 m	1,800	6.0 m	750	7.0 m	550	7.0 m	300
3.5 m	1,950	750	4.0 m	1,500	7.0 m	600	8.0 m	450	8.0 m	270
4.0 m	1,620	570	4.5 m	1,250	8.0 m	450	9.0 m	350	9.0 m	250
4.5 m	1,350	450	5.0 m	1,050	9.0 m	370	10.0 m	270	10.0 m	230
5.0 m	1,100	350	5.5 m	900	10.05m	300	11.0 m	220	11.0 m	210
5.67m	900	250	6.0 m	770			12.2 m	200	12.0 m	190
			6.5 m	670					13.0 m	170
			7.0 m	600					14.4 m	150
			7.87m	500						

Table D

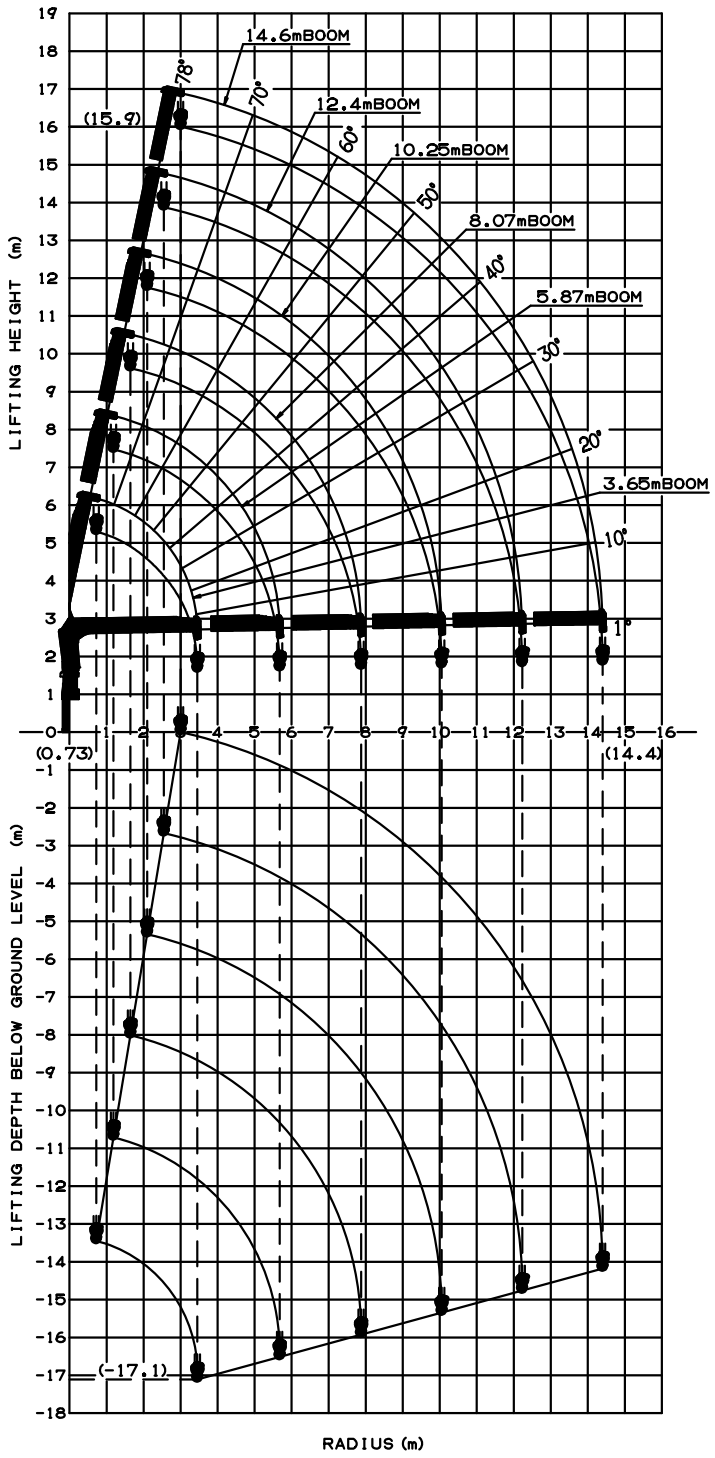
Load Radius	3.65 m / 5.87 m Boom		Load Radius	8.07 m Boom	Load Radius	10.25m Boom	Load Radius	12.4 m Boom	Load Radius	14.6 m Boom
	Extension width of outriggers			Extension width of outriggers		Extension width of outriggers		Extension width of outriggers		Extension width of outriggers
	Maximum	Minimum		Maximum		Maximum		Maximum		Maximum
2.4 m and below	3,000	1,550	2.7 m and below	2,300	4.0 m and below	1,100	5.0 m and below	850	4.9 m and below	400
2.5 m	2,800	1,450	3.0 m	2,170	5.0 m	1,020	6.0 m	700	6.0 m	350
3.0 m	2,350	1,020	3.5 m	1,900	6.0 m	850	7.0 m	600	7.0 m	300
3.5 m	1,950	750	4.0 m	1,670	7.0 m	720	8.0 m	500	8.0 m	270
4.0 m	1,670	570	4.5 m	1,450	8.0 m	620	9.0 m	450	9.0 m	250
4.5 m	1,450	450	5.0 m	1,270	9.0 m	570	10.0 m	370	10.0 m	230
5.0 m	1,270	350	5.5 m	1,120	10.05m	470	11.0 m	350	11.0 m	210
5.67m	1,070	250	6.0 m	1,000			12.2 m	300	12.0 m	190
			6.5 m	900					13.0 m	170
			7.0 m	800					14.4 m	150
			7.87m	670						

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. When the front outriggers are extended to the middle extension width, read the capacities rated for the minimum extension width.
4. This load radius shows actual load radius which includes boom deflection.
5. If the boom length exceeds the table value even a little, the performance is limited to the performance of the next boom length.
6. For boom lengths longer than 5.87m, extend front outriggers and rear outriggers to maximum extension width.
7. When the boom length is 10.25 m, a half of the first ▱ mark on lateral face of the 4th boom section is exposed out of the 3rd boom section.
8. When the boom length is 12.4 m, a half of the second ▱ mark on lateral face of the 4th boom section is exposed out of the 3rd boom section.
9. Empty Chassis Rated Capacities table A ,C and D depend on the types of chassis.
10. 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.



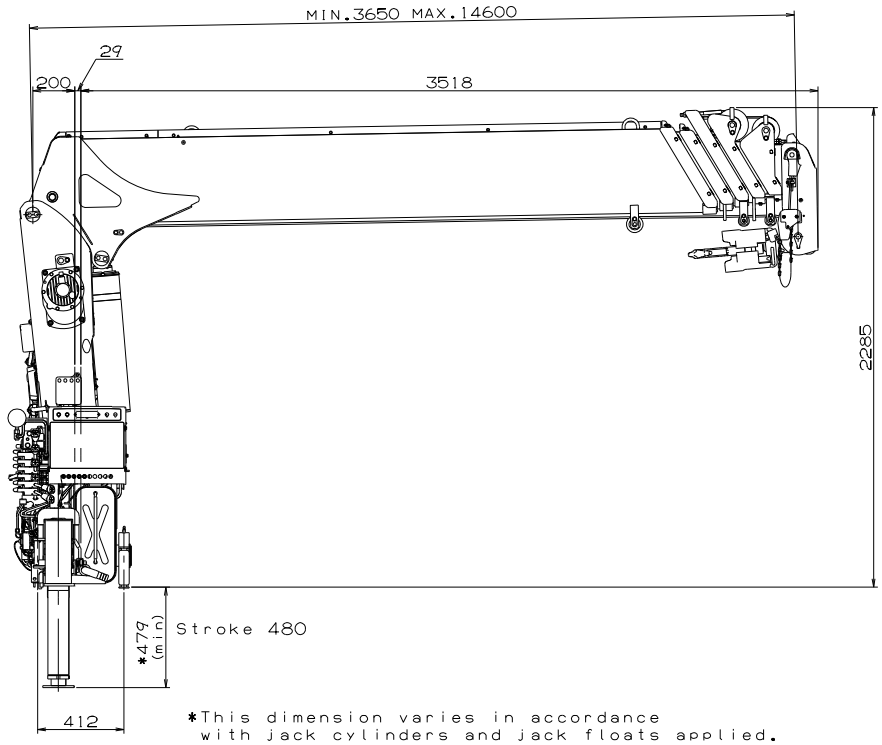
WORKING RANGE

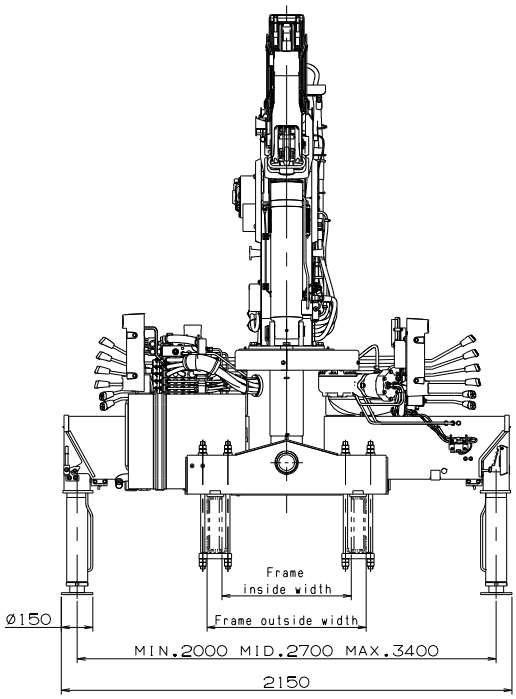


NOTE:

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 14,500 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. 1,015 mm max.
(Height of crane mounting base can be changed by combination of jack floats and crane bases)