TADANO

SPEC. SHEET No. TM-36Z-5-03453/R-02
DATE January, 2021

TADANO CARGO CRANE

MODEL : TM-ZE363HS

CRANE SPECIFICATIONS

CRANE CAPACITY — 3,000 kg at 2.7 m (4-part lines)

BOOM — Three-sectioned, fully hydraulic telescoping boom of heptagonal box construction

- Retracted length ---------- 3.28 m
- Extended length ---------- 7.71 m
- Extending speed ---------- 4.43 m / 12 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 51 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. 2,900 mm, 3,600 mm
Max. 4,200 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. 1,280 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	3.28 m / 5.51 m Boom	Load Radius	7.71 m Boom
2.4 m and below	3,000	2.7 m and below	2,370
2.7 m	3,000	3.2 m	2,050
3.0 m	2,550	3.5 m	1,900
3.5 m	2,150	4.0 m	1,650
4.0 m	1,850	4.5 m	1,500
4.5 m	1,650	5.0 m	1,350
5.0 m	1,450	5.5 m	1,250
5.31m	1,350	6.0 m	1,150
		6.5 m	1,050
		7.0 m	970
		7.51m	900

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 conditions, the types of the chassis and extension width of outriggers.

Empty Chassis Rated Capacities

Table A

Load Radius	3.28 m / 5.51 m Boom		Load Radius	7.71 m Boom
	Extension width of outriggers			Extension width of outriggers
	Maximum	Minimum		Maximum
2.4 m and below	3,000	1,350	2.7 m and below	2,370
2.7 m	3,000	1,100	3.2 m	2,050
3.0 m	2,550	900	3.5 m	1,870
3.5 m	2,050	700	4.0 m	1,570
4.0 m	1,570	550	4.5 m	1,300
4.5 m	1,300	450	5.0 m	1,070
5.0 m	1,070	400	5.5 m	950
5.31m	970	350	6.0 m	820
			6.5 m	720
			7.0 m	650
			7.51m	570

Table C

Load Radius	3.28 m / 5.51 m Boom		Load Radius	7.71 m Boom
	Extension width of outriggers			Extension width of outriggers
	Maximum	Minimum		Maximum
2.4 m and below	3,000	1,600	2.7 m and below	2,370
2.7 m	3,000	1,300	3.2 m	2,050
3.0 m	2,550	1,070	3.5 m	1,900
3.5 m	2,150	850	4.0 m	1,650
4.0 m	1,850	670	4.5 m	1,500
4.5 m	1,650	550	5.0 m	1,350
5.0 m	1,450	450	5.5 m	1,250
5.31m	1,320	400	6.0 m	1,120
			6.5 m	970
			7.0 m	870
			7.51m	770

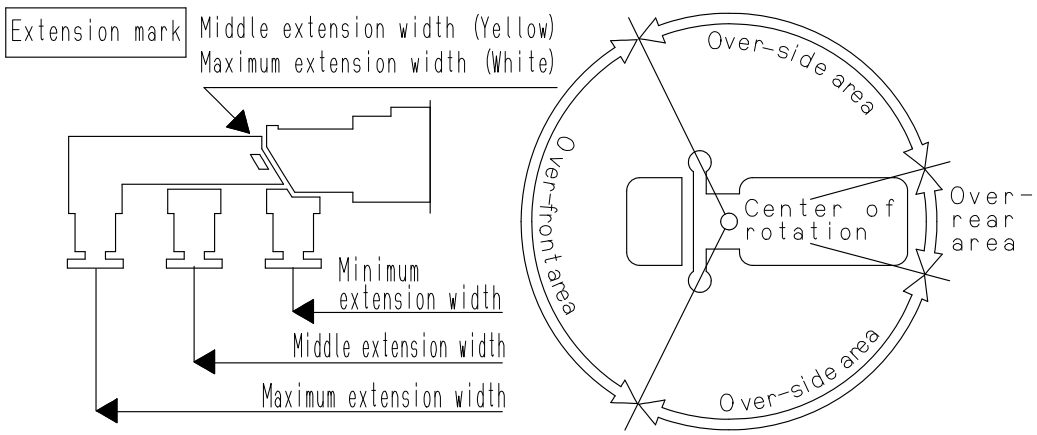
Table D

Load Radius	3.28 m / 5.51 m Boom	
	Extension width of outriggers	
	Maximum	Minimum
2.4 m and below	3,000	1,600
2.7 m	3,000	1,300
3.0 m	2,550	1,070
3.5 m	2,150	850
4.0 m	1,850	670
4.5 m	1,650	550
5.0 m	1,450	450
5.31m	1,350	400

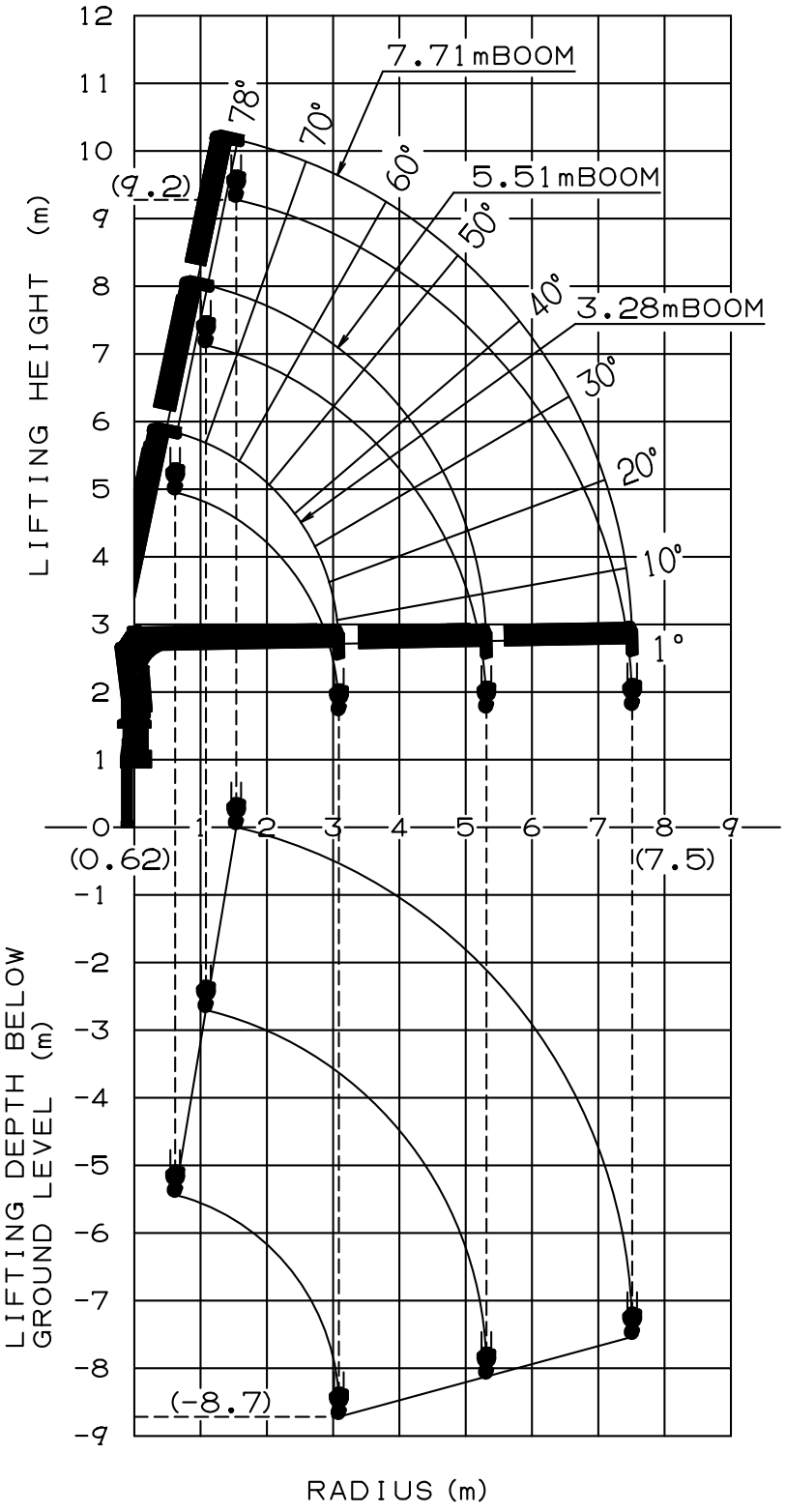
Load Radius	7.71 m Boom
	Extension width of outriggers
	Maximum
2.7 m and below	2,370
3.2 m	2,050
3.5 m	1,900
4.0 m	1,650
4.5 m	1,500
5.0 m	1,350
5.5 m	1,250
6.0 m	1,150
6.5 m	1,050
7.0 m	970
7.51m	900

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 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 5.51m, extend outriggers to maximum extension width.
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.

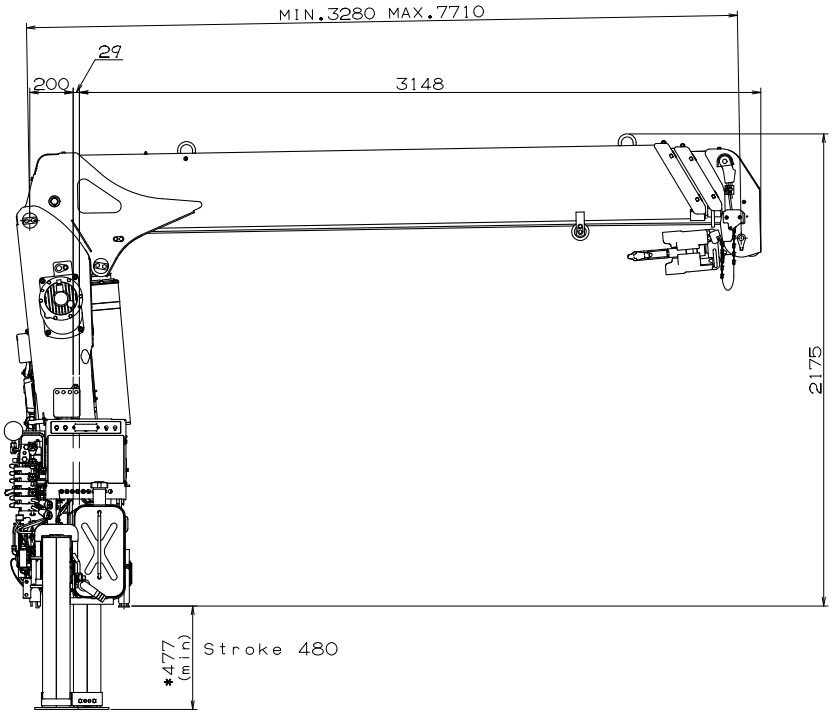


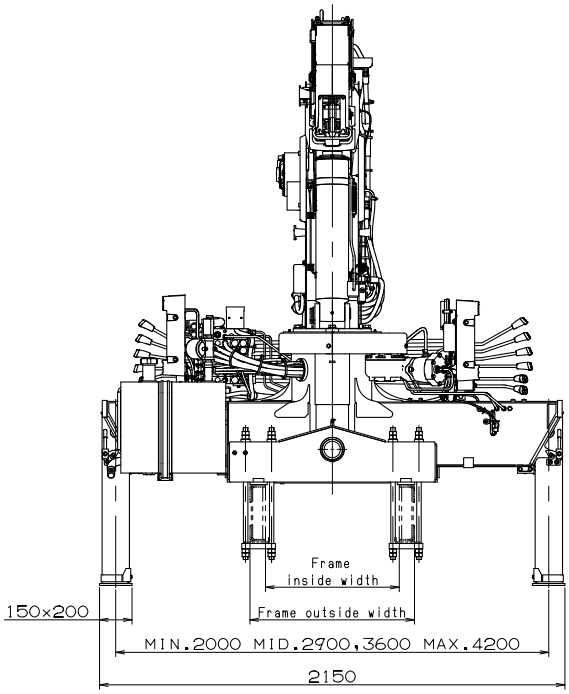
WORKING RANGE



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) ----- 8,000 to 17,000 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. 1,055 mm max.
(Height of crane mounting base can be changed by combination of jack floats and crane bases)