SPEC. SHEET No. TM-60Z-4-542/R-01
DATE December, 2011

TADANO CARGO CRANE

MODEL : TM-ZR603G(HS)

CRANE SPECIFICATIONS

MAXIMUM LIFTING CAPACITY 6,000 kg at 2.4 m (4-part lines)

CRANE CAPACITY 4,840 kg at 3.1 m (4-part lines)

BOOM Three-sectioned, fully hydraulic telescoping boom

- Retracted length ---------- 4.20 m
- Extended length ---------- 9.50 m
- Extending speed ---------- 5.3 m / 17 s
- Elevation ---------- Elevated by a double-acting hydraulic cylinder
- Elevating speed ---------- 1^{o} to 82^{o} / 24 s
- Boom point ---------- 2 sheaves

WINCH Hydraulic motor driven Spur gear speed reduction, provided with mechanical brake

- Single line pull ---------- 14.72 kN {1,500 kgf}
- Single line speed ---------- 64 m/min (at 4th layer)
- Wire rope
  - Diameter x length --------- 10 mm x 63 m
  - Breaking strength --------- 73.5 kN {7.5 tf}
  - Construction ---------- 7 x 7 + 6 x Fi(29)
- Hook block ---------- 2 sheaves

HOOK STOWING DEVICE Mechanically stowed beneath boom top portion

Specifications are subject to change without notice.

SWING	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	Hydraulically extended sliders and hydraulically extended jacks
	Integral with crane frame Power up and down
	Extended width ---------- Min. 2.25 m
	Mid. 3.10 m
	Max.3.90 m
HYDRAULICS	Hydraulic pump ---------- Tandem 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. 90 L
SAFETY DEVICES	AML(Automatic Moment Limiter)
	Load indication
	Load moment ratio to rated load indication
	Warning alarm
	Over load limiter
	WHL(Working Height Limiter)
	Load indicator
	Over-unwinding prevention
	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. 2,453 kg (crane bare)

NOTE :Operating speeds of the crane are guaranteed under the condition that the pump delivery is 85 L/min.

RATED LIFTING CAPACITIES IN KILOGRAMS

Empty Chassis Rated Capacities

Table A

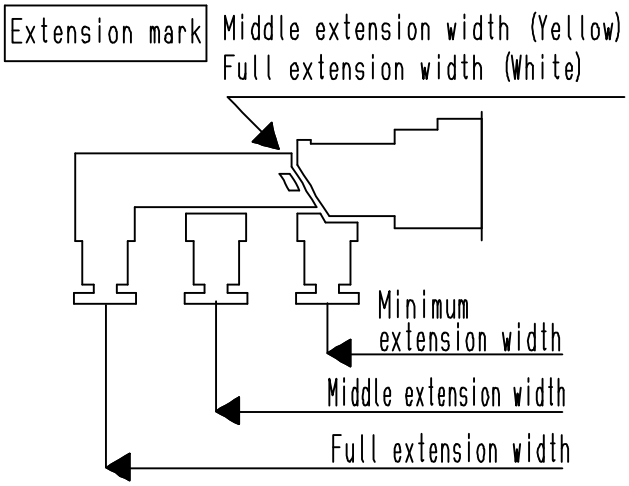
Load Radius	4.2m / 6.86m Boom		Load Radius	9.5m Boom	
	Outriggers Extended			Outriggers Extended	
	Full	Minimum		Full	Minimum
2.4 m and below	6,000	2,940	2.4 m and below	2,940	2,940
3.1 m	4,840	2,540	3.1 m	2,940	2,540
3.5 m	4,140	2,090	3.5 m	2,940	2,090
4.0 m	3,640	1,740	4.0 m	2,940	1,740
4.5 m	2,690	1,440	4.5 m	2,690	1,440
5.0 m	2,340	1,240	5.0 m	2,340	1,240
6.0 m	1,790	940	6.0 m	1,790	940
6.61 m	1,540	790	7.0 m	1,390	740
			8.0 m	1,140	590
			9.25 m	940	490

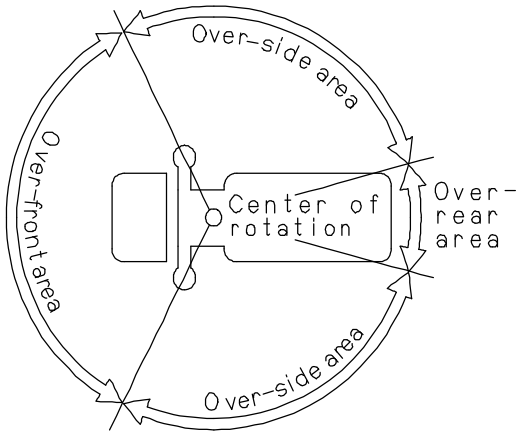
Table D

Load Radius	4.2m / 6.86m Boom		Load Radius	9.5m Boom	
	Outriggers Extended			Outriggers Extended	
	Full	Minimum		Full	Minimum
2.4 m and below	6,000	2,940	2.4 m and below	2,940	2,940
3.1 m	4,840	2,540	3.1 m	2,940	2,540
3.5 m	4,140	2,090	3.5 m	2,940	2,090
4.0 m	3,640	1,740	4.0 m	2,940	1,740
4.5 m	3,240	1,440	4.5 m	2,940	1,440
5.0 m	2,840	1,240	5.0 m	2,840	1,240
6.0 m	2,190	940	6.0 m	2,190	940
6.61 m	1,940	790	7.0 m	1,790	740
			8.0 m	1,490	590
			9.25 m	1,240	490

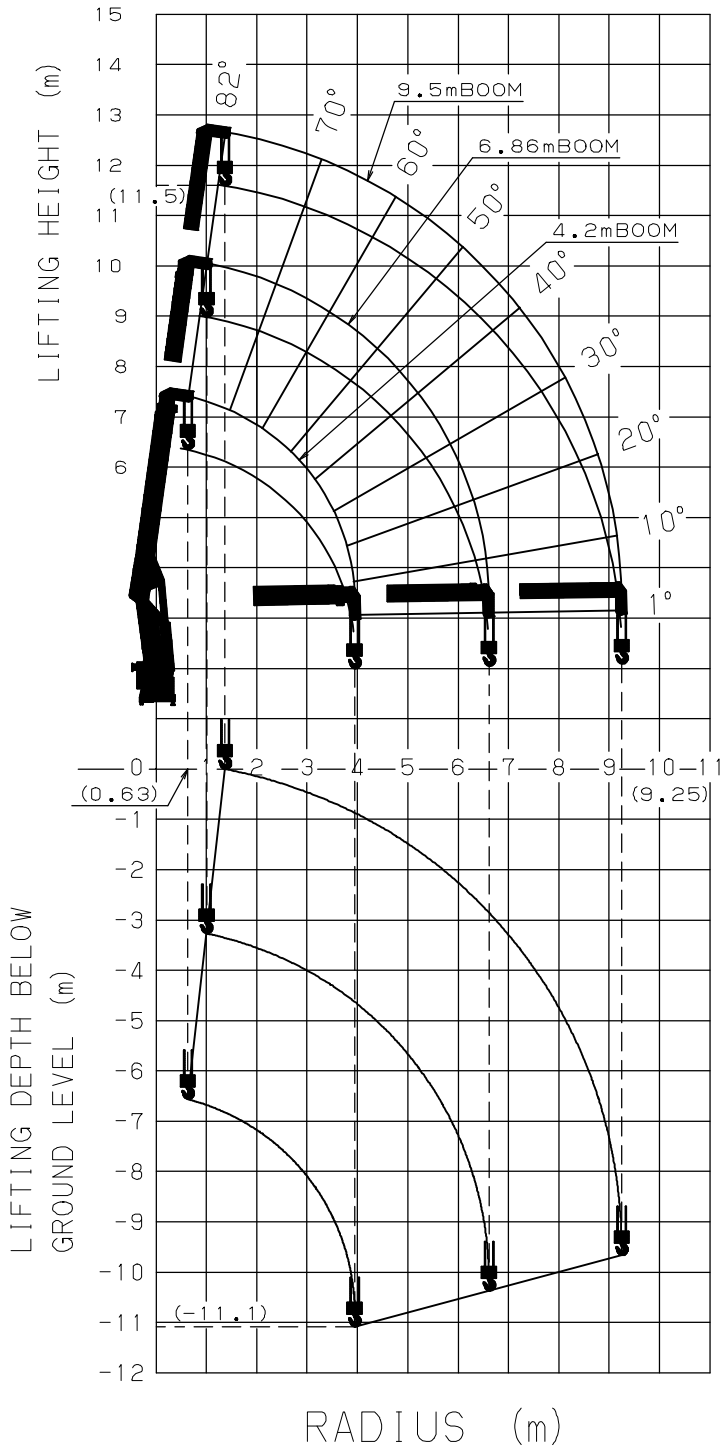
NOTES : 1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.

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 (60kg).
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. Empty Chassis Rated Capacities table A and D depend on the types of chassis.
6. 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.



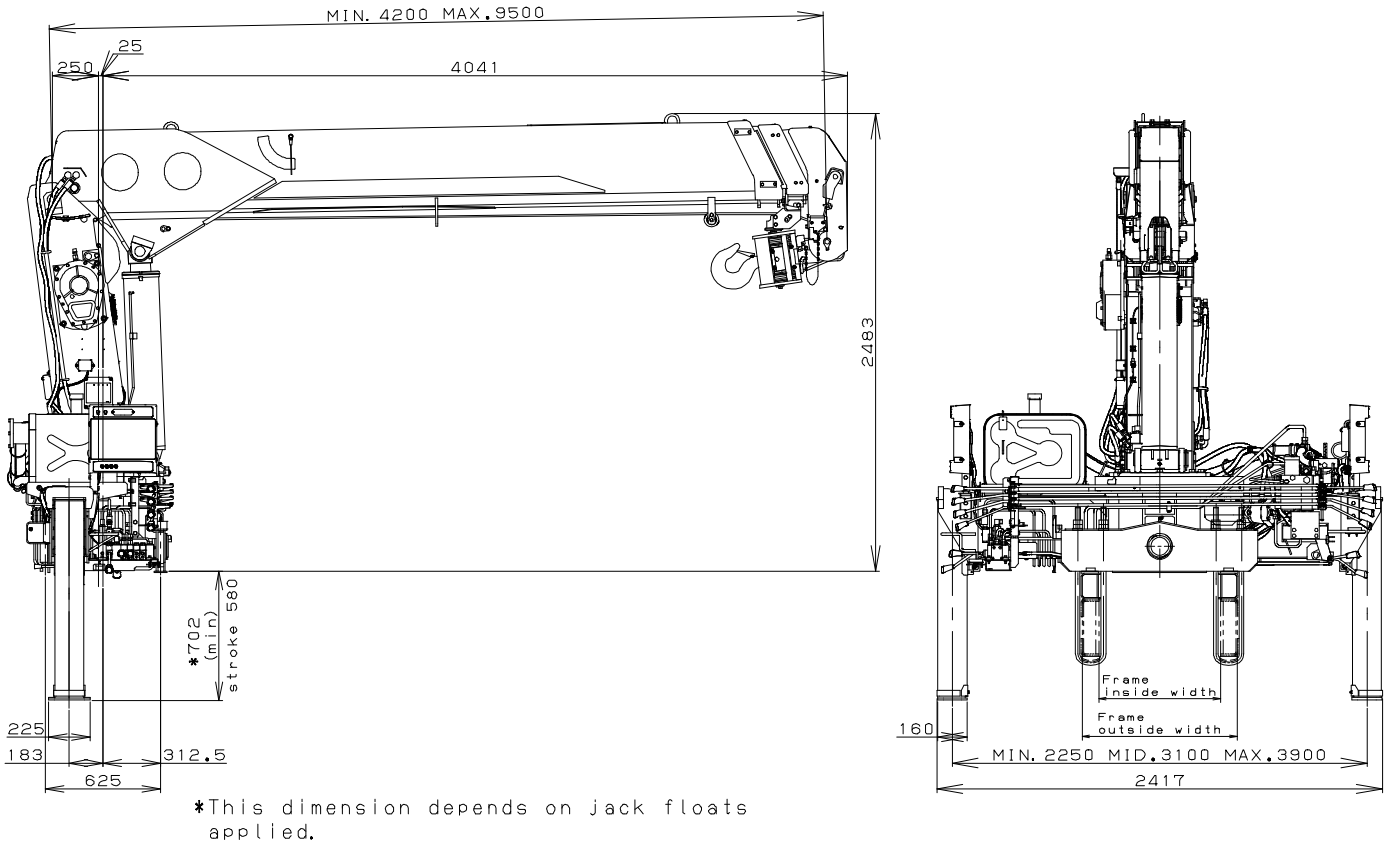


WORKING RANGE



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



*This dimension depends on jack floats applied.

GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass) --------- 20,000 to 25,000 kg
P.T.O. torque ---------- 245 N-m{25 kgf-m} min.
P.T.O. revolution ---------- Approx. 270 to 2,800 min^{-1}{rpm}
Width for crane mounting ---------- Approx. 1,000 mm min.
Frame ---------- Weight distribution and frame strength should be calculated for each truck
Frame width range (inside to outside) ---------- Approx. 576 to 953 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)