

TADANO CARGO CRANE

MODEL : **TM-ZT505**

CRANE SPECIFICATIONS

CRANE CAPACITY

5,050 kg at 2.5 m (5-part line)

BOOM

Five-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction

Retracted length ----- 3.77 m

Extended length -----13.34 m

Extending speed ----- 9.57 m / 25 s

Elevation ----- Elevated by a double-acting
Hydraulic cylinder

Elevating speed ----- 1° to 78° / 12 s

Boom point ----- 3 sheaves

WINCH

Hydraulic motor driven Spur gear speed reduction, provided with mechanical brake and cable follower

Single line pull ----- 9.90 kN{1,010 kgf}

Single line speed ----- 66 m/min.(at 4th layer)

Wire rope

Diameter x length ----- 8 mm x 97 m

Breaking strength ----- 50.1 kN{5,100 kgf}

Construction ----- 7 x 7 + 6 x WS(26)

Hook block ----- 2 sheaves

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
Extended width ----- Min. 2,200 mm
Mid. 3,000 mm
Max.3,800 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. 90 L

SAFETY DEVICES

Load meter
Load indicator
Over-winding alarm
Hook safety latch
Hydraulic safety valves, check valves and holding valves
Level gauge

CRANE MASS

Approx. 1,920 kg (except mounting parts)

NOTE : Operating speeds of the crane are guaranteed under the condition that the pump
delivery is 60 L/min.

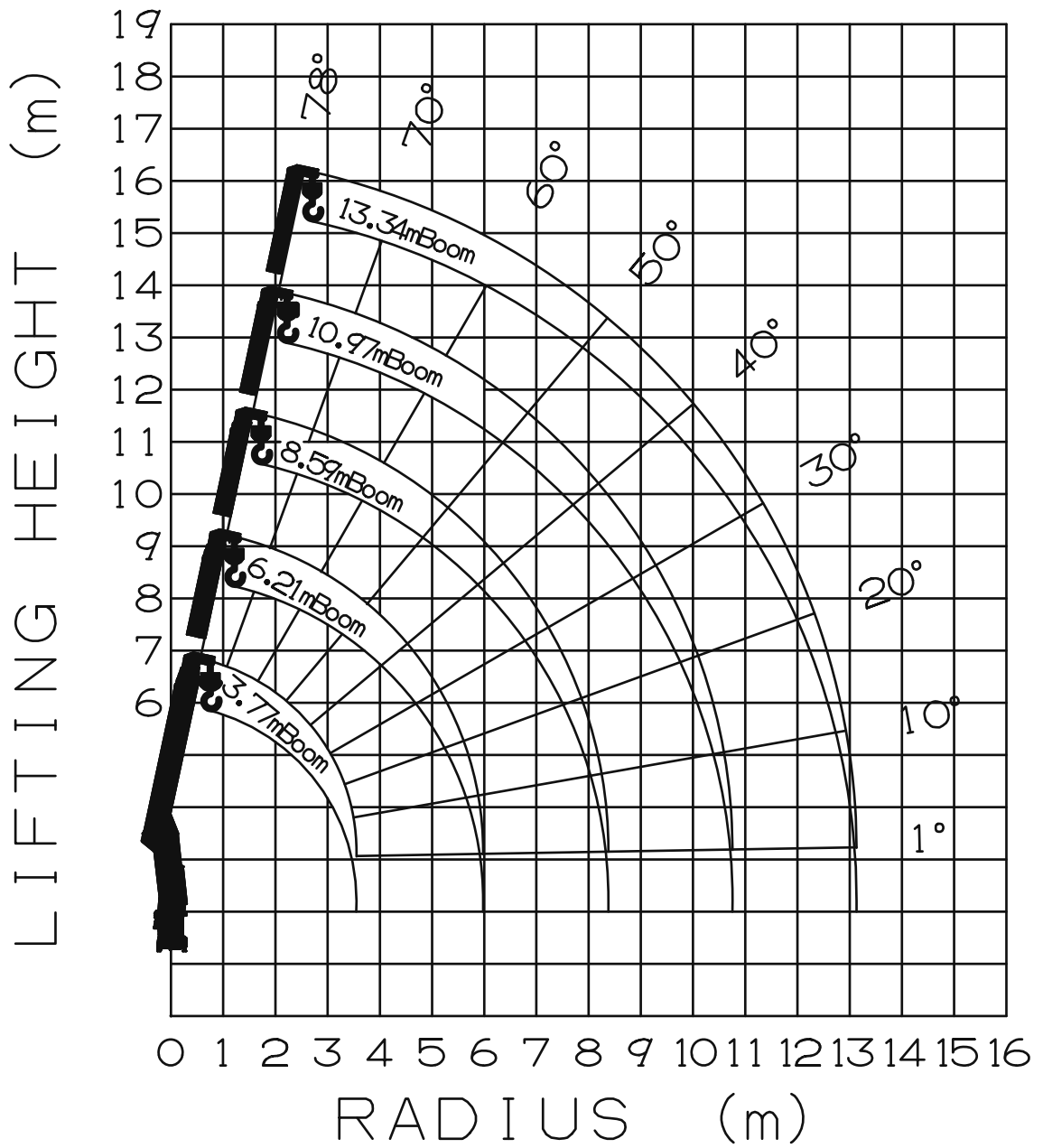
RATED LIFTING CAPACITIES IN KILOGRAMS

Crane Strength Rated Capacities

Load Radius	3.77 m Boom	Load Radius	6.21 m Boom	Load Radius	8.59 m Boom	Load Radius	10.97 m Boom	Load Radius	13.34 m Boom
2.5 m and below	5,050	2.85 m and below	4,050	3.6 m and below	3,130	4.5 m and below	2,030	5.0 m and below	1,330
2.85 m	4,050	3.6 m	3,180	3.9 m	2,930	5.0 m	1,830	6.0 m	1,100
3.55 m	3,230	3.9 m	2,930	4.5 m	2,430	6.0 m	1,480	7.0 m	950
		4.5 m	2,430	5.0 m	2,130	7.0 m	1,230	8.0 m	830
		5.0 m	2,130	5.5 m	1,880	8.0 m	1,030	9.0 m	730
		5.5 m	1,880	6.0 m	1,650	9.0 m	880	10.0 m	650
		5.99 m	1,650	6.5 m	1,480	10.0 m	780	11.0 m	600
				7.0 m	1,350	10.75 m	730	12.0 m	550
				7.5 m	1,230			13.12 m	500
				8.37 m	1,080				

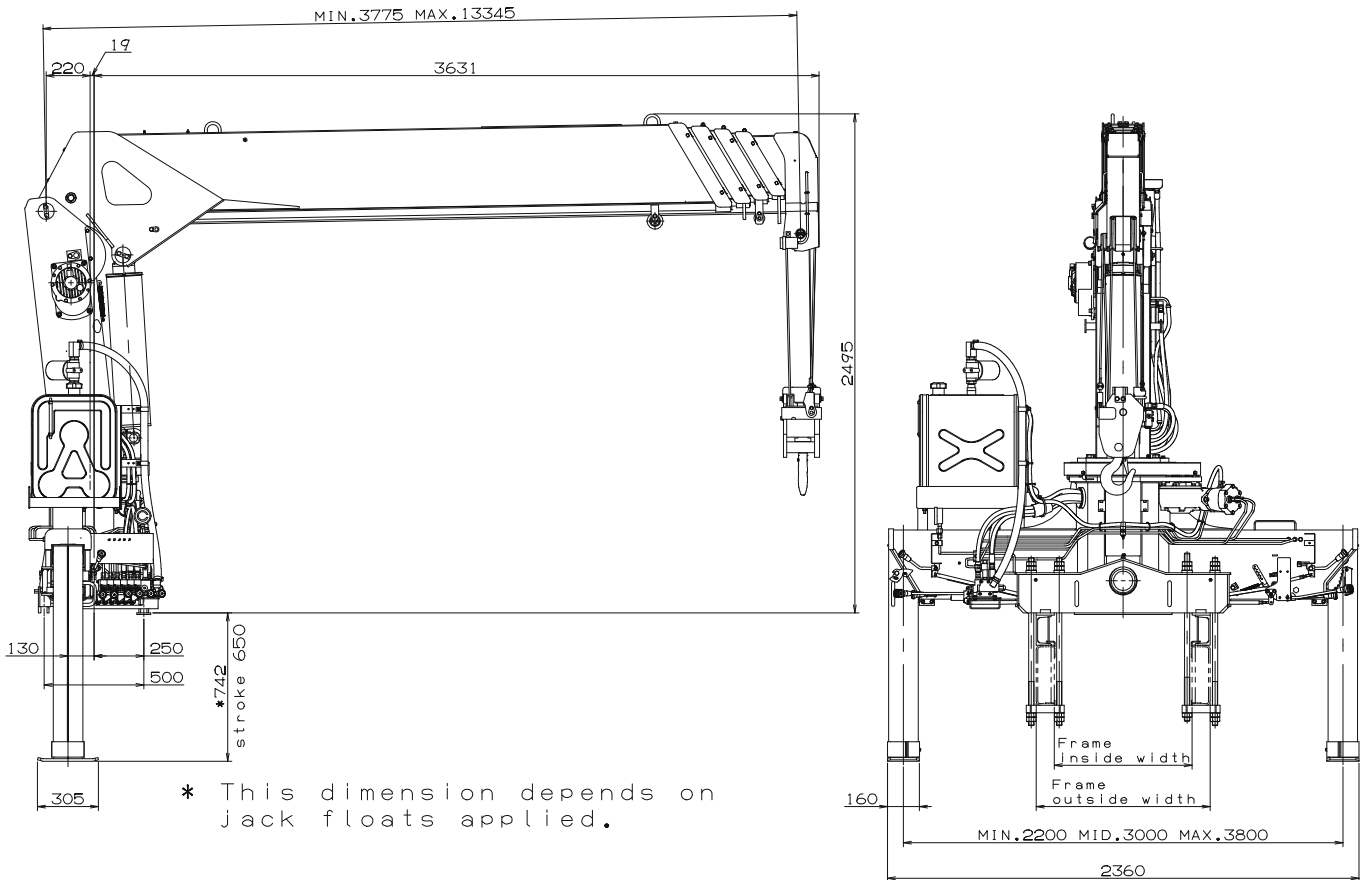
- NOTES : 1. The above numerical values of total rated loads are based on crane strength only. The total rated loads based on stability may lower than those in the above table depending on the loading conditions and the types of the chassis.
2. Rated Lifting Capacities in these tables depend on condition that crane is set level on firm level ground.
3. The mass of the hook (50 kg), slings and all similarly used load lifting devices must be added to the mass of the load.
4. For boom lengths not shown, use the rated lifting capacity of next longer boom.
5. 10.97m boom means \sphericalangle mark on 4th boom section side plate is half seen.

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) --- 15,000 kg or more

P.T.O. torque ----- 170 N·m{17.4 kgf·m} min.

P.T.O. revolution ----- Approx. 1,200 min⁻¹{rpm} max.

Width for crane mounting ----- Approx. 750 mm min.

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

Frame width range (inside to outside) ----- Approx. 610 to 940 mm

Frame height (ground to frame top) ----- Approx. 1,290 mm max.

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

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Extending speed ----- 9.57 m / 25 s

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Boom point ----- 3 sheaves

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Single line pull ----- 9.90 kN{1,010 kgf}

Single line speed ----- 66 m/min.(at 4th layer)

Wire rope

Diameter x length ----- 8 mm x 97 m

Breaking strength ----- 50.1 kN{5,100 kgf}

Construction ----- 7 x 7 + 6 x WS(26)

Hook block ----- 2 sheaves

HOOK STOWING DEVICE

Mechanically stowed beneath boom top portion

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
 Extended width ----- Min. 2,200 mm
 Mid. 3,000 mm
 Max.3,800 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. 90 L

SAFETY DEVICES

Load meter
 Load indicator
 Over-winding alarm
 Anti-two-block device
 Hook safety latch
 Hydraulic safety valves, check valves and holding valves
 Level gauge

CRANE MASS

Approx. 1,935 kg (except mounting parts)

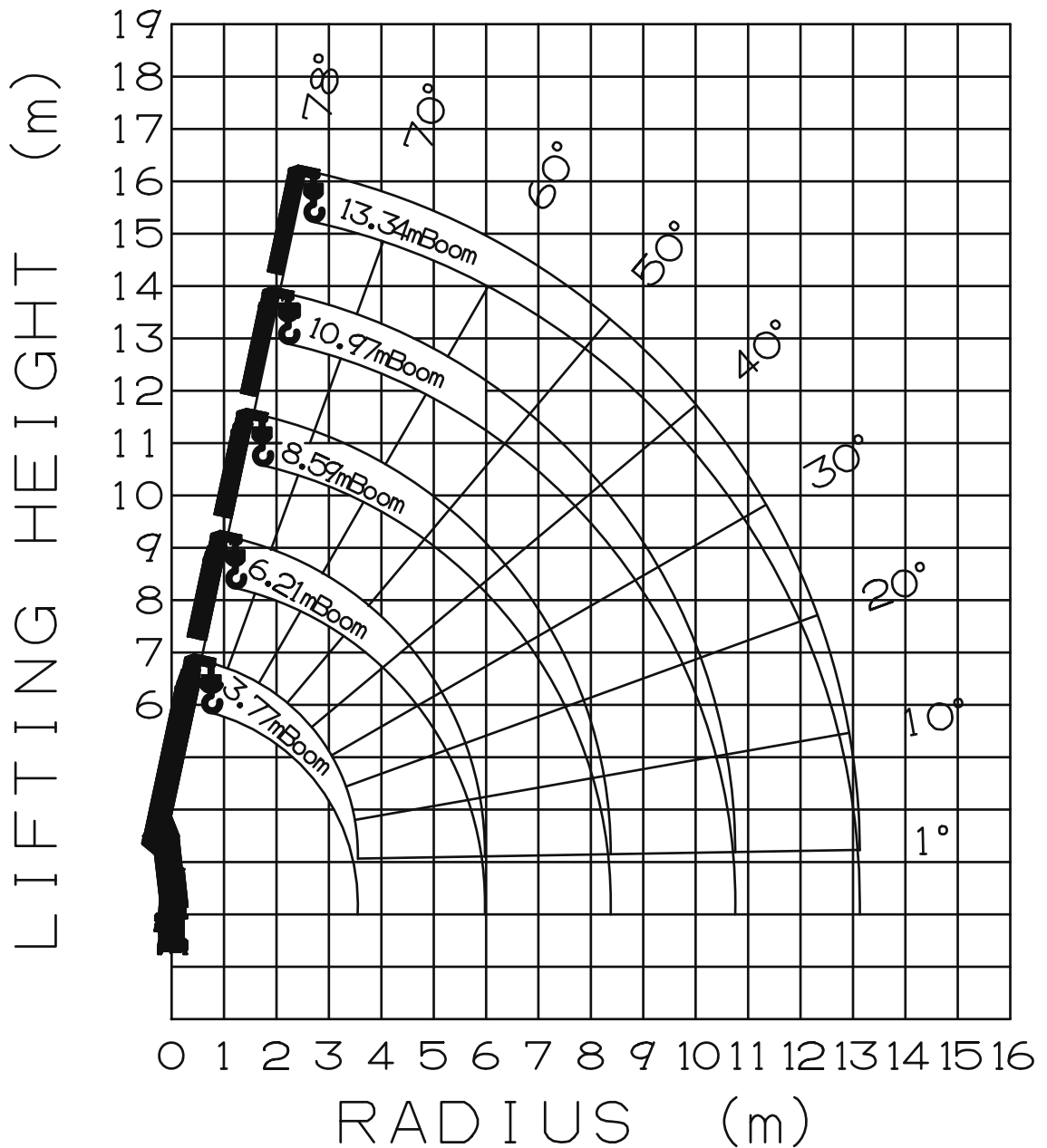
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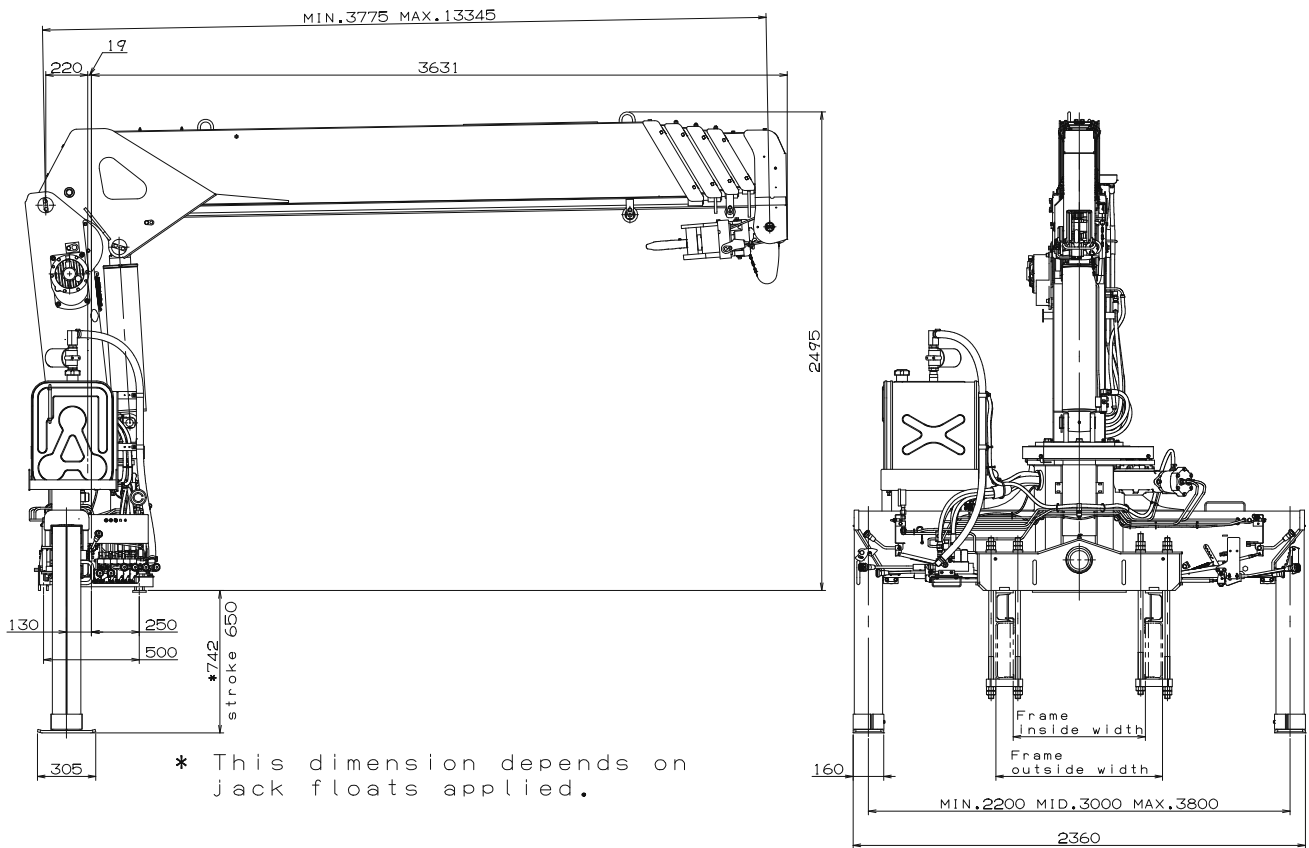
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P.T.O. revolution -----	Approx. 1,200 min ⁻¹ {rpm} max.
Width for crane mounting -----	Approx. 750 mm min.
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