

TADANO CARGO CRANE

MODEL : **TM-ZT405**

CRANE SPECIFICATIONS

CRANE CAPACITY

4,050 kg at 2.85 m (4-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 ----- 2 sheaves

WINCH

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

Single line pull ----- 9.92 kN{1,012 kgf}

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

Wire rope

Diameter x length ----- 8 mm x 81 m

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

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

Hook block ----- 2 sheaves

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

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 swing
 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. 1,855 kg (except mounting parts)

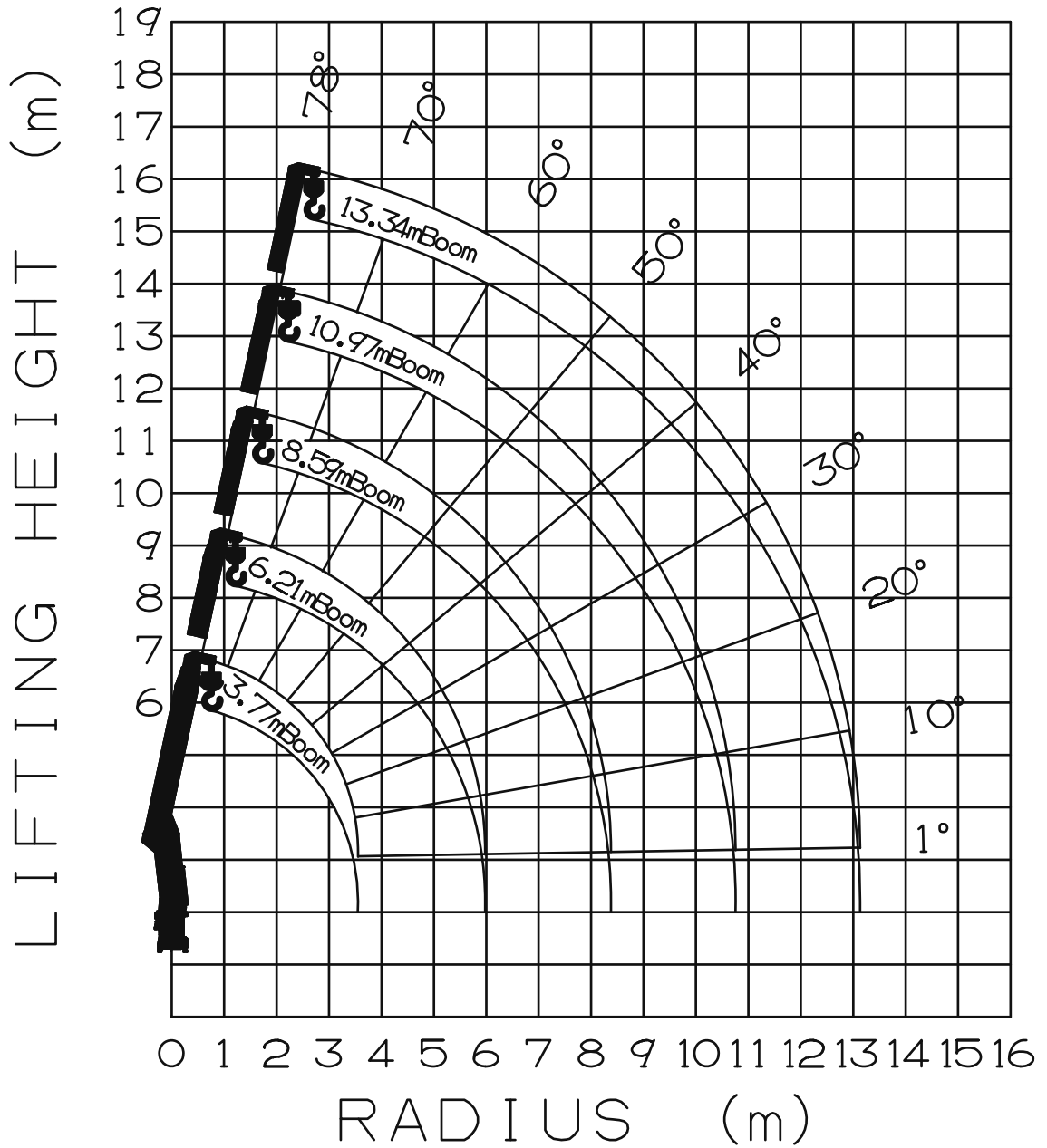
NOTE : Operating speeds of the crane are guaranteed under the condition that the pump
 delivery is 60 L/min.

RATED LIFTING CAPACITIES IN KILOGRAMS
Crane Strength Rated Capacities

| Load Radius | 3.77m/ 6.21 m Boom | Load Radius | 8.59 m Boom | Load Radius | 10.97 m Boom | Load Radius | 13.34 m Boom |
|--------------------|--------------------------|--------------------|----------------|--------------------|-----------------|--------------------|-----------------|
| 2.85 m andbelow | 4,050 | 3.6 m and below | 3,130 | 4.5 m and below | 2,030 | 5.0 m and below | 1,330 |
| 3.6 m | 3,180 | 3.9 m | 2,930 | 5.0 m | 1,830 | 6.0 m | 1,100 |
| 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 | | | | |

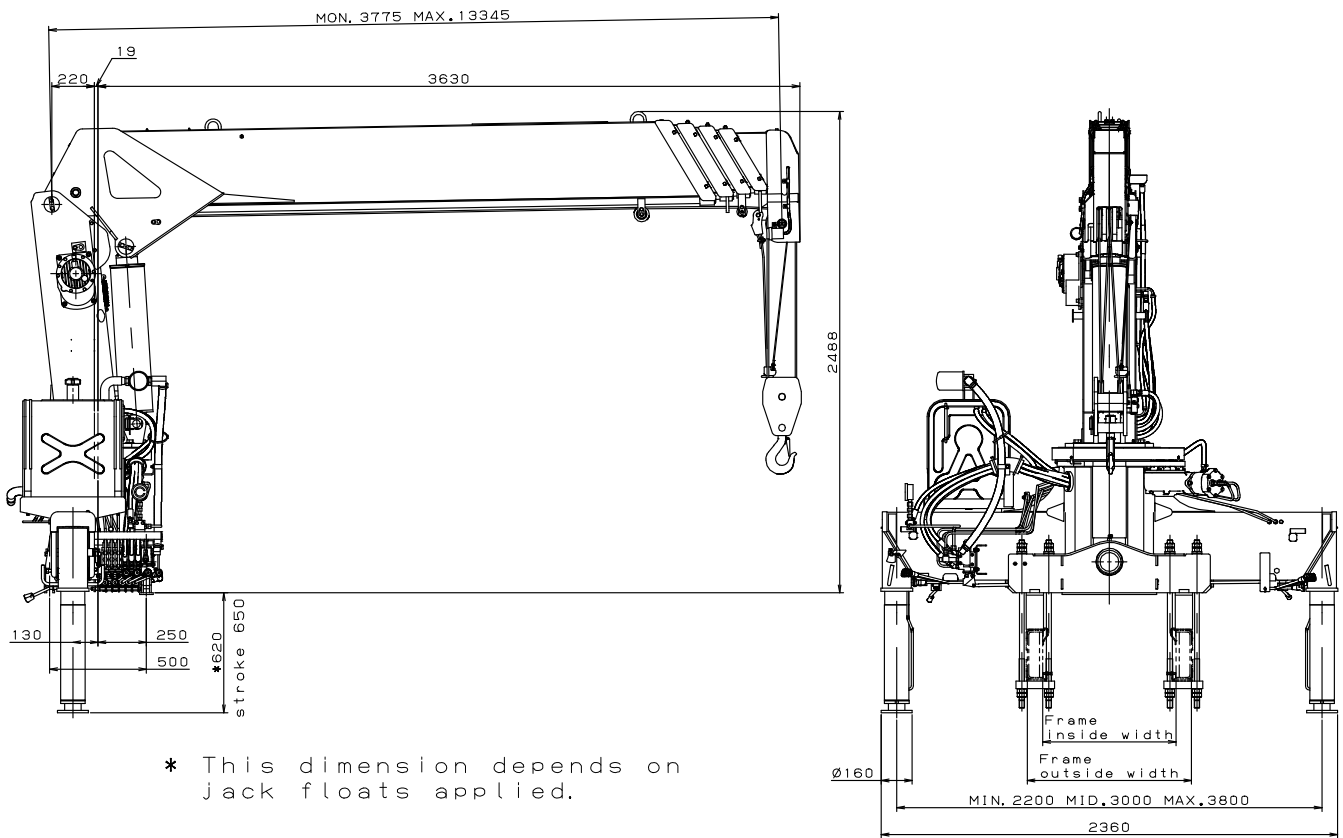
- NOTES : 1. The above numerical values of total rated loads are based on crane strength only. The total rated loads based on stability may lower than those in the above table depending on the loading conditions and the types of the chassis.
2. Rated Lifting Capacities in these tables depend on condition that crane is set level on firm level ground.
3. The mass of the hook (30 kg), slings and all similarly used load handling 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  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) --- 12,000 kg or more
- P.T.O. torque ----- 166 N·m{17 kgf·m} min.
- P.T.O. revolution ----- Approx. 1,200 min⁻¹{rpm} max.
- Width for crane mounting ----- Approx. 870 mm min.
- Frame ----- Weight distribution and frame strength
should be calculated for each truck
- Frame width range (inside to outside) ----- Approx. 610 to 960 mm
- Frame height (ground to frame top) ----- Approx. 1,235 mm max.
(Height of crane mounting base can be changed
by combination of jack floats and crane bases)