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

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**

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**

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

### 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.
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)