TADANO CARGO CRANE

MODEL: **TM-ZT1005H**

**CRANE SPECIFICATIONS**

**MAXIMUM LIFTING CAPACITY**  
10,000 kg at 1.4 m (8-part line)

**CRANE CAPACITY**  
4,900 kg at 3.1 m (4-part line)

**BOOM**  
Five-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction  
- Retracted length: 4.40 m  
- Extended length: 15.92 m  
- Extending speed: 11.5 m / 41 s  
- Elevation: Elevated by a double-acting Hydraulic cylinder  
- Elevating speed: 1° to 82° / 17 s  
- Boom point: 4 sheaves

**WINCH**  
Hydraulic motor driven  
Spur gear speed reduction, provided with mechanical brake and cable follower  
- Single line pull: 14.72 kN {1,500 kgf}  
- Single line speed: 44 m/min (at 4th layer)  
- Wire rope:  
  - Diameter x length: 10 mm x 95 m  
  - Breaking strength: 73.5 kN {7,500 kgf}  
  - Construction: 7 x 7 + 6 x Fi(29)  
- Hook block: 4 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 --------------- 2.2 min⁻¹{rpm}

OUTRIGGERS

Hydraulically extended sliders and hydraulically extended jacks
Integral with crane frame  Power up and down
Extended width --------------
Min. 2,300 mm
Mid. 3,900 mm
Max. 5,200 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. 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. 3,085 kg (except mounting parts)

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

<table>
<thead>
<tr>
<th>Load Radius</th>
<th>4.4 m Boom</th>
<th>2.25 m and below</th>
<th>7.28 m Boom</th>
<th>10.16 m Boom</th>
<th>4.5 m and below</th>
<th>13.04 m Boom</th>
<th>15.92 m Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.4 m and below</td>
<td>10,000</td>
<td>6,000</td>
<td>4,500</td>
<td>3,000</td>
<td>5,000</td>
<td>3,000</td>
<td>2,600</td>
</tr>
<tr>
<td>1.85 m</td>
<td>8,000</td>
<td>3.1 m</td>
<td>4,900</td>
<td>5.0 m</td>
<td>2,700</td>
<td>5.0 m</td>
<td>2,600</td>
</tr>
<tr>
<td>2.25 m</td>
<td>6,000</td>
<td>3.5 m</td>
<td>4,200</td>
<td>6.0 m</td>
<td>2,200</td>
<td>6.0 m</td>
<td>7.0 m</td>
</tr>
<tr>
<td>3.1 m</td>
<td>4,900</td>
<td>4.0 m</td>
<td>3,700</td>
<td>7.0 m</td>
<td>1,800</td>
<td>7.0 m</td>
<td>8.0 m</td>
</tr>
<tr>
<td>3.5 m</td>
<td>4,200</td>
<td>4.5 m</td>
<td>3,300</td>
<td>8.0 m</td>
<td>1,400</td>
<td>8.0 m</td>
<td>9.0 m</td>
</tr>
<tr>
<td>4.15 m</td>
<td>3,550</td>
<td>5.0 m</td>
<td>2,900</td>
<td>9.0 m</td>
<td>1,150</td>
<td>9.0 m</td>
<td>1,150</td>
</tr>
<tr>
<td>6.0 m</td>
<td>2,200</td>
<td>9.91 m</td>
<td>1,000</td>
<td></td>
<td></td>
<td>10.0 m</td>
<td>1,000</td>
</tr>
<tr>
<td>7.03 m</td>
<td>1,750</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.0 m</td>
<td>900</td>
</tr>
</tbody>
</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 (90 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. 13.04m boom means mark on 4th boom section side plate is half seen.
6. When the lifting load is heavier than 6,000kg, number of part lines must be 8. In case of 6,000kg or less, number of part lines must be 4. Load per line must not surpass 14.7kN(1,500kgf).
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.
GENERAL DATA FOR SUITABLE TRUCKS

Gross vehicle mass (including crane mass) --- 25,000 kg or more
P.T.O. torque -------------------------------------------- 180 N·m(18.4 kgf·m) min.
P.T.O. revolution --------------------------------------- Approx. 1,200 min⁻¹(rpm) max.
Width for crane mounting ---------------------------- Approx. 1,000 mm min.
Frame ----------------------------------------------------- Weight distribution and frame strength
Frame width range (inside to outside) ----------- Approx. 610 to 940 mm
(Height of crane mounting base can be changed
by combination of jack floats and crane bases)
Frame height (ground to frame top) -------------- Approx. 1,300 mm max.

This dimension depends on jack floats applied.