Telescoping boom truck mounted crane
Known World Wide, TADANO Quality in North America

MAXIMUM LIFTING CAPACITY: 10,000 lbs
EXTENDED LENGTH: 51.4’ (TM-ZR506XL)
TM-ZR500XL series [5ton] crane specifications

MAXIMUM LIFTING CAPACITY
10,000 lbs. @ 5' (5-part lines) (TM-ZR505XL & TM-506XL need extra sheeve exchange hook block for 10,000 lbs capacity)

BOOM
- Fully powered synchronized telescoping boom of pentagonal box construction
- Sections: 3(TM-ZR503XL), 4(TM-ZR504XL), 5(TM-ZR505XL), 6(TM-ZR506XL)
- Extended length: 27.28'(TM-ZR503XL), 35.43'(TM-ZR504XL), 43.78'(TM-ZR505XL), 51.49'(TM-ZR506XL)
- Extended speed: 15.88'/18 s(TM-ZR503XL), 23.77'/21 s(TM-ZR504XL), 31.40'/25 s(TM-ZR505XL), 38.85'/28 s(TM-ZR506XL)
- Elevation: Elevated by double-acting hydraulic cylinder
  - Elevation speed: 1° to 78° / 12 s
- NOTE: Extended speed and elevation speed are calculated under the condition that the flow is 25 GPM
- Boom point: 3 sheaves(TM-ZR503XL)/(TM-ZR504XL), 2 sheaves(TM-ZR505XL)/(TM-ZR506XL)

WINCH
- Hydraulic motor driven, Spur gear speed reduction, provided with mechanical brake and cable follower
- Single line pull: 2,000 lbs. (TM-ZR503XL)/(TM-ZR504XL), 1,750 lbs. (TM-ZR505XL)/(TM-ZR506XL)
- Single line speed: 249FPM (@4th layer)
  - NOTE: Single line speed is calculated under the condition that the flow is 57 GPM
- Wire rope: Diameter x length
  - 5/16" x 217' (TM-ZR503XL), 5/16" x 262' (TM-ZR504XL)/(TM-ZR505XL), 5/16" x 302' (TM-ZR506XL)
- Breaking strength: 9,680 lbs.
- 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: approx. 2.5 rpm

HOOK STOWING DEVICE
- Mechanically stowed beneath boom top portion

OUTRIGGERS
- Manually extended sliders and hydraulically extended jacks, Integral with crane frame, Power up and down
- Easy grab type grips lock and unlock sliders position and double lock pins for storage position.
- Extended width: Min. 7' 2-5/8'', Mid. 9' 10-1/8'', Max. 12' 5-19/32''

TM-ZR500XL series crane dimensional specifications
(TM-ZR506XL)

(Extension Mark)
Front Outriggers
Yellow: Extended
Mid. Outriggers
Extends
Outriggers Max.
Outriggers Min.
Extends

NOTE: Max. operating speeds of the crane are performed under the condition that the pump delivery is 15.8 GPM.
### HYDRAULIC
- **Hydraulic motor**: Axial piston type for winch and swing
- **Control valves**: Multiple control valves with integral safety valve
- **Recommended Hydraulic pump**:
  - **Pressure**: Max. 2,915 PSI capacity
  - **Delivery**: Max. 15.8 GPM capacity

### ELECTRICAL SYSTEM
- **Power supply**: DC12V

### SAFETY DEVICE
- **Anti-two-block with alarm**
- **Hook safety latch**
- **Level gauge**
- **Hydraulic safety valves, check valves and holding valves**
- **Over load alert with load indicator (TADANO’s exclusive “AMA” system)**
  - **Load indication**
  - **Load moment ratio to rated load indication**
  - **Audible warning**
  - **External warning lamps**

### CRANE WEIGHT
- **Approx. 3,330 lbs.** (TM-ZR503XL / crane bare)
- **Approx. 3,590 lbs.** (TM-ZR504XL / crane bare)
- **Approx. 3,950 lbs.** (TM-ZR505XL / crane bare)
- **Approx. 4,150 lbs.** (TM-ZR506XL / crane bare)

### OPTIONS AND ACCESSORIES
- **+Radio Remote Controls**
  - **Model**: RCS-F (Approved by FCC/IC)
  - **Control function of boom telescoping, hoisting up and down, boom elevating, swing, acceleration, speed mode selection, emergency stop, engine start and vehicle horn**
  - **Frequency**: 40 frequencies in 429 MHz band
  - **Operating power supply**
    - **Transmitter**: 6V DC, dry battery (AA) x 4
    - **Control unit**: 12V DC, vehicle battery
  - **Transmitter weight**: Approx. 1.26 lbs. (includes batteries)
- **+One person basket**
  - (Only for TM-ZR505XL with Radio Remote: Serial number sensitive.)
  - **300 lbs capacity, steel, non-rotation, painted blue, no- harness included.**
  - **Cage outside dimensions; L x W x H: 30” x 30” x 42”. Weight: 390 lbs**
- **+10,000 lbs capacity hook block & extra sheave for TM-ZR505XL & TM-ZR506XL.**
  - (TM-ZR503XL & TM-ZR504XL as standard)
## TM-ZR500XL series [5ton] crane capacity

### Working Range Chart

<table>
<thead>
<tr>
<th>TM-ZR500XL</th>
<th>TM-ZR504XL</th>
<th>TM-ZR505XL</th>
<th>TM-ZR506XL</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="#">Diagram</a></td>
<td><a href="#">Diagram</a></td>
<td><a href="#">Diagram</a></td>
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</tr>
</tbody>
</table>

### Rated Lifting Capacities (in Pounds)

<table>
<thead>
<tr>
<th>Model: TM-ZR503XL</th>
<th>Capacity Chart: A</th>
<th>Load</th>
<th>Radius (ft)</th>
<th>Boom Length (ft)</th>
<th>Rafter Height (ft)</th>
<th>Load</th>
<th>Radius (ft)</th>
<th>Boom Length (ft)</th>
<th>Rafter Height (ft)</th>
<th>Load</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>11.4 ft Boom</td>
<td>19.4 ft Boom</td>
<td>27.2 ft Boom</td>
<td>11.7 ft Boom</td>
<td>19.7 ft Boom</td>
<td>27.5 ft Boom</td>
<td>35.4 ft Boom</td>
<td>12.4 ft Boom</td>
<td>20.4 ft Boom</td>
<td>28.2 ft Boom</td>
<td>36.0 ft Boom</td>
<td>43.7 ft Boom</td>
<td>51.4 ft Boom</td>
<td>12.7 ft Boom</td>
<td>20.6 ft Boom</td>
<td>28.5 ft Boom</td>
</tr>
</tbody>
</table>

#### Load Capacity Chart

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<tr>
<th>Model: TM-ZR503XL</th>
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<th>Radius (ft)</th>
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<td>20.6 ft Boom</td>
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</tr>
</tbody>
</table>

The above lifting heights and boom angles are based on a straight (unladen) boom, and allowances should be made for boom deflection obtained under laden condition.
### CAPACITY CHART: D (Bigger stability)

#### MODEL: TM-ZR50XL

<table>
<thead>
<tr>
<th>Load Radius (ft)</th>
<th>11.4 ft Boom</th>
<th>19.4 ft Boom</th>
<th>27.2 ft Boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Loaded Boom Angle</td>
<td>Outriggers Extended</td>
<td>Loaded Boom Angle</td>
</tr>
<tr>
<td>5</td>
<td>63</td>
<td>10,000</td>
<td>7,000</td>
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<tr>
<td>6</td>
<td>57</td>
<td>9,700</td>
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</tr>
<tr>
<td>8</td>
<td>44</td>
<td>9,100</td>
<td>6,800</td>
</tr>
<tr>
<td>10</td>
<td>24</td>
<td>8,500</td>
<td>5,400</td>
</tr>
<tr>
<td>12</td>
<td>52</td>
<td>7,100</td>
<td>4,100</td>
</tr>
<tr>
<td>14</td>
<td>44</td>
<td>6,000</td>
<td>3,300</td>
</tr>
<tr>
<td>16</td>
<td>34</td>
<td>5,100</td>
<td>2,800</td>
</tr>
<tr>
<td>20</td>
<td>44</td>
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<tr>
<td>25</td>
<td>23</td>
<td>3,000</td>
<td>1,500</td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>2,000</td>
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<tr>
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<td>1˚</td>
<td>6,100</td>
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#### MODEL: TM-ZR60XL

<table>
<thead>
<tr>
<th>Load Radius (ft)</th>
<th>11.7 ft Boom</th>
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<th>27.5 ft Boom</th>
<th>35.4 ft Boom</th>
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<tbody>
<tr>
<td></td>
<td>Loaded Boom Angle</td>
<td>Outriggers Extended</td>
<td>Loaded Boom Angle</td>
<td>Outriggers Extended</td>
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<tr>
<td>5</td>
<td>64</td>
<td>10,000</td>
<td>7,000</td>
<td>73</td>
</tr>
<tr>
<td>6</td>
<td>58</td>
<td>9,700</td>
<td>7,000</td>
<td>73</td>
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<tr>
<td>8</td>
<td>45</td>
<td>9,100</td>
<td>6,800</td>
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<td>10</td>
<td>27</td>
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<td>45</td>
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<tr>
<td>16</td>
<td>35</td>
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<td>2,800</td>
<td>56</td>
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<td></td>
<td>1˚</td>
<td>7,900</td>
<td>4,800</td>
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#### MODEL: TM-ZR505XL

<table>
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<th>20.4 ft Boom</th>
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<td>58</td>
<td>3,200</td>
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<td>2,600</td>
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<td>25</td>
<td>1,150</td>
<td></td>
<td>49</td>
<td>1,550</td>
</tr>
<tr>
<td></td>
<td>1˚</td>
<td>6,800</td>
<td>4,200</td>
<td>1˚</td>
<td>3,800</td>
</tr>
</tbody>
</table>

### OVERSIDE AREA

- **Over-side area**: Maximum allowable area for over-side loads.
- **Over-rear area**: Maximum allowable area for over-rear loads.

### NOTE:

1. Rated lifting capacities on this chart show maximum allowable loads with the outriggers properly extended on a firm surface and the crane leveled and mounted on a factoryrecommended truck. The rated lifting capacities in shaded area are based on crane stability and other, on its stability (not to exceed 85% of tipping).
2. The weight of handling devices such as hook block (biack.), slings, etc., must be considered part of the load and must be deducted from the rated lifting capacities.
3. The operator must reduce loads to allow for such factors as wind, ground conditions, operating speed and the effects of freely suspended loads such as boom deflection.
4. For boom lengths not shown, use the rated lifting capacity of the next longer boom.
5. When outriggers are extended to mid-position, use the rated lifting capacities for outriggers extended to mid. position.
### GENERAL DATA FOR SUITABLE TRUCKS

<table>
<thead>
<tr>
<th></th>
<th>CAPACITY: A</th>
<th>CAPACITY: D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Axle Weight Rating(GAWR), front</td>
<td>9,000 lbs. or more</td>
<td>12,000 lbs. or more</td>
</tr>
<tr>
<td>Gross Axle Weight Rating(GAWR), rear</td>
<td>17,000 lbs. or more</td>
<td>21,000 lbs. or more</td>
</tr>
<tr>
<td>Gross vehicle weight</td>
<td>26,000 to 55,100 lbs.</td>
<td>33,000 to 55,100 lbs.</td>
</tr>
<tr>
<td>Cab to Axle / trunnion (CA/CT)</td>
<td>120 to 220&quot;</td>
<td></td>
</tr>
<tr>
<td>Frame Section Modulus(SM)</td>
<td>10 cu. inch</td>
<td>110,000psi</td>
</tr>
<tr>
<td>under crane; (Total of both sides.)</td>
<td>22 cu. inch</td>
<td>50,000psi</td>
</tr>
<tr>
<td>P.T.O. torque</td>
<td>115 ft-lbs. Min.</td>
<td></td>
</tr>
<tr>
<td>P.T.O. revolution</td>
<td>Approx. 270 to 2800 rpm</td>
<td></td>
</tr>
<tr>
<td>Width for crane mounting</td>
<td>Approx. 2' 5-1/2&quot; min.</td>
<td></td>
</tr>
<tr>
<td>Frame width range (inside to outside)</td>
<td>Approx. 2' to 3' 1-7/8&quot;</td>
<td></td>
</tr>
<tr>
<td>Frame height (ground to frame top)</td>
<td>Approx. 3' 9&quot; max.</td>
<td></td>
</tr>
</tbody>
</table>

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

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Highest Quality Boom Trucks on the Planet

Continuing technical development requires Tadano to retain the right to make specifications, equipment and price changes without notice.

*Some specifications are subject to change*