

TADANO CARGO CRANE

MODEL : **TM-ZE305MH**

CRANE SPECIFICATIONS

| | |
|----------------------------|--|
| <u>CRANE CAPACITY</u> | 3,030 kg at 2.3 m (4-part lines) |
| <u>BOOM</u> | Five-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction Retracted length ----- 3.52 m Extended length -----12.3 m Extending speed -----8.78 m / 18 s Elevation ----- Elevated by a double-acting hydraulic cylinder Elevating speed ----- 1° to 78° / 7.5 s Boom point ----- 2 sheaves |
| <u>WINCH</u> | Hydraulic motor driven Spur gear speed reduction, provided with mechanical brake and cable follower Single line pull ----- 7.45 kN {760 kgf} Single line speed -----76 m/min (at 4th layer) Wire rope Diameter x length --- 8 mm x 74 m Breaking strength ---43.1 kN {4.39 tf} Construction ----- 7 x 7 + 6 x WS (26) Hook block -----2 sheaves |
| <u>HOOK STOWING DEVICE</u> | Mechanically stowed beneath boom top portion |

Specifications are subject to change without notice.

RATED LIFTING CAPACITIES IN KILOGRAMS

Crane Strength Rated Capacities

| Load Radius | 3.52 m / 5.75 m Boom | Load Radius | 7.95 m Boom | Load Radius | 10.1 m Boom | Load Radius | 12.3 m Boom |
|-----------------|----------------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| 2.3 m and below | 3,030 | 2.7 m and below | 2,330 | 4.0 m and below | 1,030 | 4.5 m and below | 760 |
| 2.5 m | 2,830 | 3.0 m | 2,130 | 5.0 m | 880 | 5.0 m | 700 |
| 3.0 m | 2,430 | 3.5 m | 1,830 | 6.0 m | 730 | 6.0 m | 580 |
| 3.5 m | 2,030 | 4.0 m | 1,630 | 7.0 m | 630 | 7.0 m | 500 |
| 4.0 m | 1,730 | 4.5 m | 1,480 | 8.0 m | 580 | 8.0 m | 430 |
| 4.5 m | 1,480 | 5.0 m | 1,330 | 9.0 m | 510 | 9.0 m | 380 |
| 5.0 m | 1,330 | 5.5 m | 1,150 | 9.92 m | 480 | 10.0 m | 330 |
| 5.55 m | 1,150 | 6.0 m | 1,050 | | | 11.0 m | 300 |
| | | 6.5 m | 950 | | | 12.1 m | 280 |
| | | 7.0 m | 850 | | | | |
| | | 7.75 m | 730 | | | | |

- NOTES : 1. The mass of hook block (30kg), slings and all similarly used load lifting devices must be added to the mass of the load.
2. 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.

Empty Chassis Rated Capacities

Table A

| Load Radius | 3.52 m / 5.75 m Boom | | Load Radius | 7.95 m Boom | Load Radius | 10.1 m Boom | Load Radius | 12.3 m Boom | | | | |
|-----------------|-------------------------------|---------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Extension width of outriggers | | | | | | | | Extension width of outriggers | Extension width of outriggers | Extension width of outriggers | Extension width of outriggers |
| | Maximum | Minimum | | | | | | | | | | |
| 2.3 m and below | 3,030 | 1,280 | 2.7 m and below | 2,230 | 4.0 m and below | 1,030 | 4.5 m and below | 760 | | | | |
| 2.5 m | 2,780 | 1,180 | 3.0 m | 1,850 | 5.0 m | 650 | 5.0 m | 630 | | | | |
| 3.0 m | 1,880 | 780 | 3.5 m | 1,330 | 6.0 m | 480 | 6.0 m | 480 | | | | |
| 3.5 m | 1,330 | 630 | 4.0 m | 1,030 | 7.0 m | 380 | 7.0 m | 380 | | | | |
| 4.0 m | 1,030 | 480 | 4.5 m | 830 | 8.0 m | 300 | 8.0 m | 300 | | | | |
| 4.5 m | 830 | 380 | 5.0 m | 680 | 9.0 m | 230 | 9.0 m | 230 | | | | |
| 5.0 m | 680 | 330 | 5.5 m | 580 | 9.92 m | 200 | 10.0 m | 200 | | | | |
| 5.55 m | 580 | 280 | 6.0 m | 480 | | | 11.0 m | 180 | | | | |
| | | | 6.5 m | 430 | | | 12.1 m | 130 | | | | |
| | | | 7.0 m | 380 | | | | | | | | |
| | | | 7.75 m | 330 | | | | | | | | |

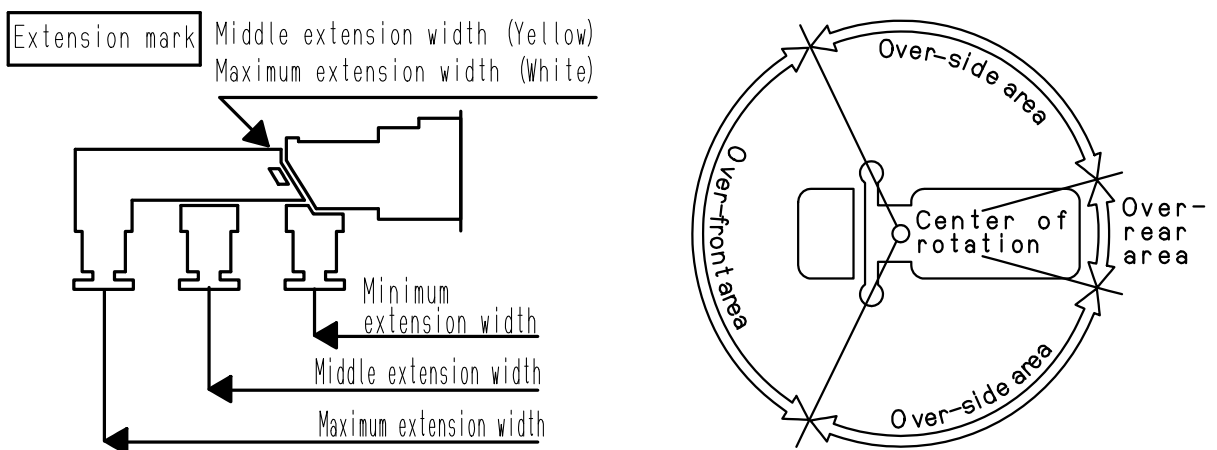
Table C

| Load Radius | 3.52 m / 5.75 m Boom | | Load Radius | 7.95 m Boom | Load Radius | 10.1 m Boom | Load Radius | 12.3 m Boom | | | | |
|-----------------|-------------------------------|---------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | Extension width of outriggers | | | | | | | | Extension width of outriggers | Extension width of outriggers | Extension width of outriggers | Extension width of outriggers |
| | Maximum | Minimum | | | | | | | | | | |
| 2.3 m and below | 3,030 | 1,380 | 2.7 m and below | 2,230 | 4.0 m and below | 1,030 | 4.5 m and below | 760 | | | | |
| 2.5 m | 2,780 | 1,230 | 3.0 m | 2,030 | 5.0 m | 780 | 5.0 m | 630 | | | | |
| 3.0 m | 2,080 | 880 | 3.5 m | 1,530 | 6.0 m | 580 | 6.0 m | 480 | | | | |
| 3.5 m | 1,530 | 680 | 4.0 m | 1,180 | 7.0 m | 430 | 7.0 m | 400 | | | | |
| 4.0 m | 1,180 | 530 | 4.5 m | 980 | 8.0 m | 350 | 8.0 m | 350 | | | | |
| 4.5 m | 980 | 430 | 5.0 m | 780 | 9.0 m | 300 | 9.0 m | 280 | | | | |
| 5.0 m | 830 | 380 | 5.5 m | 680 | 9.92 m | 280 | 10.0 m | 250 | | | | |
| 5.55 m | 680 | 280 | 6.0 m | 580 | | | 11.0 m | 230 | | | | |
| | | | 6.5 m | 480 | | | 12.1 m | 200 | | | | |
| | | | 7.0 m | 430 | | | | | | | | |
| | | | 7.75 m | 380 | | | | | | | | |

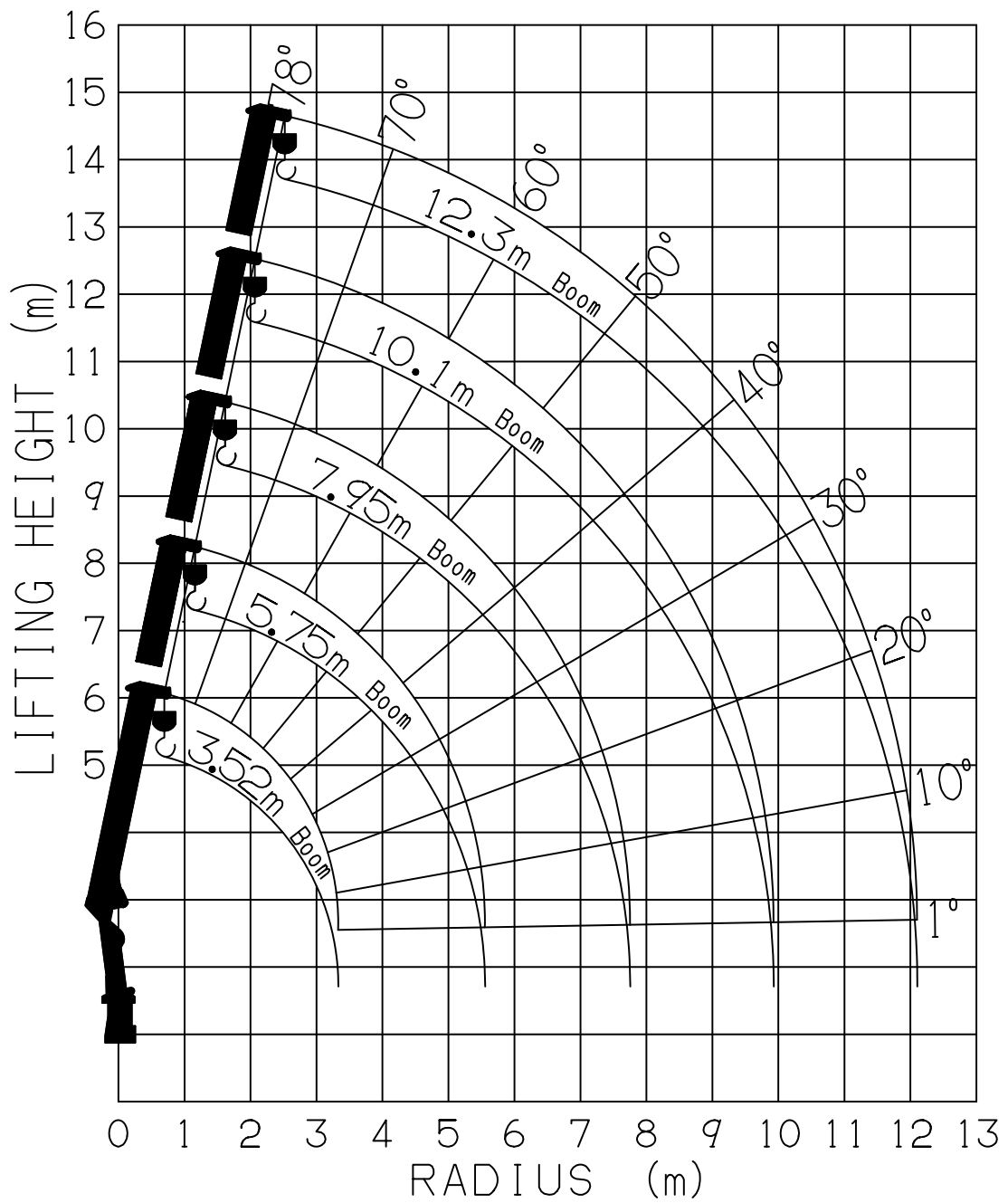
Table D

| Load Radius | 3.52 m / 5.75 m Boom | | Load Radius | 7.95 m Boom | Load Radius | 10.1 m Boom | Load Radius | 12.3 m Boom |
|-----------------|-------------------------------|---------|-----------------|-------------------------------|-----------------|-------------------------------|-----------------|-------------------------------|
| | Extension width of outriggers | | | Extension width of outriggers | | Extension width of outriggers | | Extension width of outriggers |
| | Maximum | Minimum | | Maximum | | Maximum | | Maximum |
| 2.3 m and below | 3,030 | 1,380 | 2.7 m and below | 2,330 | 4.0 m and below | 1,030 | 4.5 m and below | 760 |
| 2.5 m | 2,830 | 1,230 | 3.0 m | 2,130 | 5.0 m | 880 | 5.0 m | 700 |
| 3.0 m | 2,430 | 880 | 3.5 m | 1,830 | 6.0 m | 730 | 6.0 m | 580 |
| 3.5 m | 2,030 | 680 | 4.0 m | 1,630 | 7.0 m | 630 | 7.0 m | 500 |
| 4.0 m | 1,730 | 530 | 4.5 m | 1,480 | 8.0 m | 580 | 8.0 m | 430 |
| 4.5 m | 1,480 | 430 | 5.0 m | 1,330 | 9.0 m | 510 | 9.0 m | 380 |
| 5.0 m | 1,330 | 380 | 5.5 m | 1,150 | 9.92 m | 480 | 10.0 m | 330 |
| 5.55 m | 1,150 | 280 | 6.0 m | 1,050 | | | 11.0 m | 300 |
| | | | 6.5 m | 950 | | | 12.1 m | 280 |
| | | | 7.0 m | 850 | | | | |
| | | | 7.75 m | 730 | | | | |

- NOTES :
1. Empty Chassis Rated Capacities in these tables depend on condition that crane is set level on firm level ground.
 2. The mass of hook block (30 kg), slings and all similarly used load lifting devices must be added to the mass of the load.
 3. For boom lengths not shown, use the rated lifting capacity of next longer boom.
 4. When outriggers are extended to middle extension width, use the rated lifting capacities for outriggers are extended to minimum extension width .
 5. For boom lengths longer than 5.75 m, extend outriggers to maximum extension width.
 6. When the boom length is 10.1 m, a half of the \square mark on lateral face of the 4th boom section is exposed out of the 3rd boom section.
 7. Empty Chassis Rated Capacities table A , C and D depend on the types of chassis.
 8. Empty Chassis Rated Capacities are shown for over-side areas and over-rear area. These capacities for over-front area may lowered depending on the types of chassis.

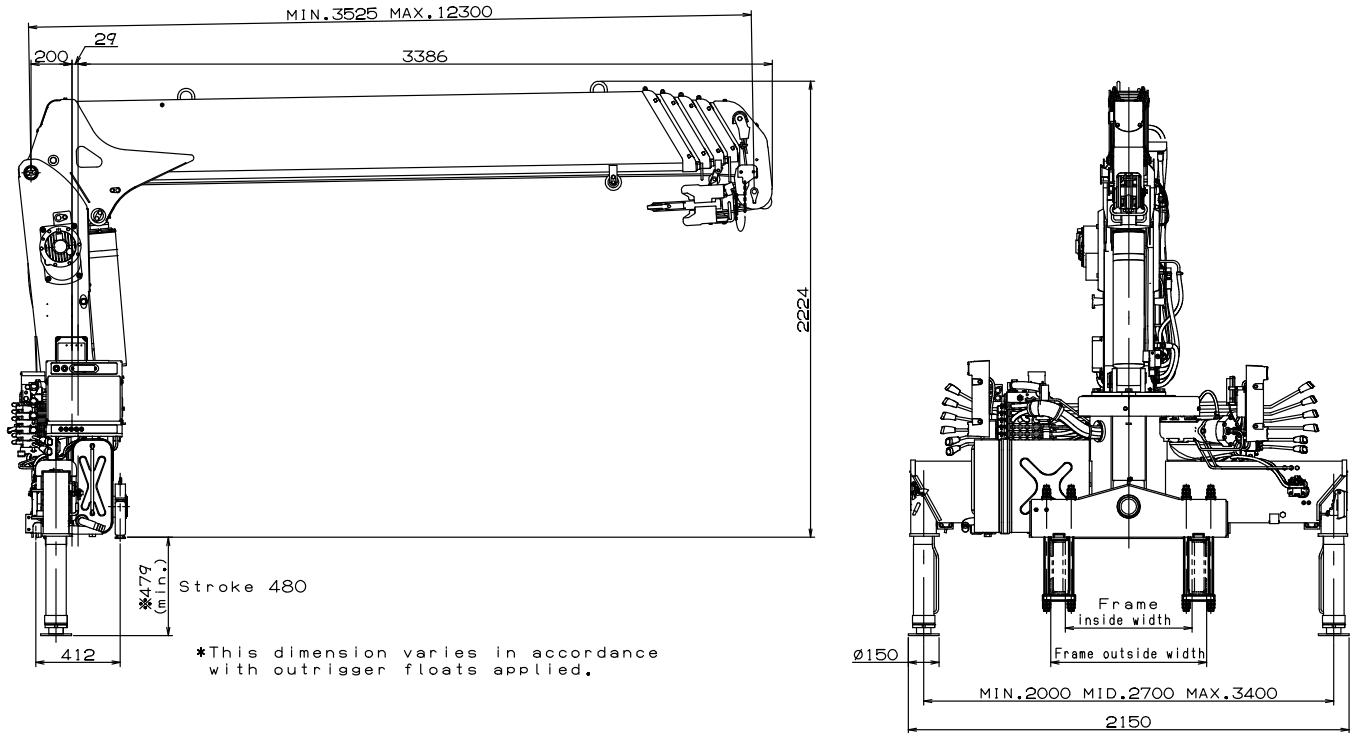


WORKING RANGE



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) ----- 8,000 to 14,500 kg

P.T.O. torque ----- 190 N-m {19.4 kgf-m} min.

P.T.O. revolution ----- Approx. 300 to 1,900 min⁻¹ {rpm}

Width for crane mounting ----- Approx. 640 mm min.

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

Frame width range (inside to outside) ----- Approx. 610 to 860 mm

Frame height (ground to frame top) ----- Approx. 1,070 mm max.

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