# TM-252

TADANO

**MAXIMUM LIFTING CAPACITY: 20,000 lbs**
**EXTENDED LENGTH: 52.23'**

## Non CDL Truck mount available
## Known World Wide, TADANO Quality in North America

# TM-1052 (10 ton) crane specifications

## MAXIMUM LIFTING CAPACITY

20,000 lbs. @ 5' (6-part lines) / 14,000lbs@5' (6part lines : Derated chart)
13,200 lbs. @ 6' (4-part lines)
6,600 lbs. @ 16' (2-part lines)

## BOOM

5-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction

| | |
|---|---|
| Retracted length | 14.44' |
| Extended length | 52.23' |
| Extended speed | 37.79' / approx. 43 s |
| Elevation | Elevated by double-acting hydraulic cylinder |
| Elevation speed | 1˚ to 82˚ / approx. 19 s |

NOTE: Extended speed and elevation speed are calculated under the condition that the flow is 15.8 GPM

| | |
|---|---|
| Boom point | 3 sheaves |

## WINCH

Hydraulic motor driven, planetary gear speed reduction, provided with automatic brake and cable follower

| | |
|---|---|
| Single line pull | 3,340 lbs. |
| Single line speed | approx. 147FPM (@ 4th layer) |

NOTE: Single line speed is calculated under the condition that the flow is 15.8 GPM

Wire rope

| | |
|---|---|
| Diameter x length | 13/32"(10mm) x 312' |
| Breaking strength | 16,530 lbs. |
| Hook block | 3 sheaves (For maximum lifting load) |

## SWING

Hydraulic motor driven, Worm gear speed reduction, Continuous
360o full circle swing on ball bearing slew ring, Automatic swing lock

| | |
|---|---|
| Swing speed | approx. 2.5 rpm |

## OUTRIGGERS

<CAB BACK MOUNTED>
Outriggers (Out & Down type)
Hydraulically extended sliders and hydraulically extended jacks, integral with crane frame

| | |
|---|---|
| Extend width | Min. 7' 4-9/16" |
| | Mid. 10' 9-29/32" |
| | Max. 14' 1-9/32" |

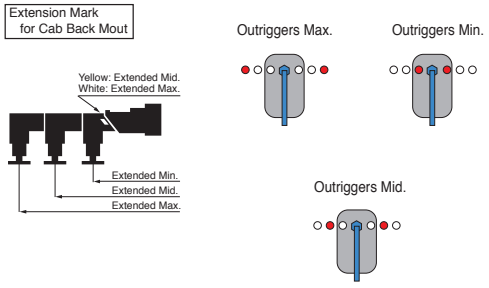
Rear stabilizers (Straight Down type)
Hydraulically extended jacks, integral with chassis frame

| | |
|---|---|
| Span | 7' 4-19/32" |

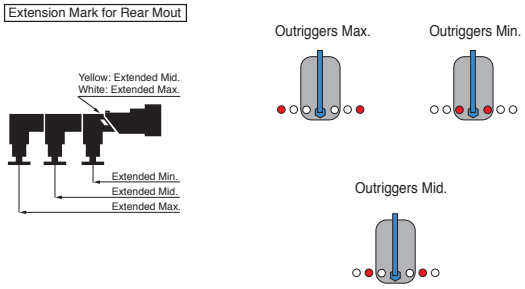
<REAR MOUNTED>
Rear outriggers (Out & Down type)
Hydraulically extended sliders and hydraulically extended jacks, integral with crane frame

| | |
|---|---|
| Extend width | Min. 7' 4-9/16" |
| | Mid. 10' 9-29/32" |
| | Max. 14' 1-9/32" |

**<CAB BACK MOUNTED>**




**<REAR MOUNTED>**



| | |
|---|---|
| **HYDRAULIC** | |
| Hydraulic motor | Axial piston type for winch and swing |
| Control valves | Multiple control valves with integral safety valve |
| Recommended Hydraulic pump | Pressure : Max. 3,000 PSI capacity |
| | Delivery : Max. 15.8 GPM (60L/min) |
| Reserve tank | 24 Gallons capacity |
| | *PTO/Mounting not included |
| **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

**BOOM REST**

- No required

**LOCALLY PROVIDED EQUIPMENT**

- Crane mounting parts (Include P.T.O, P.T.O Mounting, Pump )
- Hydraulic pump

**CRANE WEIGHT**

- Approx. 6,900 lbs. (crane bare)

**OPTIONS AND ACCESSORIES**

- +Radio Remote Controls
  - Model: RCS-F (Approved by FCC / IC)
  - Control functions 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 (Radio Remote Controls required, D & F chart only)

# TM-1052 (10 ton) crane capacity

## RATED LIFTING CAPACITY (IN POUNDS)

### CAPACITY CHART; A

| Load radius (ft.) | 14.4 ft. Boom | | | 23.9 ft. Boom | | | 33.3 ft. Boom | | 42.8 ft. Boom | | 52.2 ft. Boom | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | Loaded Boom Angle | Outriggers Extended | Loaded Boom Angle | Outriggers Extended |
| | | Max. | Min. | | Max. | Min. | | Max. | | Max. | | Max. |
| 5 | 72° | 20,000 | 8,800 | 80° | 13,200 | 8,800 | | | | | | |
| 6 | 68° | 17,800 | 8,650 | 78° | 13,200 | 8,600 | 82° | 6,600 | | | | |
| 8 | 58° | 13,000 | 5,450 | 73° | 12,950 | 5,100 | 79° | 6,600 | 82° | 6,600 | | |
| 10 | 47° | 9,650 | 3,650 | 68° | 9,250 | 3,350 | 75° | 6,600 | 80° | 6,600 | 82° | 5,700 |
| 12 | 33° | 7,000 | 2,650 | 62° | 6,650 | 2,350 | 72° | 6,200 | 77° | 6,200 | 80° | 5,700 |
| 16 | | | | 50° | 3,900 | 1,250 | 64° | 3,900 | 72° | 3,900 | 76° | 3,900 |
| 20 | | | | 34° | 2,650 | 700 | 56° | 2,650 | 65° | 2,650 | 71° | 2,650 |
| 25 | | | | | | | 44° | 1,700 | 57° | 1,700 | 65° | 1,700 |
| 30 | | | | | | | 27° | 1,150 | 48° | 1,150 | 58° | 1,150 |
| 35 | | | | | | | | | 38° | 900 | 51° | 900 |
| 40 | | | | | | | | | 22° | 700 | 43° | 700 |
| 45 | | | | | | | | | | | 33° | 550 |
| | 1° | 5,600 (13.6ft.) | 2,050 | 1° | 1,950 (23.1ft.) | 400 | 1° | 950 (32.5ft.) | 1° | 650 (42.0ft.) | 1° | 400 (51.4ft.) |

### CAPACITY CHART; D (Bigger stability)

| Load radius (ft.) | 14.4 ft. Boom | | | 23.9 ft. Boom | | | 33.3 ft. Boom | | | 42.8 ft. Boom | | 52.2 ft. Boom | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | Loaded Boom Angle | Outriggers Extended |
| | | Max. | Min. | | Max. | Min. | | Max. | Min. | | Max. | | Max. |
| 5 | 72° | 20,000 | 8,800 | 80° | 13,200 | 8,800 | | | | | | | |
| 6 | 68° | 17,800 | 8,800 | 78° | 13,200 | 8,800 | 82° | 6,600 | 6,350 | | | | |
| 8 | 58° | 13,000 | 7,850 | 73° | 13,000 | 7,850 | 79° | 6,600 | 6,350 | 82° | 6,600 | | |
| 10 | 47° | 10,550 | 5,700 | 68° | 10,550 | 5,700 | 75° | 6,600 | 5,700 | 80° | 6,600 | 82° | 5,700 |
| 12 | 33° | 8,900 | 4,250 | 62° | 8,900 | 4,200 | 72° | 6,600 | 4,200 | 77° | 6,600 | 80° | 5,700 |
| 16 | | | | 50° | 6,600 | 2,550 | 64° | 6,150 | 2,550 | 72° | 5,900 | 76° | 5,700 |
| 20 | | | | 34° | 4,750 | 1,700 | 56° | 4,750 | 1,700 | 65° | 4,300 | 71° | 4,300 |
| 25 | | | | | | | 44° | 3,400 | 1,100 | 57° | 3,300 | 65° | 3,250 |
| 30 | | | | | | | 27° | 2,450 | 600 | 48° | 2,450 | 58° | 2,450 |
| 35 | | | | | | | | | | 38° | 2,050 | 51° | 2,050 |
| 40 | | | | | | | | | | 22° | 1,550 | 43° | 1,550 |
| 45 | | | | | | | | | | | | 33° | 1,300 |
| | 1° | 7,800 (13.6ft.) | 3,500 | 1° | 3,850 (23.1ft.) | 1,250 | 1° | 2,200 (32.5ft.) | 500 | 1° | 1,450 (42.0ft.) | 1° | 950 (51.4ft.) |

### CAPACITY CHART; C (Derated)

| Load radius (ft.) | 14.4 ft. Boom | | | 23.9 ft. Boom | | | 33.3 ft. Boom | | 42.8 ft. Boom | | 52.2 ft. Boom | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | Loaded Boom Angle | Outriggers Extended | Loaded Boom Angle | Outriggers Extended |
| | | Max. | Min. | | Max. | Min. | | Max. | | Max. | | Max. |
| 5 | 72° | 14,000 | 8,800 | 80° | 13,200 | 8,800 | | | | | | |
| 6 | 68° | 14,000 | 8,650 | 78° | 13,200 | 8,600 | 82° | 6,600 | | | | |
| 8 | 58° | 13,000 | 5,450 | 73° | 12,950 | 5,100 | 79° | 6,600 | 82° | 6,600 | | |
| 10 | 47° | 9,650 | 3,650 | 68° | 9,250 | 3,350 | 75° | 6,600 | 80° | 6,600 | 82° | 5,700 |
| 12 | 33° | 7,000 | 2,650 | 62° | 6,650 | 2,350 | 72° | 6,200 | 77° | 6,200 | 80° | 5,700 |
| 16 | | | | 50° | 3,900 | 1,250 | 64° | 3,900 | 72° | 3,900 | 76° | 3,900 |
| 20 | | | | 34° | 2,650 | 700 | 56° | 2,650 | 65° | 2,650 | 71° | 2,650 |
| 25 | | | | | | | 44° | 1,700 | 57° | 1,700 | 65° | 1,700 |
| 30 | | | | | | | 27° | 1,150 | 48° | 1,150 | 58° | 1,150 |
| 35 | | | | | | | | | 38° | 900 | 51° | 900 |
| 40 | | | | | | | | | 22° | 700 | 43° | 700 |
| 45 | | | | | | | | | | | 33° | 550 |
| | 1° | 5,600 (13.6ft.) | 2,050 | 1° | 1,950 (23.1ft.) | 400 | 1° | 950 (32.5ft.) | 1° | 650 (42.0ft.) | 1° | 400 (51.4ft.) |

### CAPACITY CHART; F (Derated, Bigger stability)

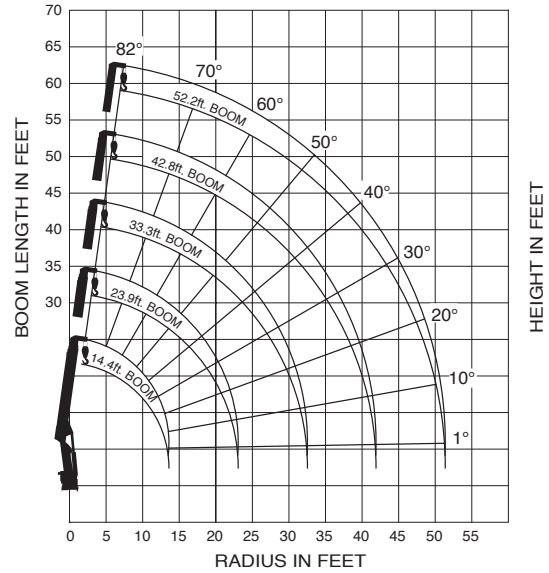
| Load radius (ft.) | 14.4 ft. Boom | | | 23.9 ft. Boom | | | 33.3 ft. Boom | | | 42.8 ft. Boom | | 52.2 ft. Boom | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | | Loaded Boom Angle | Outriggers Extended | Loaded Boom Angle | Outriggers Extended |
| | | Max. | Min. | | Max. | Min. | | Max. | Min. | | Max. | | Max. |
| 5 | 72° | 14,000 | 8,800 | 80° | 13,200 | 8,800 | | | | | | | |
| 6 | 68° | 14,000 | 8,800 | 78° | 13,200 | 8,800 | 82° | 6,600 | 6,350 | | | | |
| 8 | 58° | 13,000 | 7,850 | 73° | 13,000 | 7,850 | 79° | 6,600 | 6,350 | 82° | 6,600 | | |
| 10 | 47° | 10,550 | 5,700 | 68° | 10,550 | 5,700 | 75° | 6,600 | 5,700 | 80° | 6,600 | 82° | 5,700 |
| 12 | 33° | 8,900 | 4,250 | 62° | 8,900 | 4,200 | 72° | 6,600 | 4,200 | 77° | 6,600 | 80° | 5,700 |
| 16 | | | | 50° | 6,600 | 2,550 | 64° | 6,150 | 2,550 | 72° | 5,900 | 76° | 5,700 |
| 20 | | | | 34° | 4,750 | 1,700 | 56° | 4,750 | 1,700 | 65° | 4,300 | 71° | 4,300 |
| 25 | | | | | | | 44° | 3,400 | 1,100 | 57° | 3,300 | 65° | 3,250 |
| 30 | | | | | | | 27° | 2,450 | 600 | 48° | 2,450 | 58° | 2,450 |
| 35 | | | | | | | | | | 38° | 2,050 | 51° | 2,050 |
| 40 | | | | | | | | | | 22° | 1,550 | 43° | 1,550 |
| 45 | | | | | | | | | | | | 33° | 1,300 |
| | 1° | 7,800 (13.6ft.) | 3,500 | 1° | 3,850 (23.1ft.) | 1,250 | 1° | 2,200 (32.5ft.) | 500 | 1° | 1,450 (42.0ft.) | 1° | 950 (51.4ft.) |

Notice: The chart is only for reference and should not be used for operation.
Maintain a clearances at least 10 feet between any part of the crane, load line or load and any electrical line carrying up to 50,000 volts.
One- foot additional clearance is required for every additional 30,000 volts or less.

# TM-1052 (10 ton) crane capacity

TADANO

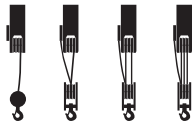
## WORKING RANGE



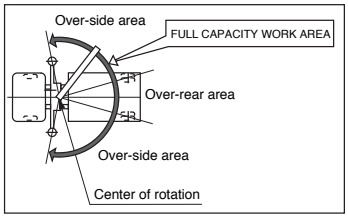

The above lifting heights and boom angles are based on a straight (unladen)boom, and allowance should be made for boom deflection obtained under laden condition.

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 factory recommended truck. The rated lifting capacities in shade area are based on crane strength and others, on its stability(not to exceed 85% of tipping).
2) The weight of handling devices such as hook block, slings, etc., must be considered part of the load and must be deducted form 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 length or radius not shown, use the rated lifting capacity of next longer boom length or radius.
5) When outriggers are extended to mid. position, use the rated lifting capacities for outriggers extended to min. position.
6) For boom lengths longer than 33.3ft., extend outriggers to max. position. (in capacity chart A & C)
7) For boom lengths longer than 42.8ft., extend outriggers to max. position. (in capacity chart D & F)
8) 42.8 ft. boom means mark on 4th boom section side plate is half visible.
9) Maximum load for number of part lines is as shown below.

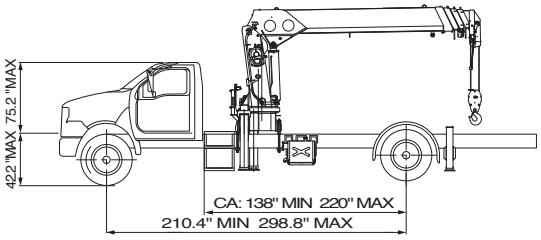


| No. of part lines | 1 | 2 | 4 | 6 |
|---|---|---|---|---|
| Max. of load | 3,340 lbs. | 6,600lbs. | 13,200lbs. | 20,000lbs. (A&D)<br>14,000lbs. (C&F) |




# TM-1052 (10 ton) crane configurations

## <CAB BACK MOUNTED>

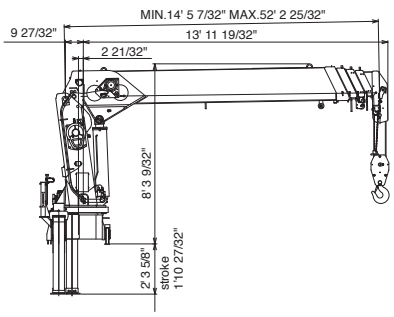



This mount requires, rear stabilizers, and additional counterweight in the underside of the truck.The complete unit must be installed in accordance with factory requirements and a test performed to determine actual stability and counterweight requirements for variety of trucks.

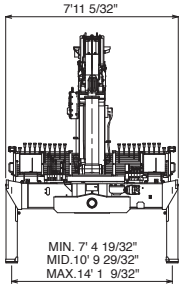
| | CAPACITY; A,C | CAPACITY; D,F |
|---|---|---|
| Gross axle weight rating(GAWR),front | 9,000 lbs. or more | 12,000 lbs. or more |
| Gross axle weight rating(GAWR),rear | 17,000 lbs. or more | 21,000 lbs. or more |
| Gross vehicle weight | 26,000 to 55,100 lbs. | 33,000 to 55,100 lbs. |
| Cab to Axle(CA) | 138 to 220" | |
| Frame Section Modulus(SM) under crane; (per rail) | 15 cu. inch | 110,000psi |
| | 33 cu. inch | 50,000psi |
| Frame Section Modulus(SM) over rear spring hanger; (per rail) | 10 cu. inch | 110,000psi |
| | 22 cu. inch | 50,000psi |
| P.T.O. torque | 158 ft-lbs. Min. | |
| P.T.O. revolution | Approx. 350 to 1,750 rpm | |
| Width for crane mounting | Approx. 3' 7-7/8" min. | |
| Frame width range (inside to outside) | Approx. 2' to 3' 1-1/2" | |
| Frame height (ground to frame top) | Approx. 3' 6" max. (Height of crane mounting base can be changed by combination of jack floats and crane bases) | |

* Estimated axle scale weights prior to installation of crane and stabilizers for 85% stability. Include counterweight.

# TM-1052 (10 ton) crane dimensional specifications




(This dimension depends on jack floats applied.)



The TADANO TM-1052 is the only true 10 ton telescopic crane offered today. With a tip height of 62 feet, this crane answers the demand for a compact, continuous rotation hydraulic crane that can be mounted in a number of configurations. With options of a work basket and radio remotes, this crane becomes an aerial work platform as well as a crane.
If you are in the market for a true 10 ton crane, the TADANO TM-1052 has the features everyone is asking for in a versatile crane package.
TADANO builds a vast range of cranes from 0.5 ton to 600 tons. No matter what your reach or lift requirements are, TADANO can provide you with a great solution. Put one to work for you now. Call today or visit our web site for more information.

**Features:**

**Exceptional Reach without a Jib:** 52.23 ft. Full powered partly synchronized Boom
**Self-Aligning Pentagonal Shaped Boom:** reducing maintenance cost
**Light Weight:** increases payload
**Out & Down Mainframe Outriggers:** complete level ability
**Multiple Outrigger Span:** easy to set up in various job sites
**Faster Function Speeds:** increase productivity
**Superior Winch Performance:** up to 147 FPM increase productivity
**Shear Plate Mounting:** more secure “no creep mount”
**Large Hydraulic Reservoir:** superior cooling capabilities
**Operator Friendly:** dual control stations with exceptional job site viewing
**Complete Load Monitoring:** TADANO’s exclusive “AMA” system

*Highest Quality Boom Trucks on the Planet*

TADANO

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TM1052-2007-07-1