TADANO

Lifting your dreams

TRUCK LOADER CRANE

TM-ZX1200MH

For Large Size Vehicles

Rear outriggers are optional.

Note: Some specifications are subject to change.

TADANO

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TM-ZX1200MH-E-22-04-02-58-612-A
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High quality and comfortable opera bility, for more powerful work.

The TM-ZX1200MH is a high quality machine, combining robustness and power of a large-scale crane with comfortable workability.

TM-ZX1200MH

Three advantages for more powerful work

1 **Max. Lifting Capacity: 12 t**

Crane Capacity: 22 tm (8.8 t at 2.5 m)

2 **Boom Length: 16 m**

Max. Lifting Height: Approx. 17.8 m Max. Load Radius: 15.7 m

3 **Max. Outriggers Extended Width : 5.5 m**

Tough outriggers with box structure jacks ensure excellent stability.

TM-ZX1200MH

Cargo Crane for Large Size Vehicles

Hook-in System

TADANO original hook-in system is equipped as standard and enhances work efficiency.

Anti-two-block Function

This function stops crane operation (hoisting up, boom elevation, and boom extension) when the hook block touches the weight, and warns the operator with an alarm, to prevent the hook block from hitting the boom head.

Responding to Operator's command

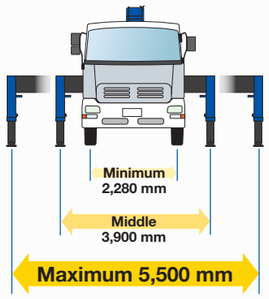
Equipped with optimally matched, high-performance control valves, the operating levers provide improved responsiveness and fine-tuned control.
Operation is fast or slow in accordance with operator's command.
The stainless rods between the left and right operation levers are provided as standard.

Continuous 360° Full Circle Slewing

The newly designed compact slewing post improves performance providing full circle, continuous rotation for more efficient operations.
Automatic slewing lock:
The boom is mechanically locked at the slewing post base which prevents boom rotation during vehicle travel.

Strong and wide Outrigger

Strong 5.5 m width and powerful outriggers with box structure jacks, an easy and safe lock system together with new universal floats. The lock system is one of the advanced reliable TADANO standard safety systems.



Strong Pentagonal Boom

TADANO's strong and light pentagonal boom made of high tensile steel thoroughly designed and well proven for its quality, strength and smoothness, with a rigid and fine-tuned telescoping boom providing comfortable crane operation.

Automatic Slewing Lock System

The boom is mechanically locked securely at the boom post base to prevent the boom from accidentally slewing out during travel.

Powerful Elevating Cylinder

The cylinder use hydraulic, control, and processing technologies cultivated from more than 50 years of manufacturing experience, supporting greater work capacity.

Cable Follower

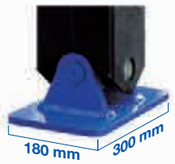
The cable follower prevents disorderly cable (wire rope) winding by always pressing the cable onto the winch drum and puts the wire rope at a right position.

Big Hydraulic Tank

Big hydraulic tank with approximately 90 liter capacity.

Tiltable Front Outrigger Jack Float

Tiltable float rotates 360 degrees to fit any ground, for better stability. Large floats reduce ground pressure.



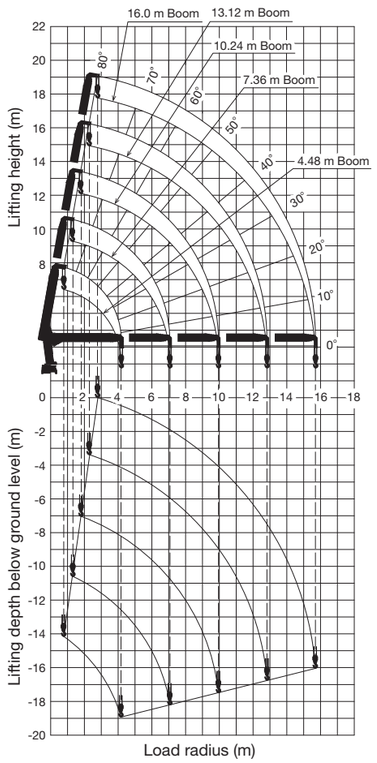
TM-ZX1200MH

Technical Specifications

Model	TM-ZX1205MH
MAXIMUM LIFTING CAPACITY	12,000 kg at 1.6 m (8-part line)
CRANE CAPACITY	8,800 kg at 2.5 m (8-part line)
BOOM	Five-sectioned, fully powered partly synchronized telescoping boom of pentagonal box construction with 4 sheaves at boom head
Fully retracted length	4.48 m
Fully extended length	16.00 m
Extension speed	11.5 m in 38 s
Elevation	Elevated by two double-acting hydraulic cylinders
Boom raising speed	0° to 80° in 22 s
Boom point	4 sheaves
WINCH	Hydraulic motor driven. Spur gear speed reduction, provided with mechanical brake and cable follower
Single line pull	14.96 kN {1,525 kgf}
Single line speed	44 m/min (at 4th layer)
Wire rope(Diameter x length)	10 mm x 95 m
Wire rope(Breaking strength)	73.5 kN {7,500 kgf}
Wire rope(Construction)	7 x 7 + 6 x Fi (29)
Hook block	4 sheaves
HOOK STOWING DEVICE	Mechanically stowed beneath boom top portion
SLEWING	Hydraulic motor driven. Worm gear speed reduction. Continuous 360° full circle slewing on ball bearing slew ring. Automatic slewing lock
Slewing speed	2.1 min^{-1} {rpm}
OUTRIGGERS	Hydraulically operated beams and jacks. Integral with crane frame
Extended width	Min.: 2,280 mm, Mid.: 3,900 mm, Max.: 5,500 mm
HYDRAULIC SYSTEM	
Hydraulic pump	Single gear pump
Hydraulic motors	Axial piston type for winch and slewing
Control valves	Multiple control valves with integral safety valves
Oil tank capacity	approx. 90 liters
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
OPTIONAL EQUIPMENT	•Rear outriggers (outrigger beam extension type) •Rear outriggers (outrigger beam non-extension type) •Oil cooler •Maintenance cock
CRANE MASS	Approx. 3,500 kg (except mounting parts)

Note: Operating speeds of the crane are guaranteed under the condition that the pump delivery is 60 L/ min.

Working Range (4 parts of line)



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.

Rated Lifting Capacities (x 1,000 kg)

< over-side , over-rear area > (over-front area : 25% of empty chassis rated lifting capacity)

Table A

● 4.48 m boom

Load radius (m)			1.6 and below	2.5	3.0	3.3	3.5	4.18
Crane Strength			12.00	8.80	7.00	6.10	5.70	4.70
Empty Chassis	Extension width of outriggers	Max.	12.00	8.80	7.00	6.10	5.70	4.70
		Mid.	12.00	8.80	6.85	5.45	4.80	3.25
		Min.	10.00	3.80	2.65	2.20	1.95	1.35

● 7.36 m boom

Load radius (m)			2.5 and below	3.0	3.5	4.0	4.5	5.0	6.0	7.06
Crane Strength			6.10	6.10	5.50	4.90	4.40	3.90	3.10	2.50
Empty Chassis	Extension width of outriggers	Max.	6.10	6.10	5.50	4.90	4.40	3.65	2.50	1.75
		Mid.	6.10	6.10	4.65	3.50	2.75	2.20	1.50	1.04
		Min.	3.65	2.55	1.85	1.40	1.10	0.85	0.52	0.26

● 10.24 m boom

Load radius (m)			4.5 and below	5.0	6.0	7.0	8.0	9.0	9.94
Crane Strength			3.30	3.20	2.90	2.50	2.10	1.85	1.55
Empty Chassis	Extension width of outriggers	Max.	3.30	3.20	2.50	1.75	1.35	1.05	0.85
		Mid.	2.75	2.20	1.50	1.04	0.82	0.62	0.46
		Min.	1.10	0.85	0.52	0.26	0.19	–	–

● 13.12 m boom

Load radius (m)			4.5 and below	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	12.82
Crane Strength			3.20	3.10	2.70	2.40	2.10	1.75	1.50	1.30	1.10	1.00
Empty Chassis	Extension width of outriggers	Max.	3.20	3.10	2.50	1.75	1.35	1.05	0.80	0.68	0.60	0.55
		Mid.	2.75	2.20	1.50	1.04	0.82	0.62	0.45	0.37	0.31	0.26

● 16.00 m boom

Load radius (m)			5.0 and below	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	15.7
Crane Strength			2.60	2.40	2.20	1.90	1.70	1.45	1.25	1.10	1.00	0.90	0.80	0.70
Empty Chassis	Extension width of outriggers	Max.	2.60	2.40	1.75	1.35	1.05	0.80	0.68	0.60	0.53	0.47	0.42	0.39
		Mid.	2.20	1.50	1.04	0.82	0.62	0.45	0.37	0.31	0.25	0.22	0.18	0.15

Table B

● 4.48 m boom

Load radius (m)			1.6 and below	2.5	3.0	3.3	3.5	4.18
Crane Strength			12.00	8.80	7.00	6.10	5.70	4.70
Empty Chassis	Extension width of outriggers	Max.	12.00	8.80	7.00	6.10	5.70	4.70
		Mid.	12.00	8.80	7.00	6.10	5.70	4.10
		Min.	12.00	4.65	3.30	2.75	2.45	1.70

● 7.36 m boom

Load radius (m)			2.5 and below	3.0	3.5	4.0	4.5	5.0	6.0	7.06
Crane Strength			6.10	6.10	5.50	4.90	4.40	3.90	3.10	2.50
Empty Chassis	Extension width of outriggers	Max.	6.10	6.10	5.50	4.90	4.40	3.90	3.10	2.25
		Mid.	6.10	6.10	5.50	4.40	3.50	2.90	2.05	1.45
		Min.	4.50	3.15	2.35	1.80	1.40	1.15	0.75	0.45

● 10.24 m boom

Load radius (m)			4.5 and below	5.0	6.0	7.0	8.0	9.0	9.94
Crane Strength			3.30	3.20	2.90	2.50	2.10	1.85	1.55
Empty Chassis	Extension width of outriggers	Max.	3.30	3.20	2.90	2.25	1.85	1.50	1.20
		Mid.	3.30	2.90	2.05	1.45	1.15	0.90	0.70
		Min.	1.40	1.15	0.75	0.45	0.25	–	–

● 13.12 m boom

Load radius (m)			4.5 and below	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	12.82
Crane Strength			3.20	3.10	2.70	2.40	2.10	1.75	1.50	1.30	1.10	1.00
Empty Chassis	Extension width of outriggers	Max.	3.20	3.10	2.70	2.25	1.85	1.50	1.15	0.95	0.80	0.70
		Mid.	3.20	2.90	2.05	1.45	1.15	0.90	0.65	0.50	0.40	0.35

● 16.00 m boom

Load radius (m)			5.0 and below	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	15.7
Crane Strength			2.60	2.40	2.20	1.90	1.70	1.45	1.25	1.10	1.00	0.90	0.80	0.70
Empty Chassis	Extension width of outriggers	Max.	2.60	2.40	2.20	1.85	1.50	1.15	0.95	0.80	0.68	0.60	0.55	0.50
		Mid.	2.60	2.05	1.45	1.15	0.90	0.65	0.50	0.40	0.33	0.28	0.25	0.22

Table C

● 4.48 m boom

Load radius (m)			1.6 and below	2.5	3.0	3.3	3.5	4.18
Crane Strength			12.00	8.80	7.00	6.10	5.70	4.70
Empty Chassis	Extension width of outriggers	Max.	12.00	8.80	7.00	6.10	5.70	4.70
		Mid.	12.00	8.80	7.00	6.10	5.70	4.70
		Min.	12.00	5.50	3.95	3.35	3.00	2.15

● 7.36 m boom

Load radius (m)			2.5 and below	3.0	3.5	4.0	4.5	5.0	6.0	7.06
Crane Strength			6.10	6.10	5.50	4.90	4.40	3.90	3.10	2.50
Empty Chassis	Extension width of outriggers	Max.	6.10	6.10	5.50	4.90	4.40	3.90	3.10	2.50
		Mid.	6.10	6.10	5.50	4.90	4.05	3.35	2.40	1.75
		Min.	5.35	3.85	2.90	2.25	1.85	1.50	1.00	0.70

● 10.24 m boom

Load radius (m)			4.5 and below	5.0	6.0	7.0	8.0	9.0	9.94
Crane Strength			3.30	3.20	2.90	2.50	2.10	1.85	1.55
Empty Chassis	Extension width of outriggers	Max.	3.30	3.20	2.90	2.50	2.10	1.80	1.45
		Mid.	3.30	3.20	2.40	1.75	1.40	1.10	0.90
		Min.	1.85	1.50	1.00	0.70	0.55	0.40	0.25

● 13.12 m boom

Load radius (m)			4.5 and below	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	12.82
Crane Strength			3.20	3.10	2.70	2.40	2.10	1.75	1.50	1.30	1.10	1.00
Empty Chassis	Extension width of outriggers	Max.	3.20	3.10	2.70	2.40	2.10	1.75	1.40	1.20	1.05	0.95
		Mid.	3.20	3.10	2.40	1.75	1.40	1.10	0.85	0.70	0.60	0.55

● 16.00 m boom

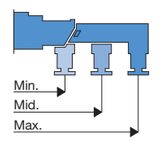
Load radius (m)			5.0 and below	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0	14.0	15.0	15.7
Crane Strength			2.60	2.40	2.20	1.90	1.70	1.45	1.25	1.10	1.00	0.90	0.80	0.70
Empty Chassis	Extension width of outriggers	Max.	2.60	2.40	2.20	1.90	1.70	1.40	1.20	1.05	0.90	0.80	0.70	0.65
		Mid.	2.60	2.40	1.75	1.40	1.10	0.85	0.70	0.60	0.53	0.47	0.42	0.40

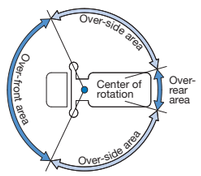
Notes:
1. This value depends on condition that crane is set level on firm level ground.
2. This value has been calculated on the basis of ISO 15442.
3. This value includes the mass of lifting devices such as hook block (95 kg).
4. This load radius shows actual load radius which includes boom deflection.
5. Rated lifting capacity is in consideration of the loading on the truck bed, and is within the range from the empty chassis rated lifting capacity to the crane strength rated lifting capacity.
6. If the boom length exceeds the table value even a little, the performance is limited to the performance of the next boom length.
7. When the lifting load is heavier than 6,100 kg, number of part lines must be 8. In case of 6,100 kg or less, number of part lines must be 4. Load per line must not surpass 14.96 kN {1,525 kgf}.
8. Empty Chassis Rated Capacities table A, B and C depend on the types of chassis.
9. Empty Chassis Rated Capacities are shown for over-side areas and over-rear area. These capacities for over-front area may be lowered depending on the types of chassis.
   (The following table shows guidelines for bodywork vehicles that can achieve the rated lifting capacities tables A, B and C. Be sure to carry out a stability inspection to determine which performance to apply.)

A	WB: 5000 mm over, GVW: 25 t over, CAWf (*1): 3.0 t over
B	WB: 5000 mm over, GVW: 25 t over, CAWf (*1): 4.0 t over
C	WB: 5000 mm over, GVW: 25 t over, CAWf (*1): 5.0 t over

*1 Chassis front axle weight (excluding crane mass)

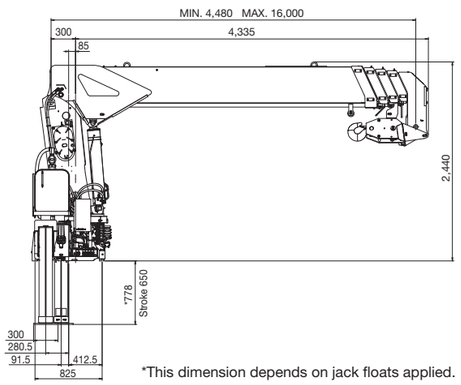
Extension width of outriggers



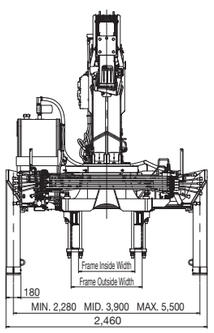


Dimensions

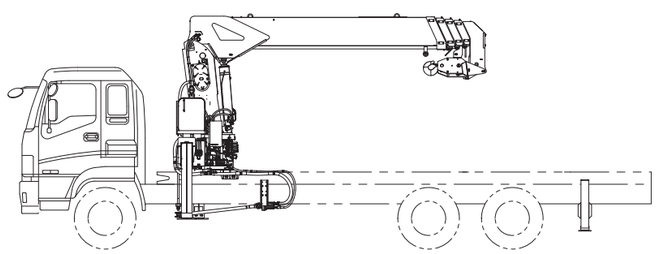
(mm)



*This dimension depends on jack floats applied.



Truck mount



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