

TM-ZE290/260MH

For Small Size Vehicles



IDEAL Cargo Crane, TADANO ZE

The ZE features all the Tadano Cargo Crane technologies that are recognized the world over.

The key development concepts remain:

EXCELLENT QUALITY, EASY OPERATION AND EASY MAINTENANCE.

The TM-ZE290/260MH series,

with a lifting capacity of 3.03/2.63 tons,

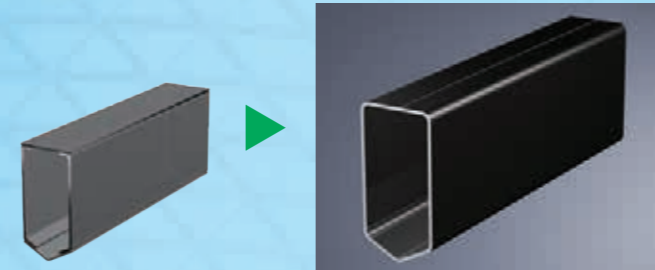
and a choice of 4 different lengths of the boom are available to meet your lifting requirements.



STRONGER AND LIGHTER BOOM

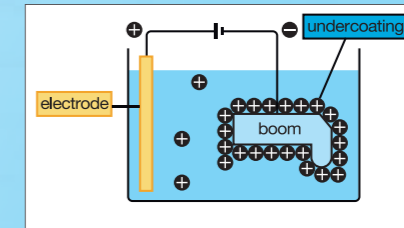
Tadano's unique pentagonal boom is made of high-tensile steel and the section of boom has a structure of bended one piece steel plate for lighter boom weight and powerful lifting capability.

Special valves enable smooth boom extension and retraction for smoother operation to reduce a shock when telescoping the boom.



CATIONIC ELECTRO-DEPOSITION COATING

The crane is undercoated by Cationic Electro-deposition method. The parts are dipped in cationic solution, and even the narrow inner booms and frames are thoroughly undercoated.



GREATER WINCH

The advantages of the enlarged winch drum and plunger motor are evident during start-up when maximum power is required. Re-hoisting with a load on the hook can also be handled with ease.

The winch reduction gear comes equipped with a failsafe automatic brake.

From the pitch of the drum grooves to the fitting of the guide sheave, cable winding has been improved in every detail so as to prevent the cable from winding off position.



FULL CIRCLE, CONTINUOUS 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 traveling.



CENTRALIZED CONTROL PANELS

Installed on both sides of the slewing post are the centralized control panels where operating switches and the lifting charts needed for crane operation are grouped together and arranged on a single panel.

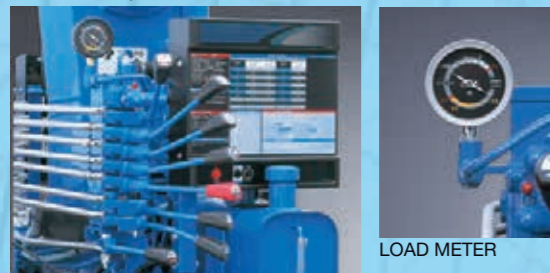


LEFT-HAND SIDE

RIGHT-HAND SIDE

RESPONDING TO OPERATOR'S COMMAND

Equipped with an 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 left and right operation levers are provided as standard.



LOAD METER

QUICKER WORK WITH ADVANCED OUTRIGGER MECHANISM

The outrigger beams can be easily operated, using a grip to lock/release and extend/retract them. The new lock system prevents the outriggers from swinging out during traveling.

A level gauge is provided as standard equipment.



NEW LOCK SYSTEM

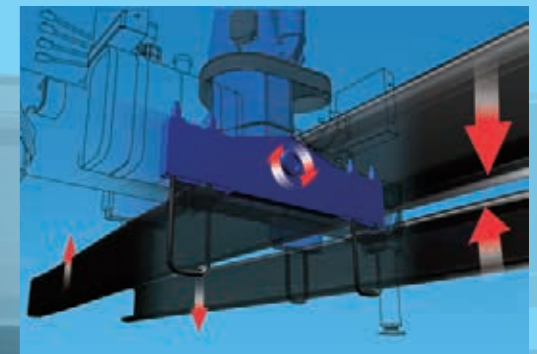


LEVEL GAUGE

THREE-POINT SUPPORT SYSTEM (Equalizer Crane Support)

Tadano's Equalizer Crane Support protects the truck frame from stress.

The crane is mounted to the truck chassis with the Equalizer Crane Support that evenly distributes the load to prevent excessive stress concentration at any one point.



TM-ZE290MH series

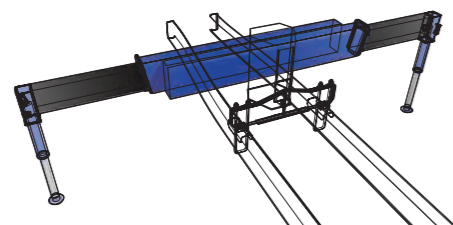


HOOK IN SYSTEM (TM-ZE290MH only)

The TM-ZE290MH feature the "Hook-In" system to further enhance work efficiency.

A pull of a lever and the crane hook is stowed automatically.

No more manual fixing.

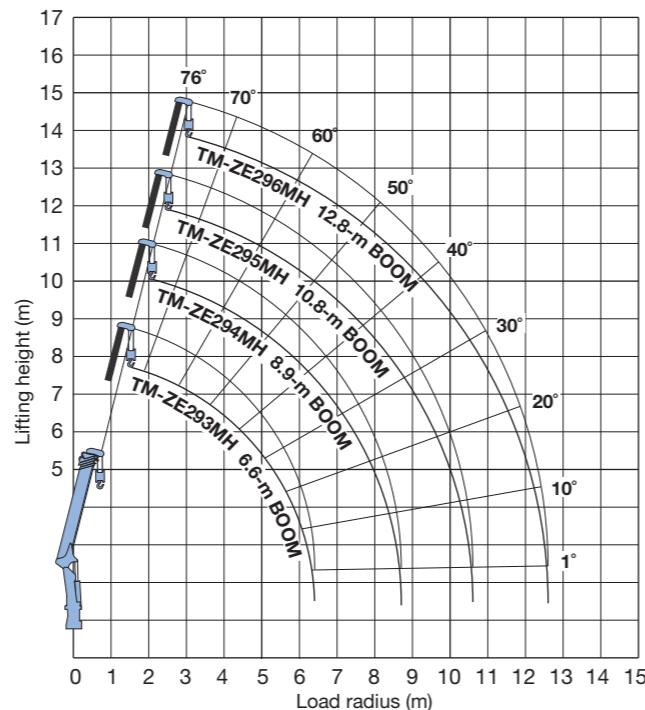


PARABOX OUTRIGGER (TM-ZE290MH series)



TM-ZE294MH

WORKING RANGE



NOTES FOR WORKING RANGE:
Boom deflection, and subsequent radius and boom angle change must be accounted for when applying load to hook.

TECHNICAL SPECIFICATIONS

MODEL	TM-ZE293M	TM-ZE293MH*	TM-ZE294M	TM-ZE294MH*	TM-ZE295M	TM-ZE295MH*	TM-ZE296M	TM-ZE296MH*
CRANE CAPACITY	3,030 kg at 1.5 m (4-parts of line)		3,030 kg at 1.5 m (4-parts of line)		3,030 kg at 1.4 m (4-parts of line)		3,030 kg at 1.4 m (4-parts of line)	
BOOM	Fully powered telescoping boom of pentagonal box construction.							
Number of sections	3		4		5		6	
Length	2.85 m-6.6 m		3.17 m-8.9 m		3.13 m-10.8 m		3.23 m-12.8 m	
Extending speed	3.75 m / 10.5 s		5.73 m / 13 s		7.67 m / 15.5 s		9.57 m / 17 s	
Elevating range/speed	1° to 76° / 6 s							
Max. lifting height**	Approx. 7.8 m**		Approx. 10.0 m**		Approx. 11.8 m**		Approx. 13.8 m**	
Max. load radius**	6.4 m**		8.7 m**		10.6 m**		12.6 m**	
WINCH	Hydraulic motor driven. Spur gear speed reduction, provided with mechanical brake.							
Max. single line pull	7.45 kN {760 kgf}							
Max. single line speed	68 m/min. (at 4th layer)							
Wire rope (Diameter x length)	8 mm x 45 m		8 mm x 56 m		8 mm x 66 m		8 mm x 75 m	
SLEWING	Hydraulic motor driven. Worm gear speed reduction. Continuous 360° full circle slewing on ball bearing slewing ring. Automatic slewing lock.							
Slewing speed	2.5 min ⁻¹ {rpm}							
OUTRIGGERS	Manually extended sliders and hydraulically extended jacks Integral with crane frame							
Extension width	Max. : 3.4 m, Mid. : 2.9m / 2.4 m, Min. : 1.72 m							
HYDRAULIC SYSTEM	Multiple control valves with integral safety valves							
Control valves	•Load meter •Load indicator •Anti-two-block alarm •Hoisting limiter •Hook safety latch •Hydraulic safety valves •Level gauge							
STANDARD SAFETY DEVICES	Gross vehicle mass (including crane mass) 4,500 to 8,000 kg							
SUITABLE TRUCKS	* WITH HOOK STOWING DEVICE. Mechanically stows hook beneath boom head. ** Boom deflection, and subsequent radius and boom angle change must be accounted for when applying load to hook.							

RATED LIFTING CAPACITIES (With empty chassis)

Table A

TM-ZE293M / ZE293MH		2.85-m/4.74-m boom		2.5		3.0		3.5		4.0		4.54	
Load radius (m)	1.5 and below	2.0	2.5	3.0	3.5	4.0	4.54	3,030	2,280	1,730	1,230	930	730
Rated lifting capacity (kg)													

Table B

TM-ZE294M / ZE294MH		3.17-m/5.12-m boom		2.5		3.0		3.5		4.0		4.5		4.92	
Load radius (m)	1.5 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.92	3,030	2,280	1,730	1,180	880	680	530
Rated lifting capacity (kg)															

Table C

TM-ZE293M / ZE293MH		2.85-m/4.74-m boom		2.5		3.0		3.5		4.0		4.54	
Load radius (m)	1.5 and below	2.0	2.5	3.0	3.5	4.0	4.54	3,030	2,280	1,830	1,430	1,080	830
Rated lifting capacity (kg)													

Table D

TM-ZE294M / ZE294MH		3.17-m/5.12-m boom		2.5		3.0		3.5		4.0		4.5		4.92	
Load radius (m)	1.5 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.92	3,030	2,330	1,880	1,500	1,250	1,080	930
Rated lifting capacity (kg)															

Table E

TM-ZE295M / ZE295MH		3.13-m/5.07-m boom		2.5		3.0		3.5		4.0		4.5		4.87	
Load radius (m)	1.4 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.87	3,030	2,180	1,730	1,430	1,230	1,080	930
Rated lifting capacity (kg)															

Table F

TM-ZE296M / ZE296MH		3.23-m/5.17-m boom		2.5		3.0		3.5		4.0		4.5		4.97	
Load radius (m)	1.4 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.97	3,030	2,130	1,730	1,430	1,230	1,030	830
Rated lifting capacity (kg)															

Table G

TM-ZE293M / ZE293MH		2.85-m/4.74-m boom		2.5		3.0		3.5		4.0		4.54	
Load radius (m)	1.5 and below	2.0	2.5	3.0	3.5	4.0	4.54	3,030	2,330	1,880	1,500	1,250	1,080
Rated lifting capacity (kg)													

Table H

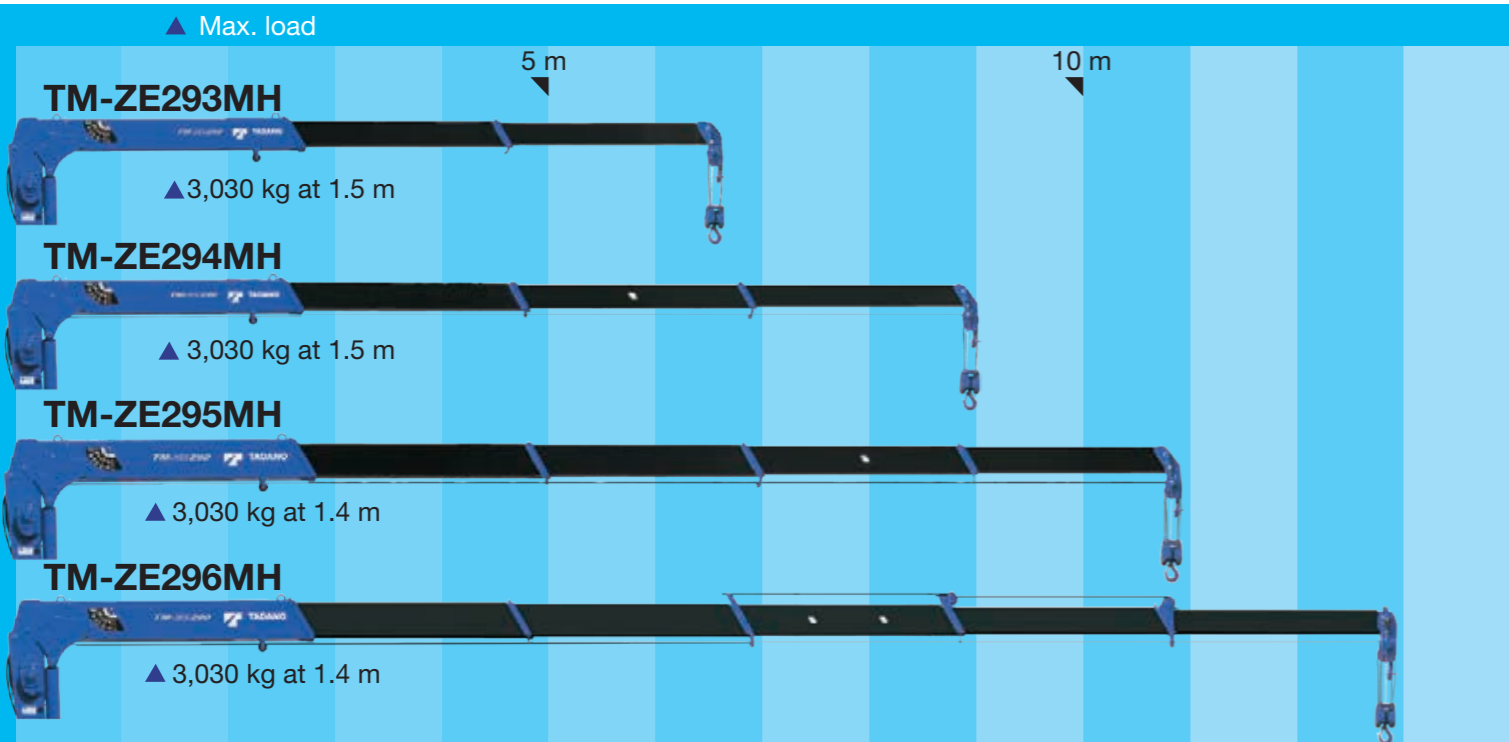
TM-ZE294M / ZE294MH		3.17-m/5.12-m boom		2.5		3.0		3.5		4.0		4.5		4.92	
Load radius (m)	1.5 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.92	3,030	2,330	1,880	1,500	1,250	1,080	930
Rated lifting capacity (kg)															

Table I

TM-ZE295M / ZE295MH		3.13-m/5.07-m boom		2.5		3.0		3.5		4.0		4.5		4.87	
Load radius (m)	1.4 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.87	3,030	2,180	1,730	1,430	1,230	1,080	930
Rated lifting capacity (kg)															

Table J

TM-ZE296M / ZE296MH		3.23-m/5.17-m boom		2.5		3.0		3.5		4.0		4.5		4.97	
Load radius (m)	1.45 and below	2.0	2.5	3.0	3.5	4.0	4.5	4.97	3,030	2,180	1,730	1,430	1,230	1,050	900
Rated lifting capacity (kg)															



The cables and sheaves are all internal - for a clean, clutter - free appearance. Except 6 section boom

NOTES FOR TECHNICAL SPECIFICATIONS:
Operating speeds of the crane are guaranteed under the conditions that the pump delivery is 53 L/min.

NOTES FOR RATED LIFTING CAPACITIES:
The mass of hook (30 kg), slings and all other lifting devices must be added to the mass of the load.

