

TM-ZE550MH

For Medium / Large Size Vehicles

CARGO CRANE



Note: Some specifications are subject to change.

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-ZE550 with the maximum lifting capacity 5.05 tons has a choice of 3 different lengths of the boom to meet your lifting requirements.

HOOK IN SYSTEM

TM-ZE550 features 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.



RESPONDING TO OPERATOR'S COMMAND

Equipped with optimally matched, high-performance control valves, the operating levers provide improved



CONTROL LEVER

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.

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.



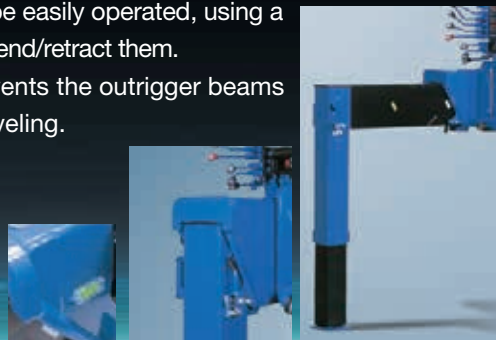
LEFT-HAND SIDE



RIGHT-HAND SIDE

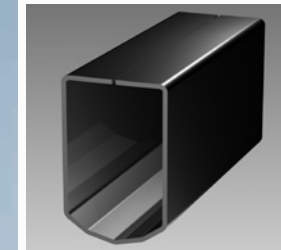
QUICKER WORK WITH ADVANCED OUTRIGGER MECHANISM

The outrigger beams can be easily operated, using a grip to lock/release and extend/retract them. The new lock system prevents the outrigger beams from extending during traveling. A level gauge is provided as standard equipment.



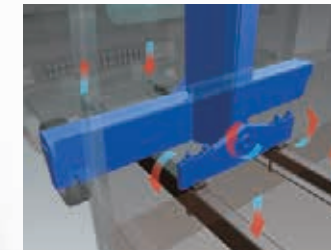
NEW HEPTAGONAL BOOM

Tadano's unique heptagonal boom is even more strong. And the new 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. The cables and sheaves are all internal—for a clean, clutter-free appearance.



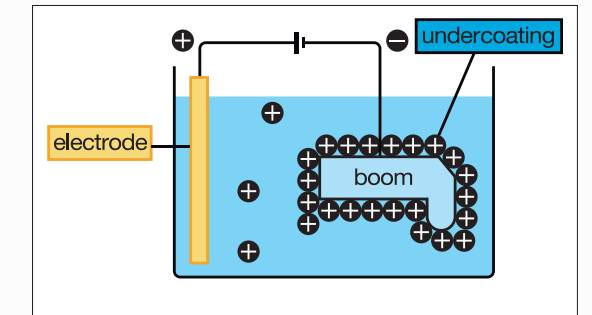
THREE-POINT SUPPORT SYSTEM (Equalizer Crane Support)

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.



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.



STRONGER 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.

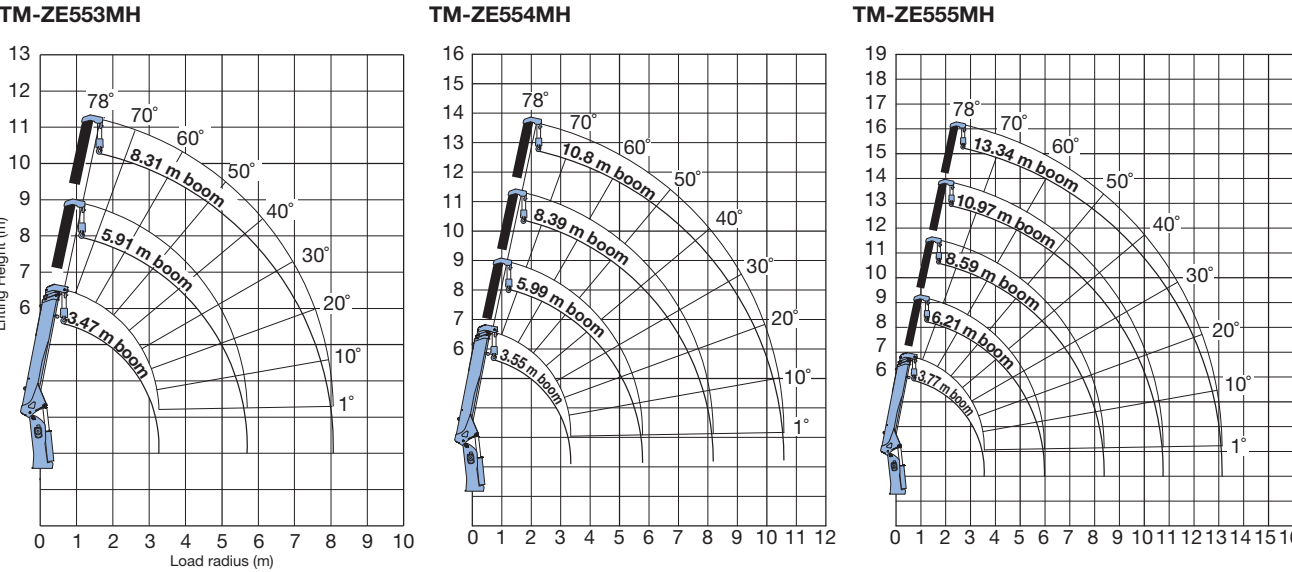
AUTOMATIC SLEWING LOCK: The boom is mechanically locked at the slewing post base which prevents boom rotation during traveling.



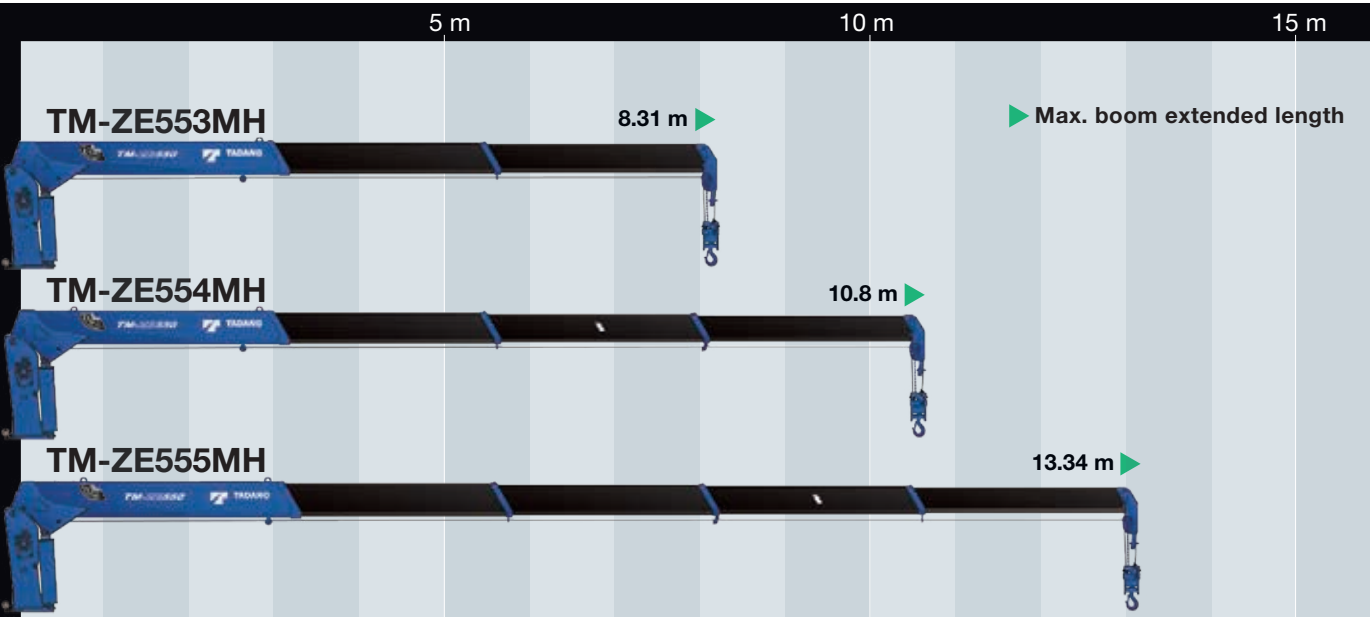
TM-ZE550MH series



WORKING RANGE



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



* The cables and sheaves are all internal - for a clean, clutter - free appearance.

TECHNICAL SPECIFICATIONS

MODEL	TM-ZE553MH*	TM-ZE554MH*	TM-ZE555MH*
CRANE CAPACITY	5,050 kg at 2.5 m (5-parts of line)		
BOOM	Fully hydraulic telescoping boom of heptagonal box construction	Fully powered partly synchronized telescoping boom of heptagonal box construction	
Number of sections	3	4	5
Length	3.47 m - 8.31 m	3.55 m - 10.8 m	3.77 m - 13.34 m
Extending speed	4.84 m / 18 s	7.25 m / 21 s	9.57 m / 25 s
Elevating range/speed	1° to 78° / 12 s		
Max. lifting height**	Approx. 10.3 m**	Approx. 12.7 m**	Approx. 15.2 m**
Max. load radius**	8.09 m**	10.58 m**	13.12 m**
WINCH	Hydraulic motor driven. Spur gear speed reduction, provided with mechanical brake. (TM-ZE555MH: and cable follower)		
Max. single line pull	9.90 kN {1,010 kgf}		
Max. single line speed	66 m/min. (at 4th layer)		
Wire rope (Diameter x length)	8 mm x 67 m	8 mm x 82 m	8 mm x 97 m
SLEWING	Hydraulic motor driven. Worm gear speed reduction. Continuous 360° full circle slewing on ball bearing slew 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.: 3.8 m, Mid.: 3.0 m, Min.: 2.2 m		
HYDRAULIC SYSTEM	Multiple control valves with integral safety valves		
Control valves	Multiple control valves with integral safety valves		
STANDARD SAFETY DEVICES	•Load meter •Load indicator •Anti-two-block alarm •Hoisting limiter •Hook safety latch •Hydraulic safety valves, check valves and holding valves •Level gauge		
SUITABLE TRUCKS	Gross vehicle mass (including crane mass) 12,000 to 25,000 kg		

* 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-ZE553MH											
• 3.47 m boom											
Load radius (m)	2.5 and below	2.8	3.25								
Rated lifting capacity (kg)	5,050	4,050	3,280								
• 5.91 m boom											
Load radius (m)	2.6 and below	2.8	3.3	3.6	4.1	4.5	5.0	5.5	5.69		
Rated lifting capacity (kg)	4,050	4,050	3,280	2,930	2,430	2,030	1,730	1,430	1,380		
• 8.31 m boom											
Load radius (m)	2.6 and below	3.4	3.8	4.1	4.5	5.0	5.5	6.0	6.5	7.0	8.09
Rated lifting capacity (kg)	3,130	3,130	2,680	2,430	2,030	1,730	1,430	1,330	1,180	1,030	930
TM-ZE554MH											
• 3.55 m boom											
Load radius (m)	2.5 and below	2.8	3.33								
Rated lifting capacity (kg)	5,050	4,050	3,250								
• 5.99 m boom											
Load radius (m)	2.6 and below	2.8	3.6	4.0	4.5	5.0	5.77				
Rated lifting capacity (kg)	4,050	4,050	2,930	2,430	1,980	1,680	1,330				
• 8.39 m boom											
Load radius (m)	2.6 and below	3.0	3.6	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.17
Rated lifting capacity (kg)	3,130	3,130	2,930	2,430	1,980	1,680	1,430	1,180	1,130	1,000	900
• 10.8 m boom											
Load radius (m)	3.5 and below	4.0	4.5	5.0	6.0	7.0	8.0	9.0	10.0	10.58	
Rated lifting capacity (kg)	2,130	2,130	1,980	1,630	1,180	1,000	800	680	580	550	
TM-ZE555MH											
• 3.77 m boom											
Load radius (m)	2.5 and below	2.8	3.55								
Rated lifting capacity (kg)	5,050	4,050	2,950								
• 6.21 m boom											
Load radius (m)	2.6 and below	2.8	3.6	3.9	4.5	5.0	5.5	5.99			
Rated lifting capacity (kg)	4,050	4,050	2,930	2,530	1,930	1,630	1,380	1,130	1,050	930	650
• 8.59 m boom											
Load radius (m)	2.6 and below	3.4	3.6	3.9	4.5	5.0	5.5	6.0	6.5	7.0	8.37
Rated lifting capacity (kg)	3,130	3,130	2,930	2,530	1,930	1,630	1,380	1,130	1,050	930	650
• 10.97 m boom											
Load radius (m)	4.0 and below	4.5	5.0	6.0	7.0	8.0	9.0	10.0	10.75		
Rated lifting capacity (kg)	2,230	1,930	1,580	1,130	900	700	550	500	450		
• 13.34 m boom											
Load radius (m)	5.0 and below	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.12		
Rated lifting capacity (kg)	1,430	1,130	900	700	550	500	430	400	350		

NOTES FOR TECHNICAL SPECIFICATIONS:
Operating speeds of the crane are guaranteed under the condition that the pump delivery is 60 L/min.

NOTES FOR RATED LIFTING CAPACITIES:
The mass of hook (45 kg), slings and all other lifting devices must be added to the mass of the load.

Table D											
TM-ZE553MH											
• 3.47 m boom											
Load radius (m)	2.5 and below	2.95	3.25								
Rated lifting capacity (kg)	5,050	4,050	3,700								
• 5.91 m boom											
Load radius (m)	2.6 and below	2.95	3.8	4.1	4.5	5.0	5.5	5.69			
Rated lifting capacity (kg)	4,050	4,050	3,130	2,930	2,630	2,380	2,180	2,080			
• 8.31 m boom											
Load radius (m)	2.6 and below	3.0	3.8	4.1	4.5	5.0	5.5	6.0	6.5	7.0	8.09
Rated lifting capacity (kg)	3,130	3,130	3,130	2,930	2,630	2,380	2,180	1,980	1,830	1,680	1,530
TM-ZE554MH											
• 3.55 m boom											
Load radius (m)	2.5 and below	2.9	3.33								
Rated lifting capacity (kg)	5,050	4,050	3,550								
• 5.99 m boom											
Load radius (m)	2.5 and below	2.9	3.7	4.0	4.5	5.0	5.77				
Rated lifting capacity (kg)	4,050	4,050	3,130	2,930	2,580	2,330	2,030				
• 8.39 m boom											
Load radius (m)	2.5 and below	3.0	3.7	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.17
Rated lifting capacity (kg)	3,130	3,130	3,130	2,930	2,580	2,330	2,080	1,930	1,780	1,630	1,480
• 10.8 m boom											
Load radius (m)	3.5 and below	4.5	5.0	6.0	7.0	8.0	9.0	10.0	10.58		
Rated lifting capacity (kg)	2,130	2,130	2,030	1,780	1,530	1,380	1,200	1,050	1,000		
TM-ZE555MH											
• 3.77 m boom											
Load radius (m)	2.5 and below	2.8	3.55								
Rated lifting capacity (kg)	5,050	4,050	3,150								
• 6.21 m boom											
Load radius (m)	2.5 and below	2.8	3.6	3.9	4.5	5.0	5.5	5.99			
Rated lifting capacity (kg)	4,050	4,050	3,130	2,930	2,530	2,230	1,980	1,780			
• 8.59 m boom											
Load radius (m)	2.5 and below	3.0	3.6	3.9	4.5	5.0	5.5	6.0	6.5	7.0	8.37
Rated lifting capacity (kg)	3,130	3,130	3,130	2,930	2,530	2,230	1,980	1,780	1,630	1,480	1,380
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Load radius (m)	4.0 and below	4.5	5.0	6.0	7.0	8.0	9.0	10.0	10.75		
Rated lifting capacity (kg)	2,230	2,180	2,030	1,730	1,430	1,230	1,080	980	900		
• 13.34 m boom											
Load radius (m)	5.0 and below	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.12		
Rated lifting capacity (kg)	1,430	1,330	1,230	1,080	980	880	800	730	650		