



Lifting your dreams

TRUCK LOADER CRANE

TM-ZE550HRS

For Medium/Large Size Vehicles

CARGO CRANE



Note: Some specifications may be subject to change.



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TADANO QUALITY: advanced safety and power in a single package

The TM-ZE550HRS is a more powerful crane that comes with the sophisticated, high-quality Safety Eyes system as standard equipment. It delivers greater safety and peace of mind.

TM-ZE550HRS



Safety Eyes See p. 3-4

Radio Controller with Color LCD* Display

*Liquid Crystal Display

A radio controller for remotely operating the crane is provided as standard. In addition to displaying the actual load, rated load, and moment load ratio, it also features a large-screen and power-saving color LCD display, has a feature that can customize speed adjustment for various operations, and has an emergency stop function. The "load weight" function makes it possible to check the work progress and the load weight on the vehicle, and also prevents overloading. These features contribute not only to the safety of crane work, but also to the safety of the vehicle when it is traveling.

**The IP rating indicates waterproofness and dust protection as defined in IEC 60529. An IP66K rating indicates an exceptional level of waterproofness and dust protection ensuring peace of mind.



**WATER-
PROOFNESS**
[IP66K**]

Emergency stop

AML (Automatic Moment Limiter)

An AML that monitors crane work safety is equipped as standard. It includes a strength monitoring function which prevents crane overloading, and a stability monitoring function which prevents the crane from falling over.

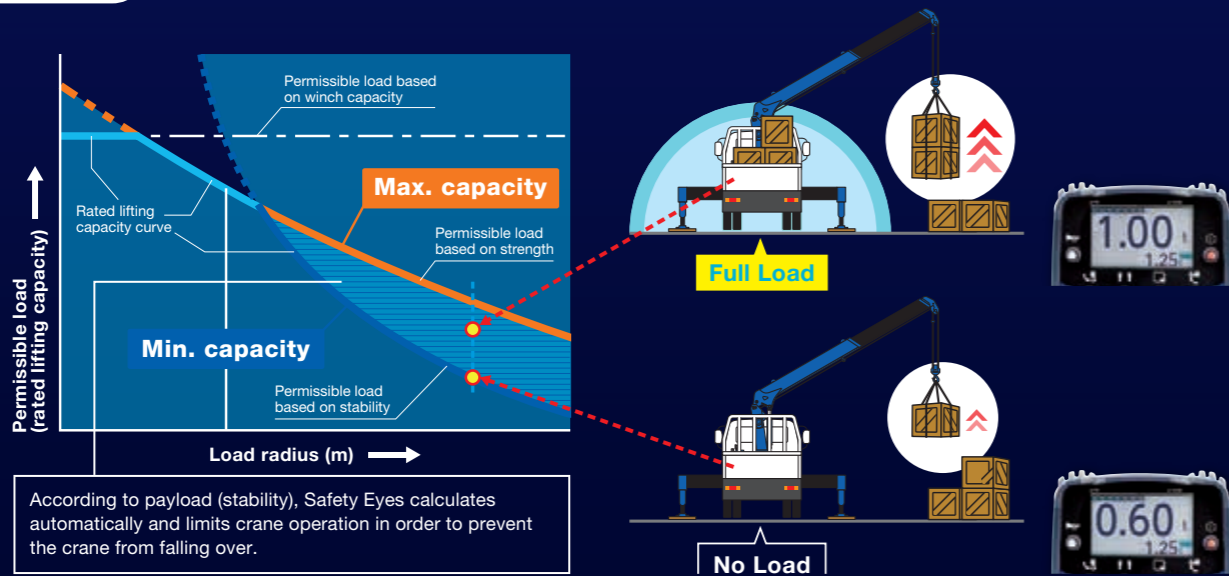
Manually entering the number of parts of line in use allows for fine-tuned controls. As the crane approaches rated performance, warning alarms and lamps are triggered. As an extra level of safety, operation is automatically stopped or warning alarms are triggered once critical parameters are reached.



Safety Eyes

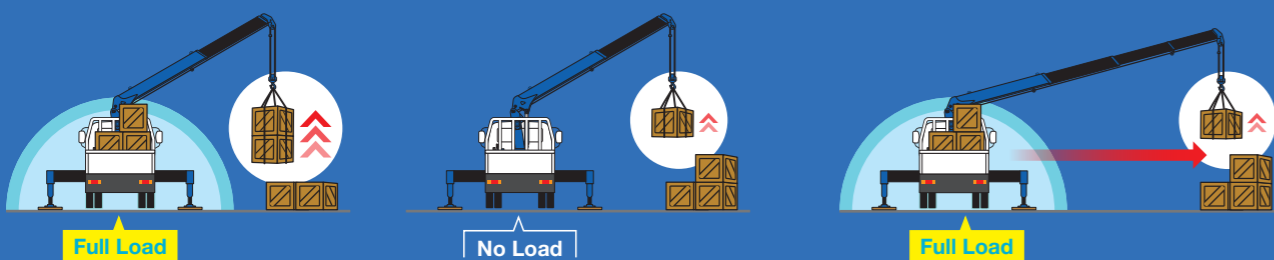


The Safety Eyes system consists of an Automatic Moment Limiter, a boom jack interlock system, a working height limiter, and other functions for monitoring operation. This system makes safe work possible.



Carry Heavier Loads When Close

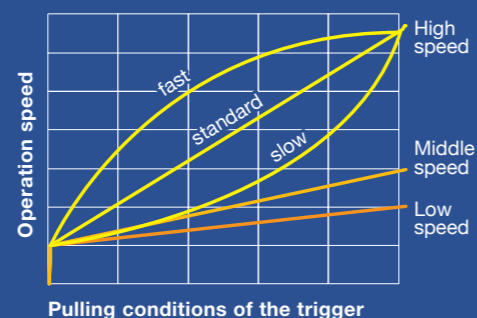
Carry Loads Farther When Light



Calculations are automatic and are based on loaded cargo (stability), allowing you to carry heavier loads farther when fully loaded.

Feeling Operation

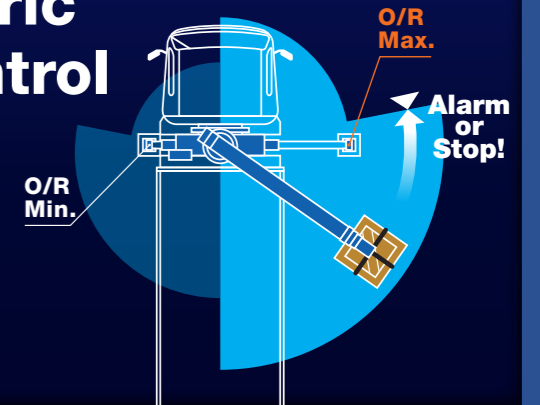
The operation speed of the machine when the trigger is pulled can be increased or decreased from the standard speed.



Outriggers Asymmetric Extension Width Control

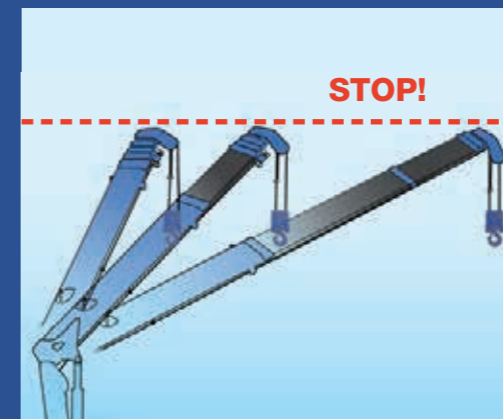
Optimum Lifting Performance at Any Outrigger Width

Constantly monitors the slewing angle and difference in outrigger extension widths. Crane motion is controlled according to the extension width of each outrigger.



Working Height Limit Function

This function presets the upper limit of the boom height (stop position). This is highly effective in work sites where attention is required to the boom height, such as under power lines and indoors.



Jack Interlock

Disables crane operation when the left or right jack is not in contact with the ground.



Centralized Control Panel Equipped with Safety Lamp

The lifting chart and switches for crane operation are grouped on both sides of the control panel, and warning lights are installed at the top of the panel.

Limit Warning Lamps

The warning lights on the control panel, moment indicator in the radio controller, three-color limit warning lamp on the crane post, and warning alarm function interlinked with one another.

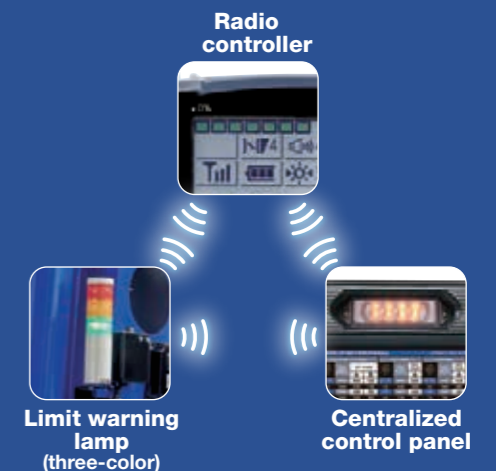
Limit warning lamp

Outrigger extension state

Indicator lamp displays the outrigger extension width.

Mode indicator

Displays the actual load, height limit value, error code, etc.



Powerful Heptagonal Boom

TADANO's unique heptagonal boom is made of high-tensile steel. The boom structure consists of a single piece of steel plate for lower boom weight and more powerful lifting capacity. Special valves enable smooth boom extension and retraction for smoother operation to reduce shock when telescoping the boom. The cables and sheaves are all internal - for a clean, clutter-free appearance.



Hook-in/out System

TADANO's hook-in system is equipped as standard and enhances work efficiency. During hook-out, the boom raises automatically to avoid hitting cargo.



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.

Emergency Stop

Use this switch to stop machine movement if the machine cannot be controlled during crane operation, or in an emergency. (Outrigger operation does not stop.)



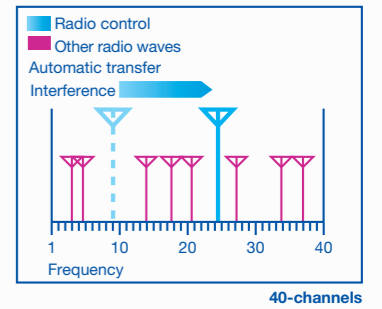
On radio controller

Automatic Slewing Lock System

This system prevents accidental boom slewing when no slewing operation takes place.

High-powered Radio Controller

Radio Controller with powerful transmitting output automatically selects a frequency free of interference out of as many as 40 channels to avoid trouble caused by interference.



Cable Follower

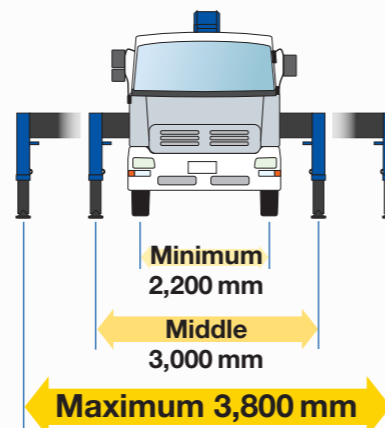
The cable follower prevents disorderly cable (wire rope) winding by always pressing the cable onto the winch drum, and keeps the wire rope in the right position.

TM-ZE550HRS

Cargo Crane for Medium/Large Size Vehicles

Broader Outrigger Width

The outriggers enable to secure a three-stage extension width up to a maximum of 3.8 meters, substantially enhancing crane performance.



Outrigger Mechanism for Quicker Work

The outrigger beams can be easily operated, using a grip to lock or release and extend or retract them. To further ensure safety, the lock system prevents the outrigger beams from extending during traveling. A spirit level is provided as standard equipment.



Spirit Level



Lock System



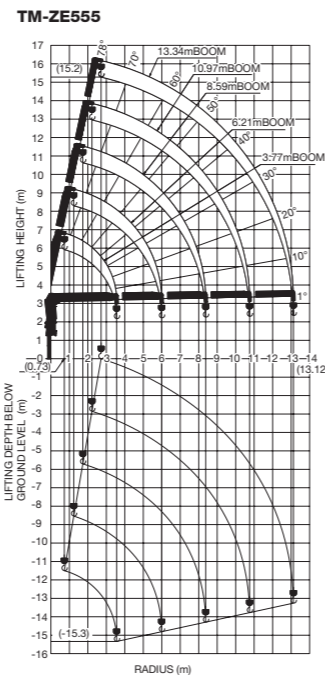
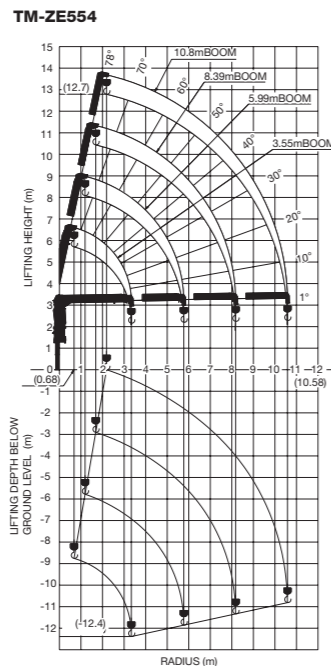
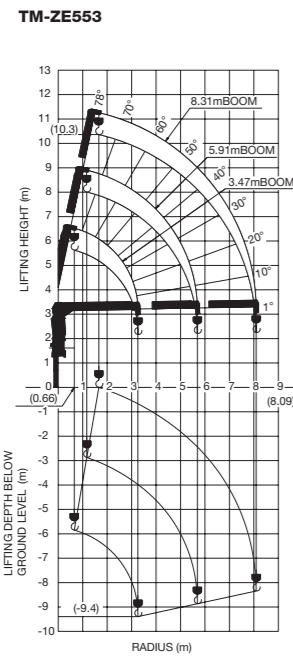
TM-ZE550HRS series

Technical Specifications

Model	TM-ZE553HRS	TM-ZE554HRS	TM-ZE555HRS
CRANE CAPACITY	5,050 kg at 2.5 m (5-part line)		
BOOM	Three-sectioned, fully hydraulic telescoping boom of heptagonal box construction	Four-sectioned, fully powered partly synchronized telescoping boom of heptagonal box construction	Five-sectioned, fully powered partly synchronized telescoping boom of heptagonal box construction
Retracted length	3.47 m	3.55 m	3.77 m
Extended length	8.31 m	10.8 m	13.34 m
Extending speed	4.84 m in 18 s	7.25 m in 21 s	9.57 m in 25 s
Elevation	Elevated by a double-acting hydraulic cylinder		
Raising speed	1° to 76° in 12 s		
Boom point	3 sheaves		
WINCH	Hydraulic motor driven. Spur gear speed reduction, provided with mechanical brake and cable follower.		
Single line pull	9.90 kN(1010 kgf)		
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
Wire rope (Breaking strength)	50.1 kN(5.1 tf)		
Wire rope (Construction)	7 x 7 + 6 x WS(26)		
Hook block	2 sheaves		
HOOK STOWING DEVICE	Hook-in (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	2.5 min ⁻¹ (rpm)		
OUTRIGGERS	Manually operated beams and hydraulically operated jacks. Integral with crane frame.		
Extension width	Min. 2,200 mm center to center(2,360 mm outer to outer), Mid. 3,000 mm center to center(3,160 mm outer to outer), Max. 3,800 mm center to center(3,960 mm outer to outer)		
HYDRAULIC SYSTEM	Single gear pump		
Hydraulic pump	Axial piston type for winch. Axial piston type for slewing.		
Hydraulic motors	Multiple control valves with integral safety valve		
Control valves	Approx. 57.6L		
Oil tank capacity	Model : RCS-F (with colored display), Control functions of telescoping, hoisting up and down, elevating, slewing, acceleration, Hook-in, Hook-out, horn, stop operation, outrigger operation and working height limit.		
RADIO CONTROLLER	40 frequencies in 433 MHz band		
Frequency	6V DC, Dry battery R6P (SUM-3) x 4		
Operating power supply	24V DC, Vehicle battery		
Transmitter	Approx. 670 g (includes batteries)		
Control unit	<ul style="list-style-type: none"> •Anti-two-block-device •AML (Automatic Moment Limiter) <Load indication, Load moment ratio indication, Warning alarm, Rated capacity indicator/limiter or Rated capacity indicator, Limit warning lamp, Outrigger length detector, Outrigger asymmetric extension width control> •WHL (Working Height Limiter) •Boom angle indicator •Load indicator •Load meter •Over-unwinding prevention •Hook safety latch •Spirit level •Jack interlock •Stop switch on radio controller •Hydraulic safety valves, check valves and holding valves •Limit warning lamp (three-color) •Emergency stop switch •Boom outrigger stowed warning 		
SAFETY DEVICES	<ul style="list-style-type: none"> •Emergency hydraulic pump •Outrigger pads •Oil cooler •Tiltable jack float •Rear outriggers (outrigger beam non-extension type) 		
OPTIONAL EQUIPMENT	Approx. 1,520 kg	Approx. 1,640 kg	Approx. 1,810 kg
CRANE MASS	(Except crane options and mounting parts.)	(Except crane options and mounting parts.)	(Except crane options and mounting parts.)

Note: Each operating speeds show the value when there is no load conditions and the pump delivery is the following conditions.
 •36 L/min (Slewing speed)
 •60 L/min (•BOOM: Extending speed, Raising speed •WINCH: Single line speed)

Working Range

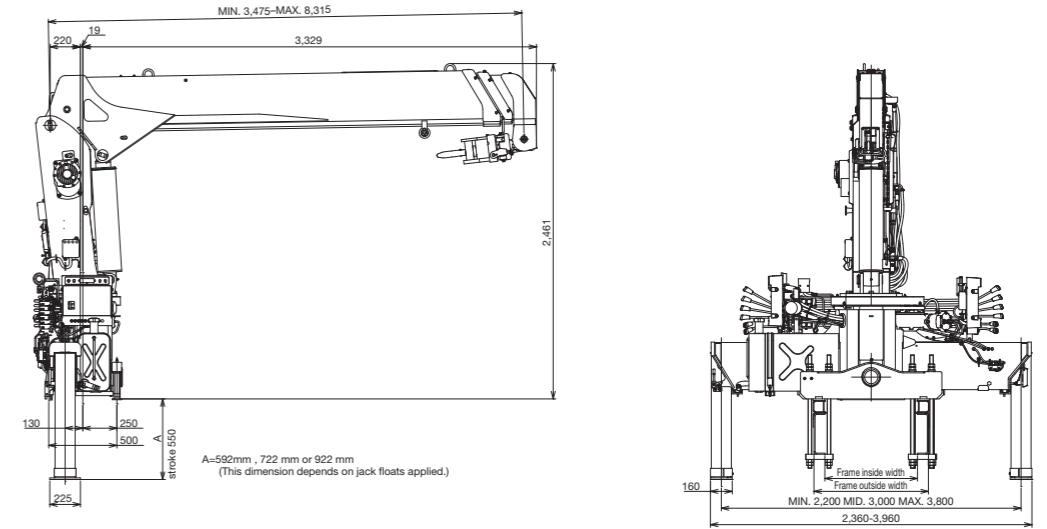


Note: The above lifting heights and boom angles are based on a straight (unladen) boom, and allowance should be made for boom deflection obtained under laden conditions.

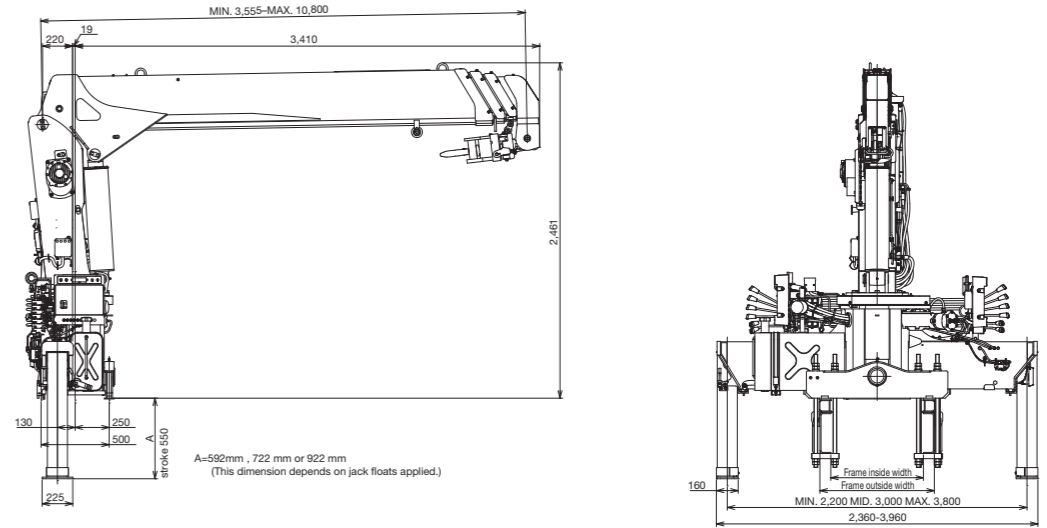
Dimensions

(mm)

TM-ZE553



TM-ZE554



TM-ZE555

