**ROUGH TERRAIN CRANE** 



# GR-1000XLL-4/GR-1000XL-4



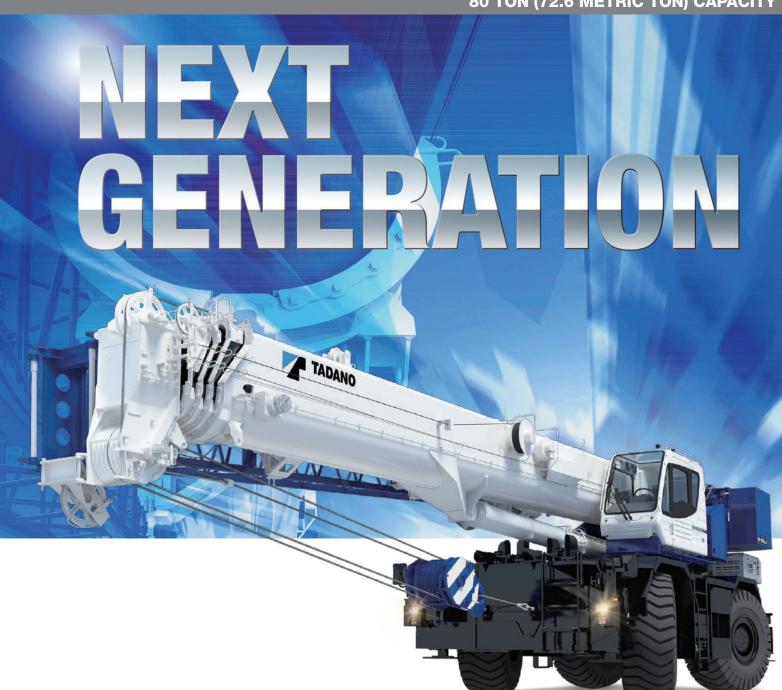


Photo: GR-1000XLL-4 (optional model)

# **Next-Generation RTs**

In the making of products at Tadano, our number one priority is safety. These fully equipped cranes feature comfortable cab newly designed with an emphasis on stable operability for the operator. Using Tadano's vaunted state-of-the-art control technology, we have safely enhanced functionality while also optimizing operational efficiency and minimizing environmental impact. Backed by trust earned over many years, Tadano's high levels of safety, quality, and efficiency adapt to the changing needs of your business. Our next generation of cranes carries on this tradition. Experience new rough terrain cranes which are the pride of Tadano!

#### Carrier

Smooth Transmission	Ultimate Boom for Rough Terrain Crane
Travel Speed	New Super structure Frame
High Performance Engine	Winch Drum Camera
New Carrier Frame	Catwalk for Easy Access to Cab
TADANO View System	Improved Accessibility to Cab
Clearance Sonar	Tiltable Cab
i Improved Accessibility to Cab	Bi-Fold Jib
4 Steering Modes	Assist Cylinder for Jib
Dashboard Indicator and Warning Symbols	Two Telescoping Modes 1 & 2
Traveling and Transportation	Two Winches with Cable Follower
Reduced Fuel Consumption	Optimally-Designed Cab
B HELLO-NET	Load Moment Indicator [AML-E]
HELLO-DATA LINK	Large Multi-Function Display
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Smart Chart System

TADANO

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### This class-leading 167.3 ft (51 m) boom model expands the range of the work you can do.

# **GR-1000XLL-4**

Crane capacity: 100 ton (90.7 metric ton) 5-section boom: 167.3 ft (51.0 m) 2-staged bi-fold jib: 33.2 ft / 58.1 ft (10.1 m / 17.7 m) Overall length: approx. 49' 9-7/8" (15,185 mm) Overall width: approx. 10' 10-1/2" (3,315 mm) Overall height: approx. 12' 5-13/16" (3,805 mm)

### This 154.2 ft (47 m) boom standard model features enhanced safety functions.

# **GR-1000XL-4**

Crane capacity: 100 ton (90.7 metric ton) 5-section boom: 154.2 ft (47.0 m) 2-staged bi-fold jib: 33.2 ft / 58.1 ft (10.1 m / 17.7 m) Overall length: approx. 47' 2" (14,375 mm) Overall width: approx. 10' 10-1/2" (3,315 mm) Overall height: approx. 12' 5-13/16" (3,805 mm)

This low-weight model dramatically increases convenience of transportation.

# **GR-800XL-4**

Crane capacity: 80 ton (72.6 metric ton) 5-section boom: 154.2 ft (47.0 m) 2-staged bi-fold jib: 33.2 ft / 58.1 ft (10.1 m / 17.7 m) Overall length: approx. 47' 2" (14,375 mm) Overall width: approx. 10' 10-1/2" (3,315 mm) Overall height: approx. 12' 6-7/16" (3,820 mm) Ultimate Boom for Rough Terrain Crane

# Crane

The rounded boom is made of high tensile steel, which allows for decreased boom weight as well as increased boom strength. In addition, the high-performance AML-E ensures operational safety.

### Longest boom and speedy operation

Max. boom length: 167.3 ft (51.0 m) [GR-1000XLL-4]

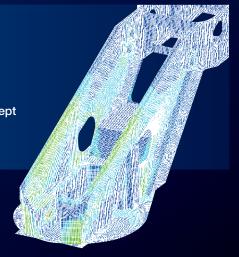
154.2 ft (47.0 m) [GR-1000XL-4]

### **154.2** ft (47.0 m) [GR-800XL-4]

Telescoping mechanism: 2 hydraulic cylinders with wire ropes Synchronization telescopic system makes the fast operation possible 2 telescoping modes selectable according to works.

### **New Super structure Frame**

When developing the crane structure, importance is attached to the shape that is best suited for crane operation. FEM analysis is used to create the design. It is also important that the slewing structure be true to Tadano's original concept and be both rigid and compact while maintaining a desirable overall height. \*FEM: Finite Element Method









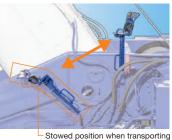


### Outrigger Control Panel



### Winch Drum Camera





**Two-Roll Sunshade** 

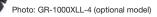


Adjustable in any position

TADANO

Longer Wiper Blade

**Flat Windshield** 



### Improved Accessibility to Cab



Cab tilt indicator and switch

### **Tiltable Cab**

You can operate the crane comfortably by tilting the cab during high hoisting operations such as lifting with the jib. The cab tilting angle is between  $0^{\circ}$  and  $20^{\circ}$ .

### Catwalk for Easy Access to Cab





New Designed Step \*Left side

### **Bi-Fold Jib**

A two-stage, bi-fold lattice-type jib can be offset at 3.5°, 25°, and 45° to enable the crane to carry out jobs that require extra reaching ability.

### **Assist Cylinder for Jib**

When mounting and stowing the jib, the assist hydraulic cylinders are used resulting in increased work efficiency and safety.







### **Two Telescoping Modes 1 & 2**

The operator has enhanced capabilities with two boom telescoping options whichever suits the lift needs.



### Mode 1

Mode 1 is extension of 2nd section only. Then follows the synchronized extension of 3rd, 4th and 5th sections.

#### Mode 2

Mode 2 is synchronized extension of 3rd, 4th and 5th sections. Then 2nd section extends independently.

### GR-1000XLL-4

Crane capacity: 100 ton (90.7 metric ton) 5-section boom: 167.3 ft (51.0 m) 2-staged bi-fold jib: 33.2 ft / 58.1 ft (10.1 m / 17.7 m)

3.5°

25

33.2 ft / 58.1 ft (10.1 m / 17.7 m)

45

Maximum lifting height: 166.0 ft (50.6 m) [Boom] 224.1 ft (68.3 m) [Jib] Maximum load radius: 155.0 ft (47.2 m) [Boom] 190.0 ft (57.9 m) [Jib]

### **Two Winches with Cable Follower**

Both the main winch and the auxiliary winch have powerful line pull and operate at high speeds thus enhancing work efficiency.

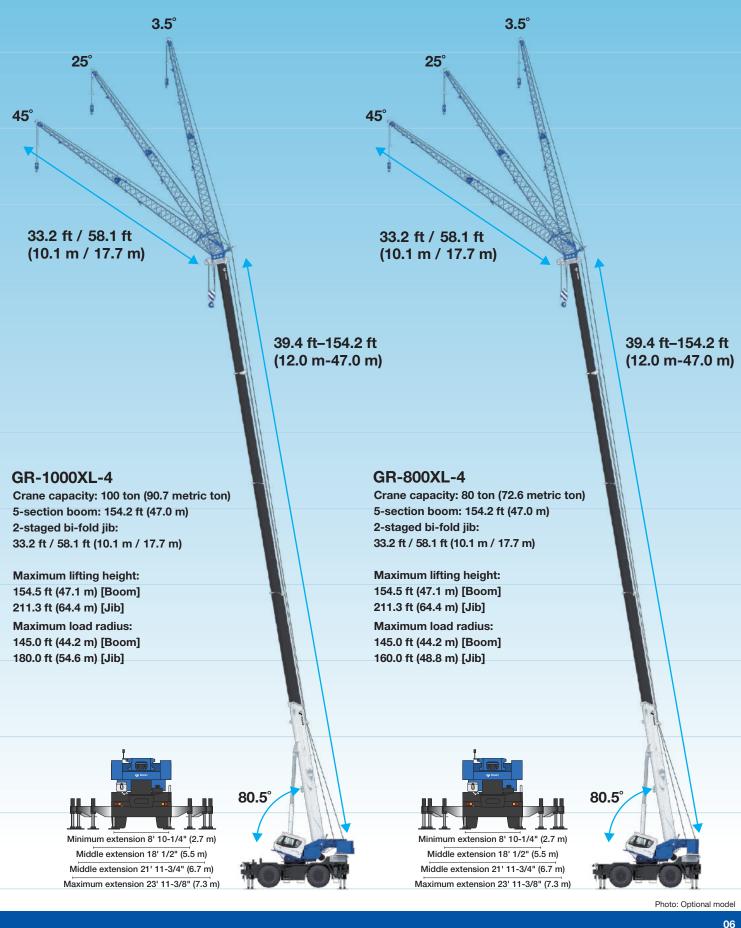
\*Maximum permissible line pull may be affected by wire rope strength.





80.5

Minimum extension 8' 10-1/4" (2.7 m) Middle extension 18' 1/2" (5.5 m) Middle extension 21' 11-3/4" (6.7 m) Maximum extension 23' 11-3/8" (7.3 m) 42.0 ft-167.3 ft (12.8 m-51.0 m)



# **Optimally-Designed Cab**

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25.0

11

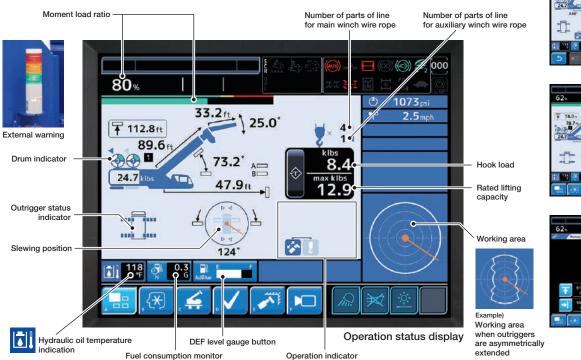
Crane cab and equipment designed for safty and operational efficiency.



## Load Moment Indicator [AML-E]

### Large Multi-Function Display

The 10.4 inch color touch panel consolidates operation information and settings for increased work efficiency and comfort. The touch panel is pressure sensitive to handle gloved operation.





Multiple seat adjustment positions for ease of operation.

Armrest adjustment button

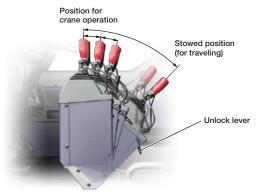


### **Adjustment of Control Lever Stand**

- The control lever stand has a 3-stage adjustment feature.
- Before you enter or exit the cab, or when you complete the crane operation, set the control lever stand on the left to the stowing position.
- The unlock lever is used by pulling to adjust for all positions of the control lever stand.



The control levers are smooth and responsive to the operators touch.



Winch drum monitoring ca Operation status



working area setting

### **Multi-Function Display Operation Switch**

Convenient hand controls are also available for when operating

the touchscreen is difficult (for instance when the seat is sliding back).



### Safety Control for Boom Raising Operation

Prevent overload using boom raising operation for lifting a load off the ground. \*Release switch available for emergency operation



### Visibility

The shape and height of the instrument panel as well as the angle of the windshield have all been designed for optimum forward visibility.



New cab

# SMART CW SMART CW SMART CW GR-1000XLL-4/GR-1000XL-4

### Uses the new Smart Counterweight System

These are the first rough terrain cranes with Tadano's Smart Counterweight system, which allows the counterweight to be moved between two mounting positions. This feature improves lifting capacity by up to 19%.





Hoist the counterweight and set it in either the front or rear position.

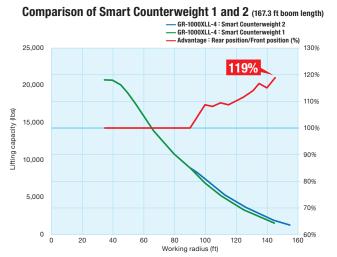




Slew the crane 180° and fully extend the counterweight cylinder. Connect the weight with the slewing table and retract the cylinder, fixing it in place.

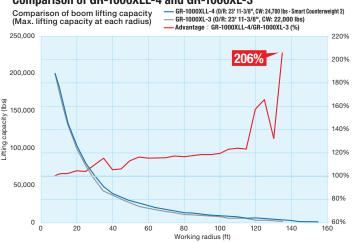


Tail Swing: 13.9'



Tail Swing: 15.9'

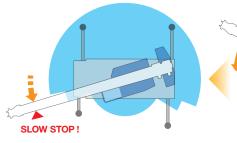
#### Comparison of GR-1000XLL-4 and GR-1000XL-3

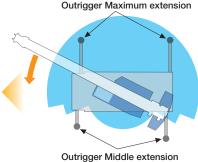


# **Asymmetric Outrigger** Extension Width Control

When operating the crane with the asymmetric outriggers extended, the AML-E detects the extension width of all of the crane's outriggers (front, rear, left and right) to measure maximum work capacity in each area. When slewing the boom from the longer outrigger area to the shorter outrigger area, the AML-E detects the motion and displays the maximum capacity according to the extension width of each of the outriggers, and brings the motion to a slow stop before it reaches the maximum capacity.

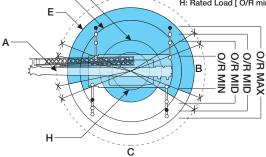
The AML-E's slow stop function will help to minimize any safety risks even in the cases of operator error.







A: Over-front B: Over-rear C: Over-side D: Over-side E: Rated Load [ O/R max, ] F: Rated Load [ O/R mid. ] G: Rated Load [ O/R mid. ] H: Rated Load [ O/R min. ]



D

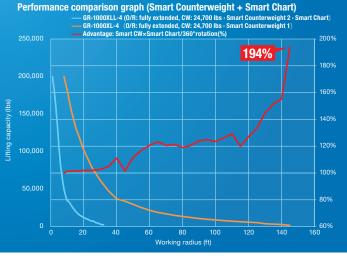
G

F

# **Smart Chart System**

The newly developed Smart Chart expands the working area, allowing you to get the best crane performance in any outrigger extension setup.





### In maximum outrigger extension setups

The Smart Chart taps the potential of a crane by expanding the conventional circular working area into a square one, improving work safety and efficiency.

# Carrier

The GR-1000XLL-4, GR-1000XL-4 and GR-800XL-4 has a compact width/height 2-axle carrier which offers improved maneuverability and reduced footprint for ease of transportation.



3 speeds - High range - 2 wheel drive; 4 wheel drive 3 speeds - Low range - 4 wheel drive

Photo: GR-1000XLL-4 (optional mo



### **High Performance Engine**

Cummins B6.7 4 cycle, turbo charged and after cooled.

Horse power (kW): Gross 280 (209) at 2,200 min<sup>-1</sup> {rpm} Max. torque ft-lb (Nm): 850 (1,152) at 1,500 min<sup>-1</sup> {rpm}

#### New Carrier Frame (GR-1000XLL-4/GR-1000XL-4)

The new carrier frame design is developed and built so that its lightweight is compatible with its high rigidity to achieve an advanced level of performance. As a result, the rigidity is enhanced and leads highly stabilized maneuverability for the new model of crane.

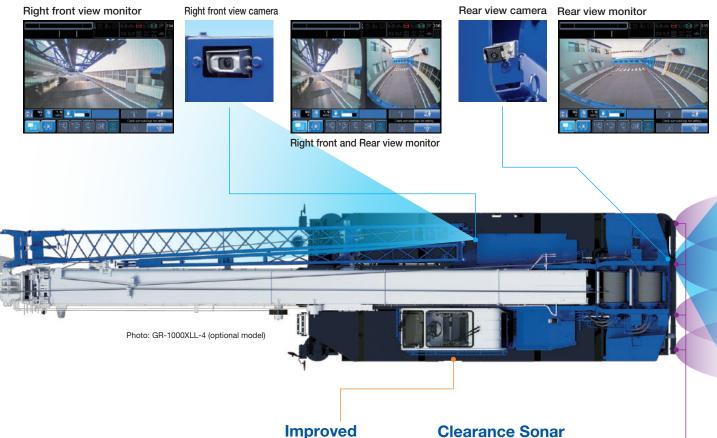
\*Compared with our conventional crane models



# **TADANO View System**

Supports safety confirmation through an above-the-vehicle image shown on the large multi-function display.

\*Camera range is limited. Do not rely only on the image. Confirm safety around the vehicle directly before driving.



### Accessibility to Cab



Detects obstacles right behind the vehicle, and warns you with a flashing icon on the indicator and buzzer sound.

\*Detection distance: approx. 1 ft - 8.5 ft (0.3 m - 2.6 m)



Clearance sonar monitor



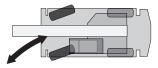
Clearance sonar

### **4 Steering Modes**

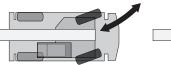
**Axle** 

Hydraulic power steering controlled by steering wheel.

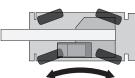
Front: Full floating type, steering and driving axle with planetary reduction. Rear: Full floating type, steering and driving axle with planetary reduction and non-spin rear differential.



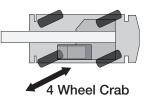
2 Wheel Front



2 Wheel Rear



4 Wheel Coordinated









12 V power outlet



Air conditioner control panel

Large multi-function display



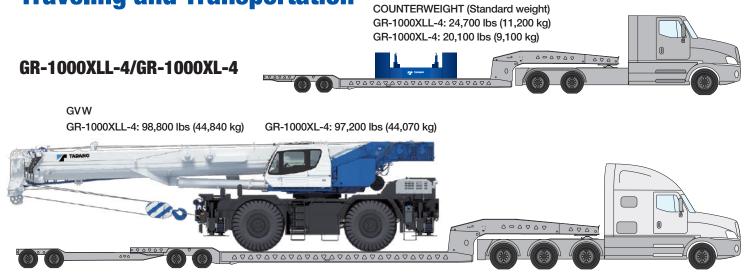
Transmission shiftswitch



Cup holder



### **Traveling and Transportation**



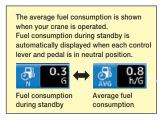
**GR-800XL-4** The vehicle body weight is less than 100,000 pounds, making road permits easy to acquire. The largest model in its class that can be transported by trailer without dismantling.



## **Reduced Fuel Consumption**

### **Fuel Monitoring**

Checking fuel consumption enables an operator to prevent wasteful fuel consumption from unnecessary acceleration and idling.





(during crane operation)





Fuel consumption history display (during crane operation)

### 🗲 Eco Mode System

Controls the maximum engine speed at the time of crane operation and enables fuel consumption and  $CO_2$  emission to decrease by Max. 28% with Eco mode 1, and Max. 37% with Eco mode 2, and noise level is reduced.

(during traveling)

### Automatic Pump Disconnect

Effectively controls the quantity of hydraulic pump

discharge during crane operation in response to

the amount of movement applied, and reduces CO2

When the automatic pump disconnect switch is set to ON and the crane is not in use for a duration of time, the crane's hydraulic pump automatically shuts off, helping to reduce fuel consumption. Three settings are available for the duration of the crane operation standby before the pump shuts off: MIN, MID and MAX.

MIN: 1 minute

consumption.

MID: 3 minutes

MAX: 5 minutes



**Fuel consumption** 

# **HELLO-NET**

HELLO-NET is a tool that connects the crane operations with owners, their service staff and the manufacturer through satellite. This high quality telematic tool collects data of the crane including working history, maintenance data and machine location. HELLO-NET can be accessed by the manufacturer to assist with downtime and to help improve Tadano support services.



HELLO-NET Telematics - Available in the U.S. and Canada, other countries may vary. Contact your distributor or sales@tadano-cranes.com for details.

## **HELLO-DATA LINK**

### **Smartphone App**

HELLO-DATA LINK connects cranes to mobile devices by wireless LAN, allowing you to receive operating status, indications, error codes and other information in real-time from outside the cab.

HELLO-DATA LINK helps crane and site supervisors to monitor operating status and stay informed on repairs and maintenance.

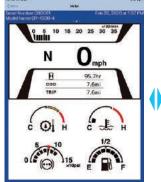


### **Three Working Displays**

\*Available display modes and information may differ depending on machine model. Display information from connected machines via handy smartphone or tablet. Swipe to easily change screens.



Crane display



Meter display



Indicators display

### **Standard Equipment**



Front steps



Right side steps



Rear steps





Battery Disconnect Switch



Work Light



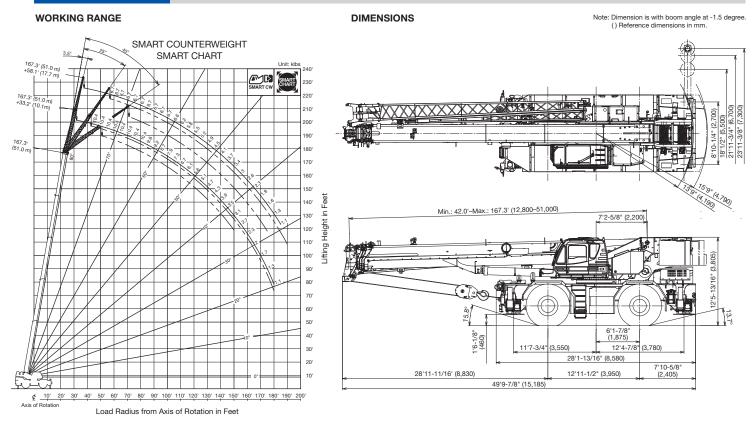




Anemometer (GR-1000XLL-4)

### **WORKING RANGE & DIMENSIONS**

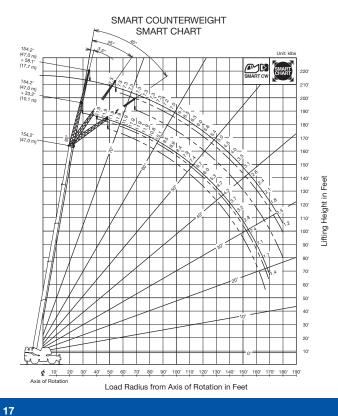
### GR-1000XLL-4

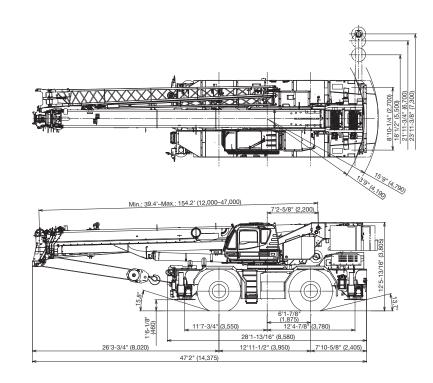


DIMENSIONS

### GR-1000XL-4

#### WORKING RANGE

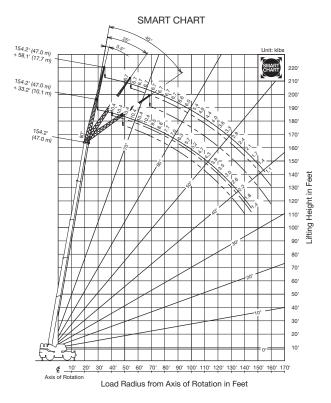


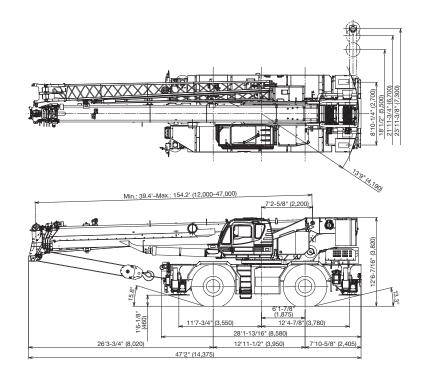


Note: Dimension is with boom angle at -1.5 degree () Reference dimensions in mm.

### GR-800XL-4

#### WORKING RANGE







DIMENSIONS

Note: Dimension is with boom angle at -1.6 degree. () Reference dimensions in mm.

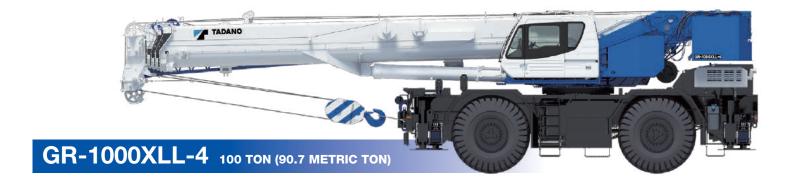






Photo: Optional model



### TADANO AMERICA CORPORATION

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