



**TADANO** 







# GLADLY TAKE ON THE HARD WORK.

The new GR-Series in Europe.

# NEXT-GENERATION RTS



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# **GR-1000EX-4**

# This best-in-class 51 m boom model expands the range of applications.

Crane capacity: 100 t 5-section boom: 51.0 m

Bi-fold jib with

**2-stage extension:** 10.1 m / 17.7 m

Overall length: 15.185 m Overall width: 3.315 m Overall height: 3.805 m



# **GR-900EX-4**

# The successor for the 47 m boom standard model shines with improved lifting performance.

**Crane capacity:** 90 t **5-section boom:** 47.0 m

Bi-fold jib with

**2-stage extension:** 10.1 m / 17.7 m

Overall length: 14.375 m Overall width: 3.315 m Overall height: 3.805 m



# **GR-700EX-4**

# This low-weight model significantly enhances ease of transportation.

Crane capacity: 70 t 5-section boom: 47.0 m

Bi-fold jib with

**2-stage extension:** 10.1 m / 17.7 m

Overall length: 14.375 m Overall width: 3.315 m Overall height: 3.805 m



Photo: Optional model

#### **CRANE**



# **Ultimate Boom for Rough Terrain Crane**

The rounded boom is made of high tensile steel, which maximizes boom strength at a lower boom weight. In addition, the highperformance automatic moment limiter AML-E provides continuous control of the load.



**Max. boom length: 51.0 m** [GR-1000EX-4]

**47.0 m** [GR-900EX-4]

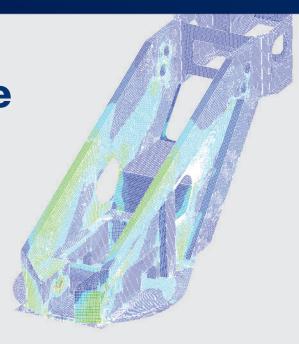
**47.0 m** [GR-700EX-4]

Telescoping mechanism: 2 hydraulic cylinders with wire ropes. The synchronized telescopic system facilitates fast operation. Two telescoping modes can be selected to flexibly adapt to the task.

# New Superstructure Frame

The crane structure is engineered to meet the requirements of tough everyday use. The design is supported by FEM\* analysis while keeping with Tadano's original concept of maintaining a compact and rigid slewing structure without deviating from the optimal overall height.

\*FEM: Finite Element Method



# **New Design**



#### **Tiltable Cab**

Cab tilt indicator and switch

b Tilting

Tilting the cab during high hoisting operations such as lifting with the jib enhances the operator experience. The available cab tilting angle ranges from 0° to 20°.





Newly designed stepladder \*Left side

#### **BI-FOLD JIB**

A two-stage, bi-fold lattice-type jib can be offset at 3.5°, 25°, and 45° to provide additional reach required.



#### **ASSIST CYLINDER FOR JIB**

When mounting and stowing the jib, the hydraulic assist cylinders increase work efficiency.





#### **TELESCOPING MODES 1 & 2**

The operator can choose between two boom telescoping options, enhancing capabilities for any lift.



#### Mode 1

In Mode 1, only section 2 is extended initially.
This is followed by a synchronized extension of sections 3, 4 and 5.



#### Mode 2

In Mode 2, the synchronized extension of sections 3, 4 and 5 comes first.

Section 2 then extends independently.

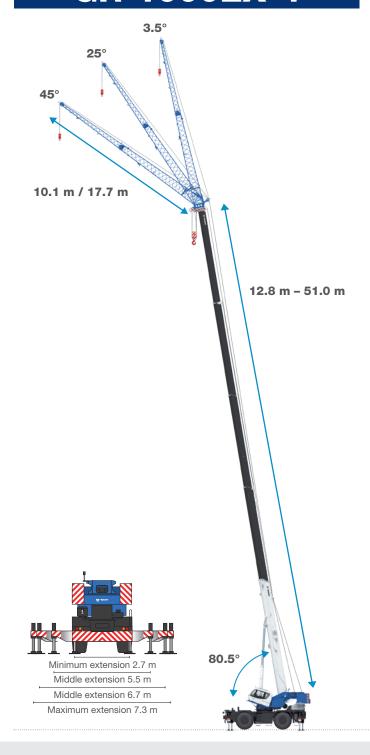
#### TWO WINCHES WITH CABLE FOLLOWER

Both the main winch and the auxiliary winch boast a powerful line pull and operate at high speeds, enhancing work efficiency.



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

### **GR-1000EX-4**



Crane capacity: 100 t 5-section boom: 51.0 m

Bi-fold jib with 2-stage extension:  $10.1\ m\ /\ 17.7\ m$ 

#### **Maximum lifting height:**

50.6 m [Boom] 68.3 m [Jib]

#### **Maximum load radius:**

42.0 m [Boom]

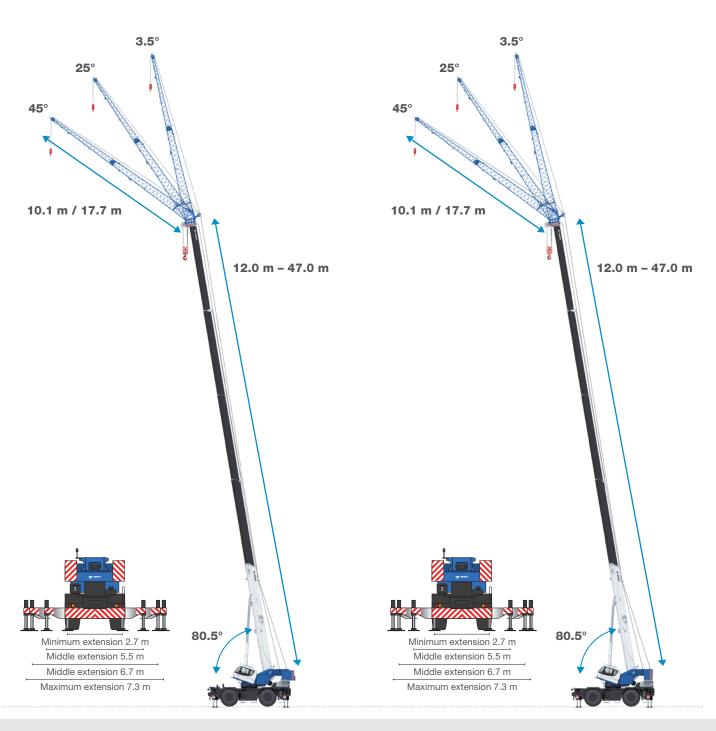
44.0 m [Boom] (Smart CW 2 + SMART CHART)

52.0 m [Jib]

54.0 m [Jib] (Smart CW 2 + SMART CHART)

### **GR-900EX-4**

### **GR-700EX-4**



Crane capacity: 90 t 5-section boom: 47.0 m

Bi-fold jib with 2-stage extension:  $10.1\ m\,/\,17.7\ m$ 

#### **Maximum lifting height:**

47.1 m [Boom] 64.4 m [Jib]

#### **Maximum load radius:**

40.0 m [Boom]

42.0 m [Boom] (Smart CW 2 + SMART CHART)

50.0 m [Jib]

52.0 m [Jib] (Smart CW 2 + SMART CHART)

Crane capacity: 70 t 5-section boom: 47.0 m

Bi-fold jib with 2-stage extension:  $10.1\ m\,/\,17.7\ m$ 

#### **Maximum lifting height:**

47.1 m [Boom] 64.4 m [Jib]

#### **Maximum lifting height:**

36.0 m [Boom]

40.0 m [Boom] (SMART CHART)

44.0 m [Jib]

48.0 m [Jib] (SMART CHART)



# **Automatic Moment Limiter [AML-E]**

#### LARGE MULTI-FUNCTION DISPLAY

The 10.4-inch color touch panel consolidates operation information and settings for greater work efficiency and comfort. The pressure sensitivity of the touch panel is geared towards gloved operation.

# **External** warning light **Drum indicator**

Outrigger status indicator

Slewing position



Hydraulic oil temperature indication

Load moment ratio

Number of parts of line for main winch wire rope Number of parts of line for auxiliary winch wire rope

**Hook load** 

**Rated lifting** capacity

Working area

(Example)

extended

Working area when outriggers

are asymmetrically



**Fuel consumption** monitor

**Operation indicator** 

#### Winch drum monitoring camera



#### Operation status



#### Working



#### area setting

#### **SEAT ADJUSTMENT**

Multiple seat adjustment positions for ease of operation.

> **Armrest adjustment** button

> > Slide adjustment

ADJUSTMENT OF CONTROL LEVER STAND

• The control lever stand has a 3-stage adjustment feature.



**Headrest height** adjustment knob

Reclining adjustment

Height adjustment

#### **MULTI-FUNCTION DISPLAY LUFFING SWITCH**

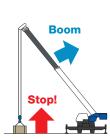
Convenient hand controls are available in addition to touchscreen operation.



#### **SAFETY CONTROL FOR BOOM LUFFING OPERATION**

Prevents overload when the boom is raised to lift a load off the ground.

\*Release switch available for emergency operation



#### Position for crane operation

• Before entering or exiting the cab and when a crane operation is complete,

• The unlock lever is pulled to adjust all positions of the control lever stand.

the control lever stand on the left should be set to stowing position.



The control levers are smooth and responsive to the operator's touch.



#### **VISIBILITY**

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



New cab

# **Smart Counterweight**

GR-1000EX-4/GR-900EX-4



#### **NEW SMART COUNTERWEIGHT SYSTEM**

These rough terrain cranes are the first to feature Tadano's Smart Counterweight system.

The counterweight can be moved between two mounting positions, increasing lifting capacity by up to 20%.

#### **Smart Counterweight 1** (Front position)

#### **Smart Counterweight 2** (Rear position)





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





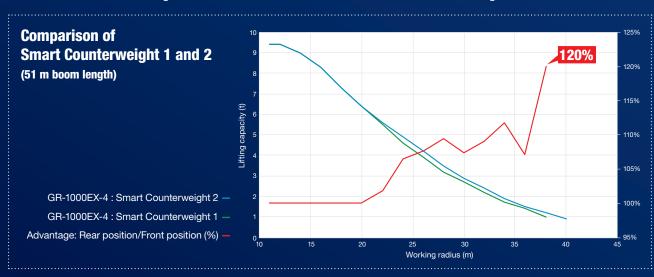
Slew the crane 180° and fully extend the counterweight cylinder. Connect the weight to the slewing table and retract the cylinder, fixing it in place.





Tail Swing: 4.190 m

Tail Swing: 4.790 m

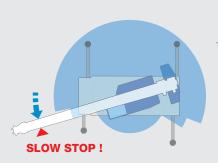


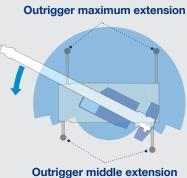
# **Asymmetric Outrigger Extension Width Control**

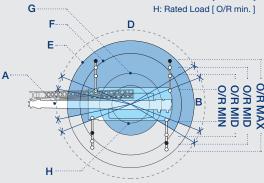
When operating the crane with an asymmetric outrigger extension, the AML-E detects the extension width of all the crane's outriggers (front, rear, left and right) to determine the maximum load capacity in each area. When the boom is slewed from a longer outrigger area to a shorter one, the AML-E detects the motion. It then displays the maximum capacity according to the extension width of each outrigger, and brings the motion to a slow stop before this maximum capacity is reached. The AML-E's slow stop function helps minimizing risks, even in the event 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. ]









# **Smart Chart System**

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

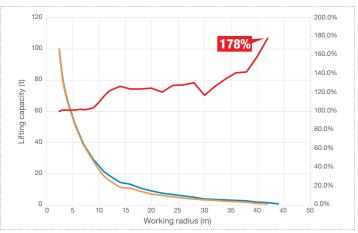


### UNDER MAXIMUM OUTRIGGER EXTENSION SETUPS

The Smart Chart boosts crane potential by expanding the conventional circular working area, improving efficiency.

#### Performance comparison graph (Smart Counterweight, Smart Chart)

- GR-1000EX-4 (O/R: fully extended, CW: 11.2 t, Smart Counterweight 2, Smart Chart)
- GR-1000EX-4 (O/R: fully extended, CW: 11.2 t, Smart Counterweight 1)
- Advantage: Smart Counterweight, Smart Chart/360°rotation (%)



### **CARRIER**

The GR-1000EX-4, GR-900EX-4 and GR-700EX-4 come with a compact width/height 2-axle carrier which offers improved maneuverability and a reduced footprint for ease of transportation.







#### **HIGH PERFORMANCE ENGINE**

Cummins B6.7

4 cycle, turbo charged and after cooled.

Horse power kW (HP): Gross 209 (280) at 2,200 min<sup>-1</sup>

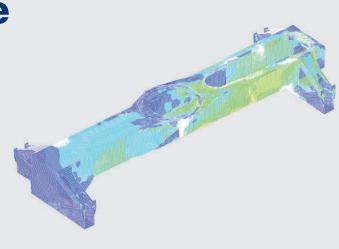
Max. torque Nm: 1,152 at 1,500 min-1

### **New Carrier Frame**

(GR-1000EX-4/GR-900EX-4)

The new carrier frame design is engineered to perfectly combine light weight and high rigidity to achieve superior performance. The resulting greater rigidity of the new crane model stabilizes crane maneuvers at a new level.

\*Compared with our conventional crane models



**TADANO View System** 

The view shown on the large multi-function display helps to significantly improve visibility.

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





Right front view monitor



Right front view camera



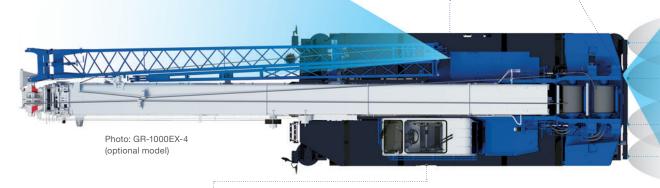
Right front and rear view monitor



camera



**Rear view monitor** 



#### **Improved Cab** Accessibility



#### **Clearance Sonar**

Detects obstacles right behind the vehicle, issuing a warning with a flashing icon on the indicator and

\*Detection distance: approx. 0.3 m - 2.6 m



Clearance sonar monitor



Clearance sonar

#### **Four Steering Modes**

Front: Full floating type, steering and driving axle with planetary reduction. Full floating type, steering

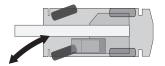
and driving axle with planetary reduction and

non-spin rear differential.

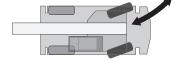
**Axle** 

Rear:

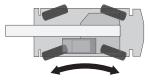
Hydraulic power steering controlled by steering wheel.



2 Wheel Front



2 Wheel Rear



**4 Wheel Coordinated** 



# **Dashboard Indicator** and Warning Symbols





Large multi-function display



12 V power outlet



**USB** port

Air conditioner control panel



Transmission shift switch Cup holder









# **Reduced Fuel Consumption**

#### **FUEL MONITORING**

Fuel consumption monitoring helps operators minimizing fuel conssumption from unnecessary acceleration and idling.

The average fuel consumption is shown when your crane is in operation. Fuel consumption during standby is automatically displayed when each control lever and pedal is in neutral position.



during standby





Fuel consumption Average fuel



Preset menu display (during crane operation)



Fuel consumption history display (during crane operation)



Fuel consumption history display (during travel)



Effectively controls the quantity of hydraulic pump discharge during crane operation in response to the amount of movement applied, and reduces CO<sub>2</sub> emission.



Controls the maximum engine speed during crane operation allowing a decrease in fuel consumption and CO<sub>2</sub> emission by up to 28% with Eco mode 1, and up to 37% with Eco mode 2, while also reducing noise levels.



#### AUTOMATIC PUMP DISCONNECT

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





MN: 1 minute



MID: 3 minutes





## HELLO-NET

HELLO-NET is a tool to connect crane operations with owners, their service staff and the manufacturer via satellite. This high-quality telematic tool is able to collect data of the crane including working history, maintenance data and machine location. The manufacturer can access HELLO-NET to assist with troubleshooting, and to provide Tadano support services.



**ONLINE TELEMATICS (machine data logging and monitoring system)** WITH HELLO-NET (\*subject to availability).

DETAILS: The availability of data communication systems including satellite or mobile communications that expand the service area differs between countries and regions. The system is not yet available in all countries. Please contact your distributor or our local sales representatives for further 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.

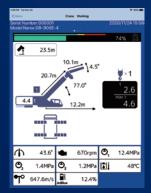
HELLO-DATA LINK helps crane and site supervisors monitor the operating status, and stay up to date on repairs and maintenance.



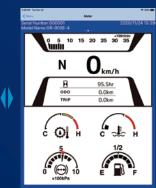
#### **THREE WORKING DISPLAYS**

\*Available display modes and information may differ depending on machine model.

Display information from connected machines via mobile devices. Simply swipe to change screens.



Crane display



Meter display



**Indicators display** 

# **Standard Equipment**



Front steps



Right side steps



Rear steps



Tool box



**Battery Disconnect Switch** 



**Work Light** 



**DEF Tank** 

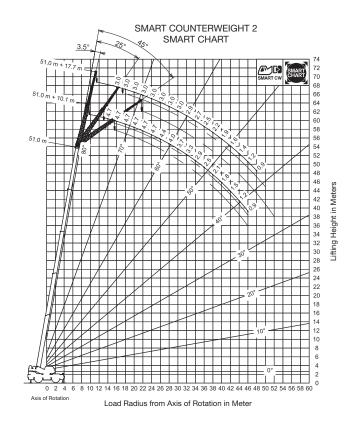


Anemometer

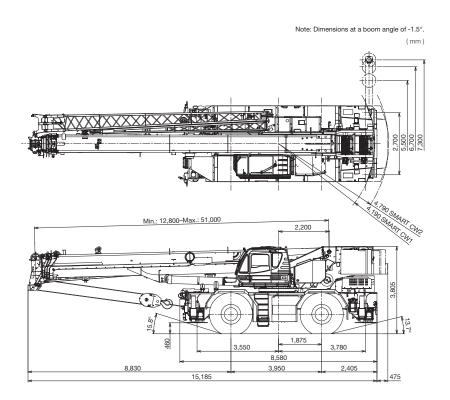
### **WORKING RANGE & DIMENSIONS**

# GR-1000EX-4

#### **WORKING RANGE**

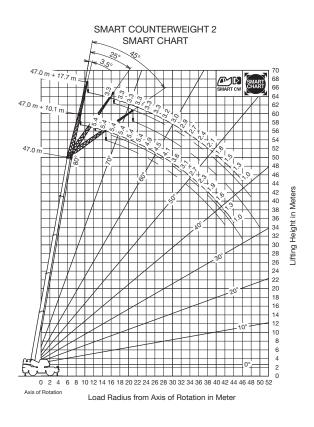


#### **DIMENSIONS**



# **GR-900EX-4**

#### **WORKING RANGE**



#### **DIMENSIONS**

Note: Dimensions at a boom angle of -1.5°. (mm)

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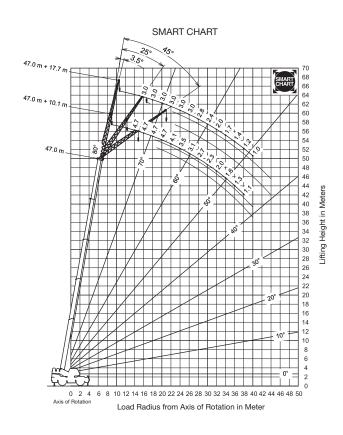
Note: Dimensions at a boom angle of -1.5°. (mm)

Note: Dimensions at a boom angle of -1.5°. (mm)

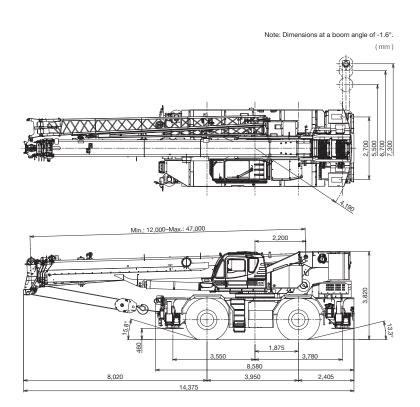
Note: Dimensions at a boom angle of -1.5°. (mm)

# **GR-700EX-4**

#### **WORKING RANGE**



#### **DIMENSIONS**



# No matter where you are:

we're here for you.



Our sales representatives, trained techs, and trusted partners ensure continuous, local availability of additional cranes, service, training, parts, and support.

#### **SALES**

Our experienced Sales team will find you the best crane for your project and provide information on the wide range of Tadano's additional services.

#### **CUSTOMER SUPPORT**

Dedicated Tadano Customer Support Teams are cross-trained to keep all products safely running, including factory-trained service technicians and distribution channel technicians.

#### **PARTS**

Our original spare parts for Tadano and Demag cranes help your company and your cranes to achieve top performance. We are here to support you with an excellent availability of spare parts and quick shipping.

#### **TRAINING**

Tadano offers comprehensive training on our Tadano and Demag branded products to help you get the most from your equipment.

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