MODEL: GR-1200XL

SPECIFICATIONS

MAXIMUM CAPACITY

- Gross vehicle mass
  - 1st axle
  - 2nd axle
- MIN. TURNING RADIUS

WEIGHT

- Fully retracted length
- Fully extended length
- Extension speed
- Angle
- Elevation speed

BOOM

- Length
- Single line pull
- Single line speed
- Wire rope

AXIAL-LIFT WENCH

- Single line pull
- Single line speed
- Wire rope

HYDRAULIC SYSTEM

Pumps
- Tandem gear pump for steering, slewing and optional equipment.
- Control valves
- Multiple valves actuated by pilot pressure with integral pressure relief valves.
- Reservoir: 763 l. capacity.
- External light oil booster
- Oil cooler: Air cooled fan type.

MAIN WINCH

- Main winch
- Auxiliary winch
- Drum rotation indicator
- Fill function
- Tare function
- Fuel consumption monitor
- External warning lamp
- Single line pull
- Single line speed
- Wire rope

AUXILIARY WINCH

- Type
- Type
- Type
- Type
- Type

DIESEL ENGINE

- Model
- Type
- Piston displacement
- Bore x stroke

TRANSMISSION

- Type
- Type
- Type
- Type

STEERING

- Type
- Type
- Type

SUSPENSION

- Type
- Type
- Type

FUEL TANK CAPACITY

- Capacity

WORKING RANGE

LIFTING HEIGHT

- Lifting height
- Load radius
- Rated lifting capacities
- Actual loads

Note: Some specifications are subject to change.
Eco mode

The Eco Mode System controls the maximum engine speed during crane operation. The system will reduce any unnecessary rise in engine speed when there is excessive acceleration and allow fuel consumption and CO₂ emissions to be reduced by a maximum 22% with Eco Mode 1, and maximum 30% with Eco Mode II. This also results in reduced noise levels.

Positive control

The Positive Control System effectively controls the hydraulic pump discharge during crane operation in direct response to the amount of movement applied by the operating control lever. Keeping the quantity of hydraulic pump discharge to a minimum, helps to reduce fuel consumption and CO₂ emissions by up to 20%.

Fuel monitoring

The Fuel Monitoring System constantly monitors and displays fuel consumption conditions on the AML screen. Monitoring the screen indicator enables the operator to prevent wasteful acceleration and idling.

At traveling

Hello-Net allows you to monitor crane activity directly from your computer or mobile device and is connected through satellite or mobile communications. It provides advanced customer support capability by providing operational information as well as the ability to manage inspection and maintenance schedules.

ROUGH TERRAIN CRANE
GR-1200XL

Compact Rough Terrain Crane with Improved Work Capacity

The GR-1200XL is a new, state-of-the-art crane with the largest lifting capacity among Tadano’s two-axle rough terrain models. The crane sits on a compact two-axle carrier and comes with the longest boom of all Tadano’s two-axle rough terrain cranes. It offers compactness—almost as small as the existing 100-ton-class rough terrain model—and is especially easy to transport. The new crane design provides improved safety, greater work efficiency, environmental considerations and exceptional quality. This new, next-generation crane is ready to work for you.

Crane capacity: 110,000 kg at 2.5 m
6-section long boom: 12.0 m – 56.0 m
2-staged bi-fold jib: 10.1 m / 17.7 m
Max. lifting height: 56.1 m (Boom)
73.6 m (Jib)
Max. working radius: 44.0 m (Boom)
48.3 m (Jib)
**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-C ensures operational safety.

**Single telescopic cylinder**

6 box type sections consisting of 1 base section and 5 telescopic sections are extended by a single telescopic cylinder. All sections are fully extended/retracted automatically and locked in the selected working position.

**Outline of telescoping mode**

Boom telescoping of the crane is performed with one telescopic cylinder. Each telescopic section is extended and fixed with pins in sequence from the top with several telescoping modes based on the designated job plan.

**Display telescoping status**

The cylinder and each boom section’s conditions are displayed on the AML using the Telescoping monitor switch.

**Two winches with cable follower**

Both the main winch and the auxiliary winch with powerful line pull operate at high speeds, serving to enhance work efficiency.

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

**New crane structure**

When developing the crane structure, importance was attached to the shape that is best suited for crane operation. FEM analysis was used to create the design. It was also important that the slewling structure be true to Tadano’s original concept and be both rigid and compact while maintaining a desirable overall height.

*FEM: Finite Element Method

**Tilt 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° and 15°.

**Assist cylinder for jib**

When mounting and stowing the jib, an assist cylinder ensures effective operation by increasing the work efficiency of jib mounting and storage.

**Ultimate boom for rough terrain crane**

The rounded boom constructed of high tensile steel contributes to decreased boom weight and increased boom strength.

**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.

**Longest boom and improved capacity**

12.0 m–56.0 m

---

*Maximum permissible line pull may be affected by wire rope strength.*
Automatic moment limiter [AML-C]

Tadano’s new AML-C is easy to use. It allows the operator to simultaneously monitor: boom angle, boom length, operating pressure of the elevating cylinder, the extension width of outriggers, slewing position, rated lifting capacity and present hook load. All of this enables the AML-C to move easily through lifting capacity changes without changing configurations and codes to make a lift.

The AML-C provides both audio and visual warnings when a condition exists that will overload the crane and automatically employs our slow stop function to avoid shock loads.

The AML-C with “OPERATOR” pre-set working range limits and automatic slow stop functions will assist the operator to deliver safe smooth operations.

Control of asymmetric extension width of outriggers

When operating the crane with the asymmetric outriggers extended, the AML-C 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-C 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. Regardless of operator awareness, the AML-C’s slow stop function will help to minimize any safety risk.
High performance engine
MITSUBISHI 6M60-TL
4-cycle, turbo charged and after cooled, direct injection diesel engine.
Max. output: 200 kW at 2,600 min-1 (rpm)
Max. torque: 785 N·m at 1,400 min-1 (rpm)

New carrier frame
The carrier frame was developed and built to be a light weight and highly rigid structure that achieves an advanced level of performance. The results produce a highly stable and maneuverable crane.

Compact carrier for rough terrain crane
The GR-1200XL has a compact width/height 2-axle carrier which offers improved maneuverability and reduced footprint for ease of transportation.

Highly Maneuverable Compact Carrier
The GR-1200XL features a compact carrier that is nearly the same size as Tadano’s smaller capacity GR-800EX. Its compactness makes the GR-1200XL both highly maneuverable and easy to transport.

Overall length: approx. 14,450 mm
Overall width: approx. 3,315 mm
Overall height: approx. 3,795 mm
Min. turning radius (at center of extreme outer tire)
4-wheel steering: 6.8 m
2-wheel steering: 11.9 m
Max. travel speed: 19 km/h
Gradeability (tan θ): 84% (at stall), 30%*  
* Machine should be operated within the limit of engine crankcase design (17°: MITSUBISHI 6M60-TLU3R)

Counterweight is hydraulically mounted and dismounted; in addition, dismounted counterweights can be lifted and moved for transport, and then remounted for operation at a work site without a helper crane.

Mounting and dismounting systems
Self-removable counterweight
Counterweight mounting/dismounting remote controller
Counterweight mounting/dismounting cylinder

GR-1200XL
14,450 mm
3,795 mm
GR-800EX
14,375 mm
3,795 mm

New Design
The carrier frame was developed and built to be a light weight and highly rigid structure that achieves an advanced level of performance. The results produce a highly stable and maneuverable crane.

Highly Maneuverable Compact Carrier
The GR-1200XL features a compact carrier that is nearly the same size as Tadano’s smaller capacity GR-800EX. Its compactness makes the GR-1200XL both highly maneuverable and easy to transport.

Overall length: approx. 14,450 mm
Overall width: approx. 3,315 mm
Overall height: approx. 3,795 mm
Min. turning radius (at center of extreme outer tire)
4-wheel steering: 6.8 m
2-wheel steering: 11.9 m
Max. travel speed: 19 km/h
Gradeability (tan θ): 84% (at stall), 30%*  
* Machine should be operated within the limit of engine crankcase design (17°: MITSUBISHI 6M60-TLU3R)

Counterweight is hydraulically mounted and dismounted; in addition, dismounted counterweights can be lifted and moved for transport, and then remounted for operation at a work site without a helper crane.

Mounting and dismounting systems
Self-removable counterweight
Counterweight mounting/dismounting remote controller
Counterweight mounting/dismounting cylinder

GR-1200XL
14,450 mm
3,795 mm
GR-800EX
14,375 mm
3,795 mm