

# **GR-800EX GR-600EX**

**80 METRIC TON CAPACITY** 

**60 METRIC TON CAPACITY** 

# **GR-300EX**







## **GR-600EX**

**GR-800EX** 



## **GR-300EX**

Photos include optional equipment.



#### Tadano Ltd.

KANDA SQUARE 18th Floor, 2-2-1 Kanda-Nishikicho, Chiyoda-ku, Tokyo 101-0054, Japan Phone: +81-3-6811-7309







# **New Generation of Cranes**

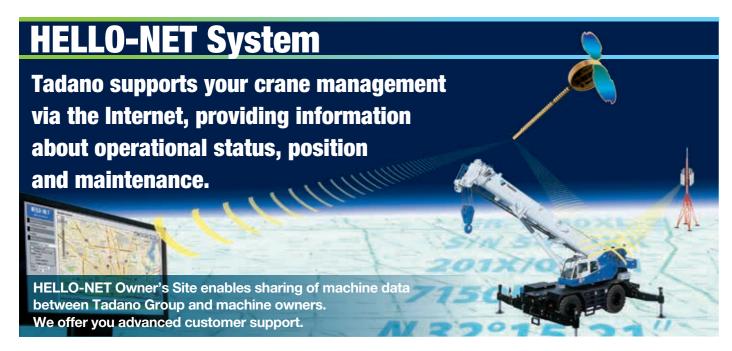
Our cranes can help you explore your future. At Tadano we are concerned about our environment.

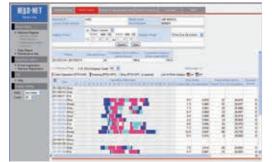
Improving our cranes operations and specifications to meet this goal is important to us.

However user friendliness, operator comfort, safety and customer support are also part of our essential goals.

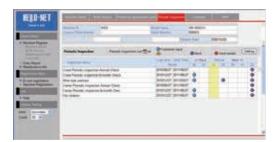
To this end Tadano has launched a new generation of crane that is friendly to the environment, our earth and our future.

## **NEW FEATURES**









#### **Monitoring machine information from your computer**

#### 1. Work History

HELLO-NET Owner's Site displays the day-to-day operational status, mileage and remaining fuel for each machine equipped with a communication terminal. In addition, you can view a list displaying the number of hours of operation and the mileage of all your machines for any specified month.

#### 2. Machine Position Data

Using HELLO-NET Owner's Site, you can check a machine's latest position (up until the previous day) on a map. Two types of position data, listed below, are transmitted automatically from your machine once every day. Work Site: The location where the machine's PTO has been activated (for one hour or more). Position at Day's End: The final location from which GPS was able to receive data on a given day.

#### 3. Maintenance Information

You can check the maintenance timetable of your machines for periodical replacement parts and inspection schedule.

HELLO-NET supports the maintenance of your machine.



Telematics (machine data logging and monitoring system) with HELLO-NET via internet (\*availability depends on the situation). DETAILS: The availability of data communication systems, such as satellite or mobile communications which serve to

widen the service area differs according to individual countries. Besides, there are some countries where the system itself is not in use yet. For details, please contact your distributor or our sales staff in charge.





## Introducing Fuel Monitoring System

The Fuel Monitoring System, displayed on the AML-C screen, monitors fuel consumption rates during crane operations, idling, and while traveling, allowing the operator to optimize fuel efficiency, reduce CO<sub>2</sub> emissions and noise level.

#### **Two devices reduce fuel consumption**

Tadano aims to reduce fuel consumption by its two newly developed technologies, the Eco Mode System and the Positive Control System. Consideration was given to the length of actual operating hours as well as non-operating time (when the crane is in a state of idling). In this relation, the average ratio between the operating hours and the non-operating time is 40/60% Operating according to the results of our investigation. This understanding helped us to successfully achieve our objectives.



Eco Mode System - reduces fuel consumption by approximately 40% while the crane is being operated.



Positive Control System - reduces fuel consumption by approximately 60% when the crane is in a state of idling.

Photos and illustrations may include optional equipment. 04

Ratio

Non-

operating

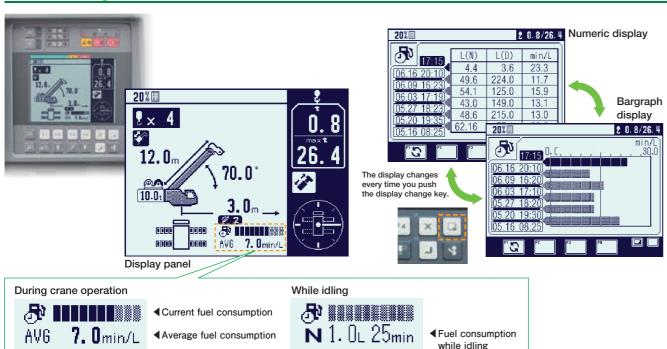
**60**%

## **Fuel Monitoring System**

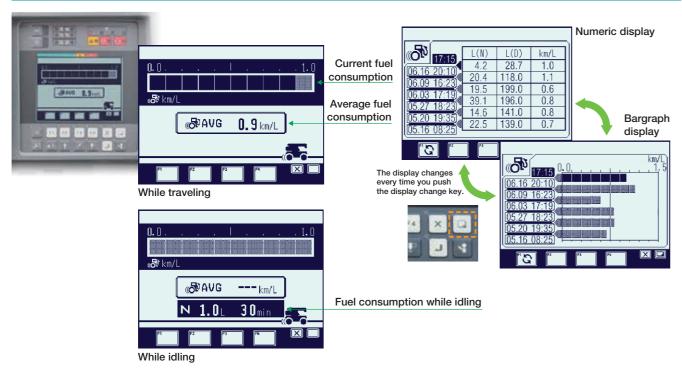
The Fuel Monitoring System constantly monitors fuel consumption on the AML screen.

Checking this monitor enables you to prevent wasteful fuel consumption from unnecessary acceleration and idling.



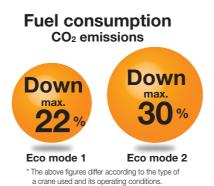


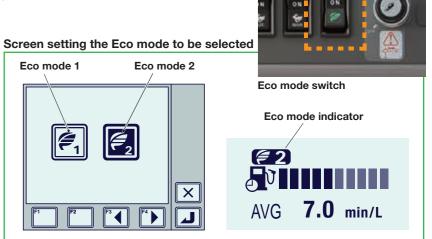
## ( Driving

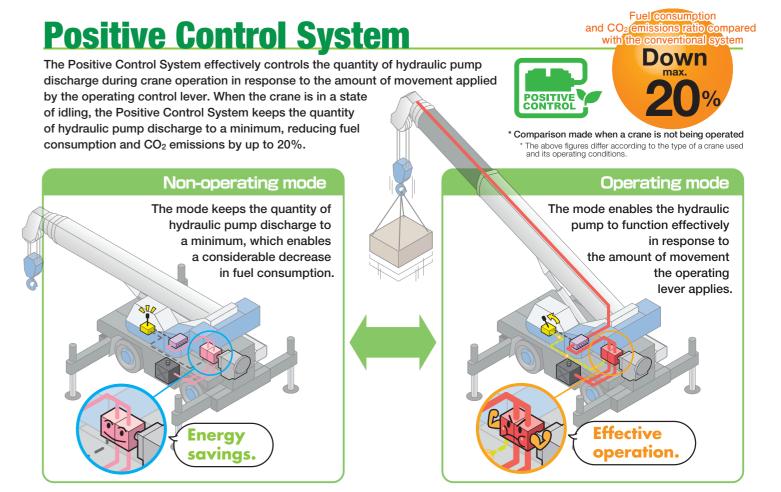


## **Eco Mode System**

The Eco Mode System controls the maximum engine speed at the time of crane operation. To prevent an unnecessary rise in engine speed when there is excessive acceleration, the system enables fuel consumption and  $CO_2$  emissions to decrease by Max. 22% with Eco mode 1, and Max. 30% with Eco mode 2, and the noise level is reduced.









#### Assist cylinder for jib (optional)

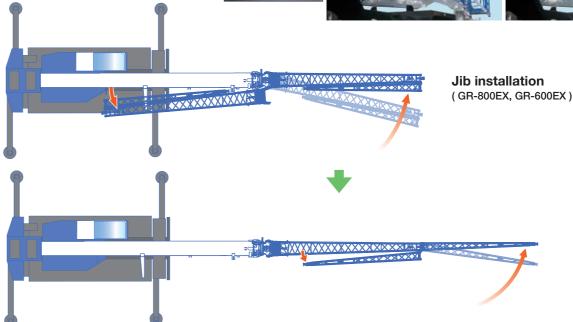
(GR-800EX, GR-600EX)

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









#### Two telescoping modes I & II

(GR-800EX, GR-600EX)

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



#### Mode I

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



#### Mode **I**

Mode  ${\rm I\hspace{-.1em}I}$  is synchronized extension of 3rd, 4th and 5th sections.

Then 2nd section extends independently.

#### New crane structure (GR-800EX, GR-600EX)

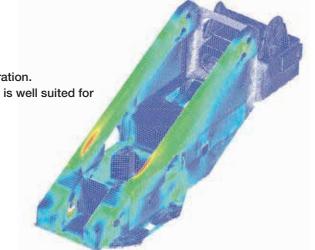
During development of the structural shape of the crane,

\*FEM analysis was applied to achieve a design tailored for optimal operation.

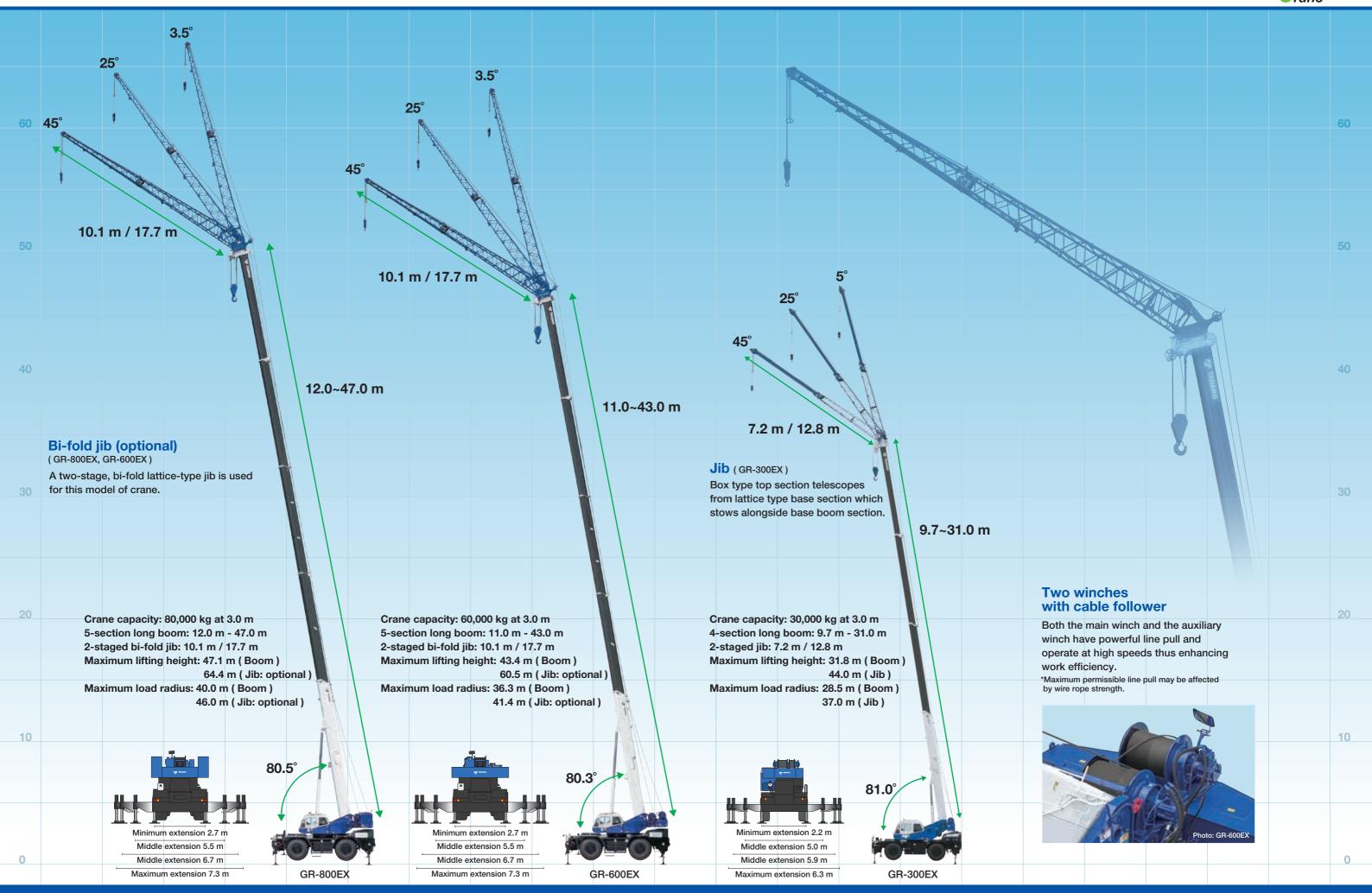
The slewing frames' structure ensures a highly rigid, compact style that is well suited for the overall planned design of the crane.

Continuing the Tadano tradition of excellence and innovation.

\*FEM: Finite Element Method



07



#### **Automatic moment limiter [AML-C]**

Tadano's AML-C is easy to use, innovative in design, displays important information to the operator and enables the operator to preset a custom working environment. For example, the AML-C shows the boom angle, boom length, load radius, operating pressure of the elevating cylinder, the extension width of the outriggers, slewing position, rated lifting capacity and present hook load. These features allow the AML-C to move seamlessly through all lifting operations without having to change configurations or input new codes to make the lift.

The AML-C safety features provide both audible and visual warnings. When an operation approaches the load limit Tadano's slow stop function engages to avoid shock loads.



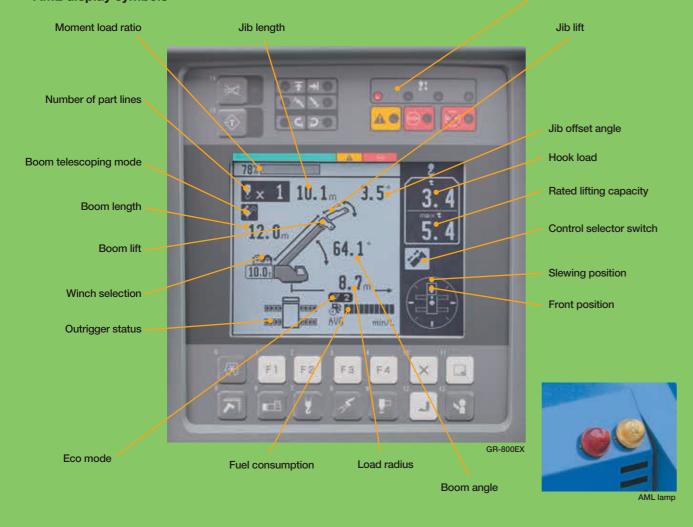
#### **Drum rotation indicator**

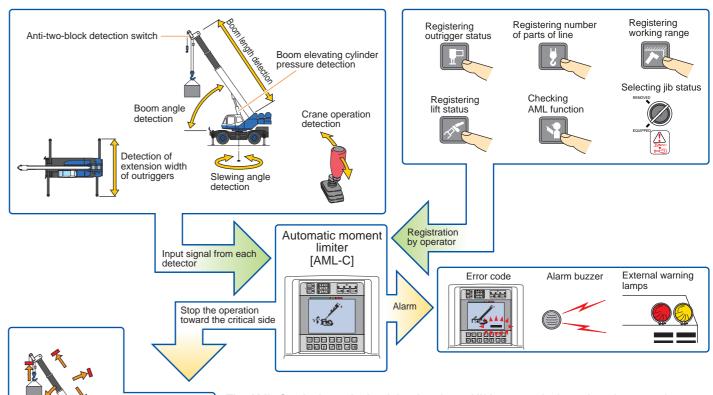
To let the operator know when the winch is rotating, the drum rotation indicator on the AML beeps and flashes sequentially.

The moving distance of the hook block per one flash of the indicator is approximately 7.9 in. to 11.8 in. (20 cm to 30 cm).



#### **AML** display symbols





The AML-C calculates the hook load and rated lifting capacity based on the operation state registered by the operator and input signal from each detector, and displays them as a moment load ratio. When the moment load ratio reaches or exceeds 100%, the AML-C stops the crane operations toward the critical sides and warns with error codes and a buzzer. (The AML-C is a safety device that aids the operator in preventing accidents, such as machine overturn, and damage resulting from overload.)

## Outrigger asymmetric extension width control

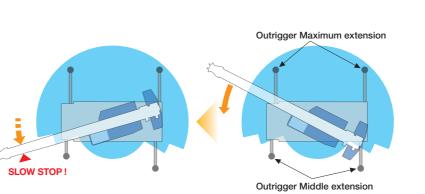
Moment load ratio

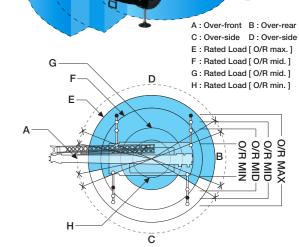
Working range limit

100% or more

wo-blocking

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. Therefore, even in the case of operator error, the AML-C's slow stop function will help to minimize any safety risk.





#### **Operator comfort**

The crane cab provides improved livability and a more comfortable working environment.



Photo: GR-600EX



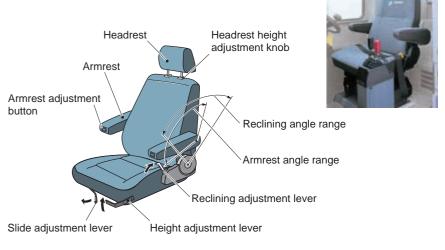
Air conditioner Hot-water heater and air conditioning.

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



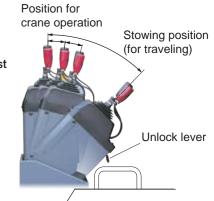
#### Seat adjustment

Multiple seat adjustment positions for ease of operation.



#### **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.



#### Wider steps and hand rails















Right side steps



The new carrier frame design was 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 was enhanced by as much as \*35% which enables highly stabilized maneuverability for the new model of crane.

\*Compared with our conventional crane models

## Winch drum monitoring mirror

(GR-800EX, GR-600EX) Folding mirror reduces height during transport.

#### **High performance engine**



Mitsubishi 6M60-TLU3R [ECE-R96-02]

#### **GR-800EX, GR-600EX**

Model Mitsubishi 6M60-TLU3R [ECE-R96-02] 4-cycle, turbo charged and after cooled, Type

6-cylinder, direct injection diesel.

Piston displacement 7.54 liters

Max. output 200 kW at 2,600 min<sup>-1</sup> {rpm} 785 N·m at 1,400 min<sup>-1</sup> {rpm} Max. torque

#### **GR-300EX**

Model Cummins QSB6.7 EU) stage IIIA

4-cycle, turbo charged and after cooled, 6-cylinder, Type

direct injection diesel.

Piston displacement 6.70 liters

Max. output 160 kW at 2,500 min<sup>-1</sup> {rpm} 843 N·m at 1,600 min<sup>-1</sup> {rpm} Max. torque

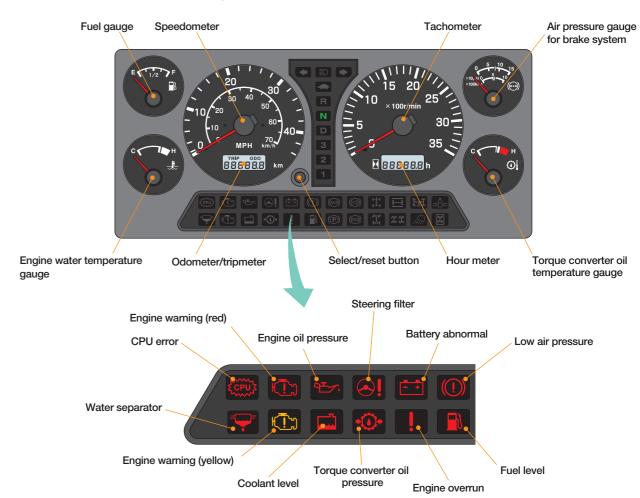


Cummins QSB6.7 EU) stage III A



Photo: GR-600EX

#### **Dashboard indicator and warning symbols**



#### **Smooth transmission**

- Electronically controlled, fully automatic transmission.
- Torque converter driving full power shift with driving axle selector.
- 6 forward and 2 reverse speeds, constant mesh.

#### **GR-800EX, GR-600EX**

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

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

4 speeds - Low range - 4 wheel drive

**GR-300EX** 

#### Fastest traveling speed (GR-300EX)

Maximum traveling speed 50 km/h Cummins Engine + 6 forward speeds transmission

#### Comfortable suspension (GR-300EX)

Semi-elliptic leaf springs with hydraulic lockout device provide good riding comfort.



#### **Axle**

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.

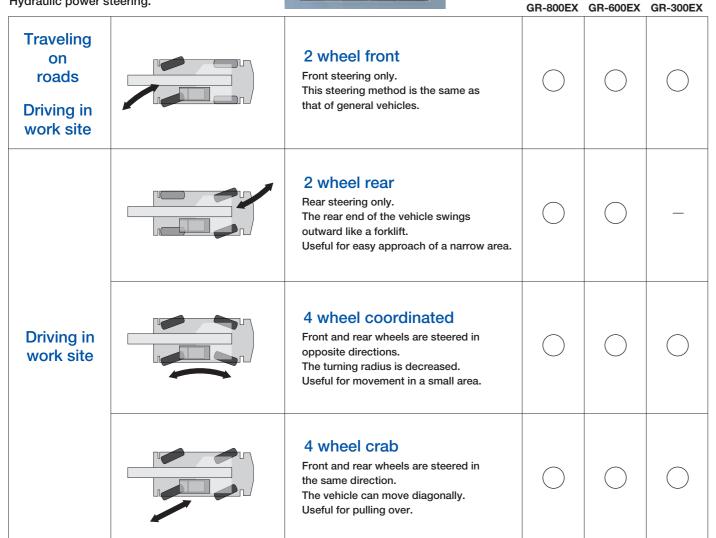
#### **Brake Systems**

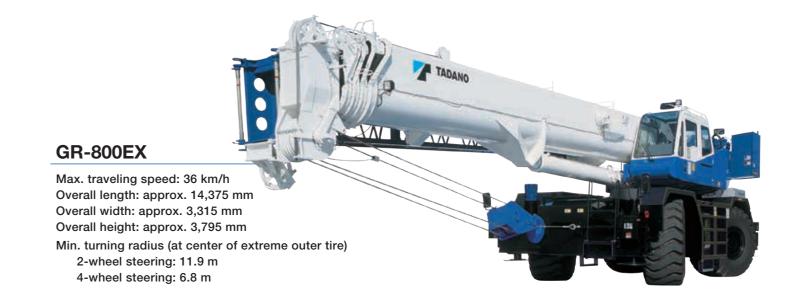
Service: Air over hydraulic disc brakes on all 4 wheels. Parking/Emergency: Spring applied-air released brake acting on input shaft of front axle.

Auxiliary: Electropneumatic operated exhaust brake.

#### 4 steering modes

Hydraulic power steering.





#### **GR-600EX**

Max. traveling speed: 36 km/h Overall length: approx. 13,380 mm Overall width: approx. 3,315 mm Overall height: approx. 3,790 mm

Min. turning radius (at center of extreme outer tire)

2-wheel steering: 11.9 m 4-wheel steering: 6.8 m

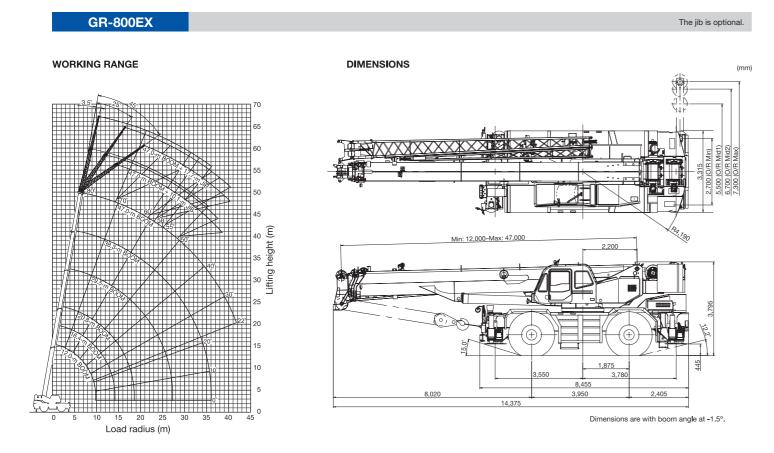


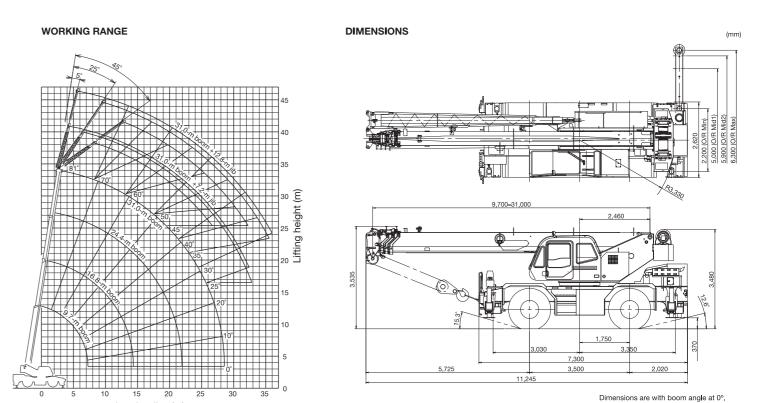
#### **GR-300EX**

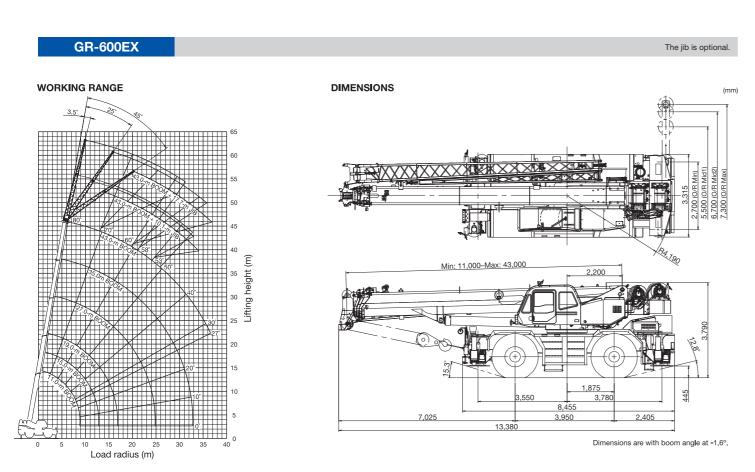
Max. traveling speed: 50 km/h Overall length: approx. 11,245 mm Overall width: approx. 2,620 mm Overall height: approx. 3,535 mm

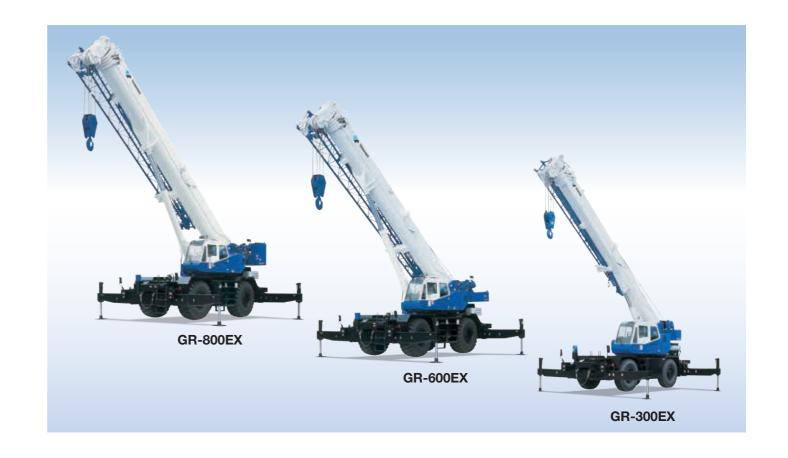
Min. turning radius (at center of extreme outer tire)

2-wheel steering: 9.8 m 4-wheel steering: 5.8 m









Photos and illustrations may include optional equipment. 20

**GR-300EX** 

Load radius (m)

MODEL	GR-800EX	GR-600EX
MAXIMUM CAPACITY	80,000 kg at 3.0 m	60,000 kg at 3.0 m
PERFORMANCE Max. Traveling speed	36 km/h	36 km/h
Gradeability (tan $\theta$ )	94%(at stall), 30%*	147% (at stall), 30%*
Gradoubinty (tail o)	* Machine should be operated within limit of engine	* Machine should be operated within limit of engine
	crackcase design. (17°: Mitsubishi 6M60-TL)	crackcase design. (17°: Mitsubishi 6M60-TL)
WEIGHT		
Gross vehicle mass	52,110 kg (incl. 80 ton hook block)	44,275 kg (incl. 60 ton hook block)
front axle	25,675 kg	22,515 kg
rear axle MIN. TURNING RADIUS	26,435 kg 11.9 m (2-wheel steering), 6.8 m (4-wheel steering)	21,760 kg 11.9 m (2-wheel steering), 6.8 m (4-wheel steering)
WIIV. TOTIVIIVA TIADIOS	(at center of extreme outer tire)	(at center of extreme outer tire)
BOOM	5-section full power telescoping boom.	5-section full power telescoping boom.
Fully retracted length	12.0 m	11.0 m
Fully extended length	47.0 m	43.0 m
Extension speed	35.0 m in 160 s	32.0 m in 128 s
Angle Elevation speed	-1.5°-80.5° 20° to 60° in 46 s	-1.6°-80.3°   20° to 60° in 46 s
JIB (optional)	2-staged bi-fold lattice type with triple offset	2-staged bi-fold lattice type with triple offset (tilt type).
orb (optional)	(tilt type). Single sheave at jib head.	Single sheave at jib head.
Offset	3.5°, 25°, 45°	3.5°, 25°, 45°
Length	10.1 m and 17.7 m	10.1 m and 17.7 m
MAIN WINCH	Variable speed type with grooved drum driven by	Variable speed type with grooved drum driven by
Cingle line and	hydraulic axial piston motor.	hydraulic axial piston motor.
Single line pull Single line speed	64.7 kN {6,600 kgf}	54.9 kN {5,600 kgf}
Wire rope	149 m/min. (at 4th layer) 19 mm x 253 m (Diameter x length)	128 m/min. (at 4th layer) 19 mm x 235 m (Diameter x length)
AUXILIARY WINCH	Variable speed type with grooved drum driven by	Variable speed type with grooved drum driven by
	hydraulic axial piston motor.	hydraulic axial piston motor.
Single line pull	64.7 kN {6,600 kgf}	54.9 kN {5,600 kgf}
Single line speed	128 m/min. (at 2nd layer)	110 m/min. (at 2nd layer)
Wire rope	19 mm x 139 m (Diameter x length)	19 mm x 133 m (Diameter x length)
SLEWING Slewing speed	1.5 min <sup>-1</sup> {rpm}	2.4 min <sup>-1</sup> {rpm}
Tail slewing radius	4,190 mm	4,190 mm
HYDRAULIC SYSTEM	Pumps 2 variable piston pumps for crane functions.	Pumps 2 variable piston pumps for crane functions.
	Tandem gear pump for steering, slewing	Tandem gear pump for steering, slewing
	and optional equipment.	and optional equipment.
	Control valves	Control valves
	Multiple valves actuated by pilot pressure	Multiple valves actuated by pilot pressure
	with integral pressure relief valves.  Reservoir 763 liters capacity. External sight level gauge.	with integral pressure relief valves.  Reservoir 763 liters capacity. External sight level gauge.
	Oil cooler Air cooled fan type.	Oil cooler Air cooled fan type.
TADANO Automatic	Following information is displayed:	Following information is displayed:
Moment Limiter	Control lever lockout function with audible and visual pre-warning	Control lever lockout function with audible and visual pre-warning
(Model: AML-C)	Number of parts of line	Number of parts of line       Boom position indicator
	Outrigger state indicator    Slewing angle	Outrigger state indicator
	Boom angle / boom length / jib offset angle / jib length / load	Boom angle / boom length / jib offset angle / jib length / load
	radius / rated lifting capacities / actual loads read out  • Potential lifting height • Ratio of actual load moment to rated	radius / rated lifting capacities / actual loads read out  • Potential lifting height • Ratio of actual load moment to rated
	load moment indication • Permissible load	load moment indication • Permissible load
	Automatic speed reduction and slow stop function for boom	Automatic speed reduction and slow stop function for boom
	elevation and slewing • Working condition register switch	elevation and slewing • Working condition register switch
	Load radius / boom angle / tip height / slewing range preset	Load radius / boom angle / tip height / slewing range preset
	function • External warning lamp • Tare function	function • External warning lamp • Tare function
	Main hydraulic oil pressure	Main hydraulic oil pressure
	Main winch / auxiliary winch select     Drum rotation indicator (audible and visible type) main and	Main winch / auxiliary winch select     Drum rotation indicator (audible and visible type) main and
	auxiliary winch • On-rubber indicator	auxiliary winch • On-rubber indicator
OUTRIGGERS	4 hydraulic, beam and jack outriggers. Vertical jack cylinders	4 hydraulic, beam and jack outriggers. Vertical jack cylinders
	equipped with integral holding valve. Each outrigger beam and	equipped with integral holding valve. Each outrigger beam and
	jack is controlled independently from cab.	jack is controlled independently from cab.
Extension width	Max 7,300 mm, Mid 6,700 mm & 5,500 mm	Max 7,300 mm, Mid 6,700 mm & 5,500 mm
CADDIED		Min 2,700 mm, Float size (Diameter) 600 mm
CAPPIED	Min 2,700 mm, Float size (Diameter) 600 mm	
CARRIER	Rear engine, left-hand drive, driving axle 2-way selected type by	Rear engine, left-hand drive, driving axle 2-way selected type by
CARRIER	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.
CARRIER	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive	Rear engine, left-hand drive, driving axle 2-way selected type by
	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive
	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled,  6-cylinder, direct injection diesel.
	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch. 4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters
	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02] Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement7.54 liters Bore x stroke 118 mm x 115 mm	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm
	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02] Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement 7.54 liters Bore x stroke 118 mm x 115 mm Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}
ENGINE	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}
ENGINE TRANSMISSION	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N-m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement 7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.
ENGINE	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}
ENGINE TRANSMISSION	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N-m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.  Hydraulic power steering.	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.  Hydraulic power steering.
ENGINE  TRANSMISSION STEERING	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement 7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.  Hydraulic power steering. 4 steering modes available: 2-wheel front, 2-wheel rear, 4-wheel coordinated, 4-wheel crab	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement 7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.  Hydraulic power steering.  4 steering modes available: 2-wheel front, 2-wheel rear, 4-wheel coordinated, 4-wheel crab
ENGINE TRANSMISSION	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02] Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement7.54 liters Bore x stroke 118 mm x 115 mm Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm} Max. torque 785 N-m at 1,400 min <sup>-1</sup> {rpm} Electronically controlled full automatic transmission. Hydraulic power steering. 4 steering modes available: 2-wheel front, 2-wheel rear, 4-wheel coordinated, 4-wheel crab Front Rigid mounted to frame.	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel.  Piston displacement 7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.  Hydraulic power steering.  4 steering modes available: 2-wheel front, 2-wheel rear, 4-wheel coordinated, 4-wheel crab  Front Rigid mounted to frame.
ENGINE  TRANSMISSION STEERING	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type 4-cycle, turbo charged and after cooled, 6-cylinder, direct injection diesel. Piston displacement 7.54 liters  Bore x stroke 118 mm x 115 mm  Max. output 200 kW at 2,600 min <sup>-1</sup> {rpm}  Max. torque 785 N·m at 1,400 min <sup>-1</sup> {rpm}  Electronically controlled full automatic transmission.  Hydraulic power steering. 4 steering modes available: 2-wheel front, 2-wheel rear, 4-wheel coordinated, 4-wheel crab	Rear engine, left-hand drive, driving axle 2-way selected type by manual switch.  4 x 2 front drive, 4 x 4 front and rear drive  Model Mitsubishi 6M60-TLU3R [ECE-R96-02]  Type

MODEL	GR-300EX
MAXIMUM CAPACITY	30,000 kg at 3.0 m
PERFORMANCE Max. Traveling speed	50 km/h
Gradeability (tan $\theta$ )	78% (at stall), 57%*
, ,	* Machine should be operated within limit of engine
WEIGHT	crackcase design. (30°: Cummins QSB6.7**)
Gross vehicle mass	27,190 kg (incl. 30 ton hook block)
front axle	13,650 kg
rear axle	13,540 kg
MIN. TURNING RADIUS	9.8 m (2-wheel steering), 5.8 m (4-wheel steering) (at center of extreme outer tire)
BOOM	4-section full power telescoping boom.
Fully retracted length	9.7 m
Fully extended length Extension speed	31.0 m 21.3 m in 91 s
Angle	0°–81°
Elevation speed	20° to 60° in 22 s
JIB	2-staged jib with triple offset (tilt type). Single sheave at jib head.
Offset	5°. 25°. 45°
Length	7.2 m and 12.8 m
MAIN WINCH	Variable speed type with grooved drum driven by
Single line pull	hydraulic axial piston motor. 39.2 kN {4,000 kgf}
Single line speed	125 m/min. (at 4th layer)
Wire rope	16 mm x 170 m (Diameter x length)
AUXILIARY WINCH	Variable speed type with grooved drum driven by hydraulic axial piston motor.
Single line pull	39.2 kN {4,000 kgf}
Single line speed	125 m/min.(at 4th layer)
Wire rope SLEWING	16 mm x 98 m (Diameter x length)
Slewing speed	3.2 min <sup>-1</sup> {rpm}
Tail slewing radius	3,330 mm
HYDRAULIC SYSTEM	Pumps 2 variable piston pumps for crane functions.
	Tandem gear pump for steering, slewing and optional equipment.
	Control valves
	Multiple valves actuated by pilot pressure
	with integral pressure relief valves.  Reservoir 380 liters capacity. External sight level gauge
	Oil cooler Air cooled fan type.
TADANO Automatic	Following information is displayed:
Moment Limiter (Model: AML-C)	Control lever lockout function with audible and visual pre-warning     Number of parts of line
(IVIOGEI: AIVIL-O)	Outrigger state indicator
	Boom angle / boom length / jib offset angle / jib length / load
	radius / rated lifting capacities / actual loads read out
	Potential lifting height       Ratio of actual load moment to rated load moment indication       Permissible load
	Automatic speed reduction and slow stop function for boom
	elevation and slewing • Working condition register switch
	Load radius / boom angle / tip height / slewing range preset function     External warning lamp     Tare function
	Main hydraulic oil pressure
	Main winch / auxiliary winch select
	Drum rotation indicator (audible and visible type) main and auxiliary winch     On-rubber indicator
OUTRIGGERS	4 hydraulic, beam and jack outriggers. Vertical jack cylinders
	equipped with integral holding valve. Each outrigger beam and
Extension width	jack is controlled independently from cab.  Max 6,300 mm, Mid 5,900 mm & 5,000mm
muui	Min 2,200 mm, Float size (Diameter) 400 mm
CARRIER	Rear engine, left-hand drive, driving axle 2-way selected type by
	manual switch. 4 x 2 front drive, 4 x 4 front and rear drive.
ENGINE	Model Cummins QSB6.7 EU) stage IIIA
	Type 4-cycle, turbo charged and after cooled,
	6-cylinder, direct injection diesel.
	Piston displacement 6.70 liters Bore x stroke 107 mm x 124 mm
	Max. output 160 kW at 2,500 min <sup>-1</sup> {rpm}
TDANIONICOLON	Max. torque 843 N•m at 1,600 min <sup>-1</sup> {rpm}
TRANSMISSION STEERING	Electronically controlled full automatic transmission.  Hydraulic power steering.
OTELNING	3 steering modes available:
	2-wheel front, 4-wheel coordinated, 4-wheel crab
CLICDENICION	Openi allindia land amain 2011 1 1 1 1 1 1 1 1
SUSPENSION	Semi-elliptic leaf springs with hydraulic lockout device.
SUSPENSION	Semi-elliptic leaf springs with hydraulic lockout device.  445/95 R 25 (OR), Single x 4



\*Some specifications are subject to change