TR-300EX
TR-250EX
HYDRAULIC ROUGH TERRAIN CRANE
33-TON CAPACITY (30 METRIC TONS)
27.6-TON CAPACITY (25 METRIC TONS)
NEW ROUGH TERRAIN CRANE CONCEPT

Safety & Reliability
Excellent Performance
Easy Operation

TR-300EX / TR-250EX
Designed for maximum speed, maneuverability and safety

Speed and maneuverability — trademarks of superior performance

Top transit speed and easy driving
TR-250EX can move at maximum travelling speed of 55km/h, and TR-300EX at 60km/h, making it easy to move between job sites. Its automatic transmission makes driving easy. When in "D" drive, the gear automatically shifts between first and third gears high and third low range in response to travelling speed. Both models' fully automatic, heavy-duty torque converter features a special automatic lock-up device.

Three-way power steering
Both models' superior maneuverability is made possible by a three-way power steering system controlled from the cab by a single switch.

High-powered carrier
Both models are equipped with a new, high-powered 155kW (211hp) engine that is designed for high power, rapid acceleration and gradability. The engine also conforms to EUROMOT stage 1 exhaust emission standards.

Non-spin differential
When travelling over rough terrains, even if one wheel starts to spin, the non-spin differential system stops power to the corresponding wheel on the other side for greater maneuverability.

4-wheel coordinated steering

Heavy-duty tires
The vehicle is fitted with large, highly durable radial tires capable of withstanding extremely high load bearing on steering drive axles.

Powerful braking performance
The vehicle's advanced braking system incorporates service brakes, powerful dual-line hydropneumatic disc units on all four wheels, and parking brakes that feature spring-operated, air-relieved brakes. The system also includes an exhaust brake for downhill movements and a special circuit air dryer that prevents rusting, eliminates freezing and increases service life.
Superior strength and control for maximum boom reach

Full-length power boom
The boom is made of high-tensile steel and lightweight box construction for maximum rigidity. The 4-section boom features two double-acting cylinders with holding valves and a wire rope mechanism for sequential and synchronized telescoping. Single-lever action ensures smooth, full-length power boom extension and retraction.

Single top (Auxiliary boom sheave)
A single top can be mounted to the boom head in order to facilitate high-speed lifting of light loads when the extra lift height provided by the jib is not required. The single top and main hoist can be used simultaneously.

Wide elevation range
The double-acting hydraulic cylinder is fitted with a counterbalance valve that has an outstanding elevation range.

Stable pick-up and carry
The superior design of the hydraulic automatic lock-up cylinders of both models guaranties stable lift and carry functions while the vehicle moves about the job site.

Powerful dual-winching action

Powerful 2-speed winching
Both models utilize a powerful, high-torque two-motor, two-drum power system, and the main and auxiliary winch feature a two-speed booster circuitry that nearly doubles line speed while maintaining high line pull characteristics. The auxiliary winch is also equipped with its own separate motor, and winch drums are grooved and wider in diameter in order to increase rope service life and eliminate off-position winding.

Minimum tail swing
The crane's two in-line winches minimize the unit's tail swing.

Wide-span outriggers with intermediate extended width

Wide-span outriggers
Both models are equipped with wide-span, hydraulically operated double-box outriggers. There are now three outrigger extension widths to choose.

Outrigger extension width detector
The device transmits a signal to the AML by automatically detecting the outrigger extension width. This device provides precautionary measures against possible accidents that may happen by an erroneous input by the operator.

Outriggers can be controlled individually or simultaneously at the touch of a button from the cab.
Safety and reliability

Automatic Moment Limiter (AML)

Precise and safe operation is ensured by an automatic motion cutting device (AML-L), which prevents overloading. Information on eight separate functions is continuously displayed on the monitor.

The attractive AML-L panel displays all the required functions for crane operations. Display changes only while Display alteration Key (1) is pressed.

Display of approximately 80 error messages

The number of error messages displayed has been increased to approximately 80 messages. If there is an error in the AML-L and an abnormality in one of the sensor switches, the buzzer sounds, and the crane automatically stops.

Standard equipment for safety

1. Position type over-turning prevention
2. Over-lowering prevention
3. Emergency stopping
4. Winch drum indicator
5. Cable follower
6. Gate switch (Doorman Switch)

Lighted control panel

The unit’s sophisticated feedback system incorporates an easy-to-monitor lighted control panel that displays the operating status of various important functions such as steering configuration.

Working range limiting function

The AML-L automatically stops at the point to stop automatically at the desired position during extension and elevation, increasing efficiency and enhancing safety.

The five working range limiting functions can be extended simultaneously:
1. Boom height limiting function
2. Boom elevation angle limiting function
3. Boom lowering angle limiting function
4. Load radius limiting function
5. Swing area limiting function

Highly functional cab design — Comfort and safety first

Full-vision cab

The cab has been designed with operator comfort and safety firmly in mind. The operator’s seat can be adjusted three ways, and has a high back, with headrest and seatbelt. Covered with automotive upholstery, it remains cool to touch, even in the hottest weather. The steering wheel has tilt and telescopic adjustment and can be positioned to suit virtually any operator. Tinted safety glass is used for all cab windows to block out harsh heat and ultraviolet rays. Washers/scrubbers have been added to the sliding ceiling window to improve visibility. Air vents are also provided to help the operator mount and downvent — especially useful when the cab has been raised by jacking up the crane body. Optional extras include cab heater with defroster and cab cooler.

Convenient step

Oil cooler

A special oil cooler controls oil temperature during extended periods of use, preventing loss of power caused by excessive oil temperature and enhancing overall operating efficiency.