TL-350E
HYDRAULIC TRUCK CRANE
38.6-ton capacity (35 metric tons)
LEADING IN ITS CLASS

The TL-350E truck-mounted crane incorporates advanced technology and Tadano's extensive on-the-job know-how to outperform any crane in its class. Both strong and flexible, the TL-350E is tough enough for big jobs, while versatile enough to handle jobs in constricted and irregularly shaped work areas. This power crane features a stronger boom, designed for maximum flexural and torsional rigidity and a wider elevation range for close-in lifting. The unit also incorporates a unique feedback system, which provides the operator with information on lifting capacity, working radius and other operational data for markedly improved operating efficiency.

Superior Carrier
Mounted on a reliable 4x4 drive Mitsubishi chassis, the TL-350E features a powerful water-cooled four-stroke direct injection diesel engine for superior performance over any terrain. In addition to increased on-road acceleration, the high torque output and flexible transmission - ten forward and two reverse speeds - also ensure that the crane can go anywhere. The low-profile type, two passenger cab has been ergonomically designed for maximum visibility and comfort. The steering wheel, seats, pedals, and control levers provide optimum comfort and easy operation, even during prolonged operation and over long distances.

Double-Acting Hydraulic Cylinders
With elevation range of -90° to 90°, the double-acting hydraulic cylinders, fitted with folding jibs, are highly maneuverable and have a positive boom angle that permit ground level reaching.

Underslung Jib
A two-stage jib stored under the base, the jib can be extended by 8.7 or 14.6 meters and when retracted can be offset either 9°, 25°, or 45° from the main boom center line. This innovative feature makes lifting in close quarters safe and efficient.

LIFTING POWER

Superior Boom Strength
The TL-350E's crane boom features a powerful, synchronized telescoping function for faster, smoother extending and retraction operations. Fully retracted to 6.1 meters, the boom can be extended up to a maximum 34 meters using either the hand lever or foot pedal. The extremely rigid and lightweight construction of the boom makes it stronger and more maneuverable than previous models.

Single Top (Auxiliary Boom Sheave)
The single top can be fitted with a single top for high-speed lifting of light loads, when the extra lift height provided by the jib is not required.
**Adjustable Outriggers**

Outriggers mounted on the TI-3506E chassis can be extended midway at 4.0 meters or to a maximum of 6.1 meters, to meet the varying requirements of job sites. Equipped with controls and level gauges on either side, the outriggers can be extended simultaneously or independently from either side of the carrier. The beams can be positioned to either extended or retracted positions, and because the legs are attached to the jack, set up is made extremely easy.

**Front Jack**

A five hydraulically operated jack is mounted to the front frame of the carrier to permit full operation through a 90° swing. However, when a front jack is not extended, the crane still has a rated over front capacity.

**Fitting Every Situation**

Outriggers can be set at various lengths on either side of the vehicle to accommodate irregularly shaped and constrained work areas.

**Automatic Moment Limiter (AML)**

This highly advanced moment limiter enables automatic moment input directly from the boom elevation & extension. A Boom, angle and length can also be set directly. In conjunction with outrigger configuration, the AML controls and monitors the critical lifting capacity changes as the work proceeds.

**Working Range Limit Function**

The AML incorporates 30 degree keys for setting maximum boom height, plus angle, negative angle and working radius, thus, maintaining increased safety for repetitive operations in congested work areas such as busy highway overpasses or under live electric power lines.
ENHANCED FEATURES

Automatic Fall-Safe Brake
Tadano's unique design incorporates an automatic fall-safe braking system with counterbalance valves for added safety and efficiency. The system is powered by a powerful high-torque, high-speed, hydraulic motor system. The primary braking utilizes two high-torque, high-speed combination brakes, and when combined with the brake mechanism, it provides multiple levels of redundancy. And, the winch cases have been water-jetted and grooved to increase rope service life.

Improved Safety Features
The outstanding safety features of the TL-S0E include limit switches, wire rope over-run cutoff, winch drum box, hook safety latch, hydraulics safety valves, load-angle indicator, and a winch drum rotation indicator.

Oil cooler
The unit oil cooler prevents power loss due to overheating from prolonged use.

Oil reservoir
The large capacity of the reservoir features a level gauge, and the return line filter is equipped with a quick-change replaceable element that simplifies maintenance.

Twin-Swing for 360° Maneuverability
The chassis of the TL-S0E averages a full 360°, owing to the special seated ballbearing swing ring, which is driven internally by an axial piston motor and planetary reduction gearing. With the flip of a switch, the operator can shift between power-control and free swing action, automatically positioning the boom head over a load's center of gravity as the hoist raises the load. This function makes it possible to avoid potentially dangerous boom head side-loading.

Non-Spin Ropes
The TL-S0E is equipped with special non-spin ropes to prevent potentially dangerous spinning during loading operations.

Expanded Field of Vision
This model has been completely redesigned to afford the maximum field of vision during both crane operation and movement of the vehicle. The interior is more spacious than previous models and designed for maximum comfort and maneuverability. Full instrumentation in the cab makes operation easy and provides a pleasant working environment, whether on the work site or the road. Fully reclining seat and headrest, and full-length crane control levers increase comfort and improve efficiency. Other features include enhanced ventilation, interior lighting, and safety glass.

Increased Crane Control Levers
All crane controls conform to international ISO standards and employ a special spring control system that automatically returns lever positions to neutral when released, thus preventing accidental lever changes during operation. An easy-to-use foot pedal improves loadgrip and braking operations, while a double-acting auxiliary pump provides extended reach. The new system improves overall control and is extremely operator-friendly.

MAXIMIZING OPERATING CONVENIENCE AND COMFORT