



series 3500

BOOM TRUCKS

features

- 35 Ton (31,8 mton) Capacity
- 5-Section 124' (37,8 m) Proportional Boom
- 4-Section 100' (30,5 m) Proportional Boom
- 3-Section 77' (23,5 m) Proportional Boom
- 1 and 2-Section 30' 6" (9,3 m) to 55' (16,8 m) Jib
- 165' 11" (50,6 m) Maximum Tip Height
- 22', 1.25" (6,7 m) Out-and-Down Outriggers at Full Extension
- Intermediate and Fully Extended Outrigger Charts are Standard
- FirstUp for Optional Front Stabilizer Auto Retract
- 2-Speed Planetary Hoist with Grooved Drum and Negative Draft Flange
- Load Moment Indicator with Digital Display, CAN Bus, Overload Shutdown and Internal Boom Length Cable
- Radio ATB
- Rugged, Weatherproof Electrical System with Circuit Status LEDs
- Removable Boom Rest
- System Pressure Gauge
- Clamp-On Mounting
- Aeroquip STC (Snap to Connect) Hydraulic Fittings
- Manitex UPTIME Comprehensive Support



product guide

series 3500

GENERAL SPECIFICATIONS

BOOM

Booms – Inverted T-cross section, 3, 4, or 5-section telescoping type, extended and retracted proportionally by a double-acting hydraulic cylinder and cable-crowd system. **35100** – 4-Section 30' 6" (9,3 m) to 100' 0" (30,5 m). 2-section, 31' (9,5 m) to 55' (16,8 m) jib. **35124C** – 5-section 31' 5/8" (9,5 m) to 123' 8 5/8" (37,7 m). 1-section, 31' (9,5 m) jib. **3577C** – 3-section, 29' 5" (9 m) to 77' (23,5 m).

Quick Reeve Boom Point – Three high-density nylon load sheaves mounted on heavy-duty roller bearings. Two removable pin-type rope guards.

Boom Elevation – Double-acting hydraulic cylinder. Working range from 10 \uparrow below horizontal to 80 \uparrow above.

Load Hook – 5-ton (4,5 mton) capacity hook with heavy-duty swivel and weight is provided for single-line operation.

HOIST

Hoist – Maximum theoretical line speed 453 fpm (138 mpm). Maximum theoretical bottom-layer line pull 14,500 lb (6 577 kg). Two-speed planetary reducer. Wet multi-disc internal brake is spring-applied, pressure-released.

Wire Rope – 380' (115,8 m) of 5/8" (16 mm) rotation resistant type.

SWING SYSTEM

Externally mounted, double-reduction planetary driven by hydraulic motor. Maximum theoretical swing speed 1.5 rpm. Wet multi-disc internal brake is spring-applied, pressure-released. Oversized diameter ball-bearing swing circle with external gear. 372 \uparrow non-continuous rotation.

OUTRIGGERS

Out-and-down style outriggers, operated independently for precise leveling. 22' 1 1/4" (6,8 m) spread at full extension and 13' 4" (4,1 m) spread at intermediate extension. 16" (406 mm) diameter floats. Bubble level located near outrigger controls.

STABILIZERS

8' (2,4 m) retracted; 18' 6" (5,6 m) extended. Operated independently for precise leveling. Double-acting hydraulic cylinders. Fixed pad size is 12" (305 mm) diameter.

MOUNTING

Mounting – Pedestal and subframe are mounted to chassis by threaded rods and clamp plates. No welding, drilling, or bolting to truck frame is required.

Subframe – Torsionally resistant, rigid 4-plate design. Mounted under crane full length of truck frame.

Rear Underride Protection – Supplied on factory-mounted cranes. Fabricated structure mounted under rear of bed. Complies with Bureau Motor Carrier Safety Standard 393.86.

Boom Rest – Heavy-duty fabrication. Easily removed to simplify loading and unloading truck deck.

CONTROL SYSTEM

Dual operator platforms are equipped with four single-lever crane controls arranged to ANSI B30.5 standards. Fully proportional control valves and system pressure gauge. Each station also includes outrigger and stabilizer controls, engine start/stop, foot throttle, signal horn, boom-angle indicator, bubble levels, beverage container, load chart and range diagram.

HYDRAULICS

Hydraulic System – A 3-section vane pump direct-mounted to power take-off on truck transmission provides 38 gpm (145 lpm) to the hoist, 27 gpm (102 lpm) to the boom hoist and telescope circuit, and 11 gpm (45 lpm) to the swing and outrigger circuit. 100-gallon (379-liter) baffled reservoir includes suction ball valve with strainer two 25-micron filters in the return line. Use of SAE O-ring and face seal O-ring hydraulic fittings throughout system. Aeroquip STC (Snap-to-Connect) on all hoses up to 1" virtually

eliminates leaks.

Hydraulic Cylinders – All load-holding cylinders are equipped with integral holding valves.

WARNING SYSTEMS

Load Moment Indicator – CAN bus system maximizes expansion capabilities. Senses boom hoist cylinder pressure, boom length and boom angle. Audio-visual warning indicated overload conditions and overload shutoff feature prevents continuing overload. Operator can access all relative crane configuration and load conditions via display at the operator station. Internal boom length cable.

Radio Anti-Two-Block System – Audible warning and shutoff functions prevent hook from contacting boom point. Switch is potted to ensure reliability.

Back-Up Alarm – Supplied on factory-mounted cranes, electronic audible motion alarm activated when truck transmission is in reverse gear.

GENERAL

Electrical – State-of-the-art, weather-resistant components throughout. Hermetically sealed power in relays. Enclosure includes power in relays and circuit status LEDs. Designed to withstand high pressure washing and varying climates.

Design/Welding – Design conforms to ANSI B30.5. Welding conforms to AWS D1.1. Tested to SAE 1063 and SAE 765.

Manuals – Operator, service and parts manuals depict correct crane operation, maintenance procedures and parts listing.

Warranty – 12-month warranty covers parts and labor resulting from defects in material and workmanship.

* In order to ensure continuous improvement, specifications may change without notice.