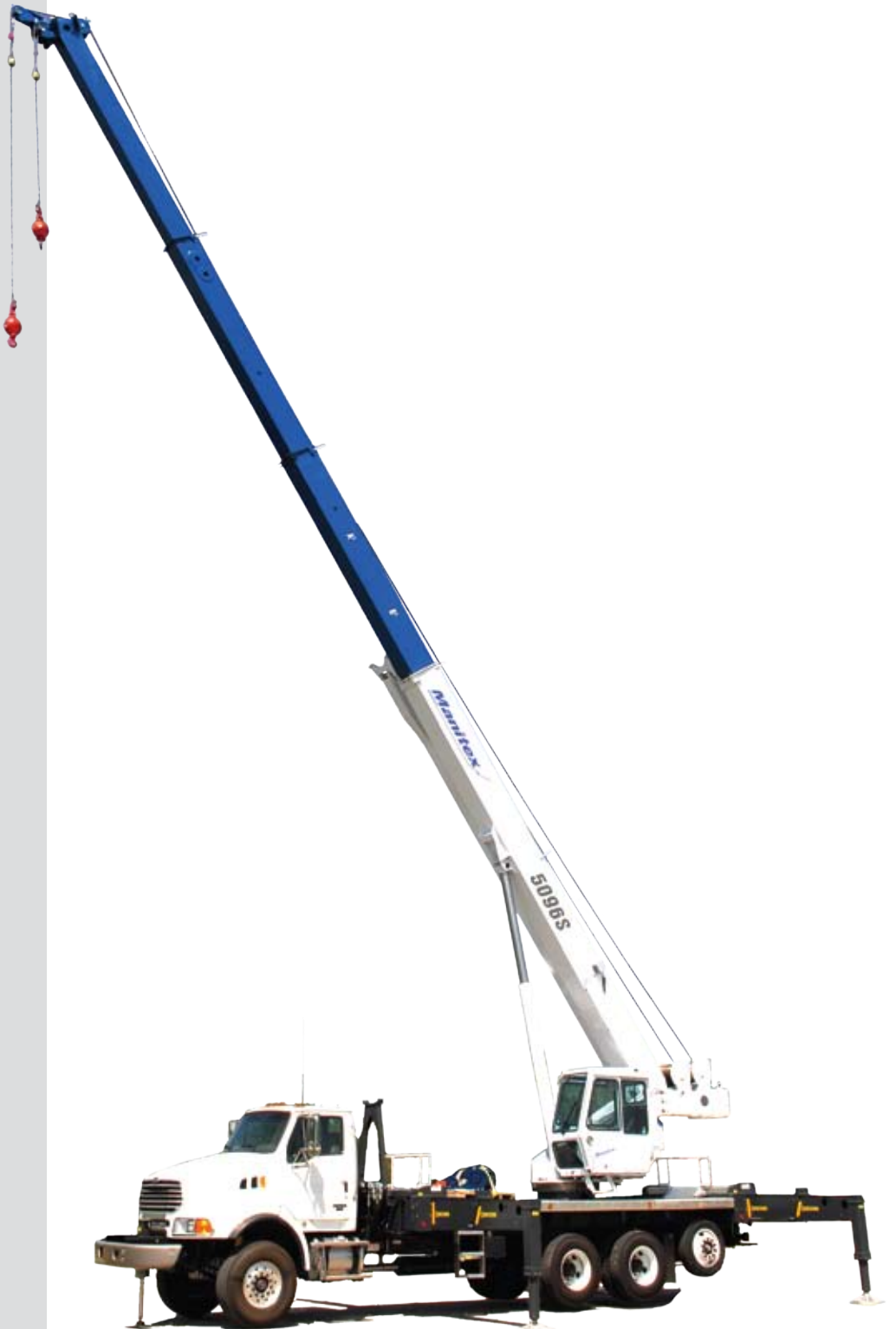


features

- 50 Ton (45,4 Mton) Capacity
- 4-Section 96' (29,3 M) Proportional Boom
- 2-Section 32' (9,8 M) To 49' (14,9 M) Telescopic Offset Jib (15°, 30°)
- 151' (46,1 M) Maximum Tip Height with Telescopic Jib
- 104' (31,6 m) Maximum Main Boom Tip Height
- Self-Lubricating Boom Slider Pads
- Two Speed Planetary Grooved Drum Hoist With Negative Draft Flange and Rope Tensioner
- Auxiliary Hoist Option
- Ride Around Operator Control Station
- Pilot Operated Crane Controls
- Fully Enclosed Cab With Diesel Heater Standard, Air Conditioner Option Available
- System Pressure Gauge
- Free Swing with Accu-Swing Control
- Continuous Rotation
- 360° Work Area
- Radio Remote Outrigger Controls, Audible Outrigger Motion Alarm
- Retracted, Intermediate And Fully Extended Outrigger Load Charts
- Load Chart On Tires Over The Rear
- Load Moment Indicator With Digital Display, CANbus Interface, Overload Shutdown And Internal Boom Length Cable
- Radio ATB
- Rugged, Weatherproof, Automotive Style Electrical System
- Hydraulic Oil Cooler
- Clamp-On Mounting
- Design Meets ANSI A92.2 And ANSI B30.5 Recommendations
- Manitex Uptime Comprehensive Support



series 5002

GENERAL SPECIFICATIONS

BOOM

Inverted T-cross section designed for optimum strength to weight ratio; 4-section telescoping type, extended and retracted proportionally by a double-acting hydraulic cylinder and a cable-crowd system. Fitted with easily replaceable self-lubricating wear pads for smooth operation.

5096S – 4-Section 30' 6" (9,3 m) to 96' (29,3 m)
2-Section 32' (9,8 m) To 49' (14,9 m) Telescopic
Offset Jib (0°, 15°, 30°)

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

Boom Elevation – Double-acting hydraulic cylinder.
Working range from 5° below horizontal to 75° above.

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

HOIST

Planetary reducer with wet multi-disc spring applied, hydraulically released internal brake and grooved drum; negative draft angle on drum flange and load line tension roller virtually eliminates load line stacking while spooling. High efficiency two speed hydraulic motor equipped with patented brake valve for precise lowering.

Main Hoist – Maximum theoretical line speed 453 fpm (138 mpm); maximum theoretical bottom-layer line pull 13396 lb (6 076 kg).

Optional Aux Hoist - Same as Main

Wire Rope – 400' (122 m) of 5/8" (16 mm) diameter rotation resistant type.

SWING SYSTEM

Free swing continuous rotation system. Externally mounted, double-reduction planetary gearbox driven by hydraulic motor. Equipped with a dual brake system; spring-applied hydraulically-released Parking Brake and a foot actuated Dynamic Service brake. Ball-bearing swing circle with external gear. Manitex ACCUSwing control allows operator to adjust crane swing speed up to a maximum of 2.0 rpm.

OUTRIGGERS

Out-and-down style outriggers, operated independently for precise leveling. Fully extended, intermediate extension and fully retracted outrigger beam positions. Bubble levels located in operator cab and near outrigger manual controls.

Maximum outrigger spread 23' 3" (7,1 m),
Intermediate outrigger spread 15' 5" (4,7 m),
22" (559 mm) diameter floats.

MOUNTING

Lower frame is mounted to chassis by threaded rods and clamp plates. No welding, drilling, or bolting to truck frame is required.

Lower Frame – Torsionally resistant, rigid 4-plate design with integrated outriggers and pedestal.

Rear Underride Protection – Standard on factory-mounted cranes. Fabricated structure mounted under rear of crane. 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

Single cab enclosed operator platform and seat mounted to turret. Four "pilot operated" single-axis crane controls provide precise metering and multifunction capability. Free swing standard; assists in tandem lifting and centering of boom over loads. Swing system is further refined using Manitex ACCUSwing control to allow swing speed setting to individual operator preference. Controls are arranged in accordance with ANSI B30.5 standards. The operator station also includes engine start/stop, air foot throttle, signal horn, load moment indicator display, boom angle indicator, load chart and range diagram.

CAB

Standard features include a diesel heater, top hatch with electric wiper and locking latches, front electric two-speed wiper, spray washer, fuse block, operator cooling fan, dome light, slider side and rear windows, two position side door with keyed outside latch. Cab may be upgraded to include a hydraulic air conditioning unit.

HYDRAULICS

Hydraulic System – A 3-section pump direct-

mounted to power take-off on truck transmission provides 41.7 gpm (158 lpm) to the hoist, 28 gpm (106 lpm) to the boom hoist and telescope circuit, and 12 gpm (45 lpm) to the swing and outrigger circuit. 100-gallon (379-liter) baffled reservoir includes suction ball valve with strainer and two 25-micron filters in the return line. Use of SAE O-ring and face seal O-ring hydraulic fittings throughout system.

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

WARNING SYSTEMS

Load Moment Indicator – CANbus interface system maximize expansion capabilities. Senses boom hoist cylinder pressure, boom length and boom angle. Audio-visual warning indicates 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. For added reliability, the LMI system features an internal boom length sensing 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; automotive style electrical system for easy installation. System is 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/maintenance 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.