

series 4002

GENERAL SPECIFICATIONS

BOOM

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.

4077S/SHL – 3-Section, 29'5" (9m) to 77' (23,5m)

40100S/SHL – 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

40124S/SHL – 5-Section, 30' 10" (9,4 m) to 123' 6" (37,6 m). 1-section, 31' (9,5 m) jib

Quick Reeve Boom Point – Five 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 10° below horizontal to 80° above.

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

HOIST

Main Hoist – Maximum theoretical line speed 453 fpm (138 mpm). Maximum theoretical bottom-layer line pull 13050 lb (5 919 kg). Two-speed planetary reducer with wet multi-disc spring applied, pressure-released internal brake and grooved drum.

Optional Aux Hoist - Same as Main

Wire Rope – 380' (115,8 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.

Cab option is required if configuring the crane with Free Swing and Auxiliary Winch option.

OUTRIGGERS

Out-and-down style outriggers, operated independently for precise leveling. Fully extended, intermediate extension and fully retracted positions. 16" (406 mm) diameter floats. Bubble level located near outrigger controls.

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 – Supplied 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 operator platform and seat mounted to turret. Four "pilot operated" single-axis crane controls provide precise metering and multifunction capability. Swing is further refined using Manitex ACCUSwing control to allow setting to individual operator preference. Optional free swing is available to assist in tandem lifting and centering of boom over loads. 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 (Option)

CAB OPTION

Enclosed cab designed to easily install over standard operator platform. Standard features include 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 options include Diesel Heater and Hydraulic Air Conditioner with controls.

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 – CAN bus 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. 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. Automotive style electrical system for easy installation. 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.