

SUGGESTED SPECIFICATIONS FOR 2-1/2 TON INDUSTRIAL CARRY DECK CRANE

1.0 INTENT:

It is the purpose of these specifications to describe a 2-1/2 TON SELF-PROPELLED INDUSTRIAL CARGO DECK CRANE with features that include low overall height, narrow width, short length and cargo deck to be purchased by :

All parts not specifically mentioned, which are necessary, or which are regularly furnished in order to provide a complete functional unit, shall be furnished by the successful bidder at the bid price and shall conform in strength, quality of material, workmanship and sound engineering standards. The bidder shall bid the latest and most current model of this type of crane manufactured by the concern which the bidder represents and the crane shall be new and unused.

2.0 GENERAL DESCRIPTION OF THE CRANE AND CHASSIS:

- 2.1 The chassis shall consist of a frame, three hydraulic outriggers, hydraulic oil tank, control station, gasoline engine, variable speed hydrostatic transmission & front wheel drive.
- 2.2 The boom assembly shall consist of a hydraulic powered, 90 degree rotating turret, three section telescopic boom, hydraulic boom elevating cylinder, boom extension cylinders and a hydraulic powered winch.
- 2.3 The overall length of the chassis shall be no greater than 9 feet 1 inch and the width of the chassis shall not exceed 48 inches.
- 2.4 The overall height, without operator's guard installed, shall be no greater than 5 feet 6 inches.
- 2.5 Maximum travel speed shall be no greater than 5.5 miles per hour.
- 2.6 The boom shall rotate a maximum of 90 degrees and elevate to a maximum of 75 degrees. Total hydraulic boom extension shall be no less than 9 feet.
- 2.7 The maximum sheave height, without jib, shall be no less than 21 feet. Horizontal reach shall be no less than 15 feet, as measured from the centerline of rotation.
- 2.8 The turntable tail swing shall not exceed 30 inches.
- 2.9 A gasoline engine shall be standard. LP, Dual Fuel (both gasoline and LP systems) and diesel engine shall be available as options and selected at time of bid.
- 2.10 The hydrostatic pump shall be a piston type and direct driven from the engine crankshaft and be capable of delivering 30 GPM at 3,000 PSI.
- 2.11 The front axle shall be a channel shaped structure housing torque hubs and hydraulic drive motors. The front axle shall oscillate a total of 1-1/2 inches to minimize wheel spin on uneven surfaces.
- 2.12 The rear axle shall be mounted rigidly to frame.
- 2.13 Full hydraulic rear wheel steering shall be standard.
- 2.14 Primary braking shall be provided by the hydrostatic transmission. A foot-actuated hydraulic disc brake shall be provided for additional braking.

- 2.15 The crane shall be equipped with the manufacturer's standard tires.
- 2.16 The cargo deck shall have 19 square feet of area and have a minimum of 5,000 pound carry capacity.
- 2.17 Three hydraulic outriggers with direct-connected holding valves shall be standard.
- 2.18 A pulling eye mounted on the front bumper shall be installed.
- 2.19 Lifting sling brackets shall be included as standard. The lifting sling brackets shall include two lift rings in front deck and a lug mounted on the turntable.
- 2.20 The chassis shall be equipped with an operator control station. The operator control station shall provide one-position access to all chassis and crane functions. Included in the operator station shall be 2-1/2 pound fire extinguisher and bubble level.
- 2.21 A 97 decibel solid-state back-up alarm shall be standard equipment.
- 2.22 A lighting group shall consist of two 12-volt headlights and one taillight.
- 2.23 The instrument group (gauges) shall include fuel gauge, ammeter, oil pressure, water temperature and hydrostatic oil temperature gauges. An hourmeter that records hours only during actual engine operation shall also be included.
- 2.24 The hydraulic system shall consist of a tandem pump mounted to the hydrostatic piston pump and delivers 5 GPM at 2,500 PSI for crane circuit and 16 GPM for the winch and outrigger circuit. The hydraulic system shall be protected by relief valves and two 10 micron filters.
- 2.25 The boom assembly shall consist of a three section, high strength steel construction. Double-acting hydraulic cylinders shall extend boom sections. The extension cylinders and the double-acting boom elevation cylinders are equipped with direct-connected holding valves.
- 2.26 The boom winch shall be a turret-mounted, worm gear winch hydraulically powered. The bare-drum line pull shall be 3,100 pounds and have a line speed of 46 feet per minute. The winch shall include 80 feet of 5/16 inch wire rope, downhaul weight and swivel hook.
- 2.27 The boom swing shall consist of two double-acting hydraulic cylinders connected to a turntable torque tube to provide 90 degrees of swing.
- 2.28 An anti-two-block device shall be standard. The purpose of the anti-two-block is to prevent damage to hoist rope and/or machine components from accidentally pulling the load hook against boom tip. The anti-two block shall dump the "boom extend", "boom lower" and "hoist raise" circuits when activated.
- 2.29 A single sheave block for two-part line requirements shall be standard.

3.0 OPTIONAL ACCESSORIES SHALL BE QUOTED SEPARATELY AND SELECTION IS TO BE MADE AT TIME OF CONTRACT AWARD:

- 3.1 **Engine:**
 - 3.1.1 Diesel Engine – Cummins A2300
 - 3.1.2 Spark Arrester Muffler
 - 3.1.3 Engine Shutdown Gauges

- 3.2 **Tire Options:**
 - 3.2.1 Solid Rubber Tires
 - 3.2.2 Non-Marking Solid Rubber Tires
 - 3.2.3 Foam Filling of Tires
 - 3.2.4 Spare Tire and Wheel
- 3.3 **Cargo Deck:**
 - 3.3.1 Cargo Deck Mats
- 3.4 **Chassis:**
 - 3.4.1 Auxiliary Winch
 - 3.4.2 Pintle Hook
 - 3.4.3 Lifting Sling
- 3.5 **Operator's Compartment:**
 - 3.5.1 Operator Guard
 - 3.5.2 Floor Mat
- 3.6 **Electrical:**
 - 3.6.1 Strobe Light
 - 3.6.2 Boom Work Lights
- 3.7 **Boom Attachments:**
 - 3.7.1 Boom Swing Lock
 - 3.7.2 7 Ft. Pin-On-Jib
 - 3.7.3 Rated Capacity Limiter

4.0 SERVICE AND PARTS FACILITIES:

The purchaser must be assured that spare parts necessary for immediate repair are in the dealer's stock and that repair service will be available within the greater metropolitan area. A complete set of parts and service manuals shall be furnished with the crane.

5.0 MANUFACTURER'S WARRANTY:

The successful bidder will be required to furnish a copy of the manufacturer's warranty. The successful bidder shall agree to replace and install, without charge, any defective parts within a period of 180 days from the date the product is placed in service.

6.0 BID ACCEPTANCE:

Bids will only be accepted through authorized dealers representing a manufacturer regularly engaged in the design and production of self-propelled hydraulic cranes. Upon request, the bidder shall submit equipment on which the bid is based for demonstration before the award of contract.

7.0 AWARD:

The contract will be awarded to the lowest responsible bidder complying with the specifications and the conditions of the invitation for bids, provided the bid is reasonable and it is in the best interest of the purchaser to accept the bid. The purchaser reserves the right to reject the apparent low bidder who is not considered responsive or in a position to perform the intended contract, in the judgement of the purchaser. The purchaser will be the sole judge of the quality, construction and suitability of the machine offered for the intended use.