

SUGGESTED SPECIFICATION FOR 15 TON INDUSTRIAL CARGO DECK CRANE

I.0 INTENT:

It is the purpose of these specifications to describe a 15 TON SELF-PROPELLED INDUSTRIAL CARGO DECK CRANE with two wheel drive or four wheel drive and four wheel steering 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 crane manufactured by the concern which the bidder represents. The crane shall be new and unused.

2.0 DESCRIPTION OF THE CRANE AND CHASSIS:

- 2.1 The chassis shall consist of a one-piece welded frame, four independently controlled hydraulic outriggers, gas EFI dual fuel engine, torque convertor, powershift four-speed transmission, front drive/steer and rear steer axle, fuel tank, oil tank, control station and full power steering. Rated Capacity Limiter shall be standard.
- 2.2 Rear Axle (Choose One)
 - 2.2.1 Non driving rear steer axle.
 - 2.2.2 Driving rear/steer axle.
- 2.3 Boom Assembly
 - 2.3.1 The boom assembly shall consist of a hydraulic powered, continuous rotation turret, 3 or 4 section telescopic boom, single hydraulic boom elevating cylinder, boom extension cylinders and a hydraulic powered hoist. Boom angle indicators on each side of boom.
 - 2.3.2 Maximum boom elevation shall be 73 degrees.
- 2.4 Selection of Crane
 - 2.4.1 Three section hydraulically extended boom with capacity of 30,000 pounds at a six foot load radius. Horizontal reach of 28 feet and vertical reach of 37 feet.
 - 2.4.2 Three section hydraulically extended boom with capacity of 30,000 pounds at a six foot load radius. Horizontal reach of 36 feet and vertical reach of 45 feet.
 - 2.4.3 Four section hydraulically extended boom with capacity of 30,000 pounds at a six foot load radius. Horizontal reach of 50 feet and vertical reach of 58 feet 8.
- 2.5 The boom tail swing shall be no greater than 6 feet from the centerline of boom rotation.
- 2.6 The crane shall have a lifting capacity on outriggers of no less than 30,000 pounds at a 6 foot load radius.
- 2.7 Overall height on rubber shall be no greater than 7 feet 11-1/4 inches. Overall width of the chassis shall be no greater than 8 feet.
- 2.8 Maximum level road speed shall not exceed 19 MPH.
- 2.9 Split-system, four-wheel hydraulically-boosted multiple-plate wet disc brakes shall be standard. A lever actuated disc-type parking brake on transmission shall also be standard.
- 2.10 The rear axle shall have a minimum of 1-1/2 degrees of oscillation in either direction.
- 2.11 Standard tires shall be 15 x 22.5, 16-ply rating.
- 2.12 Cargo deck shall provide no less than 72 square feet of self-loading space. Cargo deck shall have a minimum of 17,000 pounds capacity. A step shall be located on each front corner providing access to the cargo deck area. Seven deck stakes and stake pockets along the edge of the deck shall be standard equipment.
- 2.13 The four hydraulic outriggers shall be of box-beam construction with independent controls for each outrigger. Hydraulic cylinders shall be equipped with direct-connected holding valves.
- 2.14 When the outriggers are extended, the maximum spread for left to right shall be no greater than 11 feet 11 inches.

- 2.15 The hydraulic system shall consist of a direct-driven tandem pump delivering 29 GPM at 2,600 PSI and 34 GPM at 2,500 PSI at 2,500 RPM governed engine speed. The system shall include pressure relief valves, suction line strainer and micron return line filter.
- 2.16 The hydraulic reservoir shall have a minimum capacity of 54 gallons.
- 2.17 The crane and chassis shall be in manufacturer's standard finish paint over a suitable primer.

3.0 MACHINE SHALL BE EQUIPPED WITH THE FOLLOWING:

- 3.1 Full time power steering.
- 3.2 Control handles shall be directly connected to full-feathering hydraulic control valves.
- 3.3 Locking hood for protection of engine compartment.
- 3.4 The load hoist shall have a minimum of 10,000 pounds bare drum line pull at a speed of 100 feet per minute. The hoist shall include a minimum of 240 feet of 1/2 inch wire rope, downhaul weight and swivel hook with safety latch.
- 3.5 The electrical system shall be 12-volt, negative ground.
- 3.6 The instrument group shall consist of fuel, ammeter, oil pressure, water temperature, transmission oil convertor temperature gauges and running hourmeter. Also included shall be warning lights for low transmission oil pressure, turn signals, high beams, hazard lights, parking lights and four-wheel drive.
- 3.7 The lighting group shall consist of headlights, taillights, brake lights, turn indicators, emergency flashers and back-up lights.
- 3.8 Electrical back-up alarm.
- 3.9 Hydraulic dump, trip arm anti-two block device. The anti-two block system shall activate by a trip arm lever at boom tip. Dimension of the top of boom tip and to bottom of hook shall be no greater than 45 inches with single part line with boom in a horizontal position.
- 3.10 Four-part sheave block for maximum loads.
- 3.11 A rated capacity limiter that warns operator of impending overload with audible and visual signals shall be standard.

4.0 THE FOLLOWING OPTIONAL ACCESSORIES SHALL BE QUOTED SEPARATELY AND SELECTIONS WILL BE MADE AT THE TIME THE CONTRACT IS AWARDED:

4.1 Boom Configuration:

- 4.1.1 12 feet 8 inches to 28 feet 0 inches of hydraulically extendable boom.
- 4.1.2 15 feet 2 inches to 36 feet 2 inches of hydraulically extendable boom.
- 4.1.3 15 feet 6 inches to 50 feet 0 inches of hydraulically extendable boom.

4.2 Engine:

- 4.2.1 Cummins Turbo - 4BT3.9 Diesel Engine
- 4.2.2 Spark Arrester Muffler
- 4.2.3 Catalytic Convertor
- 4.2.4 Engine Heater
- 4.2.5 Ether Injection System
- 4.2.6 Engine Shut Down Gauges (Diesel Only)

4.3 Four-Wheel Drive:

Planetary drive/steer rear axle with 24.98 to 1.0 ratio. Transmission shall have an additional output shaft to drive rear axle. Transmission shall be equipped with electro-hydraulic control for shifting between 2-wheel drive and 4-wheel drive.

4.4 Tires

- 4.4.1 Non-Marking High Traction Tread
- 4.4.2 Foam Filling of Tires
- 4.4.3 Spare Tire & Wheel
 - 4.4.3.1 High Traction Tread
 - 4.4.3.2 Non-Marking High Traction Tread

4.5 Chassis:

- 4.5.1 Auxiliary Winch (hydraulically powered)
- 4.5.2 Pintle Hook (rear)
- 4.5.3 Pintle Hook (front)
- 4.5.4 Headlight and Taillight Grilles
- 4.5.5 Rearview Mirrors

4.6 Operator's Compartment:

- 4.6.1 Operator Guard
- 4.6.2 Operator Guard Cover
- 4.6.3 Operator Guard Door
- 4.6.4 All Weather Cab with Heater
- 4.6.5 Cab Heater Only
- 4.6.6 Windshield Washer
- 4.6.7 Floor Mat
- 4.6.8 Operator Suspension Seat
- 4.6.9 Noise Reduction Kit
- 4.6.10 Air Conditioning with R134 Coolant

4.7 Electrical:

- 4.7.1 Strobe Lights
- 4.7.2 Amber Rotating Beacons
- 4.7.3 Boom Mounted Work Lights

4.7 Boom Attachments:

- 4.7.1 Boom Extension, 15 foot
- 4.7.2 Boom Extension, 15 foot, offsettable (15 feet 2 inches to 36 feet 2 inches boom)
- 4.7.3 Boom Extension, 16 foot, offsettable (15 feet 6 inches to 50 feet 0 inches boom)
- 4.7.4 Sheave Block, 2-Part Line
- 4.7.5 Searcher Hook - Nose Mount

5.0 SERVICE AND PARTS FACILITIES:

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

6.0 MANUFACTURER'S WARRANTY:

The successful bidder will be required to furnish a warranty by the manufacturer that the equipment offered is suitable for the service intended in accordance with the specifications. The successful bidder shall agree to replace and install, without charge, any defective parts within a period of 180 days from the date of delivery to the purchaser.

7.0 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.

8.0 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.