



Light Duty Excavator

GENERAL - The intent of this specification is to secure and set forth the minimum requirements for a new current factory production model self-propelled, one operator, one engine, multipurpose track mounted hydraulic excavator designed to provide precise operator control for excavating, trenching, ditch cleaning, bank sloping, custom grading, breaking and tamping. Any deviations from these specifications must be detailed in writing and submitted with bids.

CAB - All steel, SAE ROPS fully enclosed with full height doors, sliding side and rear windows, shatter resistant, tinted safety glass all around providing unrestricted operator visibility. Cab to have heat, defrosters and air conditioning. Am/fm radio. Seat will be all vinyl upholstered, fully adjustable suspension type with foam padded cushion and backrest. Appropriate restraints shall be provided with the seat/cab assembly. All controls for both upper and lower operation will be inside the cab providing ease of access for the operator. All instruments will be mounted to a panel[s] inside the cab or on the carrier and be readily visible to the operator. Unit shall have two [2] cab mounted front facing work lights and one cab mounted safety strobe light with 360-degree visibility. Rotation of cab shall be capable of complete 360-degree operability. Due to safety measures and the machines intended use along highway roads a reduced tail swing feature, minimizing cab protrusion from the tracks of the machine during rotation shall be included.

ENGINE - Diesel powered, Turbocharged, four (4) cylinders with a minimum 85 to 95 horsepower at the flywheel under standard conditions. Engine equipment will include Air cleaner, oil filter, fan, 110-volt block heater, water pump, oil pump, fuel injection system, cold-weather starting kit and engine protection system.

ELECTRICAL SYSTEM - Will be 24 volt with starter, alternator and battery [or batteries] as required for operation.

ROAD TRAVEL - Unit to be sized to be transported safely and securely on a 30 to 35 Ton Equipment trailer.

OPERATING WEIGHT - Shall not exceed 16 metric tons.

TRACKS - Shall be 28 inches wide and of a type to provide safe operation on dirt and on pavement. Tracks to be driven independently via auto shifting, two speed hydraulic motors using integral planetary drives, sized to the operating weight of the total machine.

STEERING CONTROL - provided thru rocker pedals with optional control thru hand levers.

BRAKES - Service and parking brakes to be wet type, multiple-disc on the final drive input shafts. Units are to be spring applied, hydraulically released. Brakes shall apply automatically when controls are released.

HYDRAULIC SYSTEM - Complete hydraulic system for all operations, double acting cylinders, oil filtering system in oil tank and 10 micron element for the system and oil coolers. System shall provide continuous 360-degree swing. Unit will include 110-volt hydraulic system heater. Hydraulic system shall be of a type to provide for the attachment and operation of accessories [breakers, grapples, tampers, thumbs etc] Auxiliary hydraulic lines to boom tip.

COUNTER WEIGHT [S] - To be sufficient to off set max. lift-capacity (5,700 lbs.) ground level front and/or (Min. 4,000 Lbs.) over side in a 20-foot radius lift



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BOOM AND BUCKET [S] - Unit shall be equipped with an articulating boom that swings or rotates with the cab. It shall have a (minimum reach of 27 feet and maximum of 29 feet) at ground level front and a (minimum dig depth 17 feet up to Maximum of 20 Feet) flat bottom.

One 60 inch smooth grading, ditching, contouring bucket and one 36 inch, toothed heavy duty plate digging bucket with quick attach systems and or a "wrist O twist" type knuckle. Bucket capacities should be .78 to .90 cubic yard.

ALARM SYSTEM - Horn shall be in accordance with any OSHA standards that apply and shall be distinguishable from surrounding noise.

VANDALISM PROTECTION - Unit will have lockable doors, engine panels, fuel, hydraulic oil, radiator filler caps, tool storage and battery compartments.

COLOR - Shall be highway yellow

Complete machine must be manufactured in accordance with latest adopted OSHA or SAE Standards and amendments.

Options to match the unit you are bidding.

All Dealer advertisements to be left off completed machine delivered to the Missouri Department of Transportation.

The Missouri Highways and Transportation Commission reserves the right to waive technicalities and to reject any or all bids and no bid is final until formally accepted by the Commission