

HT30KX(X) BID SPECIFICATIONS



GENERAL DESCRIPTION

The crane shall be a telescopic service crane with a moment rating of 30,000 *ft-lbs* Maximum capacity shall be 5,000 *lbs* with a two part winch line at 5' 3" reach.

DESIGN AND TESTING

The crane shall comply with ANSI B30.5 safety standards and OSHA regulations concerning crawler locomotives and truck cranes (OSHA 29, Part 1910.180).

HYDRAULIC REQUIREMENTS

The crane shall operate from a hydraulic P.T.O. and pump. The crane shall have an open center system that operates on 2 *GPM* (non-proportional) or 4 *GPM* (proportional) at 3000 *psi*. The hydraulic reservoir shall have a 8 gallon capacity with a 100 mesh suction filter. The hydraulic system shall include a 10 micron return filter.

The valve block shall include valve coils with manual overrides for each function.

TELESCOPIC HEXAGONAL BOOM

The boom shall be fabricated of steel in a hexagonal shape to minimize boom flex and side to side movement. The boom shall telescope to provide a horizontal reach range of 10' 6" to 20' 6" using a 10 *ft* hydraulic power extension (HT30KXX) or a 6 *ft* hydraulic power extension section and a 4 *ft* manual extension section (HT30KX).

POWER EXTENSION

The boom shall be extended by a double-acting hydraulic cylinder with an integral counterbalance valve to prevent the boom from retracting should a loss of hydraulic pressure occur.

The cylinder shall be mounted inside of the boom.

BOOM ELEVATION

The boom elevation angle range shall extend from 4° below horizontal to 75° above horizontal.

The boom shall be elevated by a double-acting hydraulic cylinder with an integral counterbalance valve to prevent the boom from lowering should a loss of hydraulic pressure occur.

SHEAVES

The boom end load hoisting sheave shall be made of polymer composite material and have a pitch diameter of at least 18 times the 5/16" wire rope diameter per ANSI B30.5. Sheave bearings shall made of maintenance free composite material.



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CAPACITY CHARTS

Easy to read capacity charts with indicator arrows showing boom angles and capacities for various reaches shall be located on each side of the boom.

HYDRAULIC WINCH

The winch shall have a high-efficiency planetary gear reduction with an oil-immersed automatic load holding multi-disk brake with sprag clutch and shall be driven by a hydraulic motor which regulates pressure at the brake piston to control the speed of the lowering load.

The winch line capacity shall be 2700 *lbs* on the second layer with a line speed of approximately 55 *ft/min* at 5 *GPM* (22 *ft/min* at 2 *GPM*).

WINCH PERFORMANCE

The nominal winch performance shall be as follows.

Load (<i>lbs</i>)	Part Line	Lifting Speed @ 2 GPM (<i>ft/min</i>)	Lifting Speed @ 5 GPM (<i>ft/min</i>)
0	1	22	55
1000	1	22	55
2700	1	22	55
2700	2	11	27
5400	2	11	27

WINCH DRUM

Winch drum first layer wire rope pitch diameter shall be at least 18 times the 5/16" wire rope diameter per ANSI B30.5.

The winch drum shall be at least 6" wide between flanges. The winch drum shall have sufficient capacity to allow 110 *ft* of wire rope to be used.

WIRE ROPE

The standard 5/16" diameter 7 x 19 galvanized aircraft wire rope shall be 80 *ft* long with a thimble.

The wire rope shall have a minimum breaking strength of 9,800 *lbs* or more than 3-1/2 times the 2,700 *lbs* rated single line capacity per ANSI B30.5. The wire rope shall be outside of the boom so that the wire rope and winch drum are visible to the operator.

SNATCH BLOCK

The crane shall be supplied with a snatch block that will allow quick conversion from single to two-part line operation. The snatch block shall be provided with a 3 ton carbon steel swivel hook with safety latch. The sheave shall be made of polymer composite material and have a pitch diameter of at least 16 times the 5/16" wire rope diameter per ANSI B30.5. Sheave bearings shall be made of maintenance free composite material.



MFG., INC.
CINCINNATI, OHIO

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ROTATION

The hydraulic powered rotation system shall have positive mechanical stops to limit the rotation to a maximum of 400 degrees.

The rotation drive line shall be self-locking.

The crane housing shall rotate on a sealed turntable-style bearing.

REMOTE CONTROL

The crane shall have a remote control pendant with environmentally sealed switches and a 25 ft cord. The cord shall have a plug so that it can be unplugged from the crane when not in use.

The socket that receives the plug shall have the option of being mounted in the service body compartment, on the mounting pedestal below the crane, or on the crane itself. The pendant shall be convenient to hold and operate with one hand.

OVERLOAD SENSING SYSTEM

The crane shall have an overload sensing system that shuts off the winch up, boom down, and boom out functions to prevent excessive overloads when the crane capacity is exceeded. The winch down, boom up, boom in, and rotation functions shall remain in operation to enable the operator to bring the crane out of the overload condition.

ANTI-TWO BLOCKING

An anti-two-blocking feature shall be provided to prevent damage to the wire rope by disabling the winch up, boom down, and boom out functions (three function shut down) when the load approaches the boom sheave.

CRANE BASE

The crane base shall be 16" square and provided with 4 holes for 3/4" Grade 5 bolts.

PAINT SPECIFICATIONS

The crane shall be painted with Imron High Gloss Polyurethane Enamel (Venturo Gray).

WARRANTY

The manufacturer shall warranty the crane for one year from the date of original installation.

Specifications Subject to Change Without Notice



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