



It is the intent of General Services to purchase a folding crane to be mounted behind the cab of a Missouri Department of Transportation supplied new cab chassis for MoDOT bridge crews and other functions. The successful bidder must allow for complete installation on a new International 7400 series 4 X 2 or 6 X 4 Cab/Chassis with a minimum 120" cab to axle dimension, a section modulus of 22.12 and 2,654,400 # rbm.

**Hydraulic Knuckle Boom Crane**

**Meets or Exceeds**

**Exceptions**

**Yes      No**

A	_____	_____	Crane to have a foldable boom system known as a "Knuckle boom".	_____
B	_____	_____	Crane shall have Radio Remote Control System; with appropriate hydraulic extensions to reach approximate range of 38' to 42'.	_____
C	_____	_____	Lifting capacity to exceed 1,500 pounds at maximum crane extension in the horizontal position.	_____
D	_____	_____	Below ground lift should be equal to the above ground lift	_____
E	_____	_____	360-degree minimum rotation	
F	_____	_____	Slewing speed to be appropriate for length of boom and weight capacity	_____
G	_____	_____	Reservoir to include: built-in return oil filter with indicator, air breather, filler strainer, oil level indicator	_____
H	_____	_____	Mechanical inner and outer boom linkage system	_____
I	_____	_____	Hydraulic couplings according to ISO 8434	_____
J	_____	_____	Controls to be provided for operation of crane and outrigger functions.	_____



**Meets or Exceeds**

**Exceptions**

**Yes**

**No**

K	_____	_____	Appropriate radio remote control system for all crane functions excluding the out-rigger functions.	_____
L	_____	_____	Control unit to have a two-speed switch to control operating precision	_____
M	_____	_____	Unit must have the following systems OLP (over load protection), 90% warning, ADC (automatic duty control), ADO (automatic dumping of oil), ASC (Automatic Speed Control) to boost lifting capacity, and electric shut off.	_____
N	_____	_____	Electronics housed in 100% weather proof casing.	_____
O	_____	_____	Hand held control to offer up to ten proportional functions with a minimum of two emergency shut-off controls. All functions to be fingertip “feathering control”. No bump switches. The remote control shall enable more than one function at a time. i.e.- slew and raise.	_____
P	_____	_____	Micro-processor to be unaffected by other remote systems and eliminates all other risk of interference.	_____
Q	_____	_____	Manual controls shall be on driver’s side.	_____
R	_____	_____	High-pressure oil filter.	_____
S	_____	_____	Crane mounted oil cooler w/bypass, thermostat and soft start.	_____
T	_____	_____	Three-point bridge suspension mounting system.	_____



**Meets or Exceeds**

**Exceptions**

<b>Yes</b>	<b>No</b>		
U _____	_____	Load holding valves mounted to inner and outer boom, and extension cylinders	_____
V _____	_____	Appropriate extendible outrigger extension beams with hydraulically controlled legs. Right side legs to be controlled on right side of chassis and left side legs to be controlled on left side of chassis	_____
W _____	_____	Must provide the appropriate outrigger pads with a under body storage rack.	_____
X _____	_____	Operator's manual complete with load diagram for this exact crane and ACCNA warning decals applied	_____
Y _____	_____	Complete parts and service manual for entire crane package.	_____
Z _____	_____	Audio / Visual warning system includes warning horn,	_____
AA _____	_____	Crane is to meet or exceed safety and service standards set forth by Government regulations: EN 12999 and complies with ISO 9001	_____
BB _____	_____	Complete set of illustrated diagrams to be included with crane bid including: Load diagram, chassis installation measurement diagram, top view, side view folded, front view folded, side view unfolded stretched out, height stretched diagrams, side view unfolded close in area, and rotation diagram,	_____
<b><u>HYDRAULIC WINCH</u></b>			
CC _____	_____	Provide an winch of appropriate size and include snatch block, and anti-two block with spin resistant wire rope.	_____



**Meets or Exceeds**  
Yes      No

**Exceptions**

DD \_\_\_\_\_      \_\_\_\_\_      Snatch Block      \_\_\_\_\_

EE \_\_\_\_\_      \_\_\_\_\_      Anti-Two Block      \_\_\_\_\_

**CRANE MOUNTING AND INSTALLATION**

FF \_\_\_\_\_      \_\_\_\_\_      Complete crane package to be installed by authorized manufacturers facility or authorized by manufacturer for proper installation and with approved specifications by crane manufacturer.      \_\_\_\_\_

GG \_\_\_\_\_      \_\_\_\_\_      Hot Shift style PTO for automatic transmission      \_\_\_\_\_

HH \_\_\_\_\_      \_\_\_\_\_      Pump, Wear Strips, Frame Stiffeners, Riser if needed, Hoses and fittings must be (SAE approved) must be Installed behind the cab.      \_\_\_\_\_

II \_\_\_\_\_      \_\_\_\_\_      Delivery of completed package to any of the ten (10) MoDOT District locations throughout Missouri      \_\_\_\_\_

JJ \_\_\_\_\_      \_\_\_\_\_      Operator orientation, proper operation training, basic maintenance schedule and overall manual review from cranes “factory personnel” provided upon delivery of completed vehicle at District location taking delivery      \_\_\_\_\_

KK \_\_\_\_\_      \_\_\_\_\_      Operator orientation forms to be filed with crane manufacturer and Missouri Department of Transportation upon completion of orientation process      \_\_\_\_\_

LL \_\_\_\_\_      \_\_\_\_\_      High Boom Warning: In cab warning light to alert the driver the boom is **NOT** secured in stowable position before driving away.      \_\_\_\_\_

For chassis information contact: Joe Sontag, Sr  
International Truck and Engine    PH: (636)-343-6800

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.