

Specifications: Hydraulic Telescopic Crane

Maximum Lifting Capacity: 18 ton (16.3 metric ton)

Boom: 70 foot (21.3 m), 3-Section Proportional

Rotation 370 degrees non-continuous

Sheave Height: 80 foot (24.4 m) on base boom

LMAP (Load Moment & Area Protection) System: Hirschmann or equivalent system that includes Rated Capacity Limiter and Working Area Definition Audible Alarm

Set-Points. Includes boom angle, length and rotational position.

Winch: Single speed with burst of speed, 12,000 pound (5,443 kg) line pull on bare drum, mounted at base of boom

Rotation Resistant Wire rope 240' X 9/16 diameter

Lower Winch Control: Located at hook stowage point for ease of unit setup

Winch Drum Rotation Indicator: Provides tactile and visual indication to operator of which motion, speed, and direction.

Anti-Two Block Device

Hydraulic System: Hydraulic pilot operated control valves at the control station

Control Station(s): Curbside and street side walk-through control stations with grab handles for bed access

Operator Controls: Emergency stop, engine start/stop, and crane/outrigger mode switches

Outrigger Boom Interlock System to prevent operator from using unit until all outriggers are deployed

Outrigger Motion Alarm that provides an audible alarm when any of the outriggers are in motion

Primary and secondary outriggers are to be properly sized and positioned to meet mobile crane standards

Outrigger Controls are to be electric over hydraulic controls located at each rear corner of tail shelf providing a line-of-sight from the controls to the outrigger contact zone

Paint: Manufactures standard paint or power coating process, Manufactures standard color.

Unit must comply with ASME B30.5 Mobile Crane Standard

Manuals: Two (2) Operator's and two (2) Maintenance/Parts manuals

Basic Operation Videos: DVDs for Crane

Unit & Hydraulic Acc.

Air Shift PTO to be mounted to the transmission

HVI-22 Hydraulic Oil (Standard)

Hydraulic pump is to be properly sized to meet all the boom manufactures requirements.

50 to 70 gallon hydraulic tank

All hoses and lines are to be properly routed and protected from chafing

Body

Flat Bed, steel construction, minimum 19 feet long x 96" Wide

Body and Chassis Accessories

Flatbed Access Ladder from Ground with Grab Handles - Installed Curbside Rear of Flatbed

Standard Boom Rest, removable, installed behind cab

Two Outrigger Pad Holder, 25x25x4, Steel, For Single 24x24x3 Outrigger Pad and Smaller Chain and Hasp Retainer CS under flatbed

One Outrigger Pad Holder, 25x25x8.75, Steel, For Multiple 24x24x3 Outrigger Pads and Smaller, Chain and Hasp Retainer SS under flatbed; to hold 3 OR pads

Standard Mud Flap Installation, installed behind rear wheels

One Pair Wheel Chocks, Rubber with Metal Hairpin Style Handle, 9.75" L X 7.75" W X 5.00" H

Wheel Chock Holders (Pair) to be installed Under Flatbed

Five Wood Outrigger Pad, 24" x 24" x 2.5", with Rope Handle

Triangular Reflector Kit, Installed

5 LB Fire Extinguisher with Light Duty Bracket, Installed in side cab

Truck Chassis General

Freightliner M2 106 6X4 conventional chassis or equal

Set back axle - truck

Trailer towing provision at end of frame for truck

Truck/trailer configuration

Expected front axle(s) load: 14600.0 lbs.

Expected rear drive axle(s) load: 40000.0 lbs.

Expected gross vehicle weight capacity: 54600.0 lbs.

Expected gross combination weight: 65000.0 lbs.

Minimum 330 HP @ 2000 rpm, 1000 Lb./ft. @ 1400 rpm

65 mph road speed limit

Cruise control speed limit same as road speed limit

PTO mode engine rpm limit - 1100 rpm

PTO mode brake override - service brake applied

PTO mode clutch override - clutch enabled

PTO rpm with cruise set switch - 700 rpm

PTO rpm with cruise resume switch - 800 rpm

PTO mode cancel vehicle speed - 5 mph

PTO governor ramp rate - 250 rpm per second

PTO minimum rpm - 700

Minimum 12v 160 amp alternator with remote battery volt sense

(2) Group 31, 12 volt maintenance free 1900 CCA

Battery box frame mounted

Standard battery jumpers

Dual Tone Back-Up with Outrigger Motion Alarm

Power Train

Allison 3500 series automatic transmission or equivalent

Electronic engine integral shutdown protection system

Engine or exhaust brake integral with variable geometry turbo with on/off dash switch

Vertical tailpipe

Engine after treatment device, automatic over the road regeneration and dash mounted regeneration request switch

Regen inhibit speed threshold - 5 mph

Maximum 10 ' 06" exhaust system height

Minimum 6 gallon diesel exhaust fluid tank

Stainless steel after treatment device/muffler/tailpipe shield
Automatic fan control without dash switch, non-engine mounted
Spin on fuel filter combination full flow/bypass oil filter
Antifreeze to -34 degrees, ethylene glycol pre-charged SCA heavy duty coolant
Gates blue stripe coolant hoses or equivalent
Constant tension hose clamps for coolant hoses
Radiator drain valve
Lower radiator guard
1000 watt/115 volt block heater
Engine heater receptacle mounted under lh door
Electric grid air intake warmer

Front Axle

Drop single front axle
Non-asbestos front brake lining
Cast iron front brake drums
Vented front hub caps with window, center and side plugs - oil
Automatic front slack adjusters
Power steering
Synthetic 75w-90 front axle lube
14,600# flat leaf front suspension
Front shock absorbers

Rear Axle

40,000 lb. Tandem rear axle
Driver controlled traction differential - both tandem rear axles
(1) interaxle lock valve, (1) driver controlled differential lock forward-rear and rear-rear axle valve
Blinking lamp with each mode switch, interaxle unlock default with ignition off
Blinking lamp with each mode switch, differential unlock with ignition off, active <5 mph
Non-asbestos rear brake lining

Brake cams and chambers on forward side of drive axle(s)

Cast iron rear brake drums

Drive axles spring parking chambers

Automatic rear slack adjusters

40,000# rear spring suspension

54 inch axle spacing

Rear shock absorbers - two axles

Brakes

Minimum 18 cfm air compressor with internal safety valve

Standard mechanical air compressor governor

Air compressor discharge line

Air brake without traction control

Reinforced nylon, fabric braid and wire braid chassis air lines

Standard parking brake hose and standard brake system valves

Standard air system pressure protection system

Relay valve with 5-8 psi crack pressure, no rear proportioning valve

Air dryer frame mounted

Clear frame rails from back of cab to front rear suspension bracket, both rails outboard

Pull cable on wet tank, petcock drain valves on all other air tanks

Trailer Connections

Air connections to end of frame with glad hands for truck and dust covers

Primary connector/receptacle wired for combination stop/turn, center pin powered through ignition with stop signal.

SAE j560 7-way primary trailer cable receptacle mounted end of frame

Supplemental j560 7-way receptacle located with primary receptacle

T-125 Style Pintle Hitch (30,000 LB MGTW with 6,000 LB MVL)

Set of D-Rings for Trailer Safety Chain, installed one each side of towing device mount.

Electric Trailer Brake Controller Draw-Tite Activator II #5504 or equivalent

Wheel Base & Frame

230 to 240 inch wheelbase

Frame RBM, ca and dimensions must meet the requirements of the boom manufacture

Chassis Equipment

Three-piece 14 inch painted steel bumper with collapsible ends, spaced 3 inches forward

Front tow hooks - frame mounted

Bumper mounting for single license plate

Fender and front of hood mounted front mud flaps

Fuel system

Minimum 50 gallon aluminum fuel tank

Fuel filter/water separator with heated bowl and primer pump

Tires

12r22.5 16 ply radial front tires

11r22.5 14 ply radial rear tires

Cab Exterior

Air cab mounts

Fiberglass hood

Air horn under deck

Dual electric horns

Door locks and ignition switch keyed the same

Rear license plate mount end of frame

Integral headlight/marker assembly

Amber marker lights

Integral stop/tail/backup lights

Standard front turn signal lamps

Dual west coast mirrors

102 inch equipment width

Left and Right 8 inch molded-in color convex mirrors mounted under primary mirrors

Standard side/rear reflectors
Tinted rear window
Tinted door glass tinted non-operating wing windows
Manual door window regulators
Tinted windshield
Minimum 1 gallon windshield washer reservoir
Cab interior
Vinyl interior
Black mats with single insulation
Dash mounted power outlet
Forward roof mounted console with upper storage compartments
In dash storage bin
Heater, defroster and air conditioner
Standard insulation
Solid-state circuit protection and fuses
12v negative ground electrical system
Dome door activated left and right, dual reading lights, forward cab roof
Cab door latches with manual door locks
High back air suspension driver seat with fore and aft adjustment
High back air suspension passenger seat
Integral door panel arm rest
3 point driver and passenger seat belts
Fixed steering column
Driver and passenger interior sun visors

Instruments & Controls

Engine remote interface with park brake interlock
Electronic cruise control

PTO Hour Meter

Diagnostic interface connector, 9 pin, SAE j1939, located below dash

Engine remote interface connector at back of cab

Am/FM/ radio with CD player, Bluetooth and microphone with two Radio speakers in cab

Am/FM antenna mounted on the cab.

Speedometer

Engine coolant temperature gauge

Engine oil pressure gauge

Fuel gauge

Low air pressure indicator light and audible alarm

Primary and secondary air pressure gauges

Intake mounted air restriction indicator

Trailer hand control brake valve

Single electric windshield wiper motor with delay

Two valve parking brake system with warning indicator

Self-canceling turn signal switch with dimmer, washer/wiper and hazard in handle

Integral electronic turn signal flasher with hazard lamps overriding stop lamps

Paint

Paint: cab one solid color DuPont Centari #7744-a lime yellow

Chassis black paint

Wheels/rims manufactures standard color

Bumper paint: manufacture's standard color

Please include a cut-sheet and/or catalog of the crane you are proposing with your bid.