Bid Specifications – Telescopic Service Crane

6,000 lb. Maximum Lifting Capacity
36,000 ft.-lb. Maximum Moment

Compliance to Specifications The Bidder shall indicate their compliance by checking "Yes" or "No" for each item specified. Any space not checked shall be interpreted as non-compliance and will result in disqualification of the bid.

Make & Model	**EHC-6 NexStar**	**Comply to Specification**		**Deviation from Specification**
		Yes	**No**	
Capacity (Measured from Center of Rotation) (See full load and stability charts attached for reference)	6,000 lb. @ 6 ft.			
	4,500 lb. @ 8 ft.			
	3,593 lb. @ 10 ft.			
	3,148 lb. @ 12 ft.			
	2,719 lb. @ 14 ft.			
	2,250 lb. @ 16 ft.			
	2,021 lb. @ 18 ft.			
	1,800 lb. @ 20 ft.			
Specifications & Standards	**Overall dimensions** (L x W x H) 153 in. x 24.88 in. x 32.63 in.			
	Weight of crane shall not exceed 1,275 lb.			
	Minimum **truck chassis** of: • 14,500 lb. GVWR			
	• 360,000 in.-lb. RBM			
	Paint – Auto Crane White			
	Compliance with ANSI B30.5 standards and OSHA regulations concerning crawler locomotives and truck cranes (OSHA Title 29, Part 1910.180)			
DC Power Unit	Electro-hydraulic system consists of an electric motor driving hydraulic pump which Provides fluid power to: • Boom Lift / Lower			
	• Boom Extension / Retraction			
	• Rotation			
	Electric motor – 24V DC series wound			
	Hydraulic: • Gear pump, .097 cu. in./rev. displacement			

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	• 2.75 gallon nominal-capacity reservoir			
	System: • Set full by-pass relief @ 2,500 PSI • Output: 1.46 GPM minimum @ 2,750 PSI @ 168 amps max.			

Boom – Lift	Hydraulically actuated			
	Lift angle from -12° to 75°			
	Lift cylinder: • Double acting for smooth boom operation			
	• Counterbalance valve incorporated preventing unintentional boom dropping in the event of a hose failure			
Load Sensing	• Pressure transducer sensing coupled with 3-axis true boom angle measurement relative to crane mounting surface and 3-axis true crane base attitude monitoring (truck level).			
	• Automatic 50% reduction of rotation speed while under load (slow rotate)			
	• In Overload condition, disable <u>only</u> hoist up, boom extend and boom down functions. Other functions shall remain operable			
	• In Low Boom Pressure condition, disable <u>only</u> boom down, swing CW and CCW, boom retract and extend, hoist up. Other functions remain operable (Anti-Bridging)			

Extension	Hydraulically actuated by means of extension cylinder from 10 ft. 6 in. to 20 ft. 6 in.			
	Extension cylinder: • Trunnion mounted inside boom to protect from external damage			
	• Double acting for smooth operation			
	• Incorporates counterbalance valve to prevent unintentional boom retraction in the event of a hose failure			

Hoist	• Motor – 24V DC series wound, 2.5 HP, heavy duty			
	• Actuator must have industrial grade gear box with worm brake			

Bid Specifications – Telescopic Service Crane

	• 46:1 worm gear reduction with 7.8:1 spur gear reduction			
	• Consumer grade winch with permanent magnet motor is **NOT** acceptable			
	Rated @ 3,000 lb. last layer capacity			
	Line speed: 36 ft./min. (single line) with no load 12 ft./min. with 2500 lb. load			
	95-ft. of .375 in. diameter aircraft cable with 14,400 lb. **breaking strength** compliance to ANSI Standards			
Sheave	Anti-friction, high strength polymer with maintenance free, sealed needle bearings			
Anti-two-block Preventer	A hanging type proximity sensor that detects ferrous materials from the traveling block.			
	When activated, shall disable hoist up, boom down and extend out functions			
	Cable shall be contained in a high impact plastic case with a spring loaded cable reel			
Swivel Block	• Heavy-duty type with hook with latch			
	• Provision for double line string up			
Rotation	Hydraulically actuated			
	450° non-continuous rotation self-locking worm gear drive to hold crane position			
	Two speeds (automatically switched under load)			
	Sealed slew bearing with integrated slew drive			
Hydraulic System	**Main valve** – Mono-block type with individual cartridge valves for the crane functions for easy accessibility and serviceability			
	• Proportional Boom Up/Down			
	• Proportional Rotation			
	• Proportional Boom Ext/Ret.			
	• Manual Override on all functions			
Control System	**Remote Control – FM Radio & Tethered Options:**			

Bid Specifications – Telescopic Service Crane

	• Handheld remote control designed for one hand operation of crane functions.			
	• 2 joystick / 1 trigger configuration			
	• IP67 and CE certified remote			
	• 100% fully independent proportional function joystick or trigger control			
	• Integrated E-Stop button on remote			
	• Four distinct transmitter signal output settings to maximize control resolution for creep operation			
	• Transmitter shall have a color LCD readout providing the operator with feedback to allow explanation of current operating status			
	• Dock for remote charging and storage included			
	• Alkaline battery (AA x 3) backup included			
	Remote Control – FM Radio:			
	• Operates on a rechargeable, internal, lithium-ion battery			
	• Has an estimated 300 foot operating range			
	Remote Control – Tethered:			
	• 32 ft. communication cable included			
	Receiver – FM Radio and tethered Remote • Crane mounted and features • IP65 rated			
	See Options Section below for additional control configurations.			

Warranty	Manufacturer shall provide a **two-year limited warranty** against defects in materials and workmanship from the date of delivery			

Options (Must be available as required)	**Paint –** provide code and desired color if other than standard			
	Boom Support shall be installed for the boom in a stowed position while in transit			
	Outriggers: • Shall be installed to increase stability and reduce the load on the truck springs while lifting			
	Oil Temperature Sensor to monitor crane hydraulic oil temperatures			

Bid Specifications – Telescopic Service Crane

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Submitted by: _____ **Date:** _____

Bid Specifications – Telescopic Service Crane

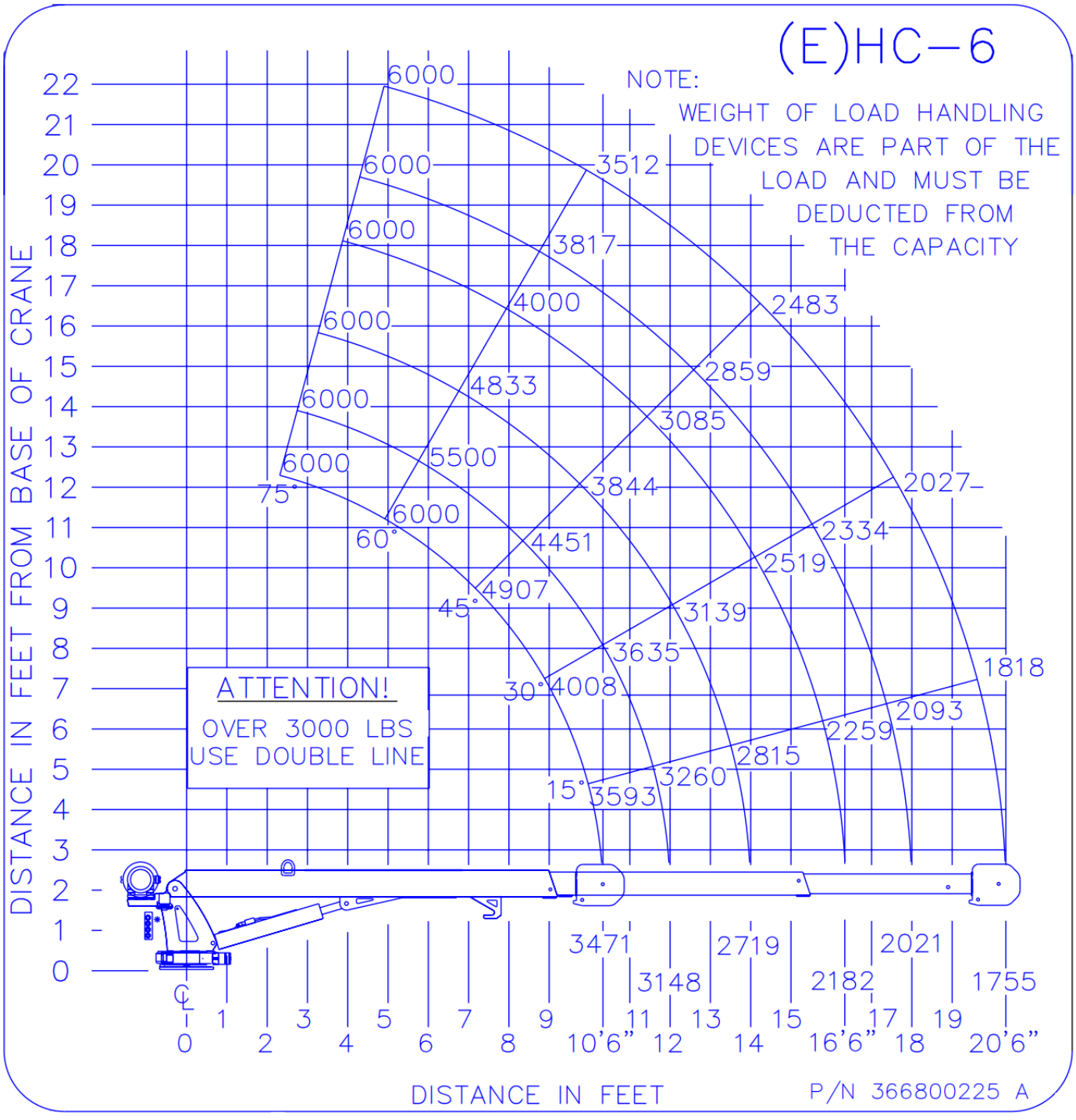


Figure 1: (E)HC-6 Load Chart