

Bid Specifications – Telescopic Service Crane

7,000 lb. Maximum Lifting Capacity
38,000 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	HC-7 NexStar	Comply to Specification		Deviation from Specification
		Yes	No	
Capacity (Measured from Center of Rotation) (See full load and stability charts attached for reference)	7,000 lb. @ 5 ft.			
	4,606 lb. @ 8 ft.			
	3,840 lb. @ 10 ft.			
	3,134 lb. @ 12 ft.			
	2,659 lb. @ 14 ft.			
	2,380 lb. @ 16 ft.			
	2,111 lb. @ 18 ft.			
	1,800 lb. @ 20 ft.			
Specifications & Standards	Overall dimensions (L x W x H) 156 in. x 23.06 in. x 33.56 in.			
	Weight of crane shall not exceed 1,700 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)			
Boom – Lift	Hydraulically actuated power extend and power retract			
	Lift angle from -12° to 75°			
	Lift cylinder: - Single stage, Double acting for smooth boom operation - Counterbalance valve incorporated preventing unintentional boom dropping in the event of a hose failure			

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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	Hydraulic motor driven, planetary gear reduction with a load holding brake			
	3,500 lb. last layer capacity			
	55 ft./min. (single line) with no 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 bail type to reduce crown to hook distance. (Hanging block two-block sensor is not acceptable.)			
	When activated, shall disable hoist up, boom down and extend out functions			
	Located on the left side of the boom to protect it from tree limbs, etc. while traveling			

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	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 turntable style slew bearings			
Hydraulic System	Main valve – Mono-block type with individual cartridge valves for the crane functions for easy accessibility and serviceability			
	8 GPM @ 2,750 PSI			
	Proportional Boom Up/Down			
	Proportional Rotation			
	Proportional Boom Ext/Ret.			
	Proportional Hoist Up/Down			
	Manual Override on all functions			
Control System	Remote Control – FM Radio with Tether Cable			
	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			

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	Has an estimated 300 foot operating range			
	Remote Control – Tethered:			
	32 ft. communication cable included - When tethered, remote is directly connected to crane and no FM signals are sent/received			
	Receiver – FM Radio and tethered Remote - Crane mounted and features - IP65 rated			

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

Notes:	

Submitted by: _____

Date: _____

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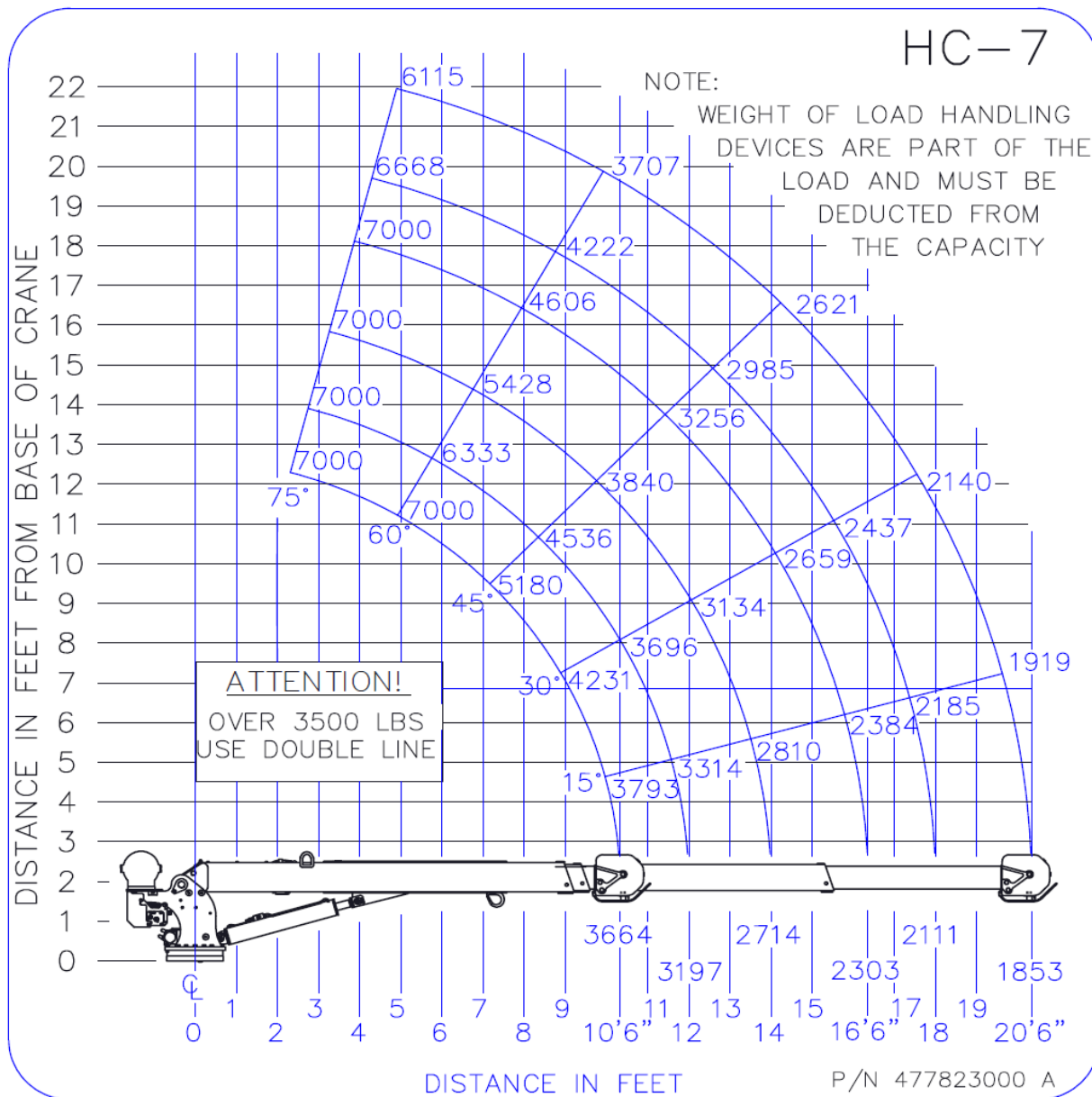


Figure 1: HC-7 Load Chart