

Bid Specifications – Telescopic Service Crane

8,000 lb. Maximum Lifting Capacity

52,750 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		Comply to Specification		Deviation from Specification
		Yes	No	
Capacity (Measured from Center of Rotation) (See full load and stability charts attached for reference)	HC-8x NexStar ZONE A 8,000 lb. @ 6 ft.			
	5,630 lb. @ 5 ft. 5 in			
	4,833 lb. @ 11 ft.			
	4,025 lb. @ 12 ft.			
	2,903 lb. @ 15 ft.			
	1,962 lb. @ 21 ft.			
	1,591 lb. @ 26 ft.			
	1,307 lb. @ 30 ft.			
	ZONE B 7,000 lb. @ 3ft.			
Specifications & Standards	Overall dimensions (L x W x H) 180.38" x 25.5" x 36.75"			
	Weight of crane shall not exceed 1,870 lb.			
	Minimum truck chassis of: 19,500 lb. GVWR 510,000 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			

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Load Sensing	Counterbalance valve incorporated preventing unintentional boom dropping in the event of a hose failure			
	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 12 ft. 5-3.8 in. to 30 ft. 5-3/4 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			
	4,000 lb. last layer capacity			
	55 ft./min. (single line) with no load			
	120-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			

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	Located on the left side of the boom to protect it from tree limbs, etc. while traveling			
	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			
	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			

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	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 - 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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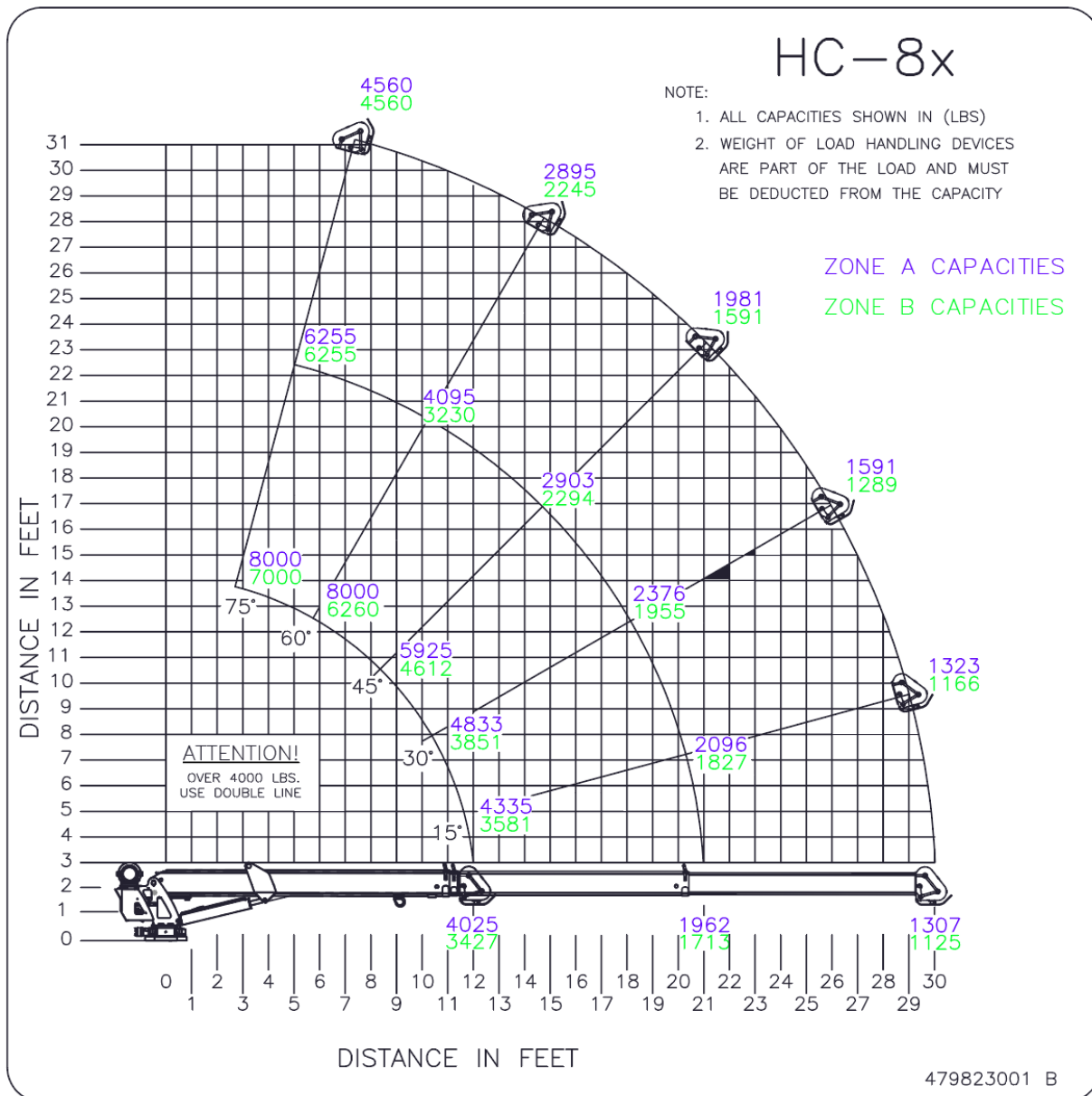


Figure 1: HC-8x Load Chart