

Bid Specifications – Telescopic Service Crane

8,000 lb. Maximum Lifting Capacity
49,000 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	<u>HC-8 NexStar</u>	Comply to Specification		Deviation from Specification
		Yes	No	
Capacity (Measured from Center of Rotation) (See full load and stability charts attached for reference)	ZONE A	ZONE B		
	8,000 lb. @ 5 ft. 3 in.	7,000 lb. @ 5 ft. 5 in.		
	6,533 lb. @ 7 ft. 6 in.	5,118 lb. @ 7 ft. 6 in.		
	4,600 lb. @ 10 ft.	3,769 lb. @ 10 ft.		
	4,041 lb. @ 12 ft.	3,134 lb. @ 12 ft.		
	3,253 lb. @ 14 ft.	2,659 lb. @ 14 ft.		
	3,008 lb. @ 16 ft.	2,380 lb. @ 16 ft.		
	2,522 lb. @ 18 ft.	2,111 lb. @ 18 ft.		
	2,423 lb. @ 20 ft. 6 in.	1,853 lb. @ 20 ft. 6 in.		
Specifications & Standards	Overall dimensions (L x W x H) 126.44 in. x 23.25 in. x 32.75 in.			
	Weight of crane shall not exceed 1,710 lb.			
	Minimum truck chassis of:			
	<ul style="list-style-type: none"> • 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:			
	<ul style="list-style-type: none"> • Single stage, Double acting for smooth boom operation 			

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Load Sensing	<ul style="list-style-type: none"> Counterbalance valve incorporated preventing unintentional boom dropping in the event of a hose failure 			
	<ul style="list-style-type: none"> 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 			
	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Hydraulic motor driven, planetary gear reduction with a load holding brake 			
	<ul style="list-style-type: none"> 4,000 lb. last layer capacity 			
	<ul style="list-style-type: none"> 55 ft./min. (single line) with no load 			
	<ul style="list-style-type: none"> 95-ft. of .375 in. diameter aircraft cable with 14,700 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	<ul style="list-style-type: none"> • Heavy-duty type with hook with latch 			
	<ul style="list-style-type: none"> • 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			
	<ul style="list-style-type: none"> • 8 GPM @ 2,750 PSI 			
	<ul style="list-style-type: none"> • Proportional Boom Up/Down 			
	<ul style="list-style-type: none"> • Proportional Rotation 			
	<ul style="list-style-type: none"> • Proportional Boom Ext/Ret. 			
	<ul style="list-style-type: none"> • Proportional Hoist Up/Down 			
Control System	<ul style="list-style-type: none"> • Manual Override on all functions 			
	Remote Control – FM Radio & Tethered Options:			
	<ul style="list-style-type: none"> • Handheld remote control designed for one hand operation of crane functions. 			
	<ul style="list-style-type: none"> • 2 joystick / 1 trigger configuration 			
	<ul style="list-style-type: none"> • IP67 and CE certified remote 			
	<ul style="list-style-type: none"> • 100% fully independent proportional function joystick or trigger control 			
	<ul style="list-style-type: none"> • Integrated E-Stop button on remote 			
	<ul style="list-style-type: none"> • Four distinct transmitter signal output settings to maximize control resolution for creep operation 			
	<ul style="list-style-type: none"> • Transmitter shall have a color LCD readout providing the operator with feedback to allow explanation of current operating status 			
	<ul style="list-style-type: none"> • Dock for remote charging and storage included 			
<ul style="list-style-type: none"> • Alkaline battery (AA x 3) backup included 				

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	Remote Control – FM Radio: <ul style="list-style-type: none"> • Operates on a rechargeable, internal, lithium-ion battery • Has an estimated 300 foot operating range 			
	Remote Control – Tethered: <ul style="list-style-type: none"> • 32 ft. communication cable included 			
	Receiver – FM Radio and tethered Remote <ul style="list-style-type: none"> • 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			
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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: <ul style="list-style-type: none"> • 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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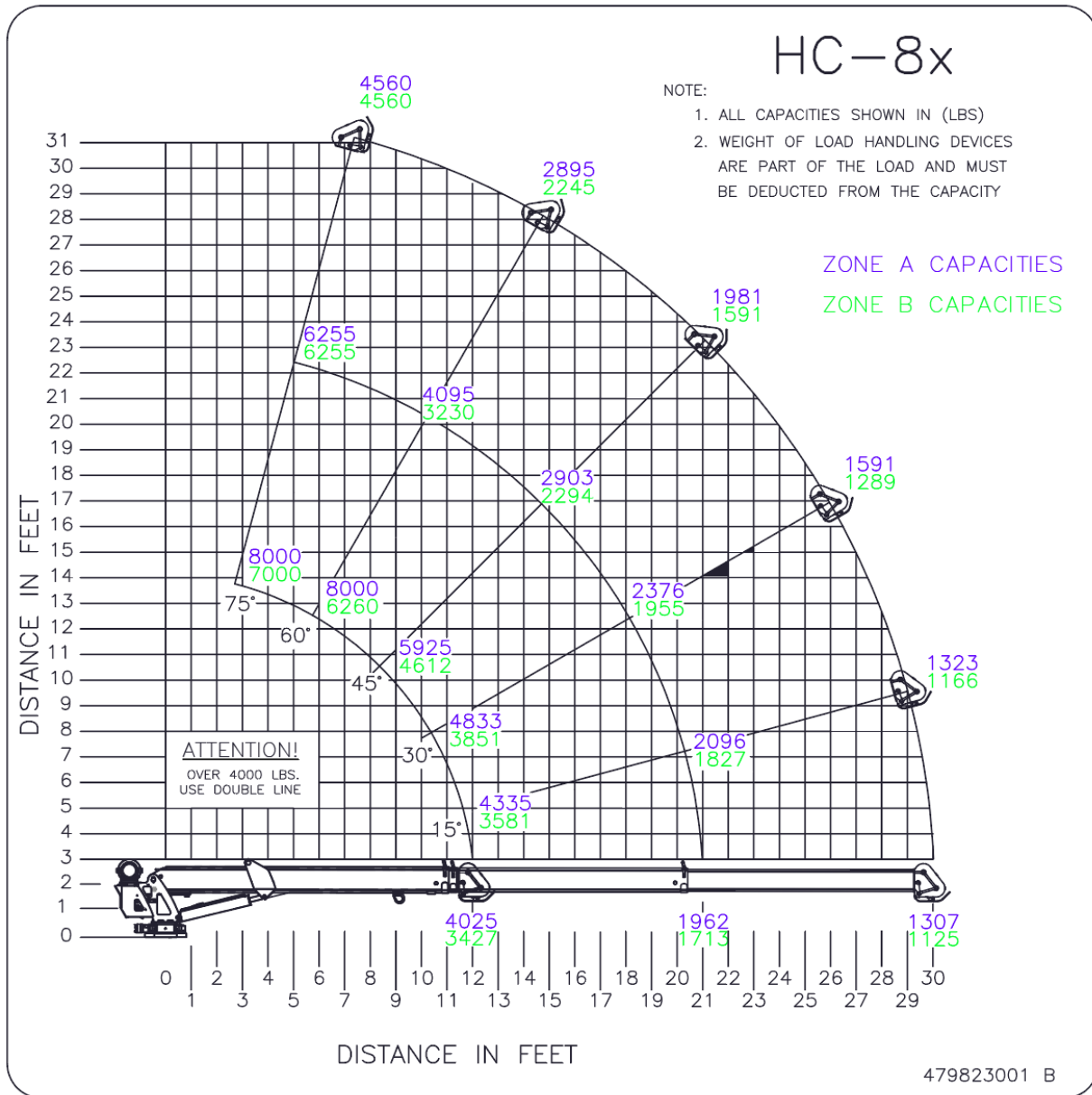


Figure 1: HC-8x Load Chart