

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	<u>HC-8x 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. @ 6 ft.	7,000 lb. @ 3ft.			
	5,630 lb. @ 5 ft. 5 in	5,118 lb. @ 5 ft. 5 in.			
	4,833 lb. @ 11 ft.	3,851 lb. @ 11 ft.			
	4,025 lb. @ 12 ft.	3,427 lb. @ 12 ft.			
	2,903 lb. @ 15 ft.	2,294 lb. @ 15 ft.			
	1,962 lb. @ 21 ft.	1,713 lb. @ 21 ft.			
	1,591 lb. @ 26 ft.	1,289 lb. @ 26 ft.			
	1,307 lb. @ 30 ft.	1,125 lb. @ 30 ft.			
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:				
	<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). 			
	<ul style="list-style-type: none"> Automatic 50% reduction of rotation speed while under load (slow rotate) 			
	<ul style="list-style-type: none"> 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 12 ft. 5-3.8 in. to 30 ft. 5-3/4 in.			
	Extension cylinder: <ul style="list-style-type: none"> Trunnion mounted inside boom to protect from external damage 			
	<ul style="list-style-type: none"> 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"> 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	<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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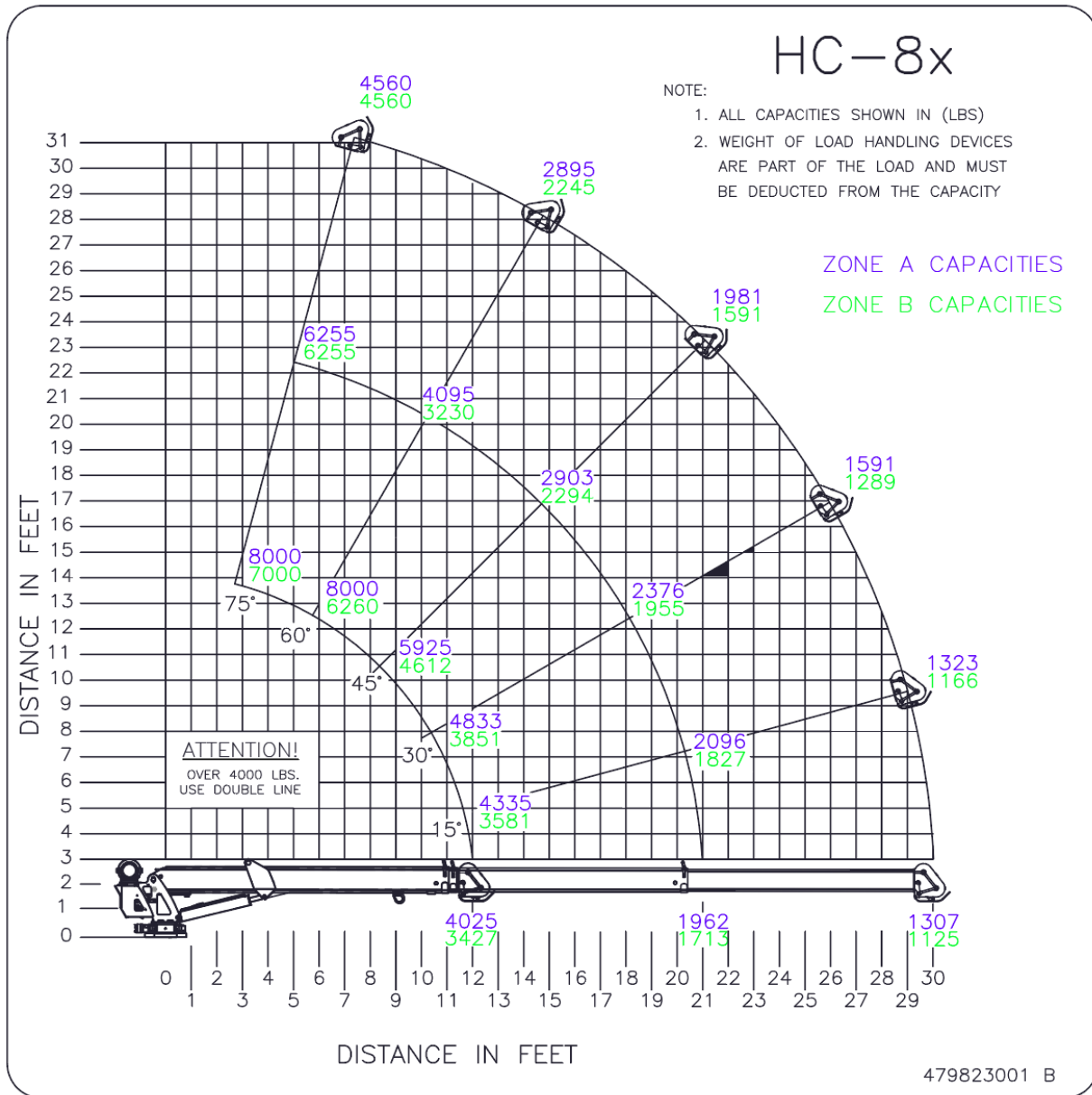


Figure 1: HC-8x Load Chart