

## Product Profile

The XCT90U is a 90USL hydraulic truck crane newly developed for the North American market. It features a compact structure, good travel performance, great lifting capacity, and a wide scope of operations. The power platform is based on the US-made Cummins engine, which complies with the EPA13 emission standards. The torque limiter system satisfies the world's most stringent EN13000 torque limiter control requirements, ensuring its reliable safety performance.

## Product Highlights

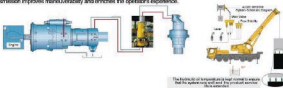
### Superior Performance

**Lifting Performance:** The five-section U-shaped arm has a length range of 39.4 – 147.6 ft. The fully extended arm is longer than the industry average by 3.3 ft, providing performance greater than other manufacturers by 9%–10%. With the dual-cylinder telescopic rope arranging system, it takes 140 seconds for the boom to be fully extended, which is highly efficient and shortens job preparation time.



### Comfortable Operation

The electric load-sensitive multi-way valve, with smoother linear gradient of throttle opening, provides precise flow control, smooth operation, and good micro-mobility. The pump control swing system is equipped with the US Eaton electronic proportional displacement pump, providing good swing micro-mobility and smooth movement. The hybrid transmission improves maneuverability and enriches the operator's experience.



The hydraulic system is highly sensitive to ensure that the system will not be provided excessive flow services.

### Safety and Reliability

The multi-mode unloading control strategy complies with 62 EN13000 safety requirements and ensures comprehensive operation safety. The high-performance lifting system, coupled with the proprietary auxiliary fuel supply system, ensures the lifting system stability and reliability and effectively prevents motor stall. Safety features such as swing brake pressure test, accumulator pressure-boosting, and low-pressure alarm effectively enhance operation safety. The working lights and 3-color warning lights adopt LED light source to ensure the safety of other people on the work site. The overlaid compensation technology and the unique pilot control structure regulate the amplitude by maintaining a constant flow in lowering operation, ensuring stable lowering speed and improving operation safety.



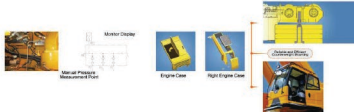
High-Pressure Alarm



3-Color Warning Light

### Ease of Use

The centralized pressure measurement and display system provides real-time monitoring of system pressure so that any faults are detected and dealt with in a timely manner. The optimized combination of cover panels facilitates removal and installation and enhances the serviceability of key elements or wearing parts. The hydraulic system assists the mounting of the combined counterweight system, greatly improving convenience and efficiency. The skirt-door control cab and the front and side pedals inside are extremely user-friendly. The deluxe cab provides extra-large storage room, and the air suspension heated seat, electric heated rear-view mirrors, and all-in-one AC system improve ride comfort.



### Energy-efficient and Environment-friendly

The lifting system featuring gravity lowering with electric proportional control relies on the weight of the arm itself to achieve lowering and effectively save energy.

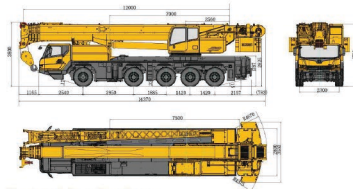


### Adaptive Design

The advanced control circuit complies with the US EPA13 emission standard. The product can be linked with an auxiliary vehicle to meet the transport requirements of North American users. The engine, hydraulic pump unit, hydraulic fittings, air filters, and urea tank all adopt original US elements.



## Outline Dimensions(mm)



## Technical Specifications

Duffel Specification	Overall Length	47.1ft	14370mm
	Overall Width	9.2ft	2800mm
	Overall Height	12.5ft	3800mm
Weight Specifications	Max. Allowable Weight	112,400lb	51000kg
	Curb Weight	112,100lb	50850kg
	Front Axle Load	50,700lb	23000kg
	Rear Axle Load	61,700lb	28000kg
Power Specifications	Engine Model	ISX15 S90	
	Rated Engine Power	500hp	373/1868kW(r/min)
	Rated Engine Torque	1,851/1,200lb-ft(r/min)	2510/1200N·m(r/min)
Travel Specifications	Emission Standard	EPA2013	
	Max. Travel Speed	63mph	100km/h
	Min. Turning Radius	78.7ft	24m
	Min. Ground Clearance	0.82ft	248mm
	Max. Gradeability	46%	
Main Performance Specifications	Max. Rated Lifting Capacity	90USL	81.6t
	Min. Rated Working Radius	9.8ft	3000mm
	Max. Lifting Torque	2,170,000lb-ft	3000kN·m
	Base Boom Length	39.4ft	12000mm
	Fully Extended Boom Length	147.6ft	45000mm
	Fully Extended Boom Length + Jib Length	182/205ft	55500/62500mm
Working Speed Specifications	Jib Mounting Angle	0°, 15°, 30°	
	Longitudinal Outriggers Span	24.6ft	7500mm
	Horizontal Outriggers Span	24.2ft	7380mm
	Boom Luffing (Lifting) Time	70s	
	Boom Extending Time	140s	
	Max. Swing Speed	±20/140°	
Working Speed Specifications	Max. Speed of Main Lifting Mechanism (single line)	35ft/min	120m/min
	Max. Speed of Auxiliary Lifting Mechanism (single line)	27ft/min	85m/min
	Outrigger Beam Extending/Retracting Time (synchronously on one side)	25 s / 25s	
	Outrigger Jacks Extending/Retracting Time (synchronously on one side)	46 s / 25s	

## Performance Table:

### 1. Boom Performance Table

Fixed lengths 39.4 ft-147.6 ft, outrigger 24.3 ft, counterweight 50706lb, ASME standard									
r/l	39.4	52.9	66.4	80.0	93.5	107.0	120.5	134.1	147.6
9.8	179897	160937							
11.5	169756	154323	132277						
13.1	158733	145505	132277	114640	99208				
16.4	127868	136686	132277	114640	99208	81571	66139		
19.7	110231	119049	119049	114640	94358	81571	66139		
23.0	88185	108688	101413	99208	82453	76280	60186		
26.2	77162	93255	92815	92594	75949	70548	55116	46297	
29.5	68343	81350	79366	82673	69446	67682	53793	44092	27337
32.8		71871	71430	72973	63493	60627	46738	40124	26455
39.4		56438	55777	57982	53793	51147	41888	36376	25133
45.9			42770	44754	46297	47399	36817	32187	23810
52.5			33510	35494	37038	38140	31306	26455	21605
59.0				28660	30203	31085	24471	23369	19180
65.6				23589	24912	26015	22487	20723	16976
72.2					20944	21826	20723	19621	15653
78.7					16094	18519	19180	18078	13889
85.3						15873	16535	17196	12787
91.8						13669	14330	14991	11684
98.4							12346	13007	10803
105.0							10803	11244	9700
111.5							7716	9921	9039
118.1								8598	7937
124.6								6614	6834
131.2									5952
137.8									5291
Parts of line	12	10	8	7	6	5	4	3	2

### 2. Jib Performance Table

Counterweight 50706 lb, Outrigger 24.3ft (100%), Fixed lengths 147.6 ft																		
Boom Angle	147.6 + 34.4ft									147.6 + 56.9ft								
	0°			15°			30°			0°			15°			30°		
	Lifting Load	Radius	Height	Lifting Load	Radius	Height	Lifting Load	Radius	Height	Lifting Load	Radius	Height	Lifting Load	Radius	Height	Lifting Load	Radius	Height
78	14550	39.1	179.1	14110	46.7	176.5	11244	53.5	172.2	9039	44.9	201.4	8378	58.1	196.5	6614	69.6	188.6
76	14330	45.2	177.4	14110	52.8	174.5	11244	59.3	169.9	9039	51.8	199.4	8378	64.8	194.2	6393	76.0	185.6
74	14330	51.3	175.5	14110	58.7	172.2	10803	65.1	167.6	9039	58.6	197.1	7937	71.4	191.6	6173	82.4	182.7
72	14110	57.3	173.2	13669	64.6	169.9	10582	70.8	165.0	8818	65.4	194.8	7937	78.0	188.6	5952	88.6	179.4
70	13889	63.2	170.9	12787	70.4	167.3	10141	76.5	162.0	8818	72.0	191.9	7496	84.4	185.6	5952	94.7	176.1
68	13669	69.0	168.3	12566	76.1	164.7	9700	82.0	159.1	8598	78.6	189.3	7275	90.7	182.0	5732	100.7	172.2
66	13228	74.7	165.6	12125	81.7	161.4	9259	87.4	155.8	8157	85.0	186.0	6834	96.9	178.8	5291	106.5	168.6
64	11905	80.4	162.7	11244	87.2	158.4	9259	92.6	152.5	7275	91.4	182.7	6173	103.0	174.8	5291	112.3	164.3
62	11244	85.9	159.4	10362	92.5	154.8	9259	97.8	148.9	6834	97.6	179.1	5732	109.0	170.9	5071	117.8	160.1
60	10582	91.3	156.1	9259	97.8	151.2	8157	102.8	145.0	6393	103.7	175.5	5512	114.8	167.0	4850	123.2	155.8
58	9259	96.6	152.5	9039	102.9	147.6	8378	107.7	141.0	5952	109.6	171.5	5291	120.4	162.4	4630	128.5	150.9
56	9039	101.8	148.9	8378	107.9	143.7	7937	112.5	137.1	5291	115.5	167.3	4850	125.9	157.8	4409	133.6	146.3
54	8598	106.8	145.0	7937	112.7	139.4	7275	117.1	132.8	5071	121.1	162.7	4409	131.2	153.2	4189	138.5	141.0
52	7937	111.7	140.7	7716	117.4	135.1	7055	121.6	128.2	4630	126.6	158.4	3748	136.4	148.3	3968	143.2	136.1
50	7716	116.4	136.4	7055	122.0	130.9	6834	125.9	124.0	4409	132.0	153.5	3527	141.4	143.0	3527	147.8	130.5
48	7275	121.0	132.2	6834	126.4	126.3	5732	130.0	119.1	3968	137.1	148.6	3527	146.2	137.8	3307	152.2	125.3
46	6614	125.5	127.6	5952	130.6	121.4	5512	134.0	114.1	3748	142.1	143.3	3307	150.8	132.5	3086	156.3	119.7
44	5952	129.7	123.0							3307	147.0	138.1	3086	155.2	126.9	2866	160.3	113.8
42										2866	151.6	132.5	2866	159.5	121.0	2646	164.1	107.9
40										2646	156.0	126.9	2646	163.5	115.1			

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XCMG For Your Success

Max. Rated Lifting Capacity 90tSt(81.6t)  
Max. Lifting Torque 2,170,000lb-ft(3000kN.m)  
Fully Extended Boom Length 147.6ft(45m)  
Engine Model ISX15 500  
Rated Engine Power 500hp(373/1800KW@/min)

# XCT90U

TRUCK CRANE