XCMG

BOOM TRUCK

XCT45_U

Less Flex, More Lift

V.1_2026


XCMG
XCT45_U

CONTENTS

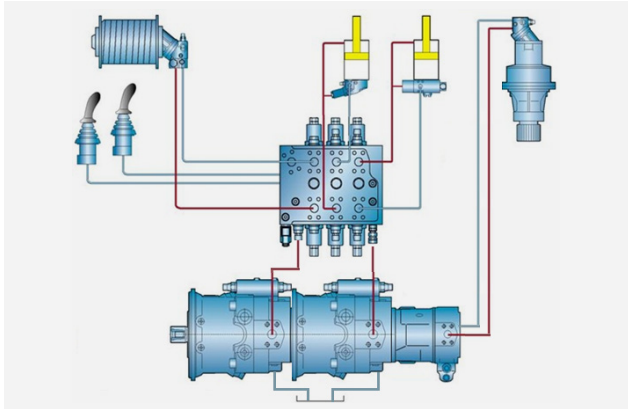
EVERY LIFT. EVERY CONFIGURATION. EVERY TIME.

142 FEET. THREE OUTRIGGER SPANS. ONE OPERATOR.

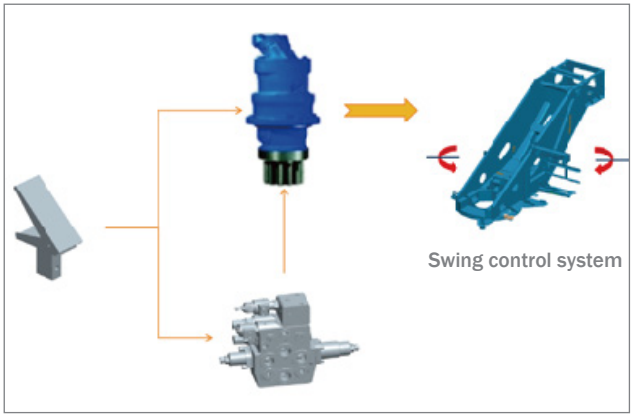
- The five-section U-section boom delivers 142 ft of reach, matching the longest in class, with a cross-section that resists deflection and keeps load placement precise at full extension.
- Three outrigger configurations keep lift planning simple. Know your chart before you leave the yard.
- Independent outrigger controls. Set up solo, one operator start to finish.

PRECISION CONTROL FROM FIRST MOVE TO FINAL PLACEMENT.

- Dual variable displacement pumps deliver smoother, more responsive control than single pump systems, more precision on every move.
- Two pumps mean higher hydraulic efficiency across the full range of crane functions, reducing heat buildup and keeping performance consistent through a long day.



Precise Hydraulic System



Foot Pedal

WHERE COMFORT MEETS CONTROL

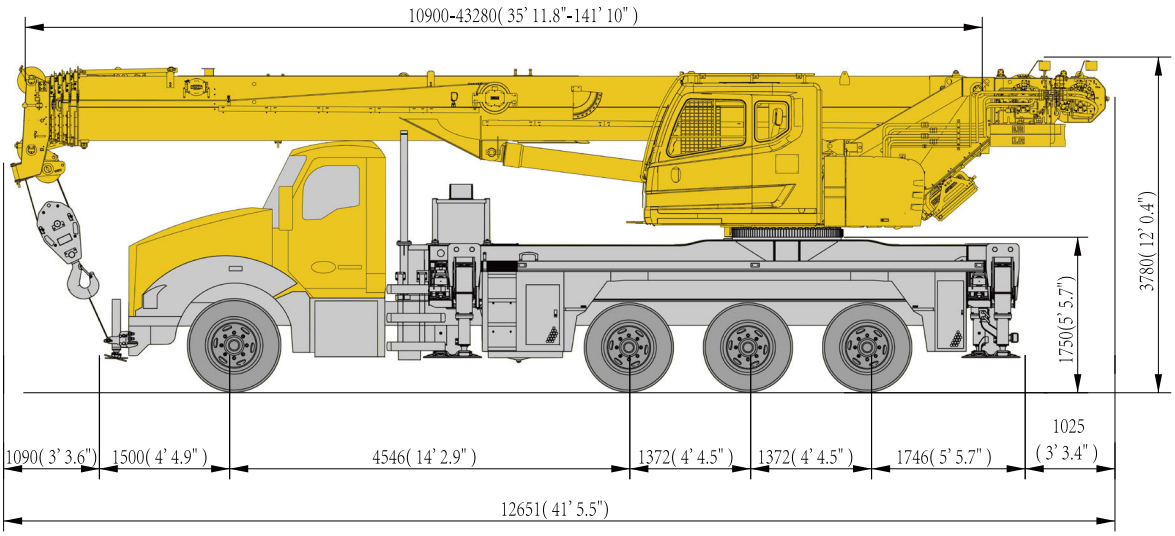
The XCT45U cab is built around the operator. More interior space, a wider seat, and an adjustable tilting cab reduce fatigue on long jobs, while the 10.4-inch color touchscreen and segmented control layout keep every function within reach and easy to read at a glance.

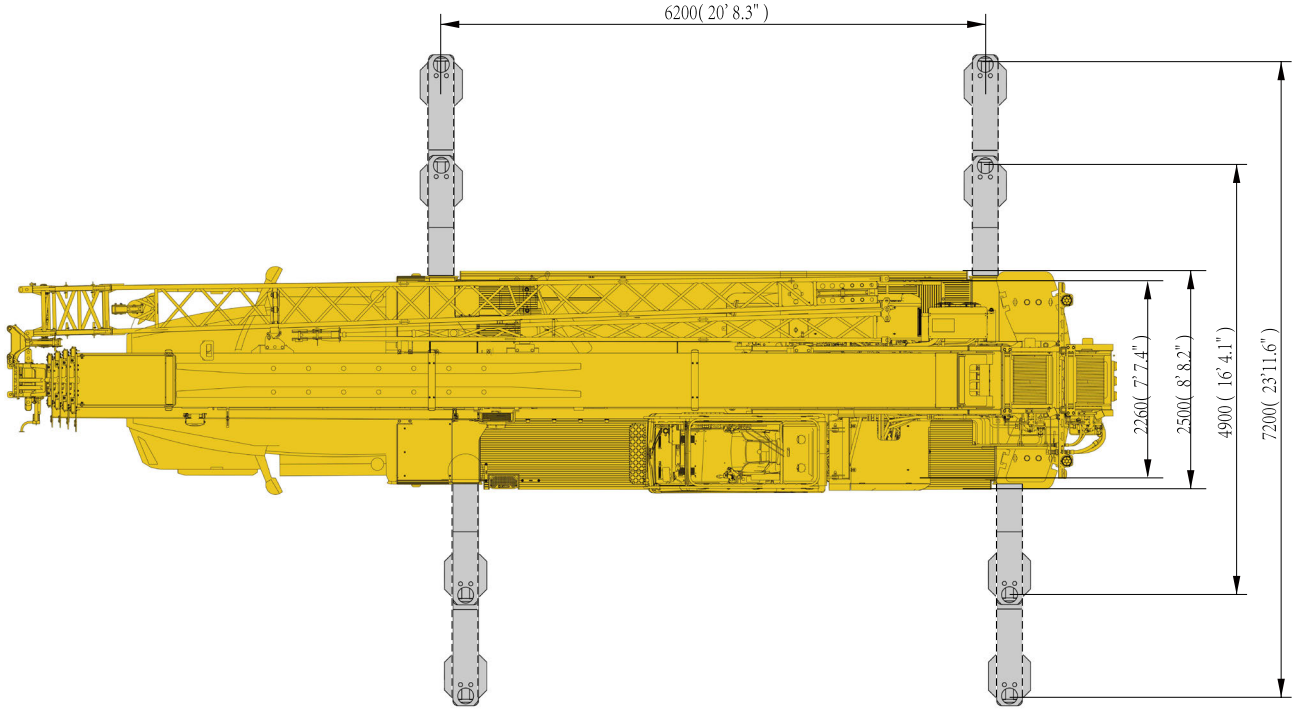
Operator's Cab	Wider seat and expanded interior reduce fatigue on long shifts. Adjustable tilting cab improves sightlines to the load at any boom angle.
Touchscreen	10.4-inch color touchscreen puts load data, crane functions, and system status in one clear view. Intuitive interface reduces time spent heads-down in the cab.
Zoned Controls	Three dedicated zones for safety, hoisting, and cab functions. Everything within reach.

EASY TO GET THERE. EASY TO SET UP. EASY TO OPERATE.

READY WHEN YOU ARE

- Available on Kenworth, Peterbilt, Freightliner, and Western Star chassis. Regardless of your preferred truck, XCMG's boom trucks are ready to roll.
- Slewing proportional brake and maximum slewing speed adjustment give the operator precise control on every lift, straight from the cab.
- Optional wireless remote control for the winch and outriggers lets one operator run the full operation solo, from setup to last lift.


10900-43280(35' 11.8"-141' 10")
3780(12' 0.4")
1750(5' 5.7")
1090(3' 3.6")
1500(4' 4.9")
4546(14' 2.9")
1372(4' 4.5")
1372(4' 4.5")
1746(5' 5.7")
1025
(3' 3.4")
12651(41' 5.5")


6200(20' 8.3")
2260(7' 7.4")
2500(8' 8.2")
4900 (16' 4.1")
7200(23' 11.6")

TECHNICAL SPECIFICATIONS

CRANE STRUCTURES	
Frame	High-strength steel construction with fully covered walking surface and anti-torsion box-type structure.
Outrigger	Four H-pattern outriggers with two-stage beams, hydraulically controlled for both horizontal and vertical movement. Level gauge and control console mounted at the rear of the chassis. Float diameter: 15.7 in. Maximum outrigger reaction force: 62,984 lb.

SUPERSTRUCTURE

Structure	High-strength steel construction.
Hydraulic System	Hydraulic pump: Variable piston pump, engine driven, used for lifting, luffing, and telescoping. Gear pump used for slewing. Control valve: Load-sensitive proportional multi-way directional valve with hydraulic-proportional pilot control. Oil circuit: Air-cooled hydraulic oil cooler reduces operating temperature. Hydraulic oil tank capacity: 149 US gal.
Control System	Superstructure control is pilot electric-proportional with CAN bus LMI. Functions include lift planning, engine parameter monitoring, and fault self-diagnosis.
Main Winch System	Hydraulically controlled via planetary gear reducer, normally closed brake, counterbalance valve, and grooved drum. Main and auxiliary winch can be operated independently.
Auxiliary Winch System	Hydraulic control is used for speed regulation. The system is driven by a hydraulic motor through a planetary gear reducer, with a normally closed brake, a counterbalance valve and a grooved drum equipped. The main winch and auxiliary winch can be independently operated.
Slewing System	Planetary gear reducer driven by hydraulic motor. Slewing ring driven by pistons, 360° continuous rotation. Dynamic control, free slewing, and stepless speed regulation available..
Luffing System	Single cylinder boom luffing. Counterbalance valve controls boom gravity during lowering, reducing fuel consumption and improving lowering speed.
Operator's Cab	Fully enclosed steel cab with excellent sealing and corrosion resistance. Sliding door with automatic step for easy entry and exit. Windshield, roof window wiper, and sun screens standard. Control levers accessible from both armrests. Heat and air conditioning standard.
Safety Devices	Hydraulic counterbalance valve, hydraulic relief valve, hydraulic lock, LMI, and turntable locking pin. Lowering limiter and anti-two block at boom head prevent wire rope over-release and over-winding.
Load Moment Indicator (LMI)	Audible and visual warning when approaching overload. Dangerous operations cut off automatically before overloading occurs. Black box overload memory and fault diagnosis functions included.
Counter-weight	Total weight: 5,952 lb. Two configurations: 4,409 lb and 5,952 lb.
Hook Block	5 5. USt

TECHNICAL SPECIFICATIONS

	SUPERSTRUCTURE
Boom	U-shaped boom in high-strength steel. Dual-cylinder wire rope telescoping system: the 1st hydraulic cylinder telescopes the 2nd boom section, while the 2nd hydraulic cylinder and wire ropes synchronously telescope sections 3 through 5. Both hydraulic cylinders can telescope independently. Boom length: 35.8 ft to 142 ft.
Auxiliary Sheave	Installed at the boom top for single line operation. Maximum lifting load should not exceed 11,023 lb.

Additional equipment available on request.

CONFIGURATION	FUNCTION DESCRIPTION
Standard	5-section boom, 35.8 ft to 142 ft.

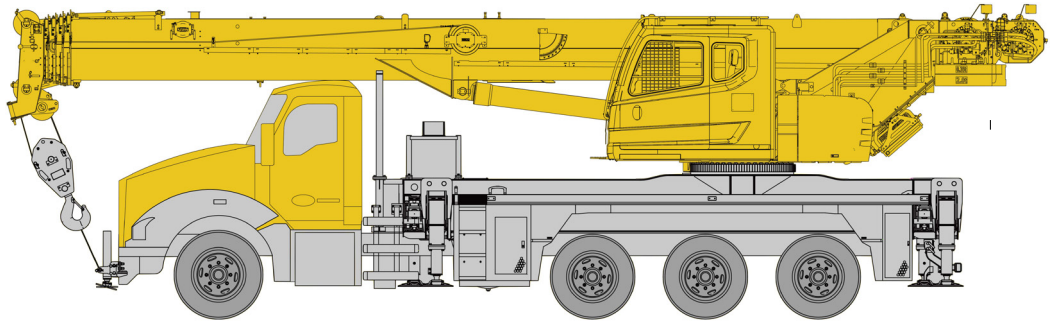
Note: only standard configuration is available for this model.

OPTIONAL EQUIPMENT	COMPONENT DESCRIPTION
Hook block	45 USt, 27 USt, 15 USt.
Jib	Connecting bracket, offsetting bracket, and one or two lattice sections. Three offset angles: 0°, 15°, and 30°. Side stowed along the boom. Jib length: 30.5 ft to 53.5 ft.
Auxiliary winch system	Hydraulically controlled via planetary gear reducer, normally closed brake, counterbalance valve, and grooved drum. Operates independently from main winch.
Superstructure Remote	Luffing and main hoist up and down operations available via remote control.
Boom Tip Camera	Wireless zoom camera monitors boom head status and expands the operator's field of view.
Turntable Locking Device	Slewing mechanism can be locked at any position during slewing
Nylon Outrigger Pad	Includes outrigger pad storage box and five nylon outrigger pads, increasing ground contact area for stable support and safe operation.
Hook Block Boom Rest	Mounts the hook block to the subframe during transport, keeping it clear of the driver's line of sight.
Fifth Jack	Enables 360° full-capacity slewing operation.

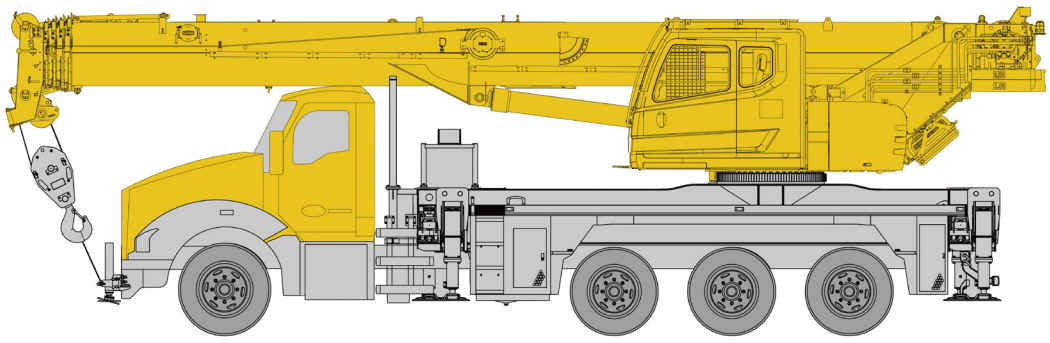
WEIGHTS

	1	2	3	4	TOTAL WEIGHT
Configuration A (lb)	18,576	13,007	20,477	20,477	72,537
Configuration B (lb)	17,187	13,007	19,416	19,416	69,026
Configuration C (lb)	17,500	13,007	19,125	19,125	68,757
Configuration D (lb)	17,787	13,007	18,345	18,345	67,484

Configuration A
Superstructure: 5,952 lb counterweight, jib, auxiliary winch with wire rope, and 27.5 USt hook block included. Maximum travel speed: 65 mph.

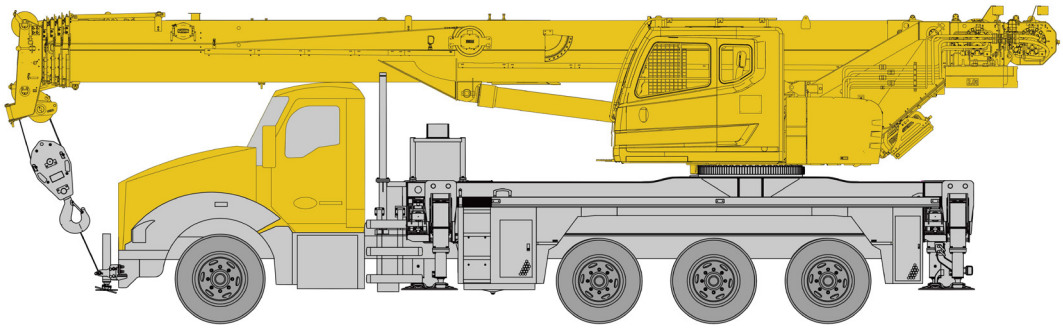


Configuration B
Superstructure: 5,952 lb counterweight and 27.5 USt hook block included. Jib, auxiliary winch, and wire rope not included. Maximum travel speed: 65 mph.

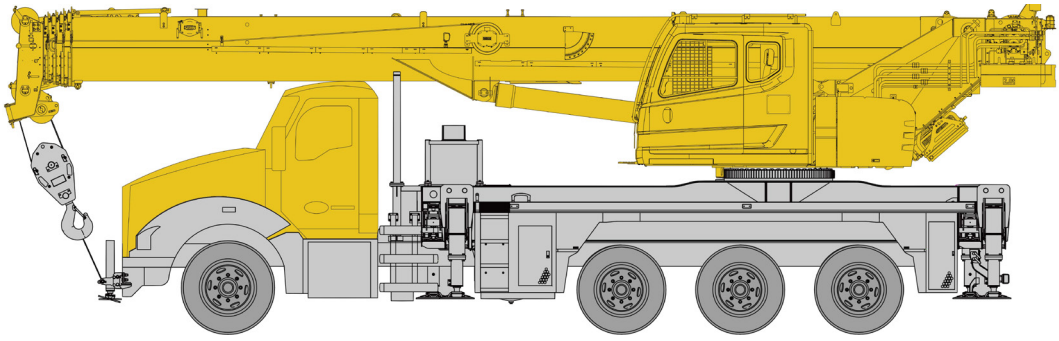


Configuration C
Superstructure: 4,409 lb counterweight, auxiliary winch with wire rope, and 27.5 USt hook block included. Jib and 1,543 lb counterweight not included. Maximum travel speed: 65 mph.

	1	2	3	4	TOTAL WEIGHT



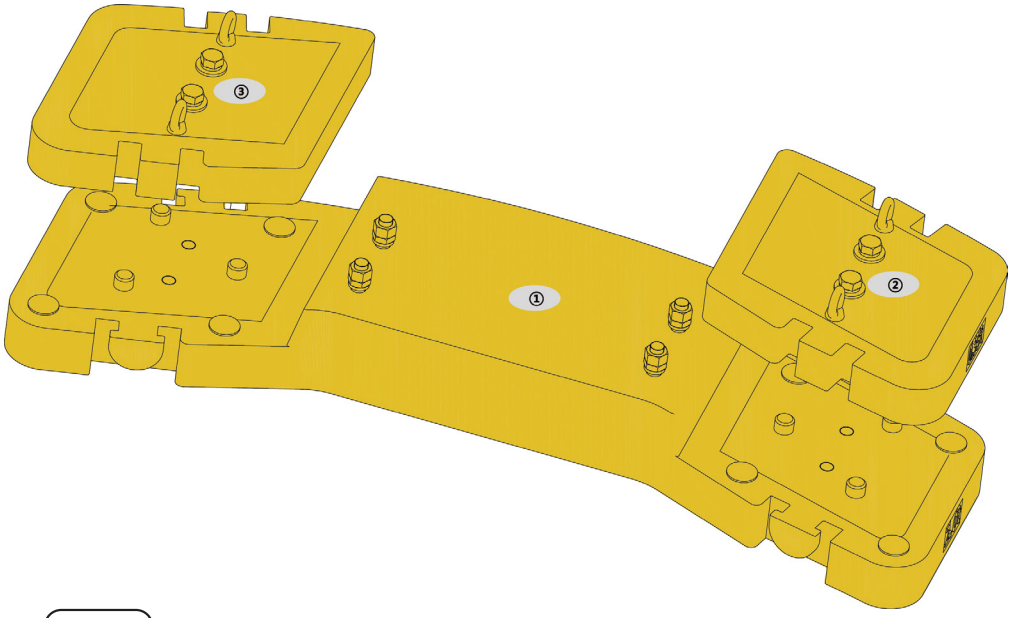
Configuration D
Superstructure: 4,409 lb counterweight and 27.5 USt hook block included. Jib, 1,543 lb counterweight, auxiliary winch, and wire rope not included. Maximum travel speed: 65 mph.



HOOK BLOCK	PARTS OF LINE	WEIGHT OF HOOK BLOCK	HOOK BLOCK DIMENSION (IN)	NOTES
45 USt (Optional)	8	794 lb	77.2 x 21.7 x 16.1	Single-hook
27.5 Ust (Optional)	6	440 lb	47.2 x 17.3 x 8.1	Single-hook
15 Ust (Optional)	3	400 lb	39.4 x 13.4 x 11.8	Single-hook
(5.5 USt	1	220 lb	23.4 x 12.0 x 31	Single-hook

WORKING SPEED

	Max	F	Φ	
	0-394 fpm, single line, no load	11,023 lb	0.63 in	410 ft
	0-394 fpm, single line, no load	11,023 lb	0.63 in	423 ft
	0-1.2 rpm			
	Approximately 35 seconds for boom luffing from -1° to 79°			
	Approximately 70 seconds for boom extending from 35.8 feet to 142 feet			



	①	②	③
Dimensions (L×W×H) ft	8.1×2.8×0.8	2.3×2.7×0.4	2.3×2.7×0.4
Weight lb	4,409	771.5	771.5

Operation modes	5,952 lb	4,409 lb
Combinations	① + ② + ③	①

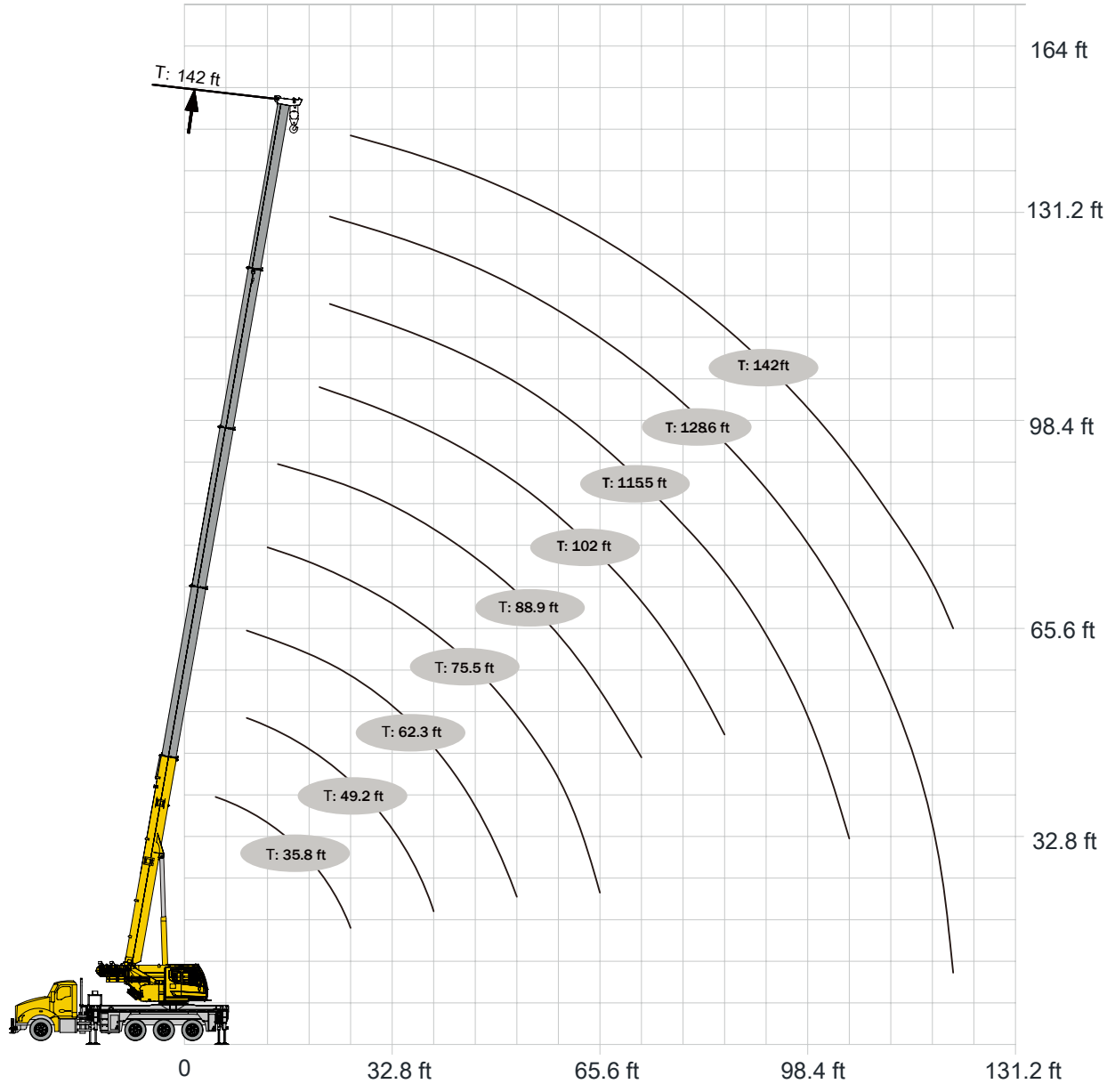
BOOM/JIB COMBINATIONS

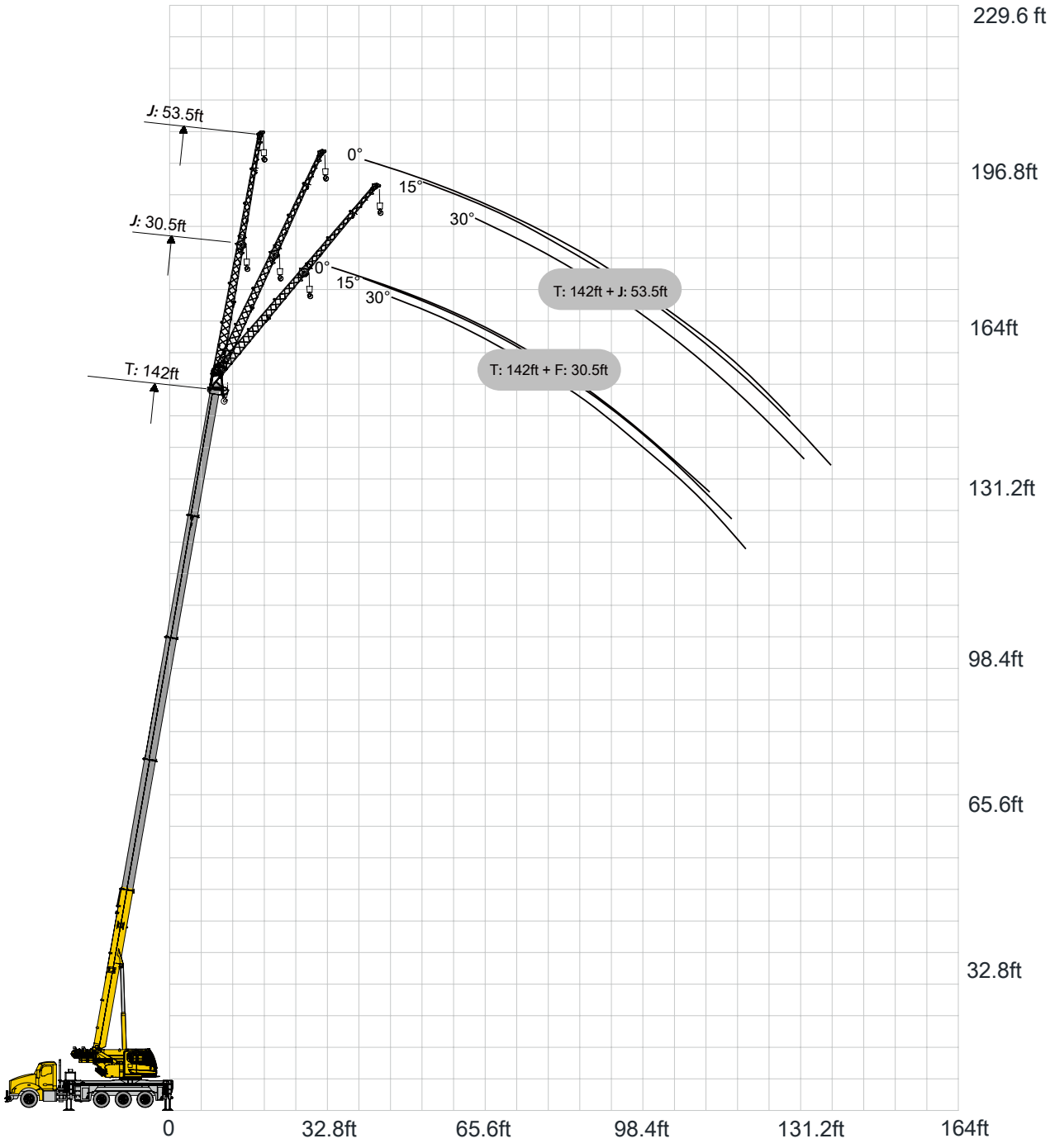
BOOM	BOOM + 1ST JIB SECTION	BOOM + 2 JIB SECTIONS
T: 35.8 ft-142 ft	T: 35.8 ft-142 ft J: 30.5 ft	T: 35.8 ft-142 ft J: 53.5 ft

COMPONENTS	STRUCTURE
Connecting bracket	
The 1st jib section assembly	
The 2nd jib section assembly	

FIXED JIB	STRUCTURE TYPE
Fixed jib— 30.5 ft	
Fixed jib— 53.5 ft	

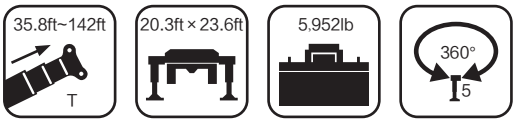
WORKING RANGE DIAGRAM FOR BOOM




229.6 ft
196.8ft
164ft
131.2ft
98.4ft
65.6ft
32.8ft
0
32.8ft
65.6ft
98.4ft
131.2ft
164ft
J: 53.5ft
J: 30.5ft
T: 142ft
0°
15°
30°
0°
15°
30°
T: 142ft + J: 53.5ft
T: 142ft + F: 30.5ft

LOAD CHARTS

ASME



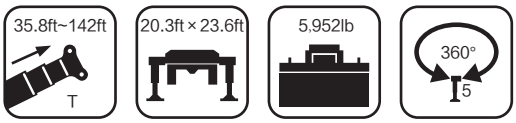
Boom Extension

Horizontal Extension

ft / ft	35.8	49.2	62.3	75.5	88.9	102	115.5	128.6	142	ft / ft
4.9	89,948*									4.9
6.6	70,547									6.6
8.2	61,729									8.2
9.8	55,115	46,297	41,667							9.8
11.5	54,013	46,297	41,667							11.5
13.1	49,604	46,076	4,1667	30,864						13.1
14.8	46,297	44,092	41,667	30,864	28,660					14.8
16.4	43,210	40,565	38,581	30,864	27,558					16.4
18	39,021	37,919	35,715	30,864	26,896					18
19.7	34,833	35,053	33,510	3,0864	25,353					19.7
21.3	31,746	30,864	30,864	30,423	24,251	18,960				21.3
23	29,321	29,542	29,983	28,880	23,369	18,960	14,550	10,803		23
26.2	24,471	26,896	26,676	2,6014	21,826	16,755	14,550	10,803	8,818	26.2
27.9	21,826	24,912	24,912	24,251	213,85	16,314	13,889	10,803	8,818	27.9
28.2	21,164	24,471	24,471	2,3810	21,164	16,094	13,669	10,803	8,818	28.2
28.5	20,723	24,030	24,251	23,369	21,164	16,094	13,669	10,803	8,818	28.5
29.5		22,707	23,148	22,266	20,723	15,653	13,228	10,803	8,818	29.5
32.8		20,723	20,503	20,503	19,841	14,991	13,007	10,803	8,818	32.8
36.1		17,857	17,637	18,739	17,857	14,550	12,787	10,582	8,818	36.1
39.4		15,212	15,212	16,314	15,432	13,889	12,566	10,582	8,818	39.4
41.3		14,109	13,889	15,212	14,330	13,448	12,125	10,362	8,818	41.3
41.7		13,889	13,669	14,991	14,109	13,448	11,905	10,362	8,818	41.7
42		13,669	13,448	14,771	13,889	13,448	11,905	10,362	8,818	42
42.7			13,007	14,330	13,889	13,228	11,684	10,362	8,818	42.7
45.9			11,684	12,787	12,787	12,125	10,803	10,141	8,157	45.9
49.2			10,141	11,243	11,464	10,803	10,362	9,259	7,937	49.2
52.5			9,039	10,362	10,141	10,141	9,700	8,598	7,496	52.5
54.5			8,377	9,700	9,700	9,700	9,259	8,157	7,275	54.5
54.8			8,377	9,700	9,480	9,480	9,039	8,157	7,055	54.8
55.1			8,157	9,480	9,480	9,480	9,039	8,157	7,055	55.1

* Capacity class.

ASME



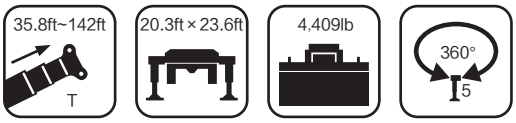
Boom Extension

Horizontal Extension

ft / ft	35.8	49.2	62.3	75.5	88.9	102	115.5	128.6	142	ft / ft
59.1				8,377	8,377	8,377	7,937	7,716	6393	59.1
65.6				6,834	7,055	7,055	7,055	6,614	5952	65.6
67.6				6,173	6,834	6,834	6,834	6,173	5732	67.6
67.9				6,173	6,614	6,614	6,614	6,173	5512	67.9
68.2				5,952	6,614	6,614	6,614	6,173	5512	68.2
72.2					5,952	5,952	5,952	5,291	4850	72.2
78.7					4,850	5,071	5,071	4,630	3748	78.7
81					4,409	4,850	4,850	4,409	3527	81
81.4					4,189	4,630	4,630	4,189	3527	81.4
81.7					4,189	4,630	4,630	4,189	3527	81.7
85.3						4,189	4,189	3,748	3086	85.3
91.9						3,527	3,527	3,086	2425	91.9
94.2						3,086	3,307	2,866	2205	94.2
94.5						3,086	3,307	2,866	2205	94.5
94.8						3,086	3,307	2,866	2205	94.8
98.4							3,086	2,425	1984	98.4
105							2,646	1,984	1323	105
107.3							2,205	1,764	1102	107.3
107.6							2,205	1,764	1102	107.6
107.9							2,205	1,764	1102	107.9
111.5								1,543	882	111.5
118.1								1,102	661	118.1
121.4								882	441	121.4

LOAD CHARTS

ASME



Boom Extension

Horizontal Extension

ft / ft	35.8	49.2	62.3	75.5	88.9	102	115.5	128.6	142	ft / ft
4.9	89,948*									4.9
6.6	70,547									6.6
8.2	61,729									8.2
9.8	55,115	46,297	41,667							9.8
11.5	54,013	46,297	41,667							11.5
13.1	49,604	46,076	41,667	30,864						13.1
14.8	46,297	44,092	41,667	30,864	28,660					14.8
16.4	43,210	40,565	38,581	30,864	27,558					16.4
18	39,021	37,919	35,715	30,864	26,896					18
19.7	34,833	35,053	33,510	30,864	25,353					19.7
21.3	31,746	30,864	30,864	30,423	24,251	18,960				21.3
23	29,101	29,101	29,983	28,880	23,369	18,960	14,550	10,803		23
26.2	24,251	26,455	26,676	26,014	21,826	16,755	14,550	10,803	8,818	26.2
29.5		22,487	22,707	22,046	20,723	15,653	13,228	10,803	8,818	29.5
32.8		20,503	20,503	20,282	18,960	14,991	13,007	10,803	8,818	32.8
36.1		17,637	17,416	18,519	17,857	14,550	12,787	10,582	8,818	36.1
39.4		14,991	14,991	16,094	15,432	13,889	12,566	10,582	8,818	39.4
42.7			12,787	14,109	13,889	13,228	11,684	10,362	8,818	42.7
45.9			11,243	12,346	12,787	12,125	10,803	10,141	8,157	45.9
49.2			9,921	11,023	11,464	10,803	10,362	9,259	7,937	49.2
52.5			8,818	9,921	10,141	10,141	9,700	8,598	7,496	52.5
59.1				7,937	8,157	8,377	7,716	7,716	6,393	59.1
65.6					6,834	7,055	7,055	6,614	5,952	65.6
72.2					5,512	5,512	5,952	5,291	4,630	72.2
78.7						4,850	5,071	4,409	3,748	78.7
85.3						3,748	4,189	3,527	2,866	85.3
91.9							3,527	2,866	2,205	91.9
98.4							2,646	1,984	1,543	98.4
105								1,543	1,102	105
111.5								1,102	661	111.5

* Capacity class.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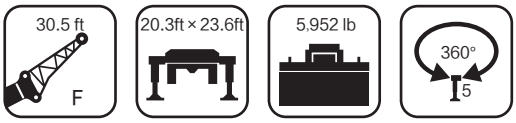
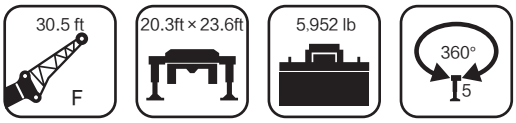
LOAD CHARTS

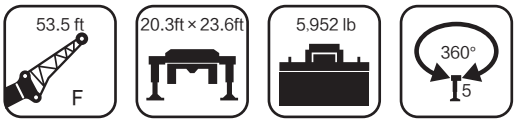


	 T 	102			115.5			 T 	
		0°	15°	30°	0°	15°	30°		
79		11,023	6,834	3,307	9,259	6,393	3,086	79	
78		10,803	6,393	3,086	9,259	5,952	3,086	78	
75		9,700	5,732	2,866	9,039	5,512	2,866	75	
72		9,039	5,291	2,866	8,157	5,071	2,646	72	
70		8,598	4,850	2,646	7,496	4,850	2,646	70	
65		6,614	4,409	2,646	5,512	4,189	2,425	65	
60		4,850	3,968	2,425	3,968	3,527	2,425	60	
55		3,527	3,307	2,205	2,866	2,646	2,205	55	
50		2,646	2,425	2,205	1,984	1,984	1,764	50	

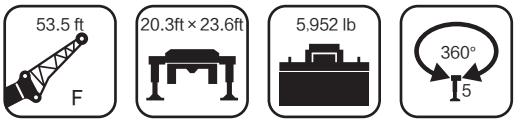


	 T 	128.6			142			 T 	
		0°	15°	30°	0°	15°	30°		
79		6,834	5,952	3,307	3,748	3,307	2,646		79
78		6,614	5,732	3,086	3,527	3,307	2,646		78
75		6,393	5,291	2,866	3,307	3,307	2,646		75
72		6,173	4,850	2,646	3,086	3,086	2,425		72
70		5,732	4,409	2,646	2,866	2,866	2,425		70
65		4,189	3,527	2,425	2,866	2,646	2,425		65
60		3,086	2,646	2,205	2,646	2,425	2,205		60
55		2,205	1,984	1,764	1,984	1,764	1,543		55
50		1,323	1,323	1,323	1,323	1,102	1,102		50

LOAD CHARTS



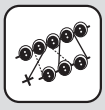
	 	102			115.5			 	
		0°	15°	30°	0°	15°	30°		
79		6,614	2,866	1,543	5,512	2,866	1,543		79
78		5,952	2,866	1,543	5,071	2,866	1,323		78
75		5,291	2,646	1,323	4,630	2,425	1,102		75
72		4,630	2,425	1,102	4,409	2,425	1,102		72
70		4,409	2,205	1,102	4,189	2,205	1,102		70
65		3,748	1,984	1,102	3,527	1,984	1,102		65
60		3,307	17,64	1,102	3,086	1,543	882		60
55		2,646	1,323	882	2,205	1,323	882		55
50		1,984	1,102	882	1,323	882	661		50



	T	128.6			142			T	
		0°	15°	30°	0°	15°	30°		
79		4,630	2,866	1,323	2,205	1,102	661		79
78		4,409	2,646	11,02	1,984	1,102	661		78
75		4,189	2,425	882	1,984	1,102	441		75
72		3,968	2,205	882	17,64	882	441		72
70		3,748	1,984	882	1,543	882	441		70
65		3,086	1,543	661	1,323	882	441		65
60		2,205	1,323	661	1,102	661	441		60
55		1,543	882	441	882	441			55
50		1,102	661		661				50

MAIN TECHNICAL PARAMETERS

CATEGORY	PROJECT			UNIT	PARAMETERS
Main performance parameters	Maximum rated lifting capacity			USt	45
	Minimum rated working radius			ft	4.9
	Slewing radius at turntable tail	At counterweight		ft	10.43
	Maximum load moment	Base boom		lb-ft	708,000
		Fully-extended boom		lb-ft	393,000
		Fully-extended boom + jib		lb-ft	231,000
	Outrigger span	Longitudinal		ft	20.3
		Lateral		ft	23.6 / 16.1 / 7.4
	Lifting height	Base boom		ft	37
		Fully-extended boom		ft	141
		Fully-extended boom + jib		ft	197
	Boom length	Base boom		ft	35.8
		Fully-extended boom		ft	142
		Fully-extended boom + jib		ft	195.5
	Jib offset angle			°	0, 15, 30
Working speeds	Time for raising boom			s	35
	Time for fully extending the boom			s	70
	Maximum slewing speed			rpm	≥1.2
	Time for extending/ retracting outriggers	Outrigger beam	Retracting	s	≤35
			Extending	s	≤35
		Outrigger jacks	Retracting	s	≤40
			Extending	s	≤40
	Hoisting speed (single line, no load)	Main winch system		fpm	≥394
Noise	Exterior radiation			dB(A)	≤109
	At driver position			dB(A)	≤85

	Superstructure
	Rated Lifting Load
	Counterweight
	Slewing Radius of Variable-Position Counterweight
	Hook Block
	Parts of Line
	Boom Length Combination
	Wind Speed
	Configuration
	Optional Equipment
	Wire Rope Length
	Wire Rope Diameter

	Boom
	Boom Length
	Working Radius
	Lifting Height with Boom
	Boom Angle
	Extension
	Independent Jib Head
	Simple Jib Head
	Fixed Jib
	Fixed Jib Length
	Fixed Jib Offset Angle
	Luffing Jib

DESCRIPTION OF SYMBOLS

	Maximum Single Line Pull
	Maximum Working Speed
	Main Winch
	Auxiliary Winch
	Chassis
	Outrigger span
	Tires
	Axle Load
	Gradeability
	Travel Speed
	Luffing
	EN 13000 Standard

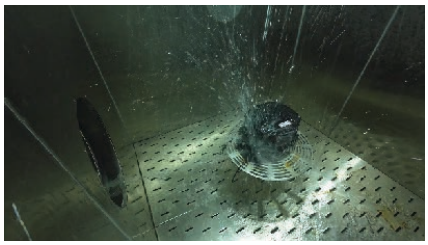
	Maximum Lifting Height
	Maximum Working Radius
	Super Llift
	Wind Power Jib
	Telescoping
	Slewing
	360° slewing
	360° Slewing with the 5th Jack Down
	Side and Rear Operation
	Operation Over front
	Operation Over Rear
	Luffing Jib Winch

TESTED AT EVERY LEVEL

- Each new technology and component must meet the most stringent design and quality protocols.
- Each complete machine undergoes rigorous run-in and testing, and components are subject to ongoing lifecycle testing.

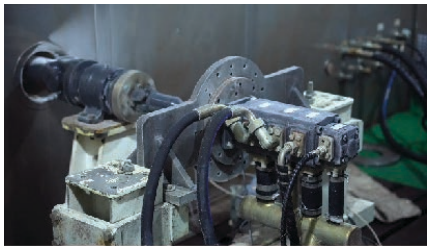
2,000+ COMPONENTS. 123 MANUFACTURERS. ALL LIFECYCLE TESTED.

HMI Display:
Low-Temperature Performance Test Under -40°F

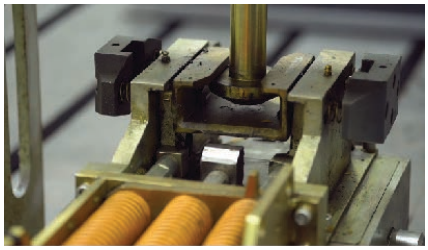


Length Measurement Sensor:
48-Hour Rain Test

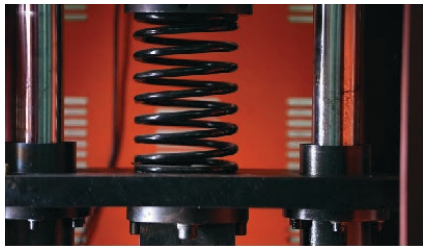
Panel Buttons: Cycled 1.2 Million Times



Hydraulic Pump: Low-Temperature
Performance Test Under -40°F



Telescoping Mechanism: Smoothness Test



Telescoping Mechanism: Smoothness Test

178 FULL-SCALE TESTS ON EVERY MACHINE BEFORE IT SHIPS

Dynamic & Static Lifting

Terrain Testing

Climbing & Hill Holding

NOTES FOR LIFTING

- The total rated loads shown in the load charts reflect maximum lifting capacity when the crane is set up on firm, level ground with the tires clear of the ground. The weight of the hook block, rigging, and rope between the boom tip and block must be deducted, along with any optional equipment such as the auxiliary sheave and jib.
- The working radius shown in the load charts is measured at the point when the load is lifted off the ground, and reflects the actual value including loaded boom deflection. The operator must account for boom deflection before beginning any lift.
- Lifting operations are only permitted when wind speed is below 46.2 ft/s and wind pressure is below 2.59 lb/ft².
- Before beginning a lift, the operator must know the weight of the load and the crane's working range, then select the appropriate working conditions. Never operate the crane beyond the limits shown in the chart. When the boom length or working radius falls between listed values, use the lower of the two. Always observe boom angle limits. Never exceed the recommended boom angle, even without a load, as doing so risks overturn.
- The boom must be extended according to the telescoping codes shown on the load charts.

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North American Crane Products

XCMG North America