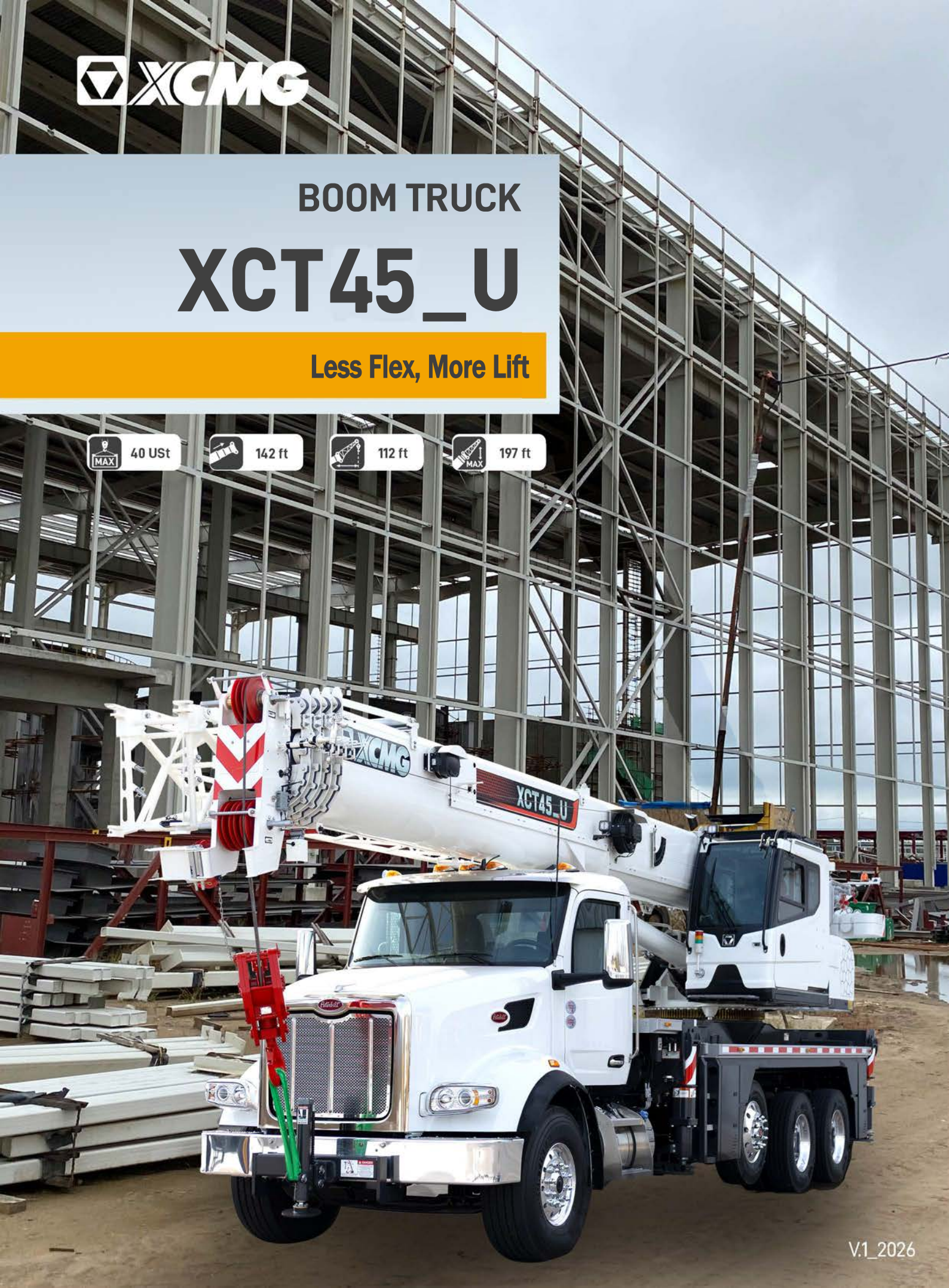
XCMG

BOOM TRUCK

XCT45_U

Less Flex, More Lift

40 USt | 142 ft | 112 ft | 197 ft



V.1_2026

CONTENTS

INDUSTRY LEADING PERFORMANCE

SUPERB LIFTING PERFORMANCE

- The 5-section U-shaped boom extends to 142 ft, matching the longest reach in the 40-ton class with less deflection and a stronger structure under load than a conventional box boom.
- Dual-cylinder wire-rope telescoping keeps extension and retraction synchronized.
- An optional three jib offset angles at 0°, 15°, and 30° across a 30.5 ft to 53.5 ft bi-fold jib provide greater operational flexibility.

HIGH WORKING EFFICIENCY SUPERIOR STABILITY

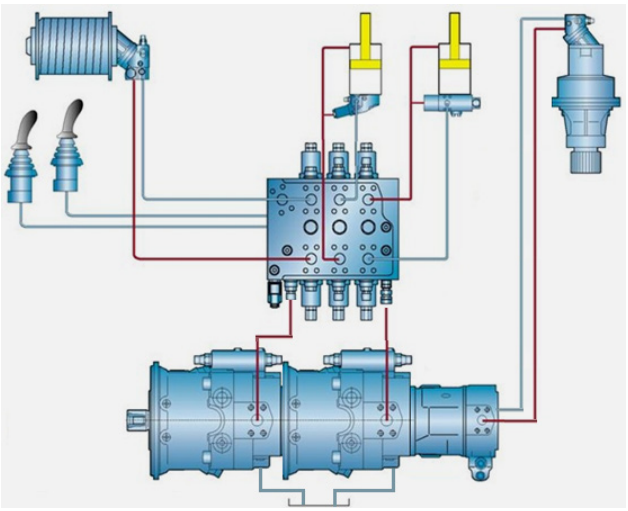
- Fast when the job demands speed. Precise when the lift demands control. Dual load sense variable displacement pumps with pilot controls deliver both.
- Minimum stable winch speed of 8.2 fpm and minimum stable slewing speed of 0.1°/s for pinpoint load placement.
- Hydraulic pilot controls for responsive operation.
- Smooth, controlled performance built for surgical lifting without sacrificing productivity.

The minimum stable slewing speed
0.1 °/s

The minimum stable lifting speed (at drum)
2.5 m/min (8.2 fpm)

ADVANCED HYDRAULIC SYSTEM

- Energy-saving hydraulic system improves fuel efficiency and reduces operating costs.
- High-power independent hydraulic oil cooling system extends working time and reliability.
- Dual-pump combined/divided flow control with high-displacement pumps and active compensation technology improves hoisting efficiency.



OUTRIGGER WIRELESS REMOTE CONTROL

- Wireless outrigger deployment within a 328 ft range.

MAIN WINCH LUFFING WIRELESS REMOTE CONTROL

- Wireless control of main winch hoisting and luffing operations. Built for a one-man crew.

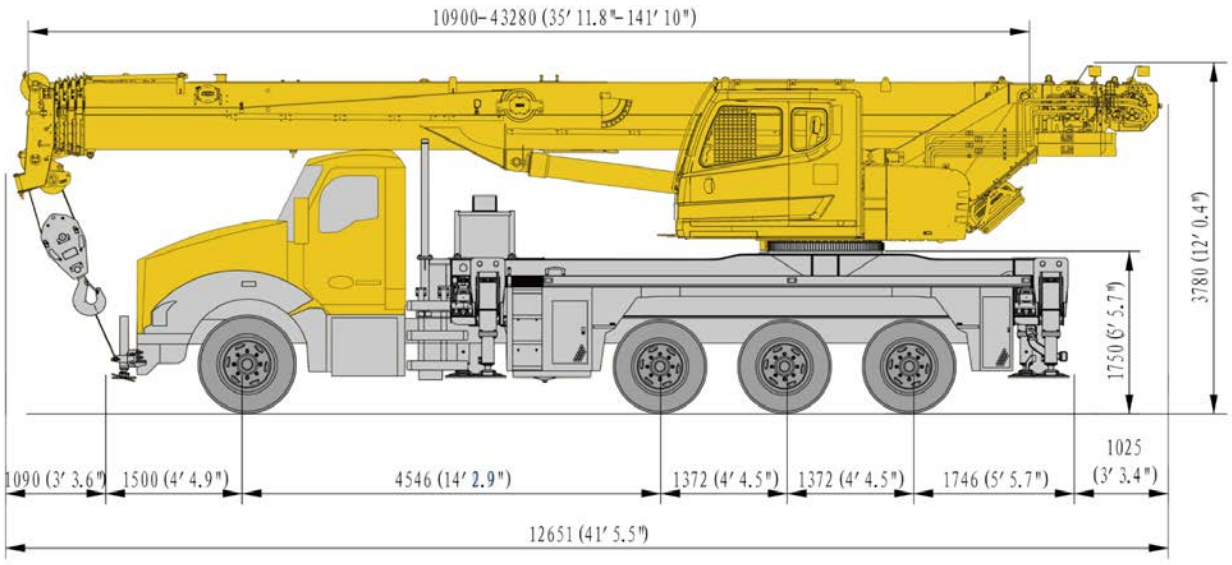
SMART LIFT PLANNING

- The onboard system automatically recommends the best operating mode for the task.
- Search, select, and set working conditions in seconds. Less time planning the lift, more time making it.

COMFORT-DRIVEN CAB DESIGN

Redesigned driver and operator cab interiors put comfort and control where they should be, within reach. Every switch, sight line, and access point built around how operators actually work. Easier drives. Smoother operations. Faster maintenance.

Operator's Cab	0°–20° tiltable cab for wider visibility and a comfortable, purpose-built workspace.
Touchscreen	7-inch true-color touchscreen puts key information and machine intelligence at the operator's fingertips. Easy to learn, logical to anyone who's run a crane.
Zoned Controls	Three dedicated control zones for safety, lifting, and operating to keep everythhing within reach.



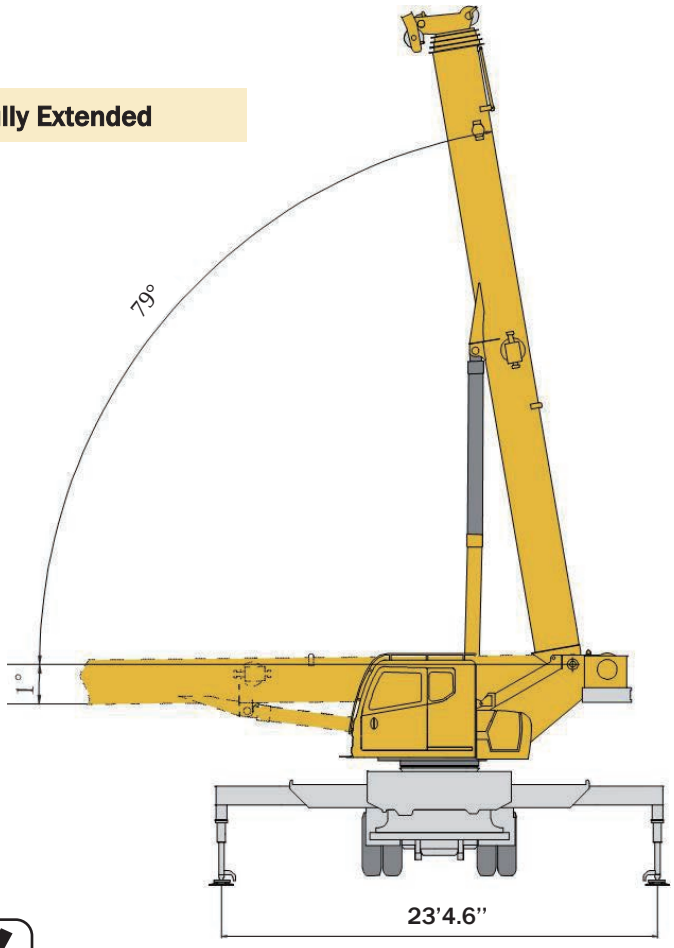
CHASSIS DATA	FRONT AXLE GROSS WEIGHT RATING	REAR AXLE GROSS WEIGHT RATING	PUSHER AXLE WEIGHT RATING
Weight	22,000 lb	46,000 lb	13,500 lb

	CRANE (STANDARD)	FIX JIB	AUXILIARY WINCH (INCLUDING ROPE)
Weight	45,465 lb	1,854 lb	1,274 lb

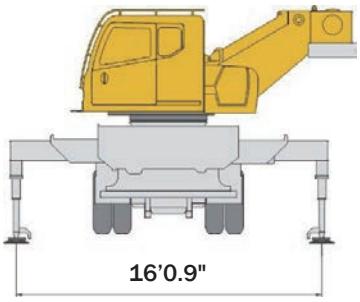
HOOK BLOCKS	NO. OF SHEAVES	PARTS OF LINE	WEIGHT	REMARKS
40 USt	4	8	794 lb	Single hook
27.5 USt	3	6	440 lb	Single hook
15 USt	1	3	400 lb	Single hook
5.5 USt	—	1	220 lb	Single hook

DIMENSIONS

Fully Extended



Half Extended



	WORKING SPEEDS	MAXIMUM SINGLE LINE PULL	ROPE DIAMETER/ LENGTH
①	0-394 fpm, Single line, 4th layer	11,023 lb	0.63 in / 410 ft
②	0-394 fpm, Single line, 4th layer	11,023 lb	0.63 in / 423 ft
	0-1.2 r/min		
	Approximately 35s for boom elevation from -1° to 79°		
	Approximately 70s for boom extension from 35.8 ft to 142 ft		

	INTERMEDIATE FRAME
Subframe	Designed and manufactured by XCMG, with all covered walking surface, made of high strength steel with inverted trapezoid cross section.
Outriggers	H-type outrigger beams with 4-point supported are wireless controlled. Wireless remote controller is standardly equipped. There is a mechanical control outrigger panel installed at rear side of chassis, with level gauge to level crane. The outrigger leg is stored under the outrigger jack with the ball hinge device. Fully-extended: 20.3 ft×23.6 ft half-extended: 20.3 ft×16 ft
Hydraulic System	The hydraulic system of outriggers is a constant displacement open-circuit system. The variable piston pump is connected to the transmission through PTO.

	SUPERSTRUCTURE
Subframe	Designed and manufactured by XCMG, made of high-strength steel.
Hydraulic System	Variable plunger pump is used for lifting, elevating, and telescoping; the gear plunger pump is used for slewing; load-sensing proportional multi-way directional control valve controlled by electric proportional pilot hydraulic oil is adopted; air-cooled hydraulic oil radiator is applied, which effectively reduces oil temperature of the system. Effective volume of oil tank: 149 gal
Control System	Pilot hydraulic proportional control is available. CAN bus power limit control system. In addition to the conventional control function, it also has the lifting planning, engine parameter virtual instrument display, fault diagnosis, etc.
Main 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 balanced valve and a grooved drum equipped.
Operator's Cab	New fully-enclosed steel tiltable cab with a full-view front window. Safety glass and sun screen are used for windows. Wipers are fitted for windshield and roof window. Standard controls and indicators are ergonomically arranged in the cab. The cab features a new ergonomic seat design with backrest adjustment and armrests with levers fitted. A sliding door and a pull-out step are available to make it easy and safe as access and egress the cab.
Slewing 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 balanced valve and a grooved drum equipped.
Safety Devices	Hydraulic balance valve, Hydraulic relief valve, Double-way hydraulic valve, LMI. Lowering limiter for preventing wire rope from over-releasing. Anti-two block at boom head for preventing wire rope from over-winding.
LMI	The LMI is installed in the control box with its display mounted in the operator's cab. When the actual moment approaches the overload value, it sends a visual alarm and automatically stops dangerous movements before overloading. Overload memory function (black box) and fault self-diagnosis function are available.
Counterweight	Total weight is 4409 lbs, fixed counterweight.
Hook Blocks	5.5 USt

TECHNICAL SPECIFICATIONS

	BOOM SYSTEM
Boom	5-section, U-shape cross section welding structure. The double-cylinder plus ropes telescoping system. Two double-acting cylinders with safe valve assemblies used for control of the telescoping movement of all booms. Boom length: 35.8 ft ~ 142 ft Boom angle: -1°~ 79°
Auxiliary sheave	Fitted at boom head, used for 8 parts of line and single line operation . Its lifting performance is the same as that for boom, but the maximum lifting load could not exceed 11023 lbs.

	OPTIONAL EQUIPMENT
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.
Jib	The jib consists of a connecting bracket, a mechanical link and two lattice sections. Three offset angles of 0°, 15° and 30° are available. Jib length: 30.5 ft, 53.5 ft
Hook Blocks	40 USt, 27.5 USt, 15 USt
Fifth Jack	By adding the 5th jack, 360° full slewing operation is available
Nylon Outrigger Pad	Including an outrigger pad storage box and five nylon outrigger pads, which increase the contact area with the ground to provide stable support and ensure operational safety.
Fixing Device of Hook Block	The middle hook can be secured to the auxiliary frame to prevent it from obstructing the forward driving visibility.
Wireless Boom Head Camera (Outside the Boom)	Wireless zoom camera monitors the status of the boom head, expanding the operator's field of view.
Turntable Locking Device	During superstructure operation, the slewing mechanism can be locked at any position during slewing.
Wireless Remote Control Optional Package	The crane's luffing and main winch up/down are operated by wireless remote control.

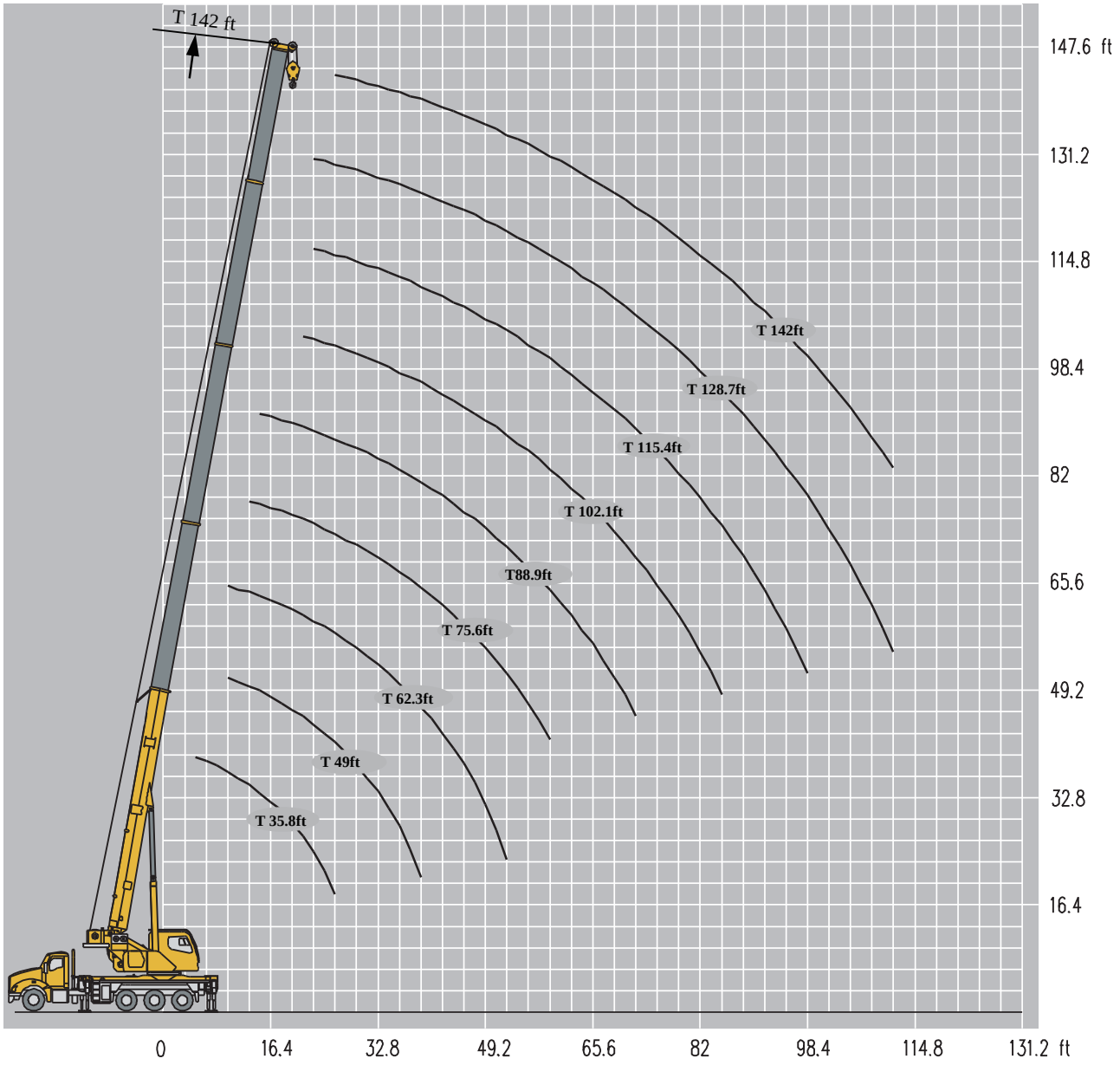
Please refer to the product quotation for specific parts.

Less Flex, More Lift

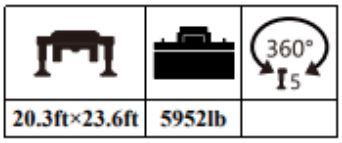
BOOM	BOOM + ONE JIB SECTION	BOOM + TWO JIB SECTIONS
T: 35.8~142 ft	T: 142 ft J: 30.5 ft	T: 142 ft J: 30.5~53.5 ft

WORKING RANGE DIAGRAM

BOOM



35.8ft~142ft

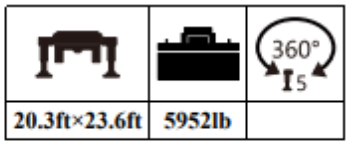


20.3ft×23.6ft | 5952lb

ft	35.8	49.2	62.3	75.5	88.9	102	115.5	128.6	142				ft
4.9	89948*												4.9
6.6	70547												6.6
8.2	61729												8.2
9.8	55115	46297	41667										9.8
11.5	54013	46297	41667										11.5
13.1	49603	46076	41667	30864									13.1
14.8	46297	44092	41667	30864	28660								14.8
16.4	43210	40565	38580	30864	27557								16.4
18	39021	37919	35714	30864	26896								18
19.7	34832	35053	33510	30864	25353								19.7
21.3	31746	30864	30864	30423	24250	18959							21.3
23	29321	29541	29982	28880	23368	18959	14550	10802					23
26.2	24471	26896	26675	26014	21825	16755	14550	10802	8818				26.2
27.9	21825	24912	24912	24250	21384	16314	13889	10802	8818				27.9
28.2	21164	24471	24471	23809	21164	16093	13668	10802	8818				28.2
28.5	20723	24030	24250	23368	21164	16093	13668	10802	8818				28.5
29.5		22707	23148	22266	20723	15652	13227	10802	8818				29.5
32.8		20723	20502	20502	19841	14991	13007	10802	8818				32.8
36.1		17857	17636	18739	17857	14550	12786	10582	8818				36.1
39.4		15211	15211	16314	15432	13889	12566	10582	8818				39.4
41.3		14109	13889	15211	14330	13448	12125	10361	8818				41.3
41.7		13889	13668	14991	14109	13448	11904	10361	8818				41.7
42		13668	13448	14770	13889	13448	11904	10361	8818				42
42.7			13007	14330	13889	13227	11684	10361	8818				42.7
45.9			11684	12786	12786	12125	10802	10141	8157				45.9
49.2			10141	11243	11464	10802	10361	9259	7936				49.2
52.5			9038	10361	10141	10141	9700	8598	7495				52.5
54.5			8377	9700	9700	9700	9259	8157	7275				54.5
54.8			8377	9700	9479	9479	9038	8157	7054				54.8
55.1				9479	9479	9479	9038	8157	7054				55.1

LOAD CHARTS

35.8ft~142ft



20.3ft×23.6ft | 5952lb

ft	35.8	49.2	62.3	75.5	88.9	102	115.5	128.6	142				ft
59.1				8377	8377	8377	7936	7716	6393				59.1
65.6				6834	7054	7054	7054	6613	5952				65.6
67.6				6172	6834	6834	6834	6172	5732				67.6
67.9				6172	6613	6613	6613	6172	5511				67.9
68.2				5952	6613	6613	6613	6172	5511				68.2
72.2					5952	5952	5952	5291	4850				72.2
78.7					4850	5070	5070	4629	3747				78.7
81					4409	4850	4850	4409	3527				81
81.4					4188	4629	4629	4188	3527				81.4
81.7					4188	4629	4629	4188	3527				81.7
85.3						4188	4188	3747	3086				85.3
91.9						3527	3527	3086	2425				91.9
94.2						3086	3306	2866	2204				94.2
94.5						3086	3306	2866	2204				94.5
94.8						3086	3306	2866	2204				94.8
98.4							3086	2425	1984				98.4
105							2645	1984	1322				105
107.3							2204	1763	1102				107.3
107.6							2204	1763	1102				107.6
107.9							2204	1763	1102				107.9
111.5								1543	881				111.5
118.1								1102	661				118.1
121.4								881	440				121.4

35.8ft~142ft

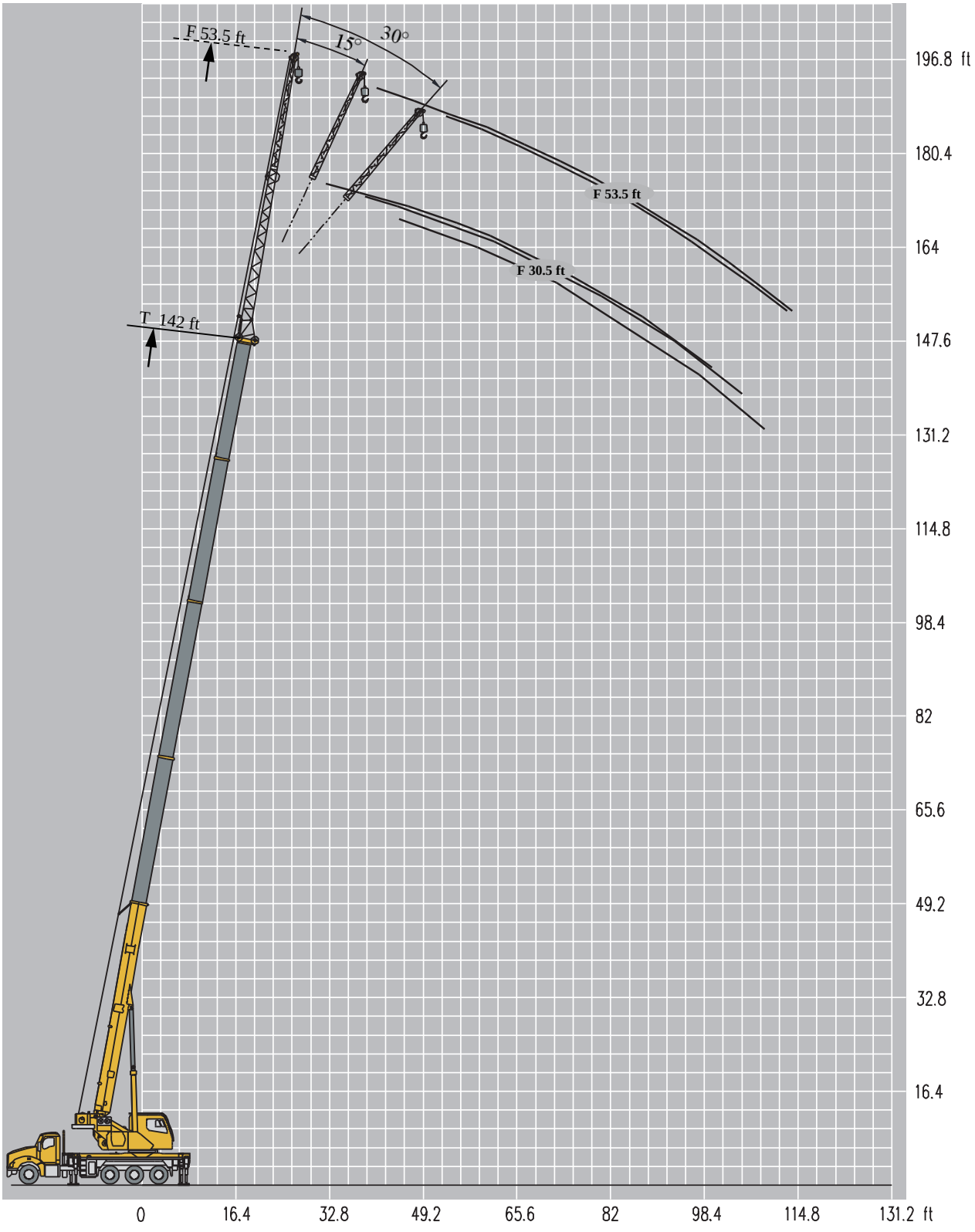
20.3ft×23.6ft

4409lb

ft	35.8	49.2	62.3	75.5	88.9	102	115.5	128.6	142				ft
4.9	89948*												4.9
6.6	70547												6.6
8.2	61729												8.2
9.8	55115	46297	41667										9.8
11.5	54013	46297	41667										11.5
13.1	49604	46076	41667	30864									13.1
14.8	46297	44092	41667	30864	28660								14.8
16.4	43210	40565	38581	30864	27558								16.4
18	39021	37919	35715	30864	26896								18
19.7	34833	35053	33510	30864	25353								19.7
21.3	31746	30864	30864	30423	24251	18960							21.3
23	29101	29101	29983	28880	23369	18960	14550	10803					23
26.2	24251	26455	26676	26014	21826	16755	14550	10803	8818				26.2
29.5		22487	22707	22046	20723	15653	13228	10803	8818				29.5
32.8		20503	20503	20282	18960	14991	13007	10803	8818				32.8
36.1		17637	17416	18519	17857	14550	12787	10582	8818				36.1
39.4		14991	14991	16094	15432	13889	12566	10582	8818				39.4
42.7			12787	14109	13889	13228	11684	10362	8818				42.7
45.9			11243	12346	12787	12125	10803	10141	8157				45.9
49.2			9921	11023	11464	10803	10362	9259	7937				49.2
52.5			8818	9921	10141	10141	9700	8598	7496				52.5
59.1				7937	8157	8377	7716	7716	6393				59.1
65.6					6834	7055	7055	6614	5952				65.6
72.2					5512	5512	5952	5291	4630				72.2
78.7						4850	5071	4409	3748				78.7
85.3						3748	4189	3527	2866				85.3
91.9							3527	2866	2205				91.9
98.4							2646	1984	1543				98.4
105								1543	1102				105
111.5								1102	661				111.5

* Capacity class.

JIB


F 53.5 ft
15°
30°
F 53.5 ft
F 30.5 ft
T 142 ft
196.8 ft
180.4
164
147.6
131.2
114.8
98.4
82
65.6
49.2
32.8
16.4
0
16.4
32.8
49.2
65.6
82
98.4
114.8
131.2 ft

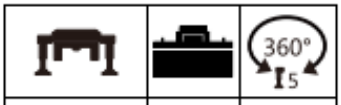
LOAD CHARTS


30.5 ft

		
20.3ft×23.6ft	5952 lb	

		102			115.5				
		0°	15°	30°	0°	15°	30°		
79		11023	6834	3307	9259	6393	3086	79	
78		10803	6393	3086	9259	5952	3086	78	
75		9700	5732	2866	9039	5512	2866	75	
72		9039	5291	2866	8157	5071	2646	72	
70		8598	4850	2646	7496	4850	2646	70	
65		6614	4409	2646	5512	4189	2425	65	
60		4850	3968	2425	3968	3527	2425	60	
55		3527	3307	2205	2866	2646	2205	55	
50		2646	2425	2205	1984	1984	1764	50	

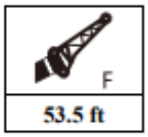
30.5 ft



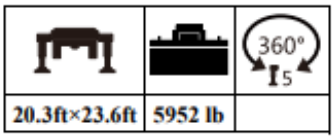
20.3ft×23.6ft | 5952 lb

		128.6			142				
		0°	15°	30°	0°	15°	30°		
79		6834	5952	3307	3747	3306	2645	79	
78		6614	5732	3086	3527	3306	2645	78	
75		6393	5291	2866	3306	3306	2645	75	
72		6173	4850	2646	3086	3086	2425	72	
70		5732	4409	2646	2866	2866	2425	70	
65		4189	3527	2425	2866	2645	2425	65	
60		3086	2646	2205	2645	2425	2204	60	
55		2205	1984	1764	1984	1763	1543	55	
50		1323	1323	1323	1322	1102	1102	50	

LOAD CHARTS



53.5 ft



20.3ft×23.6ft | 5952 lb

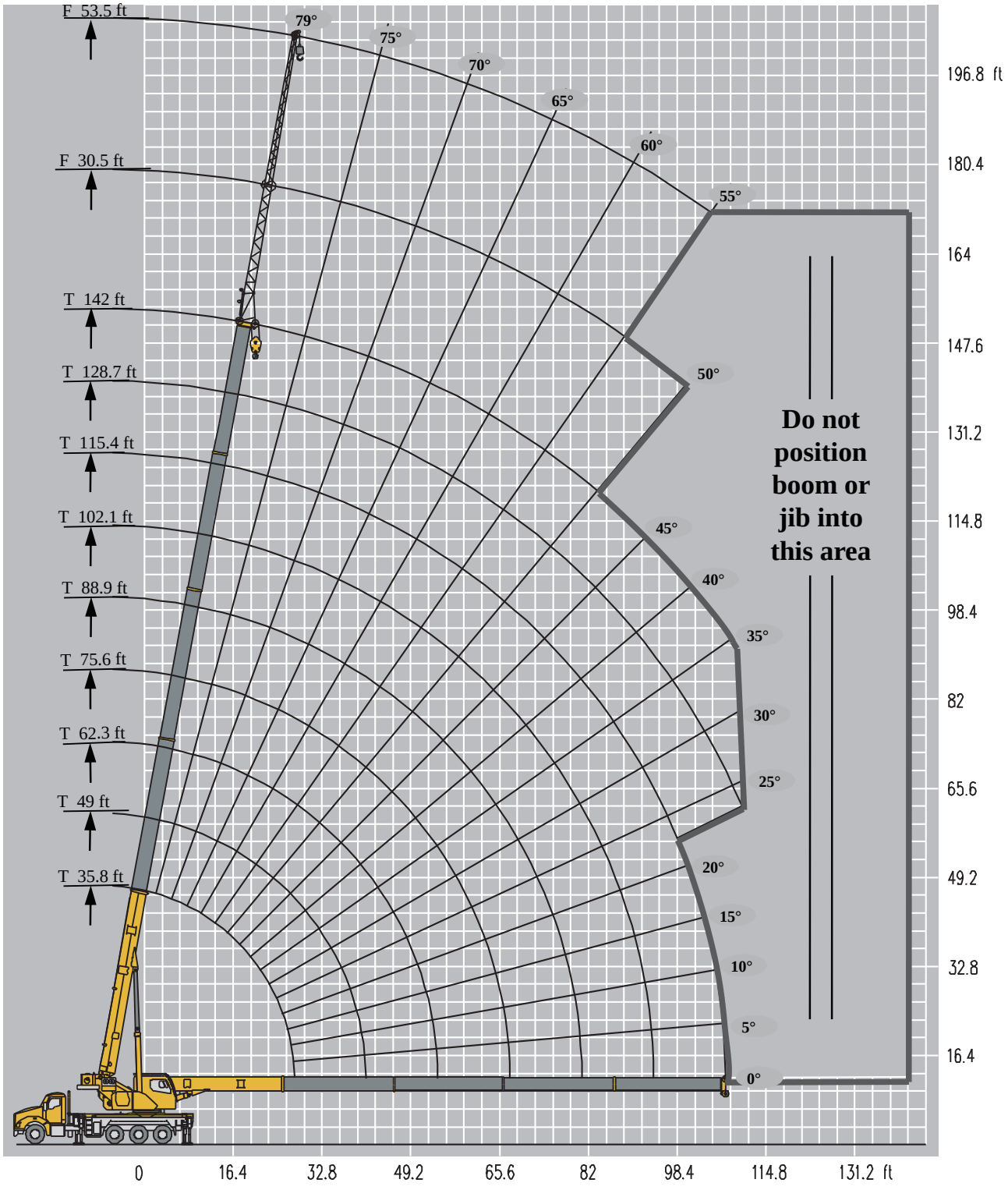
		102			115.5				
		0°	15°	30°	0°	15°	30°		
79		6614	2866	1543	5512	2866	1543	79	
78		5952	2866	1543	5071	2866	1323	78	
75		5291	2646	1323	4630	2425	1102	75	
72		4630	2425	1102	4409	2425	1102	72	
70		4409	2205	1102	4189	2205	1102	70	
65		3748	1984	1102	3527	1984	1102	65	
60		3307	1764	1102	3086	1543	882	60	
55		2646	1323	882	2205	1323	882	55	
50		1984	1102	882	1323	882	661	50	

53.5 ft

20.3ft×23.6ft

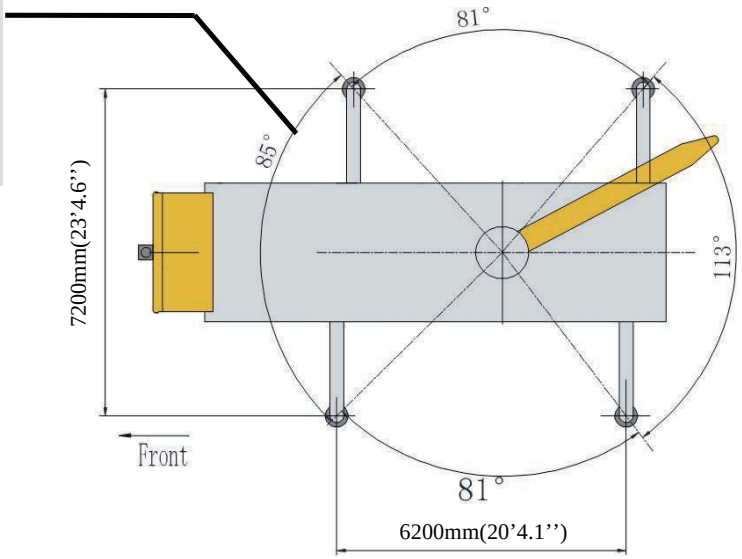
5952 lb

		128.6			142				
		0°	15°	30°	0°	15°	30°		
79		4630	2866	1323	2204	1102	661	79	
78		4409	2646	1102	1984	1102	661	78	
75		4189	2425	882	1984	1102	440	75	
72		3968	2205	882	1763	881	440	72	
70		3748	1984	882	1543	881	440	70	
65		3086	1543	661	1322	881	440	65	
60		2205	1323	661	1102	661	440	60	
55		1543	882	441	881	440		55	
50		1102	661		661			50	

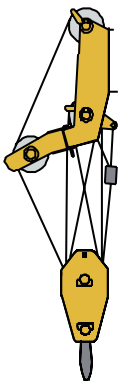
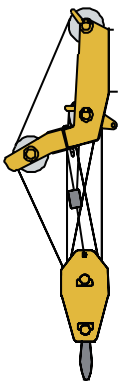
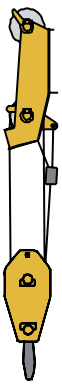
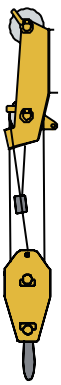
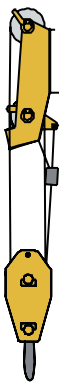
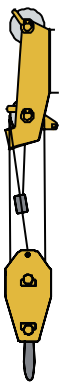
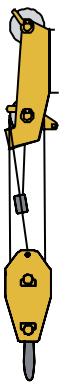
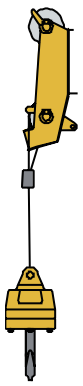

F 53.5 ft
F 30.5 ft
T 142 ft
T 128.7 ft
T 115.4 ft
T 102.1 ft
T 88.9 ft
T 75.6 ft
T 62.3 ft
T 49 ft
T 35.8 ft
79°
75°
70°
65°
60°
55°
50°
45°
40°
35°
30°
25°
20°
15°
10°
5°
0°
Do not position boom or jib into this area
196.8 ft
180.4
164
147.6
131.2
114.8
98.4
82
65.6
49.2
32.8
16.4
0
16.4
32.8
49.2
65.6
82
98.4
114.8
131.2 ft

WORKING AREAS

In order to take advantage of full 360° rotation, the fifth jack must be set in accordance with the manual before working in this area, and the machine must be level. If the fifth jack is lowered, the crane can only be operated with the boom over the side or over the rear of the crane.



REEVING DIAGRAM

ALLOWABLE LINE PULL								WARNING
8 parts of line	7 parts of line	6 parts of line	5 parts of line	4 parts of line	3 parts of line	2 parts of line	1 part of line	
								Refer to the owners manual Incorrect reeving or incorrect input of parts of line may result in serious accidents. Keep at least three turns of rope left on
82,252 lb	72,683 lb	62,913 lb	52,954 lb	42,787 lb	32,412 lb	21,826 lb	11,023 lb	—

Category	Item		Unit	Parameters
Dimensions	Dimensions (L×W×H)		ft	41.5×8.2×12.4
	Axle spacing		ft	14.9+4.5+4.5
	Track (front/rear)		ft	6.8/7/6.1/6.1
Weights	Maximum permissible total weight		lb	72536.4
	Axle load	Axle 1	lb	17822.1
		Axle 2	lb	15432.3
		Axle 3	lb	19641
		Axle 4	lb	19641
Travel	Maximum travel speed		mph	≥65
	Minimum turning diameter		ft	≤78.8
	Minimum turning diameter at boom head		ft	≤85.3
	Minimum ground clearance		ft	1
	Approach angle		°	16
	Departure angle		°	13

TABLE OF MAIN TECHNICAL PARAMETERS

Category	Item			Unit	Parameters
Main performance	Maximum rated total lifting capacity			t (USt)	40.8 (45)
	Minimum rated working radius			m (ft)	1.5 (4.9)
	Slewing radius at turntable tail	At counterweight		mm (ft)	3180 (10.43)
	Maximum load moment	Base boom		kN·m (lb·ft)	960 (708000)
		Fully-extended boom		kN·m (lb·ft)	533 (393000)
		Fully-extended boom + jib		kN·m (lb·ft)	313 (231000)
	Outrigger span	Longitudinal		m (ft)	6.2 (20.3)
		Lateral (fully extended/half extended/fully retracted)		m (ft)	7.2 (23.6)/4.9 (16.1)/2.26 (7.4)
	Lifting height	Base boom		m (ft)	11.3 (37)
		Fully-extended boom		m (ft)	43.0 (141)
		Fully-extended boom + jib		m (ft)	60.0 (197)
	Boom length	Base boom		m (ft)	10.9 (35.8)
		Fully-extended boom		m (ft)	43.3 (142)
		Fully-extended boom + jib		m (ft)	59.6 (195.5)
	Jib offset angle			°	0, 15, 30
Working speeds	Time for raising boom			s	35
	Time for fully extending boom			s	70
	Maximum slewing speed			r/min(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		m/min (fpm)	≥120 (394)
Noise	Exterior radiation			dB(A)	≤109

	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 Lift
	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

ENGINEERED AND BUILT FOR QUALITY

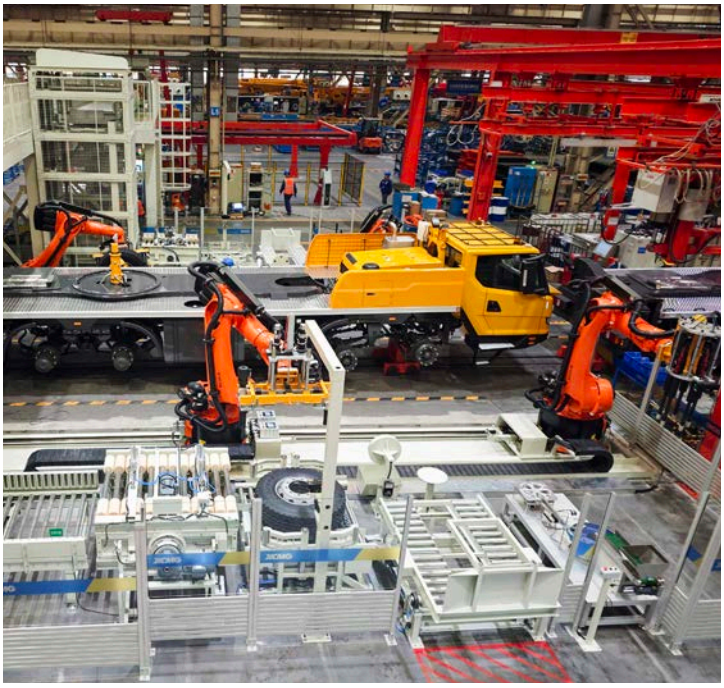
- Every XCMG crane starts as a digital model and stays digitally controlled through every step of production. From robotic welding to automated painting, the manufacturing process is built to deliver consistent quality at every stage.

Smart Component Production

Automated Production Line

Robotic Welding

Automated Painting to Ensure Consistent Quality



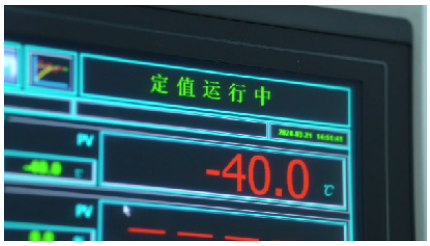
Robotic Assembly

CONSISTENT, SAFE, AND RELIABLE MACHINES

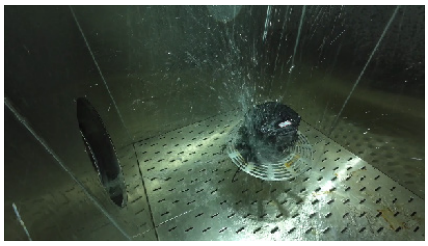
TESTED AT EVERY LEVEL

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

OVER 2,000 COMPONENTS FROM 123 MANUFACTURES UNDERGOING LIFE CYCLE TESTING

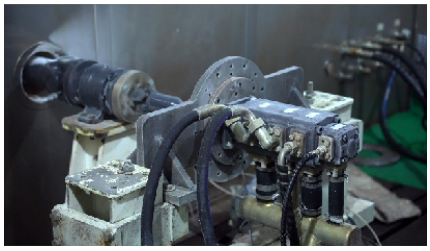


HMI Display: Low-Temperature Performance Test Under -40℃

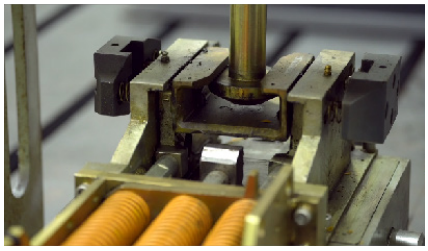


Length Measurement Sensor: 48-Hour Rain Test

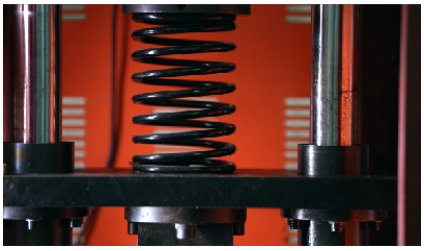
Panel Buttons: Cycled 12 Million Times



Hydraulic Pump: Low-Temperature Performance Test Under -40℃



Telescoping Mechanism: Smoothness Test



Telescoping Mechanism: Smoothness Test

178 POST-PRODUCTION FULL-SCALE TESTS ON EVERY COMPLETE MACHINE

Dynamic & Static Lifting

Terrain Testing

Climbing & Hill Holding

NOTES FOR LIFTING

- The total rated loads given in the rated load charts are the maximum lifting capacity when the crane is set up on firm and level ground with the tires free of the ground. The weights of the hookblock, rigging and the rope between the boom tip and block must be deducted as well as optional items such as the auxiliary sheave and jib.
- The working radius shown in the rated load charts is the radius when the load is lifted off the ground, and it is the actual value including loaded boom deflection. The operator will need to take boom deflection into consideration before beginning a lifting operation.
- A lifting operation is permissible only when the wind force is below grade 5 (instantaneous wind speed is 14m/s (46.2ft/s), and wind pressure is below 124Pa (2.59lb/ft2).
- Before beginning lifting operation, the operator should know the weight of the load to be lifted and the crane's working range, and then select proper working conditions. Never operate the crane beyond the limit shown in the chart. Use the lower value from the chart when the boom length or working radius is between the range of values.
- Observe the boom angle limit. Never operate the crane with the boom angle beyond the recommended limit even if a load is not being carried. Otherwise, the crane may overturn.
- The boom should be extended according to the telescoping codes shown on the load charts.

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Lawrenceville, GA 30046
Email: cranes@xcmgusa.com
Website: xcmg-usa.com/products/cranes-and-hoisting/

American Crane Products

XCMG North America