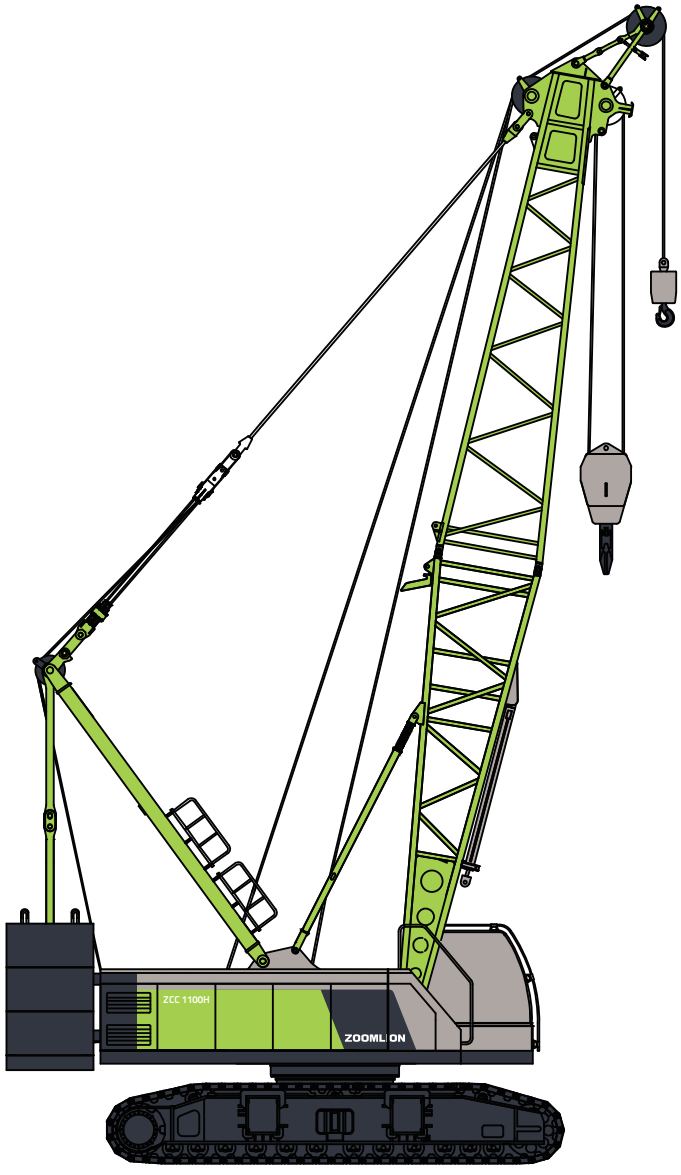
CRAWLER CRANE
ZCC1100H

ZOOMLION

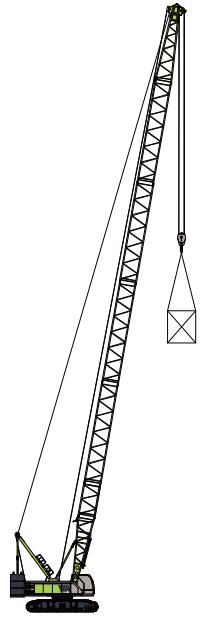
en.zoomlion.com

Technical Specifications

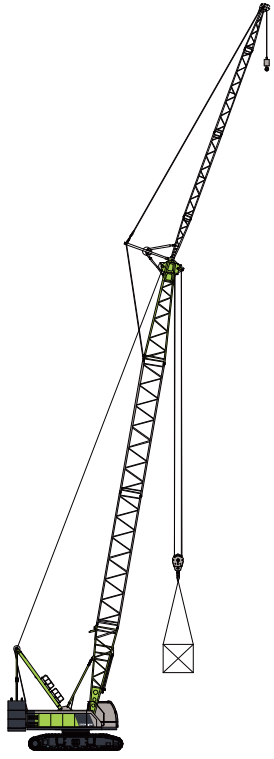
This document can not be leaked out and duplicated in any forms.



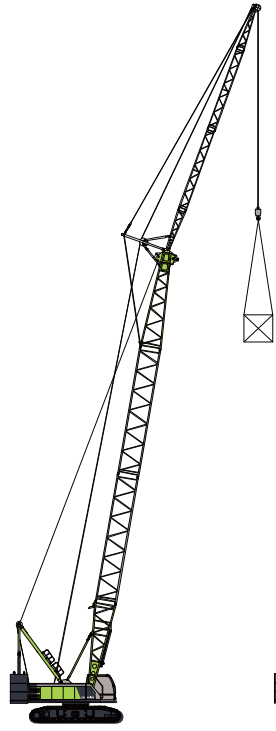
Boom Configrations



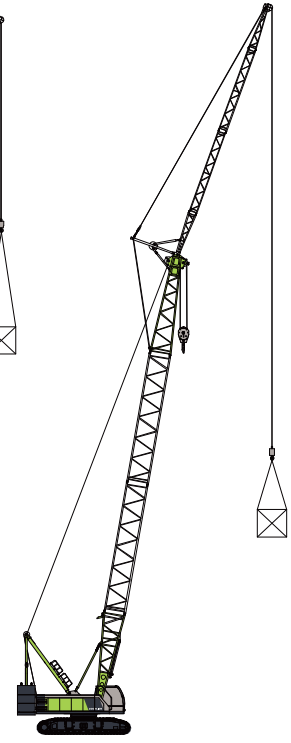
Main boom
Maximum lifting capacity: 220500 lb×10'6"
Main boom length: 42'8"-219'10"



Main boom with fixed jib
Maximum lifting capacity: 64166 lb×30'
Main boom length: 101'9"-180'5"



Main boom with fixed jib
Maximum lifting capacity: 17640 lb×70'
Main boom length: 101'9"-180'5"
Fixed jib length: 19'8"-59'



Main boom with fixed jib (with main load hook)
Maximum lifting capacity: 17640 lb×60'
Main boom length: 101'9"-180'5"
Fixed jib length: 19'8"-59'

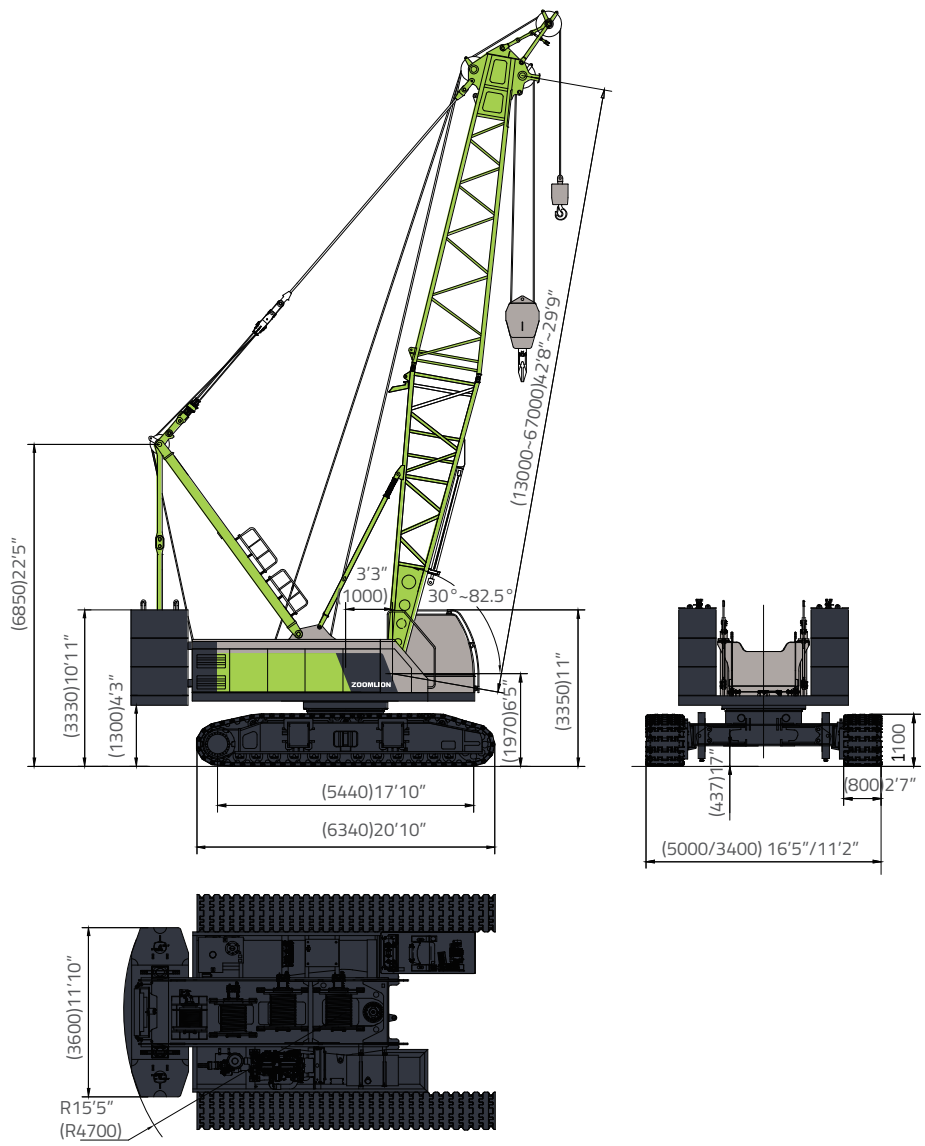
Parameters

Main technical parameters

Item		Unit	Value	Remarks
Max.lifting capacity/radius		US Tons/ft(mt/m)	110/10'6"(100/3.2)	
Max.lifting capacity of fixed jib		US Tons (mt)	8.8(8)	
Main boom length		ft(m)	42'8"-219'10"(13-67)	
Fixed jib length		ft(m)	19'8"-59'(6-18)	
Max.length of main boom with fixed jib		ft(m)	180'5"+59'(55+18)	
Main boom angle		°	30-82.5	
Fixed jib angle		°	10,30	
Rope speed of hoisting winches 1 and 2	With free-fall function	ft/min(m/min)	325(99)	On the 4th rope layer
	Without free-fall function	ft/min(m/min)	393(120)	On the 4th rope layer
Single rope speed of derricking winch		ft/min(m/min)	190(58)	On the 4th rope layer
Max./rated single rope force of hoisting winches 1 and 2	With free-fall function	Lbs(mt)	44100/29988(20/13.6)	On the 1st rope layer
	Without free-fall function	Lbs(mt)	31311/27342(14.2/12.4)	On the 1st rope layer
Max.single rope force of derricking winch		Lbs(mt)	15656(7.1)	On the 1st rope layer
Slewing speed		r/min	0-2.3	
Traveling speed(high/low speed)		mph(km/h)	0.78/0.31(1.25/0.5)	
Gradeability		%(°)	30%(16.7°)	
Max.transport weight of basic machine		Lbs(mt)	99887(45.3)	
Deadweight(with basic boom)		Lbs(mt)	189630(86)	
Counterweight		Lbs(mt)	61740(28)	Rear counterweight
			22050(10)	Central counterweight
Slewing radius		ft(m)	15'5"(4.7)	
Overall dimensions(L×W×H)		ft(m)	45'3"×11'2"×11'(13.8×3.4×3.35)	
Ground clearance of the undercarriage		ft(mm)	17"(437)	
Engine	Type		Cummins QSL9-280	
	Rated power	HP@RPM(Kw@RPM)	280@2100(209@2100)	
	Max.output torque	Lbs · ft@RPM(N · m@RPM)	1050@1500(1424@1500)	
	Exhaust standard		According to U.S.EPA Tier 3	
Distance between track center×crawler contact length×crawler width		ft(m)	8'2"×17'10"×2'7"(2.5×5.44×0.8)	Crawler carrier retracted
			13'9"×17'10"×2'7"(4.2×5.44×0.8)	Crawler carrier extended

Parameters

Overall dimensions



Main Boom Configuration

Main boom length ft(m)					Tip boom
	9'10"(3)	19'8"(6)	29'6"(9)	29'6"A(9A)	
42'8"(13)	-	-	-	-	√
52'6"(16)	1	-	-	-	√
62'4"(19)	-	1	-	-	√
72'3"(22)	-	-	1	-	√
82'(25)	1	-	1	-	√
91'11"(28)	-	1	1	-	√
101'9"(31)	1	1	1	-	√
111'6"(34)	1	-	2	-	√
121'5"(37)	-	1	2	-	√
131'3"(40)	1	1	2	-	√
141'2"(43)	1	-	3	-	√
150'11"(46)	-	1	3	-	√
160'10"(49)	1	1	3	-	√
170'8"(52)	1	-	4	-	√
180'5"(55)	-	1	4	-	√
190'4"(58)	1	1	4	-	√
200'2"(61)	1	-	4	1	√
210'(64)	-	1	4	1	×
219'10"(67)	1	1	4	1	×

Note:
(1)29'6"(9)main boom intermediate section has no connection hole for installation of intermediate tensioner.
(2)29'6"A(9A)main boom intermediate section has connection holes for installation of intermediate tensioner.
(3)"√"means the tip boom can be mounted,"×"means the tip boom can not be mounted,"-" means there is no need to mount the intermediate section.

Fixed jib configuration

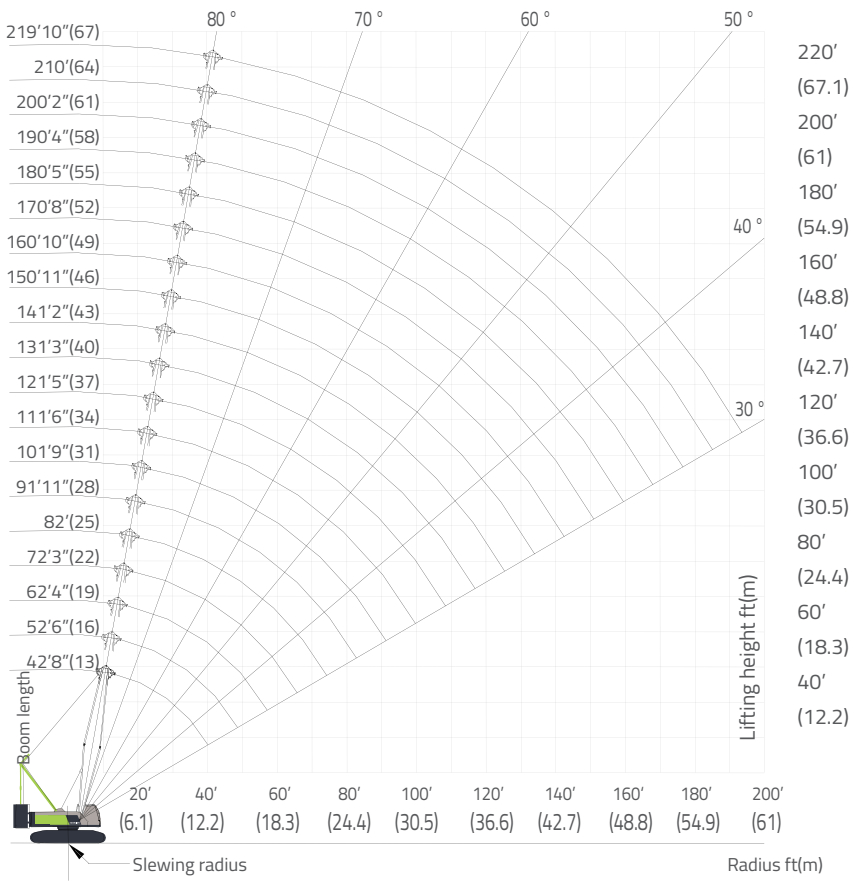
Fixed jib length ft(m)	Fixed jib pivot section	19'8"(6m)fixed jib intermediate section	Fixed jib head
19'8"(6)	1	0	1
39'4"(12)	1	1	1
59'(18)	1	2	1

Note:The main boom combination in fixed jib configuration is the same as that in main boom configuration.

Lifting Performance On S-1 Boom

The lifting capacity chart here is only for reference,and the operator can refer to rated lifting capacity shown on the load moment limiter.

Lifting Height On S-1 Boom



Note:The deflection of boom is not taken into consideration

Lifting Performance

Lifting capacity on S-1 boom

Radius ft(m)	Main boom length ft(m)								
	42'8"(13)	52'6"(16)	62'4"(19)	72'3"(22)	82'(25)	91'11"(28)	101'9"(31)	111'6"(34)	121'5"(37)
10'6"(3.2)	220.5(100)								
12(3.7)	193.2(87.6)								
13(4)	179.9(81.6)								
14(4.3)	171.1(77.6)								
15(4.6)	161.2(73.1)	159.0(72.1)							
16(4.9)	151.9(68.9)	151.7(68.8)	146.0(66.2)						
17(5.2)	142.9(64.8)	142.4(64.6)	138.7(62.9)						
18(5.5)	134.9(61.2)	134.3(60.9)	131.4(59.6)	131.4(59.6)					
19(5.8)	127.9(58)	127.2(57.7)	126.1(57.2)	124.1(56.3)					
20(6.1)	120.2(54.5)	121.1(54.9)	120.2(54.5)	119.7(54.3)	116.2(52.7)				
25(7.6)	89.3(40.5)	89.1(40.4)	89.1(40.4)	88.8(40.3)	88.8(40.3)	88.6(40.2)	88.4(40.1)	88.2(40.0)	
30(9.1)	69.5(31.5)	69.2(31.4)	69.0(31.3)	68.8(31.2)	68.8(31.2)	68.6(31.1)	68.4(31.0)	68.1(30.9)	67.9(30.8)
35(10.7)	55.8(25.3)	55.6(25.2)	55.3(25.1)	55.3(25.1)	55.1(25.0)	54.9(24.9)	54.7(24.8)	54.5(24.7)	54.2(24.6)
40(12.2)	47.0(21.3)	46.7(21.2)	46.7(21.2)	46.5(21.1)	46.3(21.0)	46.1(20.9)	45.9(20.8)	45.6(20.7)	45.4(20.6)
50(15.2)		35.3(16)	35.1(15.9)	35.1(15.9)	34.6(15.7)	34.6(15.7)	34.4(15.6)	34.2(15.5)	34.0(15.4)
60(18.3)			28.9/57 (13.1/17.4)	27.6(12.5)	27.3(12.4)	27.1(12.3)	26.9(12.2)	26.7(12.1)	26.5(12.0)
70(21.3)				24.5/65 (11.1/19.8)	22.5(10.2)	22.3(10.1)	22.1(10.0)	21.8(9.9)	21.6(9.8)
80(24.4)					20.1/75 (9.1/22.9)	18.5(8.4)	18.3(8.3)	18.1(8.2)	17.9(8.1)
90(27.4)							15.7(7.1)	15.4(7.0)	15.2(6.9)
100(30.5)								13.2(6.0)	13.0(5.9)
110(33.5)									11.2(5.1)

Lifting Performance

Radius ft(m)	Main boom length ft(m)									
	131'3"(40)	141'2"(43)	150'11"(46)	160'10"(49)	170'8"(52)	180'5"(55)	190'4"(58)	200'2"(61)	210'(64)	219'10"(67)
30(9.1)	67.7(30.7)	67.7(30.7)								
35(10.7)	54.2(24.6)	53.8(24.4)	49.6(22.5)	41.9(19)	40.1(18.2)					
40(12.2)	45.2(20.5)	45.0(20.4)	44.8(20.3)	40.1(18.2)	38.4(17.4)	33.7(15.3)	31.3(14.2)			
50(15.2)	33.7(15.3)	33.5(15.2)	33.3(15.1)	33.1(15.0)	32.9(14.9)	30.2(13.7)	29.8(13.5)	27.3(12.4)	26.2(11.9)	26.2(11.9)
60(18.3)	26.2(11.9)	26.0(11.8)	25.8(11.7)	25.6(11.6)	25.4(11.5)	25.1(11.4)	24.9(11.3)	24.7(11.2)	24.5(11.1)	23.6(10.7)
70(21.3)	21.4(9.7)	21.2(9.6)	20.9(9.5)	20.7(9.4)	20.5(9.3)	20.3(9.2)	20.1(9.1)	19.9(9.0)	19.4(8.8)	19.1(8.7)
80(24.4)	17.6(8.0)	17.4(7.9)	17.2(7.8)	17.0(7.7)	16.8(7.6)	16.5(7.5)	16.3(7.4)	15.8(7.2)	15.7(7.1)	15.7(7.1)
90(27.4)	15.0(6.8)	14.8(6.7)	14.6(6.6)	14.3(6.5)	14.1(6.4)	13.9(6.3)	13.7(6.2)	13.2(6.0)	13.0(5.9)	12.8(5.8)
100(30.5)	12.8(5.8)	12.6(5.7)	12.3(5.6)	12.1(5.5)	11.9(5.4)	11.7(5.3)	11.5(5.2)	11.0(5.0)	10.8(4.9)	10.6(4.8)
110(33.5)	11.2(5.1)	10.8(4.9)	10.6(4.8)	10.4(4.7)	10.1(4.6)	9.9(4.5)	9.7(4.4)	9.3(4.2)	9.0(4.1)	8.8(4.0)
120(36.6)	10.1/115 (4.6/35.1)	9.3(4.2)	9.0(4.1)	8.8(4.0)	8.6(3.9)	8.3(3.8)	8.2(3.7)	7.9(3.6)	7.7(3.5)	7.5(3.4)
130(39.6)		8.6/125 (3.9/38.1)	7.9(3.6)	7.7(3.5)	7.5(3.4)	7.3(3.3)	7.1(3.2)	6.6(3.0)	6.4(2.9)	6.2(2.8)
140(42.7)			7.3/135 (3.3/41.1)	6.6(3.0)	6.4(2.9)	6.1(2.8)	5.9(2.7)	5.7(2.6)	5.5(2.5)	5.1(2.3)
150(45.7)					5.5(2.5)	5.3(2.4)	5.1(2.3)	4.9(2.2)	4.6(2.1)	4.2(1.9)
160(48.8)						4.6(2.1)	4.4(2.0)	4.0(1.8)	3.7(1.7)	3.5(1.6)
170(51.8)							3.7(1.7)	3.3(1.5)	3.1(1.4)	2.9(1.3)
180(54.9)								2.9/175 (1.3/53.4)	2.4(1.1)	2.2(1.0)

Note:
(1)The value given in the lifting capacity chart is the permissible maximum lifting capacity,which is obtained from the calculation when the load is suspended (according to the standard ANSI B30.5).The value can not exceed 75% of the overturning lifting capacity when the crane is on firm and flat ground (the max.gradient of the ground can not exceed 1%).Operating speed or any other condition may impose bad influences on safe operation of the crane.As a result,the crane operator must judge the conditions at hand and reduces the lifting load and operating speed correspondingly.

(2)The values in bold are the lifting capacity determined by the strength of the machine,while the values that are not in bold are the lifting capacity determined by the stability of the machine.

(3)The sign"*/*"in the chart indicates "lifting capacity/radius".Do not lift a load in the area which is not in the lifting capacity range,otherwise the crane may topple over.

(4)The value mentioned in the chart is the lifting capacity when the crane is working with 61740lb(28t)rear counterweight and 22050lb(10t) central counterweight in 360˚range.

(5)The crawler carriers of the crrane are extended completely.The combination of boom and guy lines must be carried out according to the requirements in the operator's manual .Follow the instructions in the operator's manual strictly when operating the machine.

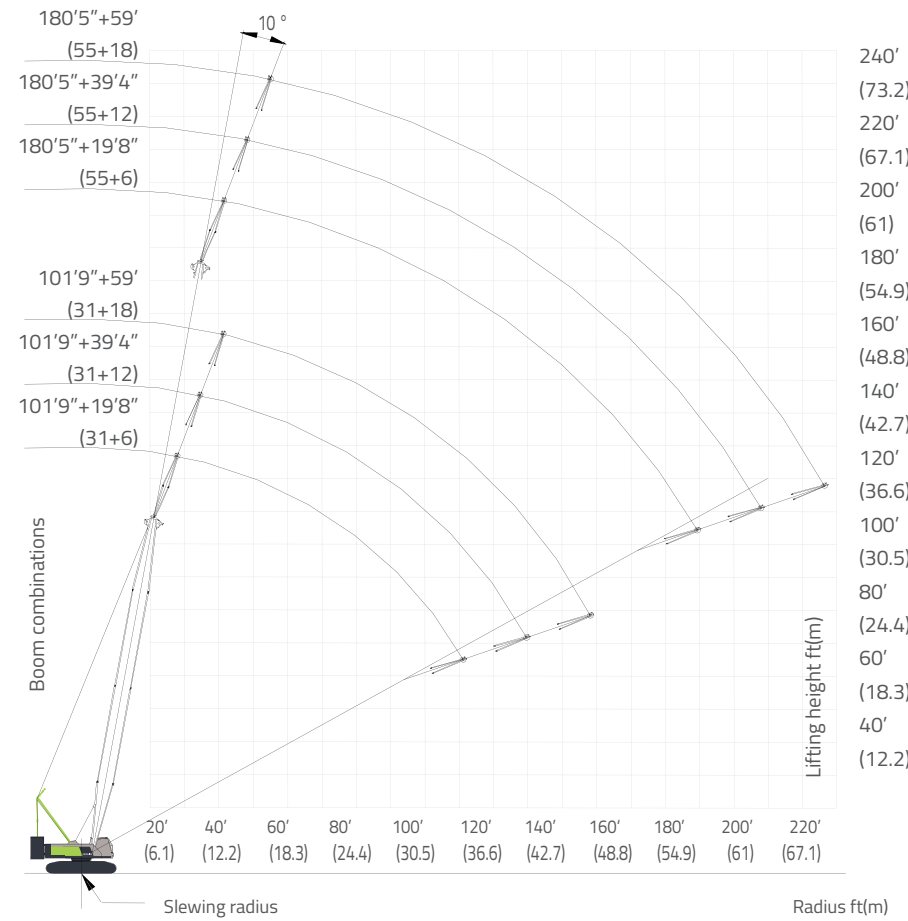
(6)The value in the chart is the maximum lifting capacity of the crane, including the weight of lifting device,hook,and wire rope connected to the hook and so on.

(7)The value in the chart is the lifting capacity of the crane without a tip boom.When main boom is fitted with tip boom,the lifting capacity must include the weight of main load hook ,wire rope,lifting device as well as the weight of tip boom,auxiliary hook,and wire rope.

Fixed jib angle=10°

Lifting performance on SF-1 boom

Lifting height on SF-1 boom



Note:The deflection of boom is not taken into consideration.

Lifting Performance

Lifting capacity on SF-1boom

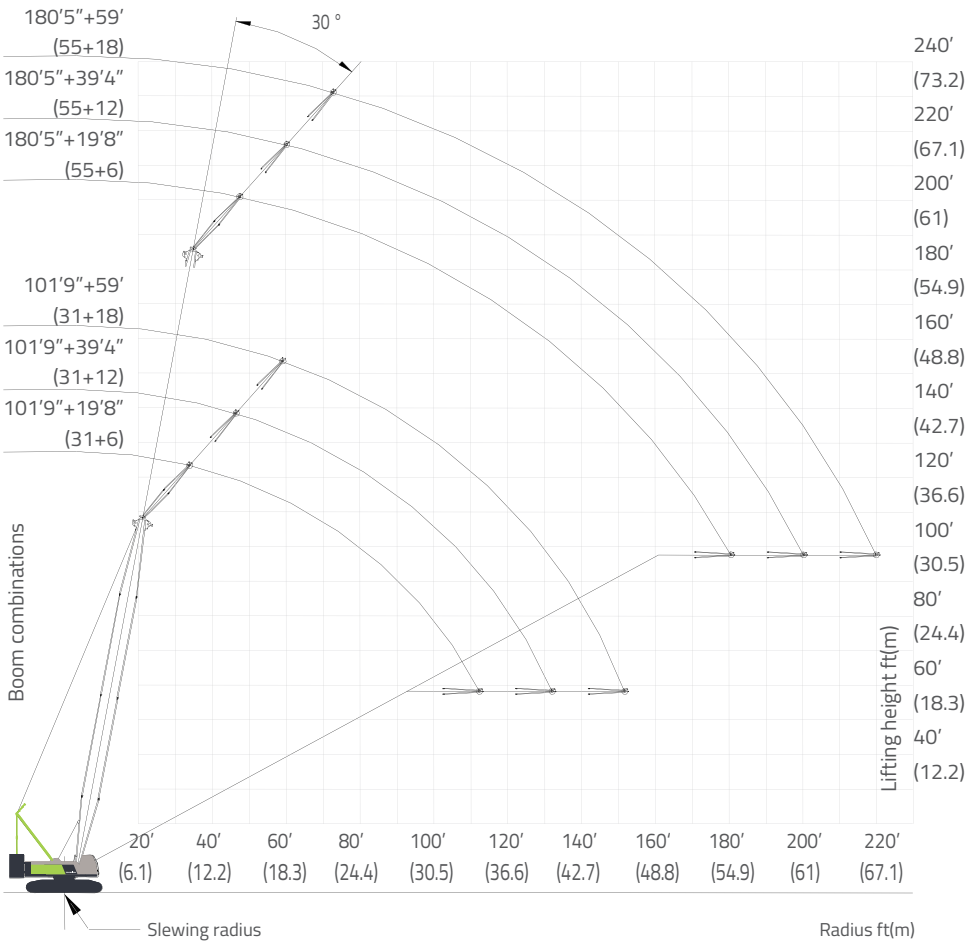
Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 101'9"(31)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
35(10.7)	17.6(8)					
40(12.2)	17.6(8)	17.6(8)	17.6(8)			
50(15.2)	17.6(8)	17.6(8)	17.6(8)		13.2(6.0)	
60(18.3)	17.6(8)	17.6(8)	17.6(8)	16.3(7.4)	12.8(5.8)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	14.8(6.7)	12.3(5.6)	8.4(3.8)
80(24.4)	16.8(7.6)	17.0(7.7)	17.4(7.9)	13.7(6.2)	11.9(5.4)	7.7(3.5)
90(27.4)	14.6(6.6)	14.3(6.5)	15.0(6.8)	12.6(5.7)	11.2(5.1)	6.8(3.1)
100(30.5)	12.3(5.6)	12.3(5.6)	12.8(5.8)	11.0(5)	10.6(4.8)	6.4(2.9)
110(33.5)		10.6(4.8)	11.0(5)	10.8(4.9)	9.7(4.4)	6.2(2.8)
120(36.6)			9.5(4.3)	9.7(4.4)	9.0(4.1)	5.7(2.6)
130(39.6)				8.4(3.8)	7.7(3.5)	5.5(2.5)
140(42.7)					7.1(3.2)	5.3(2.4)
150(45.7)						5.1(2.3)

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 111'6"(34)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
35(10.7)	17.6(8)					
40(12.2)	17.6(8)					
50(15.2)	17.6(8)	17.6(8)	17.6(8)		13.2(6.0)	
60(18.3)	17.6(8)	17.6(8)	17.6(8)	16.3(7.4)	12.8(5.8)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	14.8(6.7)	12.6(5.7)	8.4(3.8)
80(24.4)	16.8(7.6)	16.8(7.6)	16.8(7.6)	13.2(6)	12.1(5.5)	8.4(3.8)
90(27.4)	14.1(6.4)	14.6(6.6)	14.6(6.6)	12.3(5.6)	11.7(5.3)	7.5(3.4)
100(30.5)	11.9(5.4)	12.0(5.6)	12.1(5.5)	11.9(5.4)	10.8(4.9)	6.6(3)
110(33.5)	10.4(4.7)	10.6(4.8)	10.8(4.9)	10.8(4.9)	10.1(4.6)	6.4(2.9)
120(36.6)		9.0(4.1)	9.3(4.2)	9.5(4.3)	9.2(4.2)	6.0(2.7)
130(39.6)			7.9(3.6)	8.2(3.7)	8.2(3.7)	5.7(2.6)
140(42.7)				7.1(3.2)	7.1(3.2)	5.5(2.5)
150(45.7)					6.4(2.9)	5.3(2.4)
160(48.8)						4.9(2.2)

Fixed jib angle=30°



Note:The deflection of boom is not taken into consideration.

Lifting Performance

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 121'5"(37)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
35(10.7)	17.6(8)					
40(12.2)	17.6(8)					
50(15.2)	17.6(8)	17.6(8)	17.6(8)			
60(18.3)	17.6(8)	17.6(8)	17.6(8)	16.3(7.4)	13.2(6.0)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	15.4(7.0)	12.6(5.7)	8.4(3.8)
80(24.4)	16.5(7.5)	16.5(7.5)	17.2(7.8)	14.1(6.4)	12.3(5.6)	7.7(3.5)
90(27.4)	14.1(6.4)	14.3(6.5)	14.3(6.5)	13.2(6.0)	11.9(5.4)	7.5(3.4)
100(30.5)	11.9(5.4)	12.1(5.5)	12.1(5.5)	12.6(5.7)	11.0(5.0)	6.6(3)
110(33.5)	10.1(4.6)	10.4(4.7)	10.4(4.7)	10.8(4.9)	10.1(4.6)	6.4(2.9)
120(36.6)	8.6(3.9)	8.8(4.0)	9.0(4.1)	9.3(4.2)	9.3(4.2)	6.2(2.8)
130(39.6)			7.7(3.5)	8.2(3.7)	8.2(3.7)	6.0(2.7)
140(42.7)			6.8(3.1)	7.1(3.2)	7.1(3.2)	5.5(2.5)
150(45.7)					6.2(2.8)	5.5(2.5)
160(48.8)					5.3(2.4)	5.3(2.4)

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 131'3"(40)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
40(12.2)	17.6(8)					
50(15.2)	17.6(8)	17.6(8)	17.6(8)			
60(18.3)	17.6(8)	17.6(8)	17.6(8)	17.2(7.8)	13.2(6.0)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	15.9(7.2)	12.8(5.8)	
80(24.4)	16.5(7.5)	16.8(7.6)	16.8(7.6)	15.0(6.8)	12.6(5.7)	7.9(3.6)
90(27.4)	13.7(6.2)	13.9(6.3)	14.1(6.4)	13.7(6.2)	12.1(5.5)	7.5(3.4)
100(30.5)	11.5(5.2)	11.7(5.3)	12.1(5.5)	12.6(5.7)	11.2(5.1)	7.1(3.2)
110(33.5)	9.7(4.4)	9.9(4.5)	10.4(4.7)	10.6(4.8)	10.1(4.6)	6.6(3)
120(36.6)	8.4(3.8)	8.6(3.9)	8.8(4.0)	9.0(4.1)	9.3(4.2)	6.2(2.8)
130(39.6)	7.3(3.3)	7.5(3.4)	7.7(3.5)	7.9(3.6)	7.7(3.5)	6.0(2.7)
140(42.7)			6.6(3.0)	6.8(3.1)	6.8(3.1)	5.5(2.5)
150(45.7)			5.7(2.6)	6.0(2.7)	6.0(2.7)	5.5(2.5)
160(48.8)					5.3(2.4)	5.3(2.4)
170(51.8)					4.6(2.1)	4.6(2.1)

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 141'2"(43)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
50(15.2)	17.6(8)		17.6(8)			
60(18.3)	17.6(8)	17.6(8)	17.6(8)	16.8(7.6)	13.2(6.0)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	15.9(7.2)	12.8(5.8)	
80(24.4)	15.9(7.2)	16.5(7.5)	16.8(7.6)	15.0(6.8)	12.6(5.7)	8.4(3.8)
90(27.4)	13.2(6)	13.9(6.3)	13.9(6.3)	13.9(6.3)	12.1(5.5)	7.7(3.5)
100(30.5)	11.2(5.1)	11.5(5.2)	11.9(5.4)	12.3(5.6)	11.2(5.1)	7.3(3.3)
110(33.5)	9.7(4.4)	9.9(4.5)	10.1(4.6)	10.6(4.8)	10.1(4.6)	6.6(3)
120(36.6)	8.2(3.7)	8.4(3.8)	8.6(3.9)	9.0(4.1)	8.8(4.0)	6.4(2.9)
130(39.6)	7.1(3.2)	7.1(3.2)	7.3(3.3)	7.7(3.5)	7.5(3.4)	6.2(2.8)
140(42.7)	6.0(2.7)	6.0(2.7)	6.4(2.9)	6.6(3.0)	6.6(3.0)	5.7(2.6)
150(45.7)			5.5(2.5)	5.7(2.6)	5.7(2.6)	5.5(2.5)
160(48.8)			4.6(2.1)	4.9(2.2)	5.1(2.3)	5.3(2.4)
170(51.8)					4.2(1.9)	4.4(2.0)
180(54.9)						3.7(1.7)

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 150'11"(46)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
50(15.2)	17.6(8)		17.6(8)			
60(18.3)	17.6(8)	17.6(8)	17.6(8)		13.2(6.0)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	16.3(7.4)	12.8(5.8)	
80(24.4)	15.9(7.2)	16.3(7.4)	16.3(7.4)	15.4(7)	12.6(5.7)	8.3(3.8)
90(27.4)	13.2(6.0)	13.7(6.2)	13.9(6.3)	14.3(6.5)	12.6(5.7)	7.7(3.5)
100(30.5)	11.2(5.1)	11.5(5.2)	11.5(5.2)	12.1(5.5)	11.2(5.1)	7.5(3.4)
110(33.5)	9.5(4.3)	9.5(4.3)	9.9(4.5)	10.1(4.6)	10.1(4.6)	6.8(3.1)
120(36.6)	7.9(3.6)	8.2(3.7)	8.4(3.8)	8.6(3.9)	8.6(3.9)	6.6(3.0)
130(39.6)	6.8(3.1)	6.8(3.1)	7.1(3.2)	7.5(3.4)	7.5(3.4)	6.4(2.9)
140(42.7)	5.7(2.6)	6.0(2.7)	6.2(2.8)	6.4(2.9)	6.4(2.9)	6.2(2.8)
150(45.7)			5.3(2.4)	5.5(2.5)	5.5(2.5)	5.7(2.6)
160(48.8)			4.4(2.0)	4.6(2.1)	4.6(2.1)	5.1(2.3)
170(51.8)			3.7(1.7)	4.0(1.8)	4.0(1.8)	4.4(2.0)
180(54.9)					3.5(1.6)	3.5(1.6)
190(57.9)					2.9(1.3)	3.1(1.4)

Lifting Performance

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 160'10"(49)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
50(15.2)	17.6(8)	17.6(8)	17.6(8)			
60(18.3)	17.6(8)	17.6(8)	17.6(8)		13.2(6.0)	
70(21.3)	17.6(8)	17.6(8)	17.6(8)	16.8(7.6)	12.8(5.8)	
80(24.4)	16.1(7.3)	16.1(7.3)	16.3(7.4)	15.4(7)	12.6(5.7)	8.4(3.8)
90(27.4)	13.0(5.9)	13.2(6.0)	13.5(6.1)	14.3(6.5)	12.3(5.6)	8.2(3.7)
100(30.5)	10.8(4.9)	11.0(5.0)	11.2(5.1)	11.9(5.4)	11.2(5.1)	7.7(3.5)
110(33.5)	9.0(4.1)	9.3(4.2)	9.5(4.3)	9.9(4.5)	9.7(4.4)	7.3(3.3)
120(36.6)	7.7(3.5)	7.9(3.6)	7.9(3.6)	8.6(3.9)	8.4(3.8)	6.6(3.0)
130(39.6)	6.6(3.0)	6.6(3.0)	6.8(3.1)	7.3(3.3)	7.1(3.2)	6.4(2.9)
140(42.7)	5.5(2.5)	5.7(2.6)	5.7(2.6)	6.2(2.8)	6.0(2.7)	6.2(2.8)
150(45.7)	4.6(2.1)	4.9(2.2)	4.9(2.2)	5.3(2.4)	5.1(2.3)	5.7(2.6)
160(48.8)	3.7(1.7)	4.0(1.8)	4.2(1.9)	4.4(2.0)	4.4(2.0)	4.9(2.2)
170(51.8)				3.7(1.7)	3.7(1.7)	4.2(1.9)
180(54.9)					3.1(1.4)	3.5(1.6)
190(57.9)					2.6(1.2)	2.9(1.3)

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 180'5"(55)					
	Fixed jib length ft(m)					
	6		12		18	
	Fixed jib angle(°)					
	10	30	10	30	10	30
50(15.2)	17.6(8)					
60(18.3)	17.6(8)	17.6(8)	17.6(8)			
70(21.3)	17.6(8)	17.6(8)	17.6(8)	17.0(7.7)	13.2(6.0)	
80(24.4)	15(6.8)	15.4(7.0)	15.9(7.2)	16.1(7.3)	13.0(5.9)	
90(27.4)	12.3(5.6)	12.8(5.8)	12.8(5.8)	13.7(6.2)	12.6(5.7)	8.2(3.7)
100(30.5)	10.4(4.7)	10.6(4.8)	10.6(4.8)	11.5(5.2)	11.2(5.1)	7.7(3.5)
110(33.5)	8.6(3.9)	8.8(4.0)	9.0(4.1)	9.7(4.4)	9.3(4.2)	7.5(3.4)
120(36.6)	7.1(3.2)	7.5(3.4)	7.5(3.4)	8.2(3.7)	7.7(3.5)	7.1(3.2)
130(39.6)	6.0(2.7)	6.2(2.8)	6.4(2.9)	6.8(3.1)	6.6(3.0)	6.6(3.0)
140(42.7)	4.9(2.2)	5.1(2.3)	5.3(2.4)	5.7(2.6)	5.5(2.5)	6.2(2.8)
150(45.7)	4.2(1.9)	4.2(1.9)	4.4(2.0)	4.9(2.2)	4.6(2.1)	5.1(2.3)
160(48.8)	3.3(1.5)	3.3(1.5)	3.7(1.7)	4.0(1.8)	3.7(1.7)	4.4(2.0)
170(51.8)	2.9(1.3)	2.6(1.2)	3.1(1.4)	3.1(1.4)	3.1(1.4)	3.5(1.6)
180(54.9)		2.0(0.9)	2.4(1.1)	2.4(1.1)	2.4(1.1)	2.9(1.3)
190(57.9)				1.8(0.8)	1.8(0.8)	2.2(1.0)

Unit:Kip(ton)

Radius ft(m)	Main boom length ft(m) 170'8"(52)					
	Fixed jib length ft(m)					
	19'8"(6)		39'4"(12)		59'1"(18)	
	Fixed jib angle(°)					
	10	30	10	30	10	30
50(15.2)	17.6(8)					
60(18.3)	17.6(8)	17.6(8)	17.6(8)			
70(21.3)	17.6(8)	17.6(8)	17.6(8)	16.8(7.6)	13.2(6)	
80(24.4)	15.7(7.1)	15.7(7.1)	16.1(7.3)	15.4(7.0)	12.8(5.8)	8.4(3.8)
90(27.4)	12.6(5.7)	13.2(6.0)	13.2(6.0)	13.5(6.1)	12.6(5.7)	8.2(3.7)
100(30.5)	10.6(4.8)	11.0(5.0)	11.0(5.0)	11.7(5.3)	11.2(5.1)	7.5(3.4)
110(33.5)	8.8(4.0)	9.3(4.2)	9.3(4.2)	9.7(4.4)	9.5(4.3)	7.3(3.3)
120(36.6)	7.3(3.3)	7.7(3.5)	7.9(3.6)	8.4(3.8)	8.2(3.7)	6.6(3.0)
130(39.6)	6.2(2.8)	6.4(2.9)	6.6(3.0)	7.1(3.2)	6.8(3.1)	6.4(2.9)
140(42.7)	5.3(2.4)	5.3(2.4)	5.7(2.6)	6.0(2.7)	6.0(2.7)	6.2(2.8)
150(45.7)	4.4(2.0)	4.6(2.1)	4.9(2.2)	5.1(2.3)	5.1(2.3)	5.5(2.5)
160(48.8)	3.5(1.6)	3.7(1.7)	4.0(1.8)	4.2(1.9)	4.2(1.9)	4.6(2.1)
170(51.8)	2.9(1.3)	3.1(1.4)	3.3(1.5)	3.5(1.6)	3.5(1.6)	4.0(1.8)
180(54.9)			2.6(1.2)	2.9(1.3)	2.9(1.3)	3.3(1.5)

Note:

(1)The value given in the lifting capacity chart is the permissible maximum lifting capacity,which is obtained from the calculation when the load is suspended (according to the standard ANSI B30.5).The value can not exceed 75% of the overturning lifting capacity when the crane is on firm and flat ground (the max. gradient of the ground can not exceed 1%).Operating speed or any other condition may impose bad influences on safe operation of the crane.As a result,the crane operator must judge the conditions at hand and reduces the lifting load and operating speed correspondingly.

(2)The values in bold are the lifting capacity determined by the strength of the machine,while the values that are not in bold are the lifting capacity determined by the stability of the machine.

(3)The sign "*/* "in the chart indicates"lifting capacity/radius".Do not lift a load in the area which is not in the lifting capacity range, otherwise the crane may topple over.

(4)The value mentioned in the chart is the lifting capacity when the crane is working with 61740lb(28t) rear counterweight and 22050lb -(10t) central counterweight in 360 ° range.

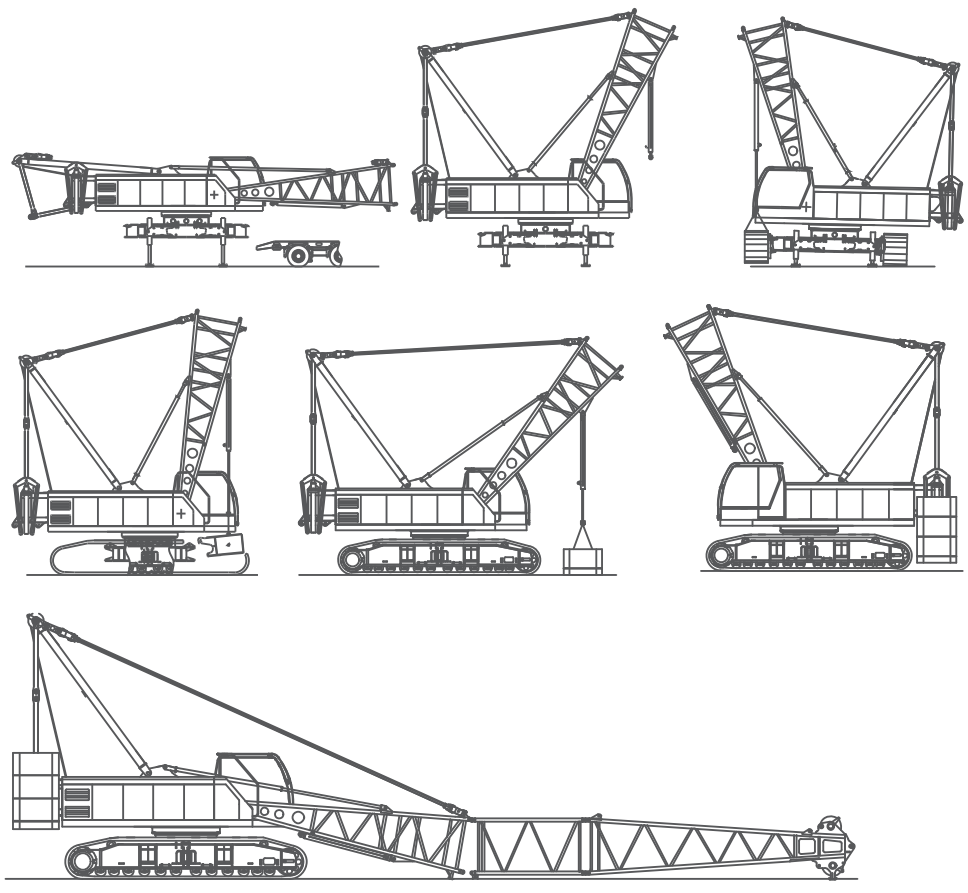
(5)The crawler carriers of the crane are extended completely.The combination of boom and guy lines must be carried out according to the requirements in the operator's manual.Follow the the instructions in the operator's manual strictly when operating the machine.

(6)The value in the chart is the maximum lifting capacity of the crane,including the weight of lifting device,hook,and wire rope connected to the hook and so on.

Transportation

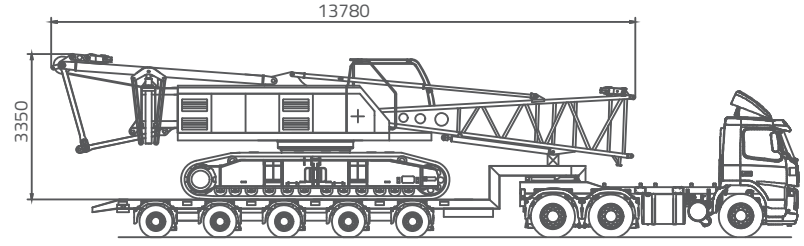
Powerful self-assembly and dismantling function

The crane can assemble and dismantle the rear counterweight, central counterweight,and crawler carriers by itself.In assembly mode,the load moment limiter must monitor the status of mounting cylinder in real time when it is used to lift the load so as to ensure safe crane operation.Raise the whole vehicle by four support cylinders to unload the whole vehicle from the low-loader.Assembly and dismantling of crawler carriers and central counterweight,and the pilling of rear counterweight plates are performed via the mounting cylinder on main boom pivot section.Assemble and dismantle the rear counterweight via two counterweight lifting cylinders on the rear part of the slewing table.



Loading vehicle - transportation as a whole

The basic machine mainly consists of main boom pivot section,hoisting winches 1 and 2(inclusing wire rope), derricking winch (including wire rope and derricking pulley block),left and right crawler carriers,etc. The designed transport width is 11'2"(3.4m) and the weight is 99887lb(45.3mt).

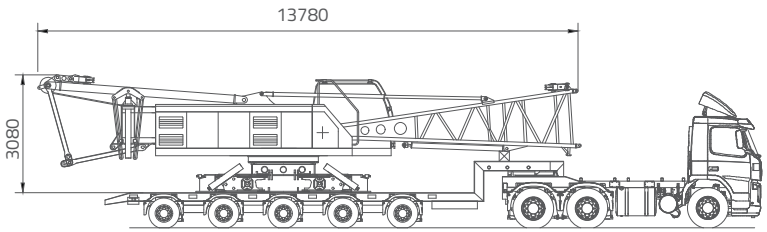


Names of transport units	Weight		Transport vehicle no.			
	lb	mt	1#	2#	3#	4#
Basic machine	99887	45.30	1			
Packing box Ⅰ	662	0.30			1	
Packing box Ⅱ	2073	0.94			1	
Packing box Ⅲ	2073	0.94			1	
Packing box Ⅳ	441	0.20			1	
100mt load hook	3462	1.57		1		
50mt load hook	2778	1.26				1
30mt load hook	1764	0.80				1
8mt load hook	617	0.28				1
Tip boom	331	0.15			1	
Central counterweight	11091	5.03			1	1
Rear counterweight plate	8004	3.63		2	2	2
Rear counterweight base plate	14112	6.40		1		
9m main boom intermediate section A	1720	0.78				1
9m main boom intermediate section	1610	0.73		2	1	1
6m main boom intermediate section	2139	0.97			1	
3m main boom intermediate section	706	0.32			1	
Main boom head	2800	1.27			1	
Fixed jib head	485	0.22		1		
Fixed jib pivot section	397	0.18				1
6m fixed jib intermediate section	353	0.16		1		1
FA-frame and tilting-back support	926	0.42			1	
Folding bracket	904	0.41		4		
Hoisting winch 3	4917	2.23				1
Sum weight	lb		99887	41675	39690	41234
	mt		45.3	18.9	18.0	18.7

Loading Vehicle

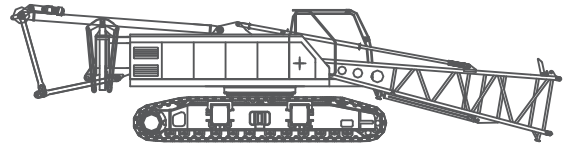
dismantling crawler carriers for separate transportation

The basic machine mainly consists of main boom pivot section,A-frame assy,hoisting winches 1 and 2 (including wire rope),derricking winch (including wire rope and derricking pulley block),etc.The designed transport width is 11'2"(3.4m)and the weight is 63945lb (29mt).

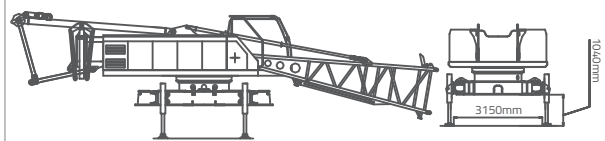


Names of transport units	Weight		Transport vehicle no.			
	lb	mt	1#	2#	3#	4#
Basic machine	60417	27.4	1			
Packing box Ⅰ	662	0.30		1		
Packing box Ⅱ	2073	0.94	1			
Packing box Ⅲ	2073	0.94	1			
Packing box Ⅳ	441	0.20		1		
100mt load hook	3462	1.57			1	
50mt load hook	2778	1.26			1	
30mt load hook	1764	0.80				1
8mt load hook	617	0.28				1
Tip boom	331	0.15		1		
Central counterweight	11091	5.03			1	1
Rear counterweight plate	8004	3.63		2	2	2
Rear counterweight base plate	14112	6.40				1
9m main boom intermediate section A	1720	0.78			1	
9m main boom intermediate section	1610	0.73		1	1	2
6m main boom intermediate section	2139	0.97			1	
3m main boom intermediate section	706	0.32			1	
Main boom head	2800	1.27				1
Fixed jib head	485	0.22				1
Fixed jib pivot section	397	0.18			1	
6m fixed jib intermediate section	353	0.16			1	1
FA-frame and tilting-back support	926	0.42			1	
Folding bracket	904	0.41	4			
Hoisting winch3	4917	2.23			1	
Left crawler carrier	19845	9		1		
Right crawler carrier	19845	9		1		
Sum weight	lb		68135	58433	45203	50936
	mt		45.3	18.9	18.0	18.7

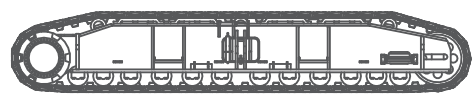
Dimensions And Weight Of Transport Units



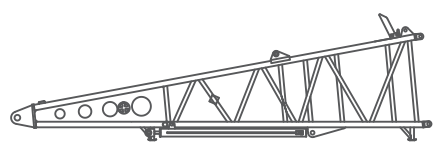
Basic machine (without hoisting winch 3)	
Length	45'2"(13.78m)
Width	11'2"(3.4m)
Height	11'(3.35m)
Weight	99887 lb(45.3mt)



Basic machine (including folding brackets,but not crawler carriers)	
Length	45'2"(13.78m)
Width	11'2"(3.4m)
Height	10'(3.06m)
Weight	63945 lb (29mt)

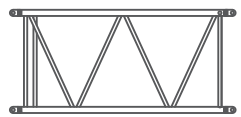


Crawler carrier	
Length	20'9"(6.43m)
Width	3'6"(1.06m)
Height	3'7"(1.1m)
Weight	20286 lb(9.2mt)

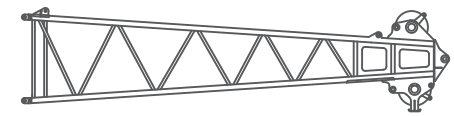


Main boom pivot section	
Length	22'(6.7m)
Width	5'6"(1.69m)
Height	6'6"(2m)
Weight	27563 lb(1.25mt)

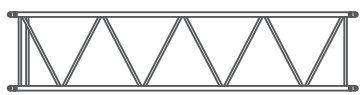
Dimensions And Weight Of Transport Units



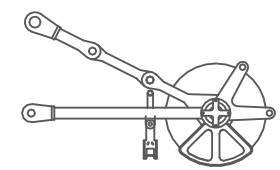
3m main boom intermediate section (including guy lines and pin spindles)	
Length	10’1”(3.09m)
Width	5’6”(1.69m)
Height	4’10”(1.49m)
Weight	840 lb(0.38mt)



Main boom head (including guy lines and pin spindles)	
Length	23’5”(7.15m)
Width	5’6”(1.69m)
Height	5’6”(1.69m)
Weight	3042 lb(1.38mt)

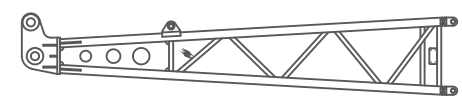


6m main boom intermediate section (including guy lines and pin spindles)	
Length	20’(6.09m)
Width	5’6”(1.69m)
Height	4’10”(1.49m)
Weight	1345 lb(0.61mt)



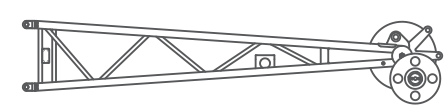
Tip boom assy.	
Length	4’6”(1.38m)
Width	2’3”(0.69m)
Height	1’11”(0.58m)
Weight	330 lb(0.15mt)

9m main boom intermediate section (including guy lines and pin spindles)	
Length	29’10”(9.09m)
Width	5’6”(1.69m)
Height	4’10”(1.49m)
Weight	1852 lb(0.84mt)



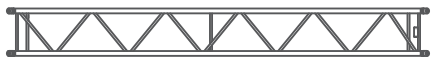
Fixed jib pivot section	
Length	10’4”(3.16m)
Width	2’5”(0.74m)
Height	1’10”(0.57m)
Weight	397 lb(0.18mt)

9m main boom intermediate section A(including guy lines and pin spindles)	
Length	29’10”(9.09m)
Width	5’6”(1.69m)
Height	4’10”(1.49m)
Weight	1962 lb(0.89mt)

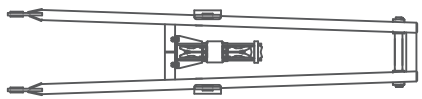


Fixed jib head	
Length	11’(3.36m)
Width	2’1”(0.65m)
Height	2’1”(0.65m)
Weight	510 lb(0.23mt)

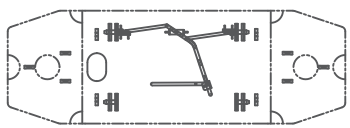
Dimensions And Weight Of Transport Units



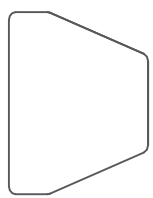
Fixed jib intermediate section	
Length	19′10″(6.06m)
Width	1′10″(0.56m)
Height	1′10″(0.56m)
Weight	362 lb(0.164mt)



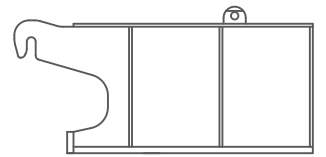
FA-frame,front and rear tilting-back supports of fixed jib	
Length	1′(0.32m)
Width	2′3″(0.69m)
Height	1′10″(0.55m)
Weight	545 lb(0.247mt)



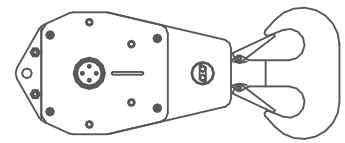
Rear counterweight base plate	
Length	11′10″(3.6m)
Width	4′(1.21m)
Height	1′10″(0.55m)
Weight	14112 lb(6.4mt)



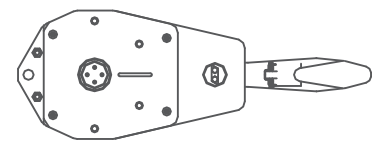
Rear counterweight plates(6pieces)	
Length	2′7″(0.8m)
Width	4′(1.21m)
Height	2″(0.61m)
Weight	7938 lb(3.6mt)



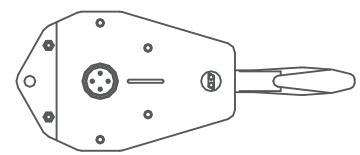
Centra; counterweight(2 pieces)	
Length	4′8″(1.42m)
Width	4″(1.21m)
Height	2′3″(0.69m)
Weight	11000 lb(5mt)



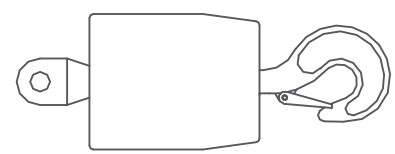
100 mt load hook	
Length	6′1″(1.86m)
Width	2′6″(0.76m)
Height	2′10″(0.86m)
Weight	33516 lb(1.52mt)



50 mt load hook	
Length	6′(1.84m)
Width	2′4″(0.7m)
Height	2′2″(0.66m)
Weight	2712 lb(1.23mt)



30 mt load hook	
Length	5′7″(1.7m)
Width	2′4″(0.7m)
Height	1′11″(0.58m)
Weight	1720 lb(0.78mt)



8 mt load hook	
Length	3′2″(0.96m)
Width	1′2″(0.35m)
Height	1′2″(0.35m)
Weight	582 lb(0.264mt)