

Section 4-Load Charts



2 Operating Condition Codes

Operating Condition Codes

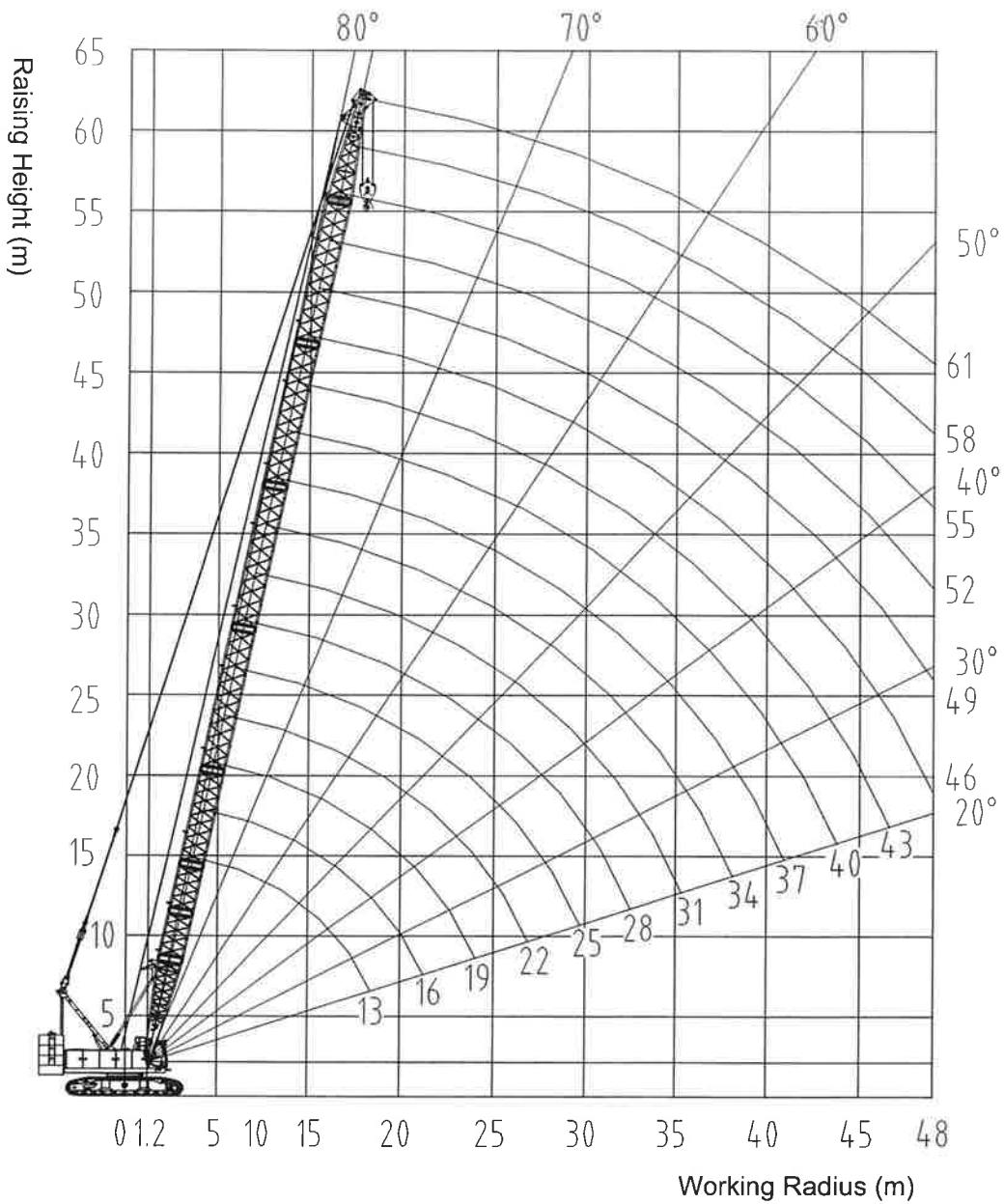
NO.	Operating Condition	Code
1	Main Boom	H
2	Main Boom + Fix Jib	FJ
3	Main Boom + Upper Boom Point	HC
4	Luffing Jib	LJ

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3 Operating Range Curve

3.1 Main boom operating condition (H)

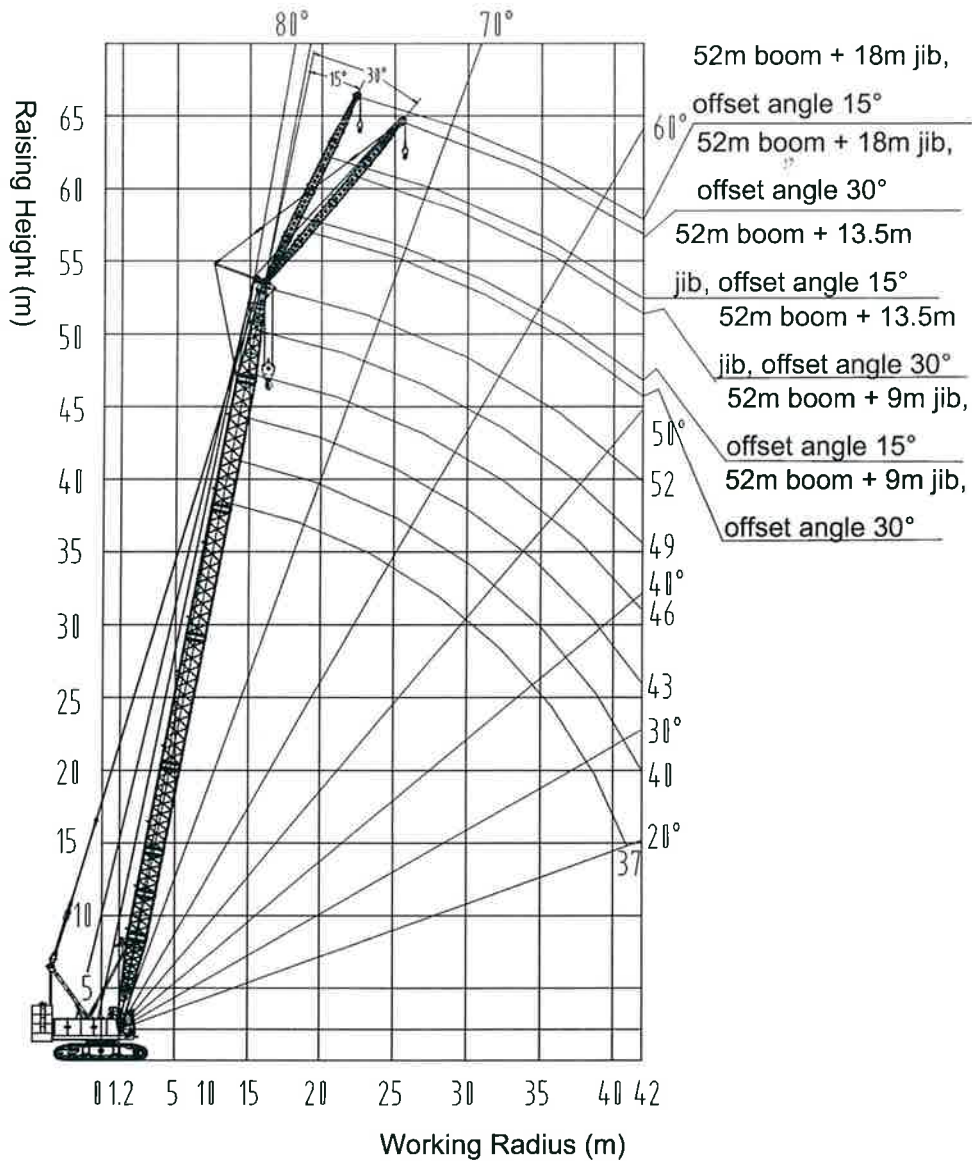


Curve of Boom Raising Height



Section 4-Load Charts

3.2 Main Boom + Fixed Jib Operating Condition (FJ)



Curve of Fixed Jib Raising Height

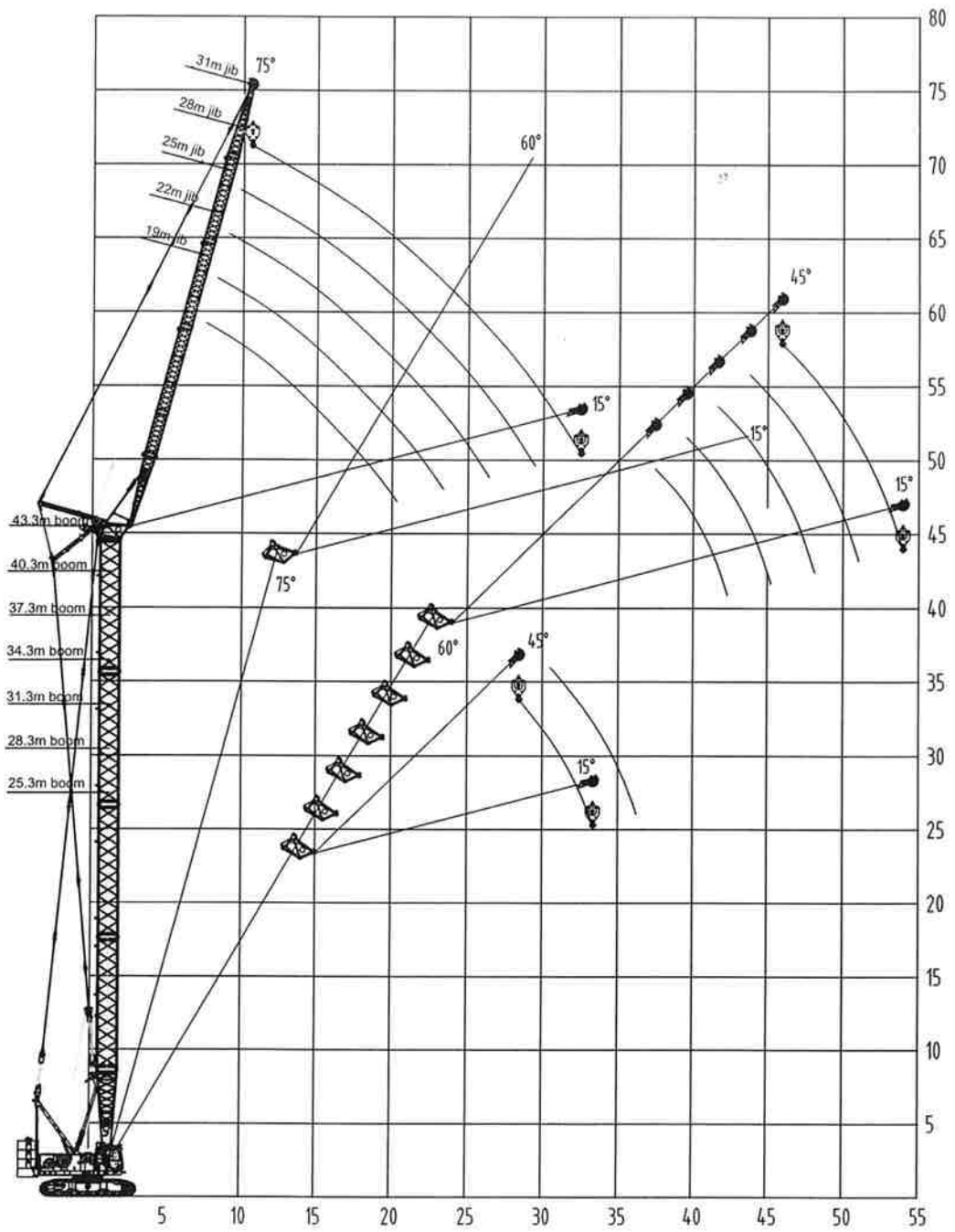
3.3 Main Boom + Upper Boom Point Operating Condition (HC)

The HC Operating Range Diagram is the same as in H operating condition. Please see 3.1 Main Boom Operating Condition for details.

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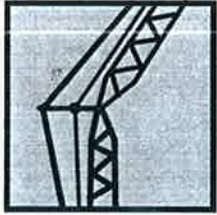






3.4 Luffing Jib Operating Condition (LJ)



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4 Load Charts

Signs		
		
Operating Radius (R)	Main Boom (H)	Fixed Jib (FJ)
		
Luffing Jib	Counterweight, Additional Counterweight, Counterweight +Additional counterweight	Upper Boom Point
		
Boom Hook	Jib Hook	Extension Jib Hook

Please refer to the annex of Section III Load Chart.

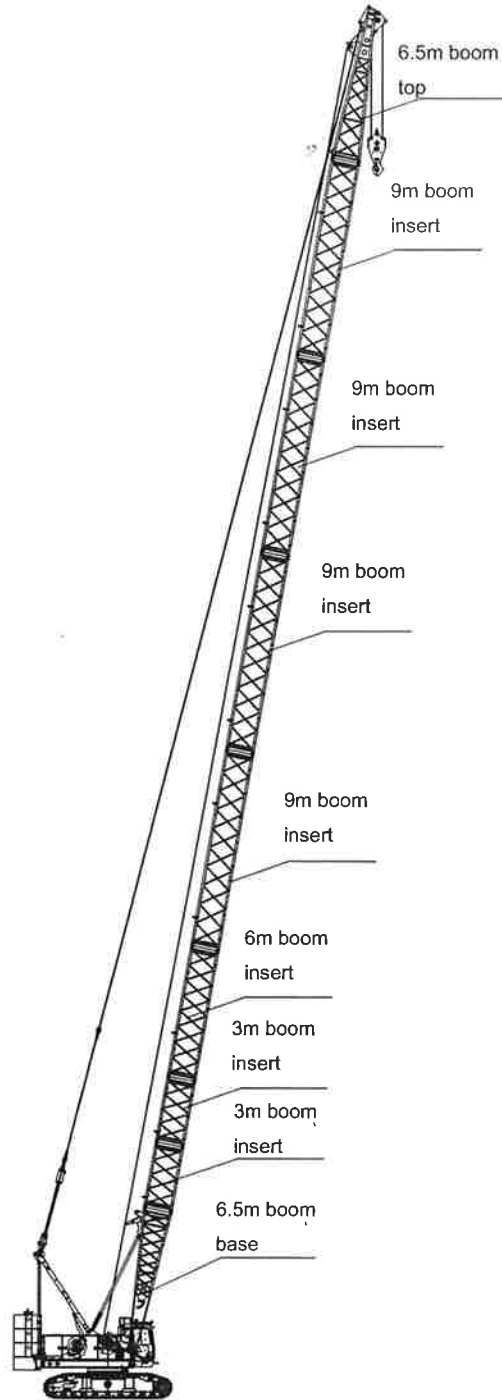
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4.1 Load Charts of Hook for H Operating Condition

Boom Combination of HC Operating Condition

Boom length (m)/(ft)	Boom insert		
	3 m (9'10")	6 m (19'8")	12m (39'4")
13(42'8")	-	-	-
16(52'6")	1	-	-
19(62'4")	-	1	-
22(72'2")	-	-	1
25(82'0")	1	-	1
28(91'10")	-	1	1
31(101'8")	1	1	1
34(111'7")	-	-	2
37(121'5")	1	-	2
40(131'3")	-	1	2
43(141'1")	1	1	2
46(150'11")	-	-	3
49(160'9")	1	-	3
52(170'7")	-	1	3
55(180'5")	1	1	3
58(190'3")	-	-	4
61(200'1")	1	-	4
61(200'1")	2	1	4



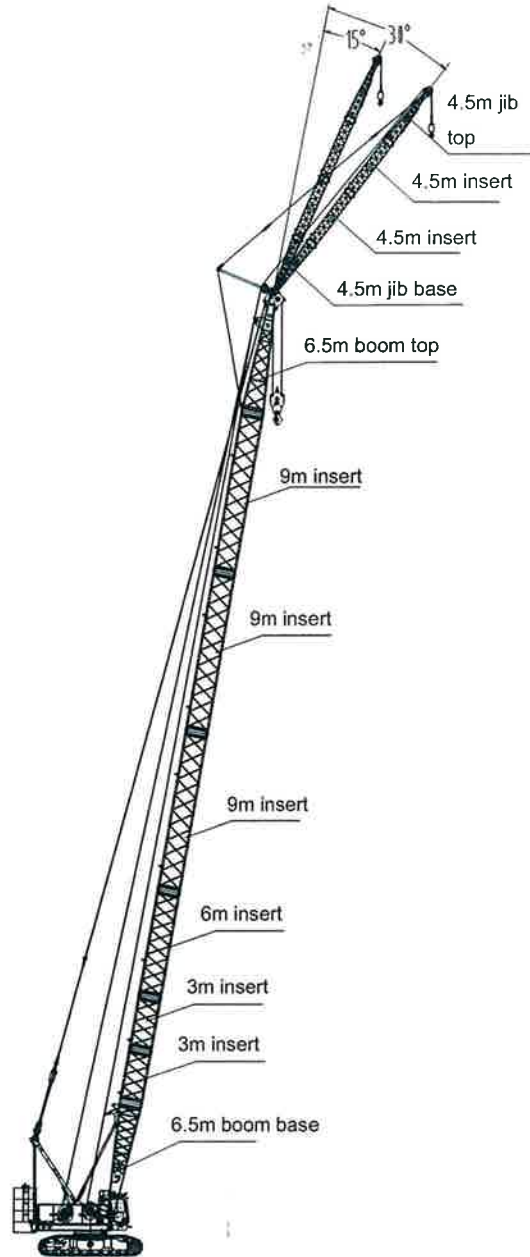
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4.2 Load Charts of Jib Hook for FJ Operating Condition

Combination of Fixed Jib

Jib Length (m)/(ft)	Jib insert
	4.5m(14'9")
9(29'6")	-
13.5(44'3")	1
18(59'1")	2



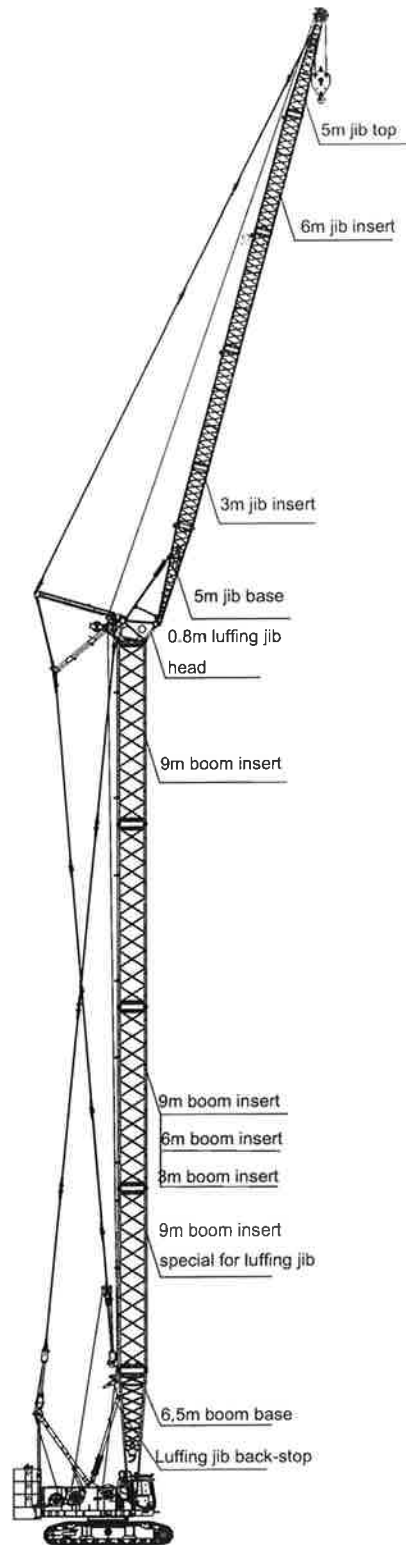
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4.3 Load Charts of Hook for LJ Operating Condition

Boom length (m)/(ft)	Boom insert			
	Special 9m (29'6")	3 m (9'10")	6 m (19'8")	9m (29'6")
25.3 (83'4")	1	-	-	1
28.3 (92'10")	1	1	-	1
31.3 (102'8")	1	-	1	1
34.3 (112'6")	1	-	-	2
37.3 (122'5")	1	1	-	2
40.3 (132'2")	1	-	1	2
43.3 (142'1")	1	-	-	3

Jib Length (m)/(ft)	jib insert	
	3 m (9'10")	6 m (19'8")
19m 62'4"	1	1
22m 72'2"	-	2
25m 82'	1	2
28m 91'10"	-	3
31m 101'8"	1	3



SCC1000E Load Charts for H Operating Condition -- Boom Length 13m~61m

Jib Boom L	Rear Counterweight 30t										Central Ballast 10t									
	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	58	61	Boom Length/Radius		
3.6																		3.6		
4																		4		
4.5																		4.5		
5																		5		
5.5																		5.5		
6																		6		
6.5																		6.5		
7																		7		
7.5																		7.5		
8																		8		
9																		9		
10																		10		
11																		11		
12																		12		
13																		13		
14																		14		
15																		15		
16																		16		
18																		18		
20																		20		
22																		22		
24																		24		
26																		26		
28																		28		
30																		30		
32																		32		
34																		34		
36																		36		
38																		38		
40																		40		
42																		42		
44																		44		
46																		46		
48																		48		

Note: 1. Rated capacity in the load charts is valid when the crane is on firm, level and evenly-supported ground with gradient smaller than 1% and within 360° slewing range.
 2. Actual Lifting Capacity shall deduct the weight of hook blocks, lifting devices, and wire ropes reeving between the hooks and boom head from the rated capacity.
 3. Values with yellow background is determined by strength.

SCC1000E Load Charts for HC Operating Condition using Main Fall -- Boom Length 13m ~ 55m
 Rear Counterweight 30t Central Ballast 10t

Radius Boom Length	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	Boom Length Radius
4	89															4
4.5	79															4.5
5	71	71														5
5.5	64	64	64													5.5
6	58.5	57.9	57.4	56.8												6
6.5	51.6	51.1	50.7	50.3	49.7											6.5
7	46.2	45.7	45.4	45	44.6	44.1										7
7.5	41.7	41.3	41	40.7	40.3	40	39.5									7.5
8	38	37.6	37.3	37	36.7	36.4	36.1	35.6								8
9	32.2	31.8	31.6	31.4	31.1	30.8	30.6	30.3	30							9
10	27.8	27.5	27.3	27.1	26.8	26.6	26.4	26.1	25.9	25.7	25.4					10
11	24.4	24.1	23.9	23.8	23.5	23.3	23.1	22.8	22.6	22.5	22.2	22	21.7			11
12	21.7	21.4	21.3	21.1	20.8	20.6	20.5	20.2	20	19.9	19.6	19.4	19.3	19		12
13	19.5	19.2	19.1	18.9	18.7	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.2	16.9	16.7	13
14		17.4	17.2	17.1	16.8	16.7	16.5	16.3	16.1	16	15.7	15.5	15.4	15.2	15	14
15		15.8	15.7	15.5	15.3	15.1	15	14.8	14.6	14.4	14.2	14	13.9	13.7	13.5	15
16		14.5	14.3	14.2	14	13.8	13.7	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.2	16
18			12.2	12.1	11.8	11.7	11.5	11.3	11.2	11	10.8	10.6	10.5	10.3	10.1	18
20				10.4	10.1	10	9.9	9.6	9.5	9.4	9.1	9	8.8	8.6	8.5	20
22					8.8	8.7	8.5	8.3	8.2	8	7.8	7.7	7.5	7.3	7.2	22
24					7.7	7.6	7.4	7.2	7.1	6.9	6.7	6.6	6.4	6.2	6.1	24
26						6.6	6.5	6.3	6.2	6	5.8	5.7	5.5	5.3	5.2	26
28							5.7	5.5	5.4	5.3	5	4.9	4.8	4.5	4.4	28
30							5.1	4.8	4.7	4.6	4.4	4.2	4.1	3.9	3.7	30
32								4.3	4.1	4	3.8	3.6	3.5	3.3	3.2	32
34									3.6	3.5	3.3	3.1	3	2.8	2.7	34
36									3.2	3.1	2.8	2.7	2.6	2.3	2.2	36
38										2.7	2.4	2.3	2.2	1.9	1.8	38
40											2.1	1.9	1.8	1.6	1.5	40
42												1.6	1.5	1.3	1.1	42
44												1.3	1.2	1	0.8	44

Note: 1. Rated capacity in the load charts is valid when the crane is on firm, level and evenly-supported ground with gradient smaller than 1% and within 360° slewing range.
 2. Actual Lifting Capacity shall deduct the weight of hook blocks, lifting devices, and wire ropes reeving between the hooks and boom head from the rate capacity.
 3. Values with yellow background is determined by strength.

SCC1000F Road Charts for HC Operating Condition -- Boom length 13m~55m
 Rear Counterweight 30t Central Ballast 10t

Radius / Boom length	13	16	19	22	25	28	31	34	37	40	43	46	49	52	55	Boom Length Radius
4	9															4
4.5	9															4.5
5	9	9														5
5.5	9	9	9													5.5
6	9	9	9	9												6
6.5	9	9	9	9	9											6.5
7	9	9	9	9	9	9										7
7.5	9	9	9	9	9	9	9									7.5
8	9	9	9	9	9	9	9	9								8
9	9	9	9	9	9	9	9	9	9							9
10	9	9	9	9	9	9	9	9	9	9						10
11	9	9	9	9	9	9	9	9	9	9	9					11
12	9	9	9	9	9	9	9	9	9	9	9	9				12
13	9	9	9	9	9	9	9	9	9	9	9	9	9			13
14		9	9	9	9	9	9	9	9	9	9	9	9	9		14
15		9	9	9	9	9	9	9	9	9	9	9	9	9	9	15
16		9	9	9	9	9	9	9	9	9	9	9	9	9	9	16
18			9	9	9	9	9	9	9	9	9	9	9	9	9	18
20				9	9	9	9	9	9	9	9	9	8.8	8.6	8.5	20
22					8.8	8.7	8.5	8.3	8.2	8	7.8	7.7	7.5	7.3	7.2	22
24					7.7	7.6	7.4	7.2	7.1	6.9	6.7	6.6	6.4	6.2	6.1	24
26						6.6	6.5	6.3	6.2	6	5.8	5.7	5.5	5.3	5.2	26
28							5.7	5.5	5.4	5.3	5	4.9	4.8	4.5	4.4	28
30							5.1	4.8	4.7	4.6	4.4	4.2	4.1	3.9	3.7	30
32								4.3	4.1	4	3.8	3.6	3.5	3.3	3.2	32
34									3.6	3.5	3.3	3.1	3	2.8	2.7	34
36									3.2	3.1	2.8	2.7	2.6	2.3	2.2	36
38										2.7	2.4	2.3	2.2	1.9	1.8	38
40											2.1	1.9	1.8	1.6	1.5	40
42												1.6	1.5	1.3	1.1	42
44												1.3	1.2	1	0.8	44

Note: 1. Maximum rated capacity for upper boom point is 9t, which is mainly determined by rated line pull of hoisting wire rope. Values less than 9t is determined by stability.

SCC1000E Load Charts for FJ Operating Condition

Boom Length 37m~52m Rear Counterweight 30t Central Ballast 10t Unit: t

Boom Length m	37						40					
	9		13.5		18		9		13.5		18	
Offset angle/Radius m	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°
14	8						8					
15	8	8	7				8	8	7			
16	8	8	7	6.5			8	8	7	6.5		
18	8	8	7	6.5	5.5		8	8	7	6.5	5.5	
20	8	8	7	6.5	5.5		8	8	7	6.5	5.5	
22	8	8	7	6.5	5.5	5	8	8	7	6.5	5.5	5
24	7.8	8	7	6	5.5	4.5	7.7	7.9	7	6	5.5	4.5
26	6.9	7.1	7	6	5.5	4.5	6.8	7	6.9	6	5.5	4.5
28	6.2	6.3	6.3	5.5	5.5	4.2	6	6.2	6.1	5.5	5.5	4.5
30	5.5	5.6	5.6	5.5	5	4	5.4	5.5	5.5	5.5	5.5	4
32	5	5.1	5.1	5	5	4	4.9	5	4.9	5	4.5	4
34	4.5	4.6	4.6	4.7	4.6	3.9	4.4	4.5	4.5	4.6	4.5	4
36	4	4.1	4.1	4.3	4.2	3.8	3.9	4	4	4.2	4.1	3.9
38	3.7	3.7	3.7	3.9	3.8	3.7	3.5	3.6	3.6	3.8	3.7	3.8
40	3.3	3.4	3.4	3.5	3.4	3.6	3.2	3.3	3.3	3.4	3.3	3.5
42	3	3	3.1	3.2	3.1	3.2	2.9	2.9	3	3.1	3	3.1

- Note: 1. Rated capacity in the load charts is valid when the crane is on firm, level and evenly-supported ground with gradient smaller than 1% and within 360° slewing range.
 2. Actual Lifting Capacity shall deduct the weight of hook blocks, lifting devices, and wire ropes reeving between the hooks and boom head from the rate capacity.
 3. Values with yellow background is determined by boom strength.

SCC1000E Load Charts for FJ Operating Condition												
Boom Length 37m~52m Rear Counterweight 30t Central Ballast 10t Unit: t												
Boom Length m	43						46					
	9		13.5		18		9		13.5		18	
Offset angle/Radius m	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°
14	8						8					
15	8						8					
16	8	8	7				8	8	7			
18	8	8	7				8	8	7			
20	8	8	7	6.5	5.5		8	8	7	6.5	5.5	
22	8	8	7	6.5	5.5	5	8	8	7	6.5	5.5	
24	7.5	7.7	7	6.5	5.5	5	7.3	7.6	7	6.5	5.5	5
26	6.6	6.8	6.7	6	5.5	4.5	6.5	6.7	6.6	6	5.5	4.5
28	5.9	6	6	6	5.5	4.5	5.7	5.9	5.8	6	5.5	4.5
30	5.2	5.4	5.3	5.5	5	4	5.1	5.3	5.2	5.5	5	4.5
32	4.7	4.8	4.8	5	4.5	4	4.5	4.7	4.6	4.9	4.7	4
34	4.2	4.3	4.3	4.5	4	4	4	4.2	4.1	4.4	4.2	4
36	3.7	3.8	3.8	4	3.9	4	3.6	3.7	3.7	3.9	3.8	4
38	3.4	3.4	3.4	3.6	3.5	3.7	3.2	3.3	3.3	3.5	3.4	3.6
40	3	3.1	3.1	3.2	3.1	3.3	2.9	3	3	3.1	3	3.2
42	2.7	2.8	2.8	2.9	2.8	3	2.6	2.6	2.7	2.8	2.7	2.9

Note: 1. Rated capacity in the load charts is valid when the crane is on firm, level and evenly-supported ground with gradient smaller than 1% and within 360° slewing range.
 2. Actual Lifting Capacity shall deduct the weight of hook blocks, lifting devices, and wire ropes reeving between the hooks and boom head from the rate capacity.
 3. Values with yellow background is determined by boom strength.

SCC1000E Load Charts for FJ Operating Condition												
Boom Length 37m~52m Rear Counterweight 30t Central Ballast 10t Unit: t												
Boom Length m	49						52					
	9		13.5		18		9		13.5		18	
Offset angle/Radius m	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°	15°	30°
14												
15	8						8					
16	8	8	7				8	8	7			
18	8	8	7				8	8	7			
20	8	8	7	6.5	5.5		8	8	7	6.5	5.5	
22	8	8	7	6.5	5.5		8	8	7	6.5	5.5	
24	7.2	7.5	7	6.5	5.5	5	7	7.3	7	6.5	5.5	5
26	6.3	6.6	6.5	6	5.5	4.5	6.2	6.4	6.3	6.5	5.5	5
28	5.6	5.8	5.7	5.5	5.5	4.5	5.4	5.6	5.6	5.5	5.5	4.5
30	5	5.1	5.1	5.4	5.2	4.5	4.8	5	4.9	5.2	5	4.5
32	4.4	4.6	4.5	4.8	4.6	4	4.2	4.4	4.3	4.6	4.4	4
34	3.9	4.1	4	4.3	4.1	4	3.7	3.9	3.9	4.1	3.9	4
36	3.5	3.6	3.6	3.8	3.7	3.9	3.3	3.4	3.4	3.6	3.5	3.8
38	3.1	3.2	3.2	3.4	3.3	3.5	2.9	3	3	3.2	3.1	3.4
40	2.8	2.9	2.9	3	2.9	3.1	2.6	2.7	2.7	2.9	2.7	3
42	2.5	2.5	2.5	2.7	2.6	2.8	2.3	2.4	2.4	2.5	2.4	2.6

Note: 1. Rated capacity in the load charts is valid when the crane is on firm, level and evenly-supported ground with gradient smaller than 1% and within 360° slewing range.

2. Actual Lifting Capacity shall deduct the weight of hook blocks, lifting devices, and wire ropes reeving between the hooks and boom head from the rate capacity.

3. Values with yellow background is determined by boom strength.

SCC1000E Load Charts for FJ Operating Condition using Main Fall -- Boom Length 37m~52m
 Rear Counterweight 30t Central Ballast 10t

Radius Boom Length	37			40			43			46			49			52			Boom Length Radius		
	Jib length m	0	9	13.5	18	18	0	9	13.5	18	18	0	9	13.5	18	18	0	9		13.5	18
9	31	29.8	29.4	29																	9
10	26.9	25.7	25.3	24.9	24.7	24.4	26.7	25.5	25.1	24.7	24.4	23.5	22.3	21.9	21.5	21.2	24.8	24.4			10
11	23.6	22.4	22	21.6	21.5	21.2	23.5	22.3	21.9	21.5	21.2	20.6	19.4	19	18.6	18.3	21.8	21.4	21	20.7	11
12	21	19.8	19.4	19	18.9	18.6	20.9	19.7	19.3	18.9	18.6	18.5	17.3	16.9	16.5	16.2	19.2	18.8	18.4	18.3	18
13	18.9	17.7	17.3	16.9	16.7	16.5	18.7	17.5	17.1	16.7	16.5	16.7	15.5	15.1	14.7	14.4	17.1	16.7	16.3	16.2	13
14	17.1	15.9	15.5	15.1	15	14.7	17	15.8	15.4	15	14.7	15.4	14.2	13.8	13.4	13	14.9	14.5	14.2	14.1	14
15	15.6	14.4	14	13.6	13.4	13.2	15.4	14.2	13.8	13.4	13.2	14.1	12.9	12.5	12.1	11.7	13.8	13.4	13	12.9	15
16	14.3	13.1	12.7	12.3	12.1	11.9	14.1	12.9	12.5	12.1	11.9	13.9	12.7	12.3	11.9	11.7	12.5	12.1	11.7	11.6	16
18	12.2	11	10.6	10.2	10	9.8	12	10.8	10.4	10	9.8	11.8	10.6	10.2	9.8	9.6	10.4	10	9.6	9.5	18
20	10.5	9.3	8.9	8.5	8.4	8.1	10.4	9.2	8.8	8.4	8.1	10.1	8.9	8.5	8.1	8	8.8	8.4	8	7.8	20
22	9.2	8	7.6	7.2	7	6.8	9	7.8	7.4	7	6.8	8.8	7.6	7.2	6.8	6.4	7.5	7.1	6.7	6.5	22
24	8.1	6.9	6.5	6.1	5.9	5.7	7.9	6.7	6.3	5.9	5.7	7.7	6.5	6.1	5.7	5.4	6.4	6	5.6	5.4	24
26	7.2	6	5.6	5.2	5	4.8	7	5.8	5.4	5	4.8	6.8	5.6	5.2	4.8	4.6	5.5	5.1	4.7	4.5	26
28	6.4	5.2	4.8	4.4	4.3	4	6.3	5.1	4.7	4.3	4	6	4.8	4.4	4	3.9	4.7	4.3	3.9	3.8	28
30	5.7	4.5	4.1	3.7	3.6	3.4	5.6	4.4	4	3.6	3.4	5.4	4.2	3.8	3.4	3.2	4	3.6	3.2	3.1	30
32	5.1	3.9	3.5	3.1	3	2.8	5	3.8	3.4	3	2.8	4.8	3.6	3.2	2.8	2.6	3.4	3	2.6	2.5	32
34	4.6	3.4	3	2.6	2.5	2.3	4.5	3.3	2.9	2.5	2.3	4.3	3.1	2.7	2.3	2.1	2.9	2.5	2.1	2	34
36	4.2	3	2.6	2.2	2.1	1.9	4.1	2.9	2.5	2.1	1.8	3.8	2.6	2.2	1.8	1.7	2.5	2.1	1.7	1.6	36
38							3.7	2.5	2.1	1.7	1.4	3.4	2.2	1.8	1.4	1.3	2.1	1.7	1.3	1.2	38
40												3.1	1.9	1.5			2.9	1.7	1.3		40
42																	2.6	1.4		2.3	42
44																	2.3			2	44
46																	1.9			1.7	46
48																				1.5	48

- Note: 1. Rated capacity in the load charts is valid when the crane is on firm, level and evenly-supported ground with gradient smaller than 1% and within 360° slewing range.
 2. Actual Lifting Capacity shall deduct the weight of hook blocks, lifting devices, and wire ropes reeving between the hooks and boom head from the rated capacity.
 3. The column with jib length of zero is the original rated capacity of boom without fixed jib.

SCC1000E - LJ Operating Condition

Boom Length Jib Length Boom angle Radius	40.3m															
	19m			22m			25m			28m			31m			
	90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	
7	18.4/7.4															7
8	18.4			18.2/8.2												8
9	18.4			17.6			15.6									9
10	17.5			16.7			14.9						12.3/10.6			10
12	16.5			15.1			13.7						11.0			12
14	14.5			13.6			12.5						10.2			14
16	12.5			12.1			11.3						9.5			16
18	10.5			10.5			10.2						8.8			18
20	8.5			9.0			8.9						8.0			20
22	7.1/20.9	6.8/22.4		8.3	6.4/23.9		8.2						7.4			22
24		6.5		6.5/23.8	6.4		7.5	6.6/25.4					6.8			24
26		6.0			5.9		5.8	5.8					6.2			26
28		5.5			5.4		5.0/26.6	5.3					5.7	5.1/28.4		28
30		5.0			5.0			4.9					5.2	4.7		30
32		4.7/31.3			4.6			4.5					4.3	4.3		32
34			3.1/35.9		4.3			4.2					4.0/32.4	4.0		34
36			3.1		4.2/34.2			3.9						3.7		36
38			2.9			2.9/38.1		3.7/37.1						3.5		38
40			2.7			2.7			2.6/40.2					3.3		40
42			2.6/40.8			2.5			2.4				2.2/42.3	3.1		42
44						2.3/43.7			2.2				2.2	3.0/42.8	2.0/44.4	44
46									2.1				2.0		1.9	46
48									2.0/46.6				1.9		1.8	48
50													1.8/49.5		1.7	50
52															1.6	52
54															1.5/52.4	54

SCC1000E - LJ Operating Condition

Boom Length		43.3m												Boom Length			
Jib Length		19m			22m			25m			28m			31m			Jib Length
Boom angle Radius		90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	90°	75°	60°	Boom angle Radius
7	18.4/7.4																7
8	18.4				17.2/8.2												8
9	18.2				16.6			14.8			14.0/9.8						9
10	17.3				15.8			14.2			12.7			11.0/10.6			10
12	15.5				14.3			13.0			11.8			10.6			12
14	13.8				12.8			11.8			10.9			9.8			14
16	12.3				11.5			10.7			9.9			9.1			16
18	10.5				10.3			9.6			9.1			8.3			18
20	8.4				9.0			8.8			8.3			7.7			20
22	7.0/20.9	6.5/23.2			8.3			7.9			7.5			7.0			22
24		6.3			6.5/23.8	6.0/24.7		7.2			6.8			6.4			24
26		5.8				5.7		5.8	5.4/26.2		6.2	5.1/27.7		5.9			26
28		5.3				5.2		4.8/26.6	5.1		5.3	5.0		5.4	4.6/29.2		28
30		4.9				4.8			4.7		4.2/29.5	4.6		5.0	4.5		30
32		4.5				4.5			4.4		4.3	4.3		4.2	4.2		32
34						4.2			4.1		4.0	4.0		3.9/32.4	3.9		34
36						4.0/34.9			3.8		3.7	3.7			3.6		36
38									3.5/37.8		3.5	3.5			3.4		38
40											3.3	3.3			3.2		40
42											3.1/40.7	2.0/43.8			3.0		42
44											2.2	2.1			2.8/43.6	1.8/45.9	44
46											2.0	1.9				1.8	46
48											1.8	1.8				1.7	48
50											1.8/48.1	1.7				1.6	50
52												1.6/51				1.5	52
54																1.4/53.9	54