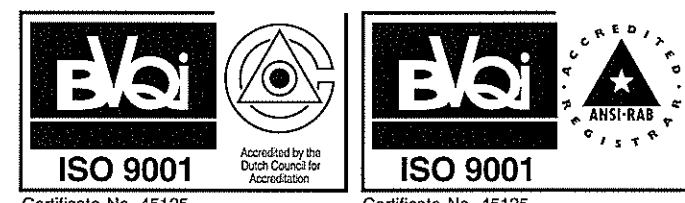


SC 2000-3

200-M ton Hyd. Crawler Crane Luffing Towercrane Att.

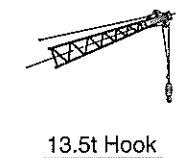
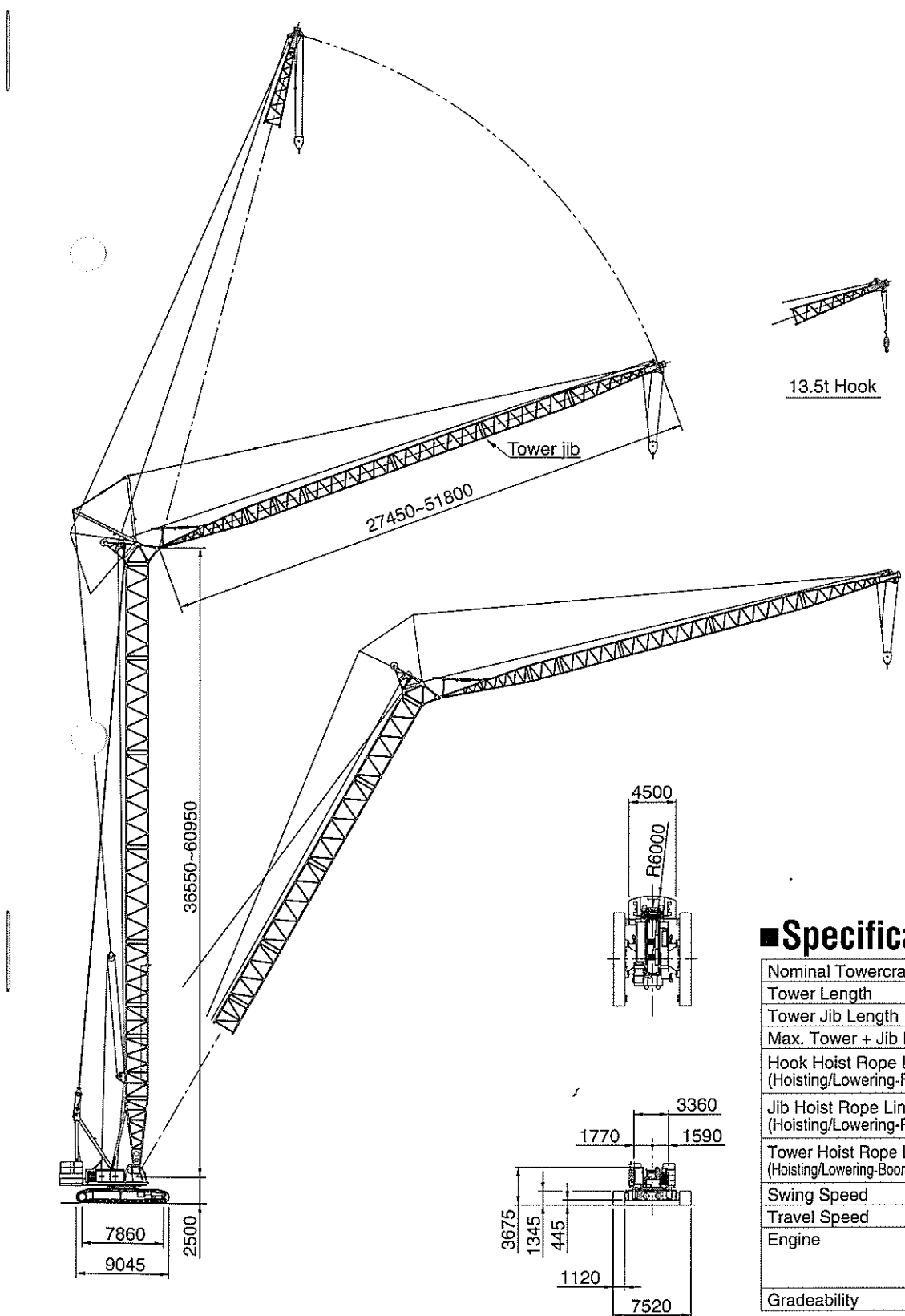
SUMITOMO HEAVY INDUSTRIES CONSTRUCTION CRANE CO., LTD.

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- We are constantly improving our products and therefore reserve the right to change designs and specifications without notice.
- Units in this specification are shown under International System of Units; the figures in parenthesis are under Gravitational System of Units as old one.

Address Inquires to:



■ Specification

Nominal Towercrane Cap.	25.0 t × 14.0 m
Tower Length	36.55 m ~ 60.95 m
Tower Jib Length	27.45 m ~ 51.80 m
Max. Tower + Jib Length	60.95 m + 51.80 m
Hook Hoist Rope Line Speed (Hoisting/Lowering-Front Drum)	120 ~ 2.0 m/min
Jib Hoist Rope Line Speed (Hoisting/Lowering-Rear Drum)	51 ~ 2.0 m/min
Tower Hoist Rope Line Speed (Hoisting/Lowering-Boom Hoist Drum)	(24 ~ 1.0 m/min) × 2
Swing Speed	1.7 min. ⁻¹ < 1.7 rpm >
Travel Speed	1.2/0.8 km/hr
Engine	Mitsubishi 6D24-TL 235kW/2,000min. ⁻¹ < 320 ps/2,000rpm >
Gradeability	17° (30%)

Luffing Towercrane 25 metric tons

TOWER BOOM:

Lattice construction, round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing.

Tower boom connectionsIn-line pin connections at 2.10m deep by 2.10m wide.

Special tower boom extensions6.10m long, lattice construction; mounts tower jib bail assembly on upper part, and just pinned next to 7.60m bottom section. Available to use as liftcrane boom extension. Also, 9.15m long special tower boom extension is available.

Tower boom extensionsAvailable in length 3.05m, 6.10m and 9.15m with tower boom/tower jib hoist pendants. Available to use as liftcrane boom extension.

Tower head section1.50m long, lattice construction; pinned on top of tower boom. This section pins tower jib and fan-shaped post, and provides one guide sheaves for hoist cable and two guide rollers for tower jib hoist pendant ropes.

Tower boom length36.55m to 60.95m; the configuration of a 60.95m tower boom as maximum is as under:
 (1) 7.60m heavy-duty tower bottom section × 1 pce. (2) 6.10m special heavy-duty boom extension × 1 pce. (3) 9.15m special heavy-duty boom extension × 1 pce. (4) 3.05m heavy-duty boom extension × 1 pce. (5) 6.1m heavy-duty boom extension × 1 pce. (6) 9.15m heavy-duty boom extension × 3 pcs. (7) 1.50m tower head section × 1 pce.

Tower boom luffing angle90° thru 60° steplessly.

Note:

- Bottom section of 7.60m long and boom extensions of 3.05m, 6.10m and 9.15m long as necessary to complete liftcrane boom attachment are available from those of luffing towercrane boom attachment.
- In case of converting luffing towercrane boom attachment of 60.95m as max. to liftcrane boom attachment 88.40m as maximum as available, four items of each one of 4.55m tapered boom extension, 6.10m light-duty boom extension, 9.15m light-duty boom extension and 9.15m light-duty tapered top section are only additionally required.

TOWER JIB:

Lattice construction, round tubular main chords, alloy hi-ten steel, with bracing of round steel tubing.

Tower jib connectionsIn-line pin connections at 1.55m deep by 1.55m wide.

Basic tower jibThree-pieces, 27.45m basic length; 9.15m bottom section, one 9.15m light-duty boom extension and 9.15m light-duty tapered top section.

Tower jib top head machinerySingle head and one guide sheaves mounted on anti-friction bearings.

Tower jib extensionsAvailable in 3.05m, 6.10m and 9.15m lengths with pendants.

Maximum tower jib length51.80m; a 51.80m tower jib as maximum is as per following combination. (1) 9.15m light-duty tower jib bottom section × 1 pce. (2) 3.05m light-duty boom extension × 2 pcs. (3) 9.15m light-duty boom extension × 3 pcs. (4) 9.15m light-duty tower jib top section × 1 pce.

Tower boom luffing angleAvailable from 15° thru 75° (to ground).

FAN-SHAPED POST:

All-welded construction; pinned to tower head section. This serves as mechanical connection for tower jib hoisting and lowering motions.

TOWER JIB BAIL AND BRIDLE:

All-welded construction; provided with larger sheaves of a 22.9 D/d ratio on both bail and bridle for 8-part tower jib hoist rope reeving. Bail mounted on 6.10m special tower boom extensions, and bridle suspended between an 8-part tower jib hoist rope and pendant ropes connecting to tower post.

HOOK BLOCKS:

To be selected from 35ton and 13.5ton hook blocks (as same as those of the HOOK BLOCKS mentioned in to "Crane 200 metric tons" of separate SC2000-3 Technical Data).

DRUM DATA:

See DRUM DATA mentioned into page 7 of separate SC2000-3 Technical Data. In case that machine is operated under luffing towercrane attachment, rope line speed of rear main drum (as used for tower jib hoisting/lowering motion) must be changed to "51-2.0m/min".

HOIST REEVING:

Towercrane hoist		
No. of part line	2	1
Max. load (ton)	25.0	13.5

CABLES:

Front drumP-S (19)+39xP7, non-spin type, 28mm dia./410m long, breaking load 755kN (77.0t).

Rear drumIWRC 6xP-WS (31), 28mm dia./180m long, breaking load 657kN(67.0t).

Boom hoist drumSame as that of liftcrane application.

WORKING WEIGHT:

Approx. 222ton with 60.95m tower boom, 51.80m tower jib, 86.3ton counterweight, 14.0ton lower frame, 1,120mm wide track shoes and 25t hook block.

GROUND PRESSURE:

118kPa <1.20kg/cm²> under a 222ton working weight mentioned above.

Luffing Towercrane Capacities

■ w/36.55m Tower

Jib length (m)	27.45				30.50			
	90	80	70	60	90	80	70	60
10.0	25.0/10.8				25.0/11.6			
12.0	25.0				25.0			
14.0	25.0				25.0			
16.0	25.0				25.0			
18.0	25.0				24.2			
20.0	24.1	23.4/21.5			23.3			
22.0	23.1	23.1			22.4	21.7/22.8		
24.0	20.5	20.5			20.7	20.7		
26.0	18.3	18.3			18.4	18.4		
28.0	15.7	16.5			16.6	16.6		
30.0	13.7/28.7	15.0	14.1/31.5		15.0	15.0		
32.0		13.8	13.8		12.0/31.6	13.7	13.0/33.3	
34.0		12.7	12.7			12.6	12.6	
36.0		11.9/35.7	11.8			11.7	11.7	
38.0			11.0			10.8	10.8	
40.0			10.3	10.0/40.7		10.6/38.6	10.1	
42.0			9.7/41.7	9.6			9.5	9.2/42.8
44.0				9.1			8.9	8.9
46.0				8.6			8.7/44.7	8.4
48.0				8.3/47.4				7.9
50.0								7.5
52.0								7.4/50.3

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■ w/39.60m Tower

Jib length (m)	27.45				30.50				33.50			
	90	80	70	60	90	80	70	60	90	80	70	60
10.0	25.0/10.8				25.0/11.6							
12.0	25.0				25.0				25.0/12.4			
14.0	25.0				25.0				25.0			
16.0	25.0				25.0				24.2			
18.0	25.0				24.2				23.4			
20.0	24.1				23.3				22.6			
22.0	23.1	23.1			22.4	21.3/23.3			21.8			
24.0	20.5	20.5			20.7	20.7			21.0	20.2/24.6		
26.0	18.2	18.2			18.4	18.4			18.6	18.6		
28.0	16.0	16.4			16.5	16.5			16.7	16.7		
30.0	13.6/28.7	15.0			15.0	15.0			15.1	15.1		
32.0		13.7	13.4/32.6		11.8/31.6	13.7			13.8	13.8		
34.0		12.6	12.6			12.6	12.4/34.3		11.8	12.7		
36.0		11.7	11.7			11.6	11.6		10.8/34.4	11.7	11.7/36.1	
38.0		11.6/36.2	10.9			10.8	10.8			10.9	10.9	
40.0			10.2			10.3/39.2	10.0			10.1	10.1	
42.0			9.6	9.5/42.2			9.4			9.5	9.5	
44.0			9.4/42.8	9.0			8.8	8.7/44.4		9.4/42.1	8.9	
46.0				8.5			8.4/45.7	8.3			8.3	8.2/46.5
48.0				8.1				7.8			7.9	7.9
50.0				7.9/48.9				7.4			7.7/48.7	7.4
52.0								7.1/51.8				7.0
54.0												6.7
56.0												6.6/54.8

(EC401059)

■ w/42.65m Tower

Jib length (m)	27.45				30.50				33.50				36.55			
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60
10.0	25.0/10.8				25.0/11.6											
12.0	25.0				25.0				25.0/12.4				23.6/13.2			
14.0	25.0				25.0				25.0				23.3			
16.0	25.0				25.0				24.2				22.6			
18.0	25.0				24.2				23.4				21.9			
20.0	24.1				23.3				22.6				21.2			
22.0	23.1	22.4/22.5			22.4	20.8/23.8			21.8				20.5			
24.0	20.4	20.4			20.6	20.6			20.9	19.6/25.1			19.8			
26.0	18.2	18.2			18.3	18.3			18.6	18.6			18.6	18.2/26.4		
28.0	16.3	16.4			16.5	16.5			16.6	16.6			16.6	16.6		
30.0	13.7/28.7	14.9			14.9	14.9			15.1	15.1			15.0	15.0		
32.0		13.7	12.8/33.6		12.0/31.6	13.6			13.8	13.8			13.7	13.7		
34.0		12.6	12.6			12.5	11.8/35.4		12.0	12.6			12.5	12.5		
36.0		11.7	11.7			11.6	11.6		11.0/34.4	11.7	11.2/37.1		11.6	11.6		
38.0		11.4/36.7	10.9			10.7	10.7			10.8	10.8		9.7/37.3	10.7	10.3/38.9	
40.0			10.2			10.1/39.7	10.0			10.1	10.1			9.9	9.9	
42.0			9.5	9.1/43.7			9.4			9.4	9.4			9.3	9.3	
44.0			9.0/43.8	9.0			8.8	8.3/45.9		9.2/42.6	8.8			8.7	8.7	
46.0				8.5			8.3	8.3			8.3			8.2/45.6	8.1	
48.0				8.0			8.1/46.8	7.8			7.8	7.8			7.6	
50.0				7.6				7.4			7.5/49.7	7.4			7.2	7.2/50.2
52.0				7.5/50.4				7.0				7.0			6.8	6.8
54.0								6.7/53.4				6.6			6.7/52.7	6.4
56.0												6.3				6.1
58.0												6.3/56.3				5.8
60.0																5.6/59.2

(EC401059)

■ w/48.75m Tower

Jib length (m)	27.45				30.50				33.50				36.55				39.60				42.65								
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60	
10.0	25.0/10.8				25.0/11.6																								
12.0	25.0				25.0				25.0/12.4				23.6/13.2																
14.0	25.0				25.0				25.0				23.3												21.4			18.9/14.8	
16.0	25.0				25.0				24.2				22.6												20.8			19.2	
18.0	25.0				24.2				23.4				21.9												20.2			18.7	
20.0	24.1				23.3				22.6				21.2												19.6			18.2	
22.0	23.1	22.4/22.5			22.4	20.8/23.8			21.8				20.5												19.0			17.7	
24.0	20.4	20.4			20.6	20.6			20.9	19.6/25.1			19.8												19.4			17.2	
26.0	18.1	18.1			18.2	18.2			18.2	18.2			18.2	18.2										18.5	17.0/27.5		17.8		16.6
28.0	16.3	16.3			16.4	16.4			16.4	16.4			16.5	16.5										16.5	15.8/28.8		16.1		15.0
30.0	14.1/28.7	14.8			14.8	14.8			14.8	14.8			15.0	15.0										14.9	14.9		14.9		14.6
32.0		13.6				12.3/31.6			13.5				13.7	13.7										13.6	13.6		13.5	13.5	13.3
34.0		12.5	11.7/35.7			12.4			12.4				12.2	12.5										12.4	12.4		12.4	12.4	12.2
36.0		11.6	11.6			11.5	10.8/37.5		11.5	10.8/37.5			11.2/34.4	11.6										11.5	11.5		11.4	11.4	11.2
38.0		10.8/37.8	10.8			10.6	10.6		10.6	10.6			10.7	10.3/39.2										10.0/37.3	10.6		10.5	10.5	10.3
40.0		10.1				9.9	9.9		9.9	9.9			10.0	10.0										9.8	9.5/41.0		9.1	9.8	9.5
42.0		9.4				9.4	9.4		9.4	9.4			9.3	9.3										8.8/40.2	9.1	8.8	8.8	8.8	8.8
44.0		8.9				8.7			8.7				8.8/43.7	8.7										8.6	8.6		8.5	8.5	7.9/43.0
46.0		8.4/45.9	8.2/46.8			8.2			8.2				8.2											8.0	8.0		8.0	8.0	7.7
48.0			7.9			7.7	7.5/48.9		7.7	7.5/48.9			7.7											7.8/46.6	7.5		7.5	7.5	7.2
50.0			7.5			7.5	7.5/48.9	7.3		7.3	7.1/51.1		7.1											7.1		7.1	7.0		6.7
52.0			7.2			7.2		6.9		6.9	6.5/53.2		6.7	6.5/53.2										6.6	6.6		6.6	6.3	6.3
54.0			6.9/53.5			6.9	6.9	6.5		6.5	6.5		6.2	6.2										6.3	6.3		6.3	6.3	6.3
56.0						6.2		6.2		6.2			6.2											6.2/54.7	6.0		5.9	5.9	5.6
58.0						6.2/56.4		6.2		6.2			5.9											5.7		5.7	5.6	5.3	5.3
60.0													5.7/59.3											5.4		5.4	5.3	5.0	5.0
62.0																								5.1		5.1	5.1	4.9	4.7
64.0																								5.1/62.3		4.8		4.8	4.5
66.0																										4.7/65.2		4.2	
68.0																											4.7/65.2		4.0
70.0																												4.0	

(EC401059)

■ w/45.70m Tower

Jib length (m)	27.45				30.50				33.50				36.55				39.60												
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60									
10.0	25.0/10.8				25.0/11.6																								
12.0	25.0				25.0				25.0/12.4				23.4/13.2																
14.0	25.0				25.0				24.8				23.1																21.6
16.0	25.0				25.0				24.0				22.4																21.0
18.0	25.0				24.2				23.2				21.7																20.4
20.0	24.1				23.3				22.4				21.0																19.8
22.0	23.1	21.6/23.1			22.4				21.6				20.3																19.2
24.0	20.4	20.4			20.6	20.1/24.4			20.8	18.8/25.7			19.6																

■ w/54.85m Tower

Jib length (m) Tower angle Working radius (m)	27.45				30.50				33.50				36.55			
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60
10.0	25.0/10.8				25.0/11.6											
12.0	25.0				25.0				24.8/12.4				22.8/13.2			
14.0	25.0				25.0				24.2				22.5			
16.0	25.0				24.5				23.4				21.8			
18.0	24.9				23.6				22.6				21.1			
20.0	23.9				22.7				21.8				20.4			
22.0	22.9				21.8				21.0				19.7			
24.0	20.2	19.4/24.7			20.4				20.2				19.0			
26.0	18.0	18.0			18.1	18.1			18.4	17.2/27.2			18.3			
28.0	16.2	16.2			16.3	16.3			16.4	16.4			16.4	16.0/28.5		
30.0	14.3/28.7	14.7			14.7	14.7			14.9	14.9			14.8	14.8		
32.0		13.5			12.5/31.6	13.4			13.6	13.6			13.5	13.5		
34.0		12.4				12.3			12.4	12.4			12.3	12.3		
36.0		11.5	10.7/37.8			11.4			11.4/34.4	11.5			11.4	11.4		
38.0		10.7	10.7			10.5	10.0/39.5			10.6			10.1/37.3	10.5		
40.0		10.3/38.9	10.0			9.8	9.8			9.9	9.4/41.3			9.7		
42.0			9.3			9.2/41.8	9.2			9.2	9.2			9.1	8.8/43.0	
44.0			8.8				8.6			8.6	8.6			8.5	8.5	
46.0			8.3				8.1			8.4/44.8	8.1			7.9	7.9	
48.0			7.8	7.5/49.8			7.6				7.6			7.5/47.7	7.4	
50.0				7.4			7.2				7.2				7.0	
52.0				7.1			7.0/50.9	6.8			6.8				6.6	
54.0				6.7				6.4			6.5/53.9	6.4/54.1			6.2	
56.0				6.4				6.1				6.1			5.9	5.8/56.3
58.0					6.3/56.5			5.8				5.8			5.8	5.5/57.9
60.0								5.6/59.5				5.5				5.3
62.0												5.3				5.0
64.0												5.2/62.4				4.8
66.0																4.6/65.3

(EC401059)

■ w/57.90m Tower

Jib length (m) Tower angle Working radius (m)	27.45				30.50				33.50				36.55			
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60
10.0	25.0/10.8				25.0/11.6											
12.0	25.0				25.0				24.6/12.4				22.6/13.2			
14.0	25.0				25.0				24.0				22.3			
16.0	25.0				24.5				23.2				21.6			
18.0	24.7				23.4				22.4				20.9			
20.0	23.7				22.5				21.6				20.2			
22.0	22.7				21.6				20.8				19.5			
24.0	20.2	18.8/25.2			20.4				20.0				18.8			
26.0	17.9	17.9			18.1	17.6/26.5			18.3	16.6/27.8			18.1			
28.0	16.1	16.1			16.2	16.2			16.4	16.4			16.4	15.5/29.1		
30.0	14.4/28.7	14.7			14.7	14.7			14.8	14.8			14.8	14.8		
32.0		13.4			12.6/31.6	13.4			13.5	13.5			13.4	13.4		
34.0		12.3				12.3			12.4	12.4			12.3	12.3		
36.0		11.4				11.3			11.5/34.4	11.4			11.3	11.3		
38.0		10.6	10.3/38.9			10.5				10.6			10.2/37.3	10.4		
40.0		10.1/39.4	9.9			9.7	9.6/40.6			9.8				9.7		
42.0			9.3			9.1	9.1			9.2	9.1/42.3			9.0		
44.0			8.7				9.0/42.3	8.5		8.6	8.6			8.4	8.4/44.1	
46.0			8.2					8.0		8.2/45.3	8.0			7.9	7.9	
48.0			7.8					7.5			7.6			7.4	7.4	
50.0			7.6/49.0	7.1/51.4				7.1			7.1			7.3/48.2	6.9	
52.0				7.0				6.7	6.5/53.5		6.7			6.7	6.5	
54.0				6.7				6.4			6.4	6.1/55.7			6.2	
56.0				6.3				6.1			6.1	6.2/54.9	6.1		5.8	5.6/57.8
58.0				6.1				5.8			5.8		5.8		5.5/57.9	5.5
60.0								5.5			5.5			5.5		5.2
62.0											5.4/61.0			5.2		5.0
64.0														5.0/63.9		4.7
66.0																4.5
68.0																4.4/66.9

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■ w/54.85m Tower

Jib length (m) Tower angle Working radius (m)	39.60				42.65				45.70				48.75			
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60
14.0	21.0				19.2/14.8				16.6/15.6							
16.0	20.4				18.8				16.5				14.9/16.4			
18.0	19.8				18.3				16.0				14.5			
20.0	19.2				17.8				15.6				14.1			
22.0	18.6				17.3				15.2				13.7			
24.0	18.0				16.8				14.7				13.3			
26.0	17.4				16.2				14.3				12.8			
28.0	16.4	14.9/29.8			15.7				13.8				12.4			
30.0	14.8	14.8			14.6	13.9/31.1			13.4				12.0			
32.0	13.4	13.4			13.3	13.3			13.0	12.8/32.4			11.6	11.2/33.7		
34.0	12.3	12.3			12.2	12.2			12.2	12.2			11.2	11.2		
36.0	11.3	11.3			11.2	11.2			11.2	11.2			10.6	10.6		
38.0	10.4	10.4			10.3	10.3			10.3	10.3			9.8	9.8		
40.0	9.3	9.7			9.5	9.5			9.5	9.5			9.1	9.1		
42.0	8.7/40.2	9.0			8.8	8.8			8.8	8.8			8.5	8.5		
44.0		8.4	8.2/44.8		8.1/43.0	8.2			8.2	8.2			7.9	7.9		
46.0		7.9	7.9			7.7	7.6/46.5		7.7	7.1/45.9			7.4	7.4		
48.0		7.4	7.4			7.2	7.2			7.2	7.1/48.3		6.9	6.9		
50.0		6.9	6.9			6.7	6.7			6.7	6.7	6.4/48.7	6.5	6.5		
52.0		6.8/50.6	6.5			6.3	6.3			6.3	6.3		6.1	6.1		
54.0			6.2			6.0/53.6	5.9			5.9	5.9		5.8	5.8		
56.0			5.8				5.6			5.6	5.6		5.4	5.4		
58.0			5.5	5.5/58.4			5.3			5.5/56.5	5.2		5.1	5.1		
60.0			5.3/59.8	5.2			5.0	4.9/60.6			4.9		4.9/59.5	4.8		
62.0				5.0			4.7	4.7			4.7	4.6/62.8		4.6		
64.0				4.7			4.6/62.7	4.5			4.4	4.4		4.3	4.2/64.9	
66.0				4.5				4.2			4.2/65.7	4.2		4.1	4.1	
68.0				4.3				4.0				3.9		3.9	3.9	
70.0				4.2/68.3				3.8				3.7		3.8/68.6	3.7	
72.0								3.7/71.2				3.5			3.5	
74.0												3.3			3.3	
76.0												3.3/74.2			3.1	
78.0															3.0/77.1	

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■ w/57.90m Tower

Jib length (m) Tower angle Working radius (m)	39.60				42.65				45.70				48.75			51.80		
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	90	80	70
14.0	20.8				19.0/14.8				16.6/15.6									
16.0	20.2				18.6				16.5				14.9/16.4				13.6/17.1	
18.0	19.6				18.1				16.0				14.5				13.4	
20.0	19.0				17.6				15.6				14.1				13.0	
22.0	18.4				17.1				15.2				13.7				12.6	
24.0	17.8				16.6				14.7				13.3				12.2	
26.0	17.2				16.0				14.3				12.8				11.8	
28.0	16.3				15.5				13.8				12.4				11.4	
30.0	14.7	14.5/30.3			14.6	13.5/31.6			13.4				12.0				11.0	
32.0	13.4	13.4			13.3	13.3			13.0	12.6/32.9			11.6				10.6	
34.0	12.2																	

■ w/60.95m Tower

Jib length (m)	27.45				30.50				33.50				36.55			
	90	80	70	60	90	80	70	60	90	80	70	60	90	80	70	60
10.0	25.0/10.8				24.1/11.6											
12.0	25.0				23.9				22.3/12.4				20.6/13.2			
14.0	24.2				23.0				21.7				20.3			
16.0	23.2				22.1				20.9				19.6			
18.0	22.2				21.2				20.1				18.9			
20.0	21.2				20.3				19.3				18.2			
22.0	20.2				19.4				18.5				17.5			
24.0	19.2	18.1/25.7			18.5				17.7				16.8			
26.0	17.9	17.9			17.6	16.9/27.0			16.9				16.1			
28.0	16.1	16.1			16.2	16.2			16.1	15.9/28.3			15.4	14.8/29.6		
30.0	14.4/28.7	14.6			14.6	14.6			14.8	14.8			14.7	14.7		
32.0		13.4			12.6/31.6	13.3			13.5	13.5			13.4	13.4		
34.0		12.3			12.2				12.3	12.3			12.2	12.2		
36.0		11.4			11.3				11.6/34.4	11.4			11.3	11.3		
38.0		10.6	9.9/39.9		10.4				10.5				10.2/37.3	10.4		
40.0		9.9/39.9	9.9		9.7	9.2/41.6			9.8				9.6			
42.0			9.2		9.1	9.1			9.1	8.7/43.4			9.0			
44.0			8.7		8.8/42.9	8.5			8.5	8.5			8.4	8.1/45.1		
46.0			8.2			8.0			8.0/45.8	8.0			7.8	7.8		
48.0			7.7			7.5			7.5	7.5			7.3	7.3		
50.0			7.3			7.1			7.1				7.2/48.8	6.9		
52.0			7.3/50.1	6.8/52.9		6.7			6.7					6.5		
54.0				6.6		6.5/53.0	6.2/55.0		6.3					6.1		
56.0				6.3			6.0		6.0	5.8/57.2				5.8		
58.0				6.0			5.7			5.7				5.5	5.3/59.3	
60.0				5.8/59.6			5.4			5.4				5.4/58.9	5.2	
62.0							5.2			5.2					4.9	
64.0							5.1/62.5			4.9					4.7	
66.0											4.8/65.4				4.4	
68.0															4.2	
70.0															4.2/68.4	

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Notes:

1. Capacities included in these charts are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
2. Capacities are in metric tons, and are not more than based on 78% of minimum tipping loads except the figures surrounded by bold lines which are based on the other factor of machine structural strength limitation.
3. Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear. SUMITOMO's hook block weight is as follows;
35t.....0.9ton 13.5t.....0.6ton
4. An 86.3ton counterweight and 14.0ton lower frame are required.
5. All capacities are rated for 360° swing.
6. Least stable rated condition is over the side.
7. Attachment must be erected and lowered over the front of the crawler mounting.
8. Working radii shown above are at loading condition.
9. The machine can be steplessly operated at tower angle between 60 and 90 degrees safely; towercrane capacities available under any tower angle are automatically set up by a computerized automatic over-load preventing system, SUMITOMO Model SML-10.
10. The machine must be operated in accordance with correct tower boom and jib combination shown right.
11. Capacities under single part hoist line are detailed; if required, please consult us, or nearest distributor.
12. Capacities apply only to the machine as originally manufactured and normally equipped by Sumitomo Heavy Industries Construction Crane Co., Ltd.

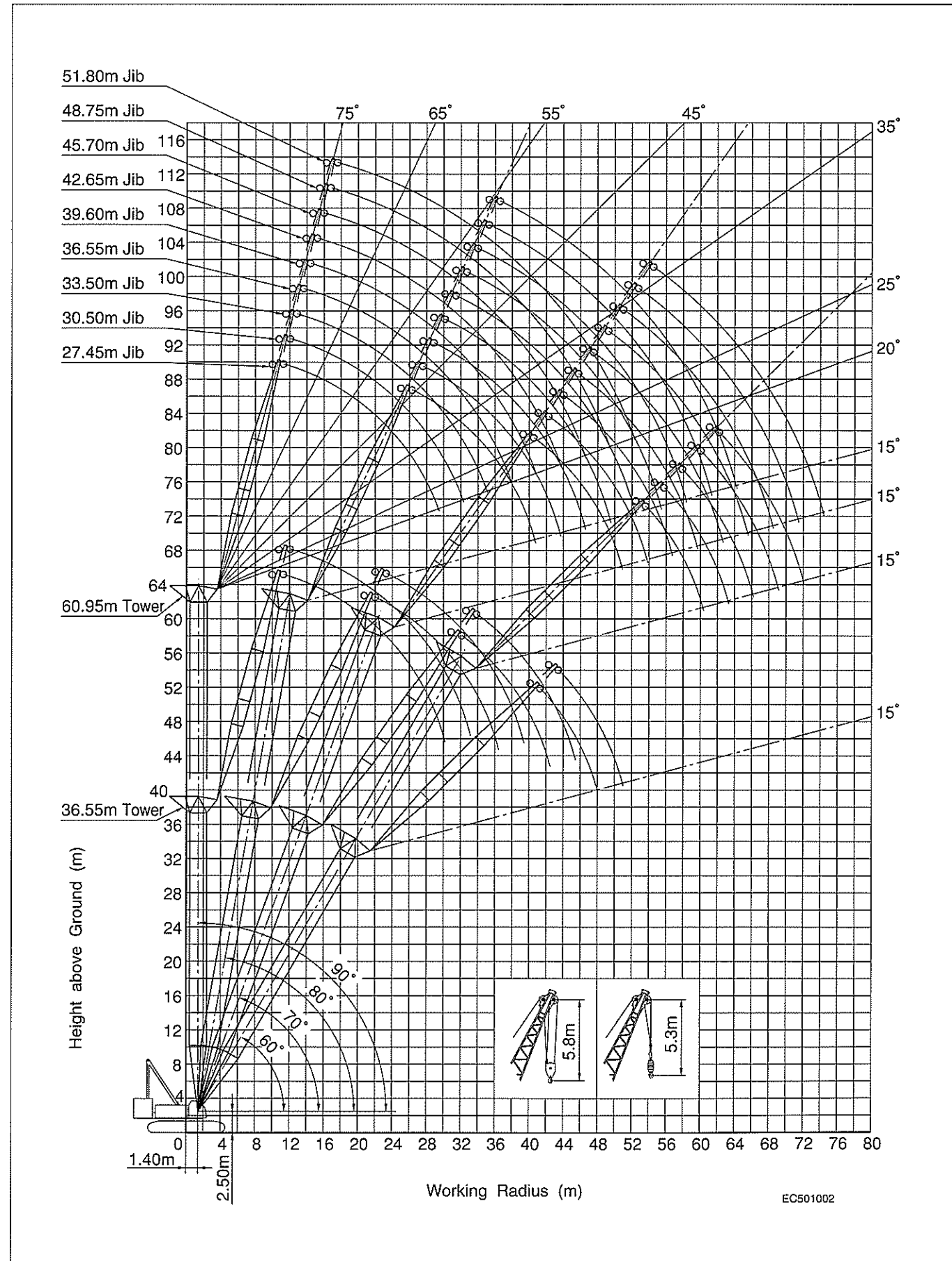
■ w/60.95m Tower

Jib length (m)	39.60				42.65			45.70			48.75			51.80		
	90	80	70	60	90	80	70	90	80	70	90	80	70	90	80	70
14.0	19.0				17.5/14.8			16.1/15.6								
16.0	18.4				17.1			16.0			14.9/16.4			13.6/17.1		
18.0	17.8				16.6			15.5			14.5			13.4		
20.0	17.2				16.1			15.1			14.1			13.0		
22.0	16.6				15.6			14.7			13.7			12.6		
24.0	16.0				15.1			14.2			13.3			12.2		
26.0	15.4				14.5			13.8			12.8			11.8		
28.0	14.8				14.0			13.3			12.4			11.4		
30.0	14.2	13.8/30.9			13.5			12.9			12.0			11.0		
32.0	13.3	13.3			13.0	12.9/32.2		12.5	12.1/33.5		11.6			10.6		
34.0	12.2	12.2			12.1	12.1		12.0	12.0		11.2	10.9/34.7		10.0		
36.0	11.2	11.2			11.1	11.1		11.1	11.1		10.5	10.5		9.3		
38.0	10.3	10.3			10.2	10.2		10.2	10.2		9.7	9.7		8.6	8.6	
40.0	9.4	9.6			9.4	9.4		9.4	9.4		9.0	9.0		8.1	8.1	
42.0	9.0/40.2	8.9			8.7	8.7		8.7	8.7		8.4	8.4		7.5	7.5	
44.0		8.3			8.2/43.0	8.1		8.1	8.1		7.8	7.8		7.1	7.1	
46.0		7.8	7.6/46.9		7.6			7.3/45.9	7.6		7.3	7.3		6.6	6.6	
48.0		7.3	7.3		7.1	6.9/48.6		7.1			6.8	6.8		6.2	6.2	
50.0		6.8	6.8		6.6	6.6		6.6	6.5/50.4	6.5/48.7	6.4			5.9	5.9	
52.0		6.5/51.7	6.4		6.2	6.2		6.2	6.2		6.0	6.0/52.1	5.6/51.6	5.5	5.2/53.9	
54.0			6.1		5.8	5.8		5.8	5.8		5.7	5.7		5.2	5.2	
56.0			5.7		5.7/54.6	5.5		5.5	5.5		5.3	5.3		4.9	4.9	
58.0			5.4			5.2		5.2/57.6	5.1		5.0	5.0		4.6	4.6	
60.0			5.1	4.9/61.5		4.9		4.8			4.7	4.7		4.4	4.4	
62.0			4.9/61.9	4.9		4.6		4.6			4.7/60.5	4.5		4.1	4.1	
64.0				4.6		4.4		4.3			4.2			4.0/63.5	3.9	
66.0				4.4		4.3/64.8		4.1			4.0				3.7	
68.0				4.2				3.9/67.8			3.8				3.5	
70.0				3.9							3.6				3.3	
72.0				3.8/71.3								3.5/70.7			3.2	
74.0															3.0/73.6	

(EC401059)

Luffing Towercrane Working Ranges

Tower Boom and Jib Combination Table



Combination Table

Jib length (m)	27.45	30.50	33.55	36.60	39.60	42.65	45.70	48.75	51.80
36.55	⊙	⊙	×	×	×	×	×	×	×
39.60	⊙	⊙	⊙	×	×	×	×	×	×
42.65	⊙	⊙	⊙	⊙	×	×	×	×	×
45.70	⊙	⊙	⊙	⊙	⊙	×	×	×	×
48.75	⊙	⊙	⊙	⊙	⊙	⊙	×	×	×
51.80	⊙	⊙	⊙	⊙	⊙	⊙	⊙	×	×
54.85	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	×
57.90	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
60.95	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

Notes:

- The meaning of symbols shown in the above table is as follows;
1. Symbol of "⊙" : Possible to luff tower between 90° thru 60°;
 2. Symbol of "⊙" : Possible to luff tower between 90° thru 70°;
 3. Symbol of "×" : Impossible to make any of tower boom and jib combination.

Tower Boom Configuration

Boom length (m)	Tower boom combination
36.55	◀ TB 6SH 9H 9SH 3H ▶
39.60	◀ TB 6SH 9H 9SH 6H ▶
42.65	◀ TB 6SH 9H 9SH 9H ▶
45.70	◀ TB 6SH 9H 9SH 3H 9H ▶
48.75	◀ TB 6SH 9H 9SH 6H 9H ▶
51.80	◀ TB 6SH 9H 9SH 9H 9H ▶
54.85	◀ TB 6SH 9H 9SH 3H 9H 9H ▶
57.90	◀ TB 6SH 9H 9SH 6H 9H 9H ▶
60.95	◀ TB 6SH 9H 9SH 3H 6H 9H 9H ▶

Note:

The meaning of figures and symbols shown above is as follows:

- ◀ TB : 7.60m heavy-duty tower bottom section
- ▶ H : 1.50m tower head section
- 9H : 9.15m heavy-duty boom extension
- 6H : 6.10m heavy-duty boom extension
- 3H : 3.05m heavy-duty boom extension
- 9SH : 9.15m special heavy-duty boom extension
- 6SH : 6.10m special heavy-duty boom extension

Tower Jib Boom Configuration

Boom length (m)	Tower jib boom combination
27.45	◀ LB 9L LT ▶
30.50	◀ LB 3L 9L LT ▶
33.50	◀ LB 6L 9L LT ▶
36.55	◀ LB 9L 9L LT ▶
39.60	◀ LB 3L 9L 9L LT ▶
42.65	◀ LB 6L 9L 9L LT ▶
45.70	◀ LB 9L 9L 9L LT ▶
48.75	◀ LB 3L 9L 9L 9L LT ▶
51.80	◀ LB 3L 3L 9L 9L 9L LT ▶

Note:

The meaning of figures and symbols shown above is as follows:

- ◀ LB : 9.15m light-duty tower jib bottom section
- ▶ LT : 9.15m light-duty tower jib top section
- 9L : 9.15m light-duty boom extension
- 6L : 6.10m light-duty boom extension
- 3L : 3.05m light-duty boom extension

Liftcrane Capacities

Liftcrane Working Ranges

■ w/7.60m Tapered Crane Heavy Top Section

Boom length (m) Working radius (m)	15.25	18.30	21.35	24.40	27.45	30.50	33.50	36.55	39.60	42.65	45.70	48.75	51.80	54.85	57.90	60.95	64.00	67.05	70.10	73.15	
4.0	200.0/4.6																				
5.0	200.0	192.1/5.2	175.0/5.7																		
6.0	184.7	183.2	175.0	150.0/6.2	150.0/6.8																
7.0	163.5	163.3	162.8	150.0	150.0	125.0/7.3	124.8/7.8														
8.0	143.8	143.6	143.1	142.8	142.5	125.0	124.1	100.0/8.3	100.0/8.9												
9.0	128.2	128.0	127.6	127.3	127.0	125.0	120.4	100.0	100.0	94.9/9.4	80.0/9.9										
10.0	115.6	115.4	115.0	114.7	114.4	114.7	114.4	100.0	100.0	93.5	80.0	75.0/10.5	72.6/11.0	67.0/11.5							
12.0	89.6	89.5	89.3	89.2	89.0	89.5	89.3	89.4	89.2	88.9	80.0	75.0	71.1	66.3	61.9	56.7/12.6	50.0/13.1	48.1/13.6			
14.0	71.9	72.0	71.8	71.7	71.4	71.9	71.7	71.7	71.5	71.2	71.1	71.1	68.4	63.8	59.4	55.3	50.0	47.8	44.3/14.2	37.5/14.7	
16.0	63.5/14.8	60.1	59.8	59.6	59.3	59.8	59.5	59.6	59.4	59.1	58.9	58.9	58.6	58.4	57.3	53.4	49.6	46.3	43.0	37.5	
18.0		53.3/17.5	51.0	50.8	50.5	51.0	50.7	50.7	50.5	50.2	50.1	50.0	49.7	49.5	49.5	49.2	48.0	44.8	41.6	37.5	
20.0			44.4	44.2	43.8	44.3	44.0	44.0	43.8	43.4	43.3	43.2	42.9	42.7	42.7	42.4	42.3	42.2	40.3	36.6	
22.0			44.1/20.1	38.9	38.6	39.0	38.7	38.7	38.5	38.1	38.0	37.9	37.6	37.4	37.3	37.0	37.0	36.8	36.5	34.0	
24.0				37.3/22.7	34.4	34.7	34.4	34.4	34.2	33.8	33.7	33.6	33.2	33.1	33.0	32.7	32.6	32.4	32.1	31.7	
26.0					31.9/25.4	31.3	30.9	30.9	30.6	30.3	30.1	30.0	29.7	29.5	29.4	29.1	29.1	28.9	28.5	28.5	
28.0						28.3	28.0	27.9	27.7	27.3	27.2	27.1	26.7	26.5	26.5	26.1	26.1	25.9	25.5	25.5	
30.0							25.5	25.4	25.2	24.8	24.6	24.5	24.2	24.0	23.9	23.6	23.5	23.3	23.0	23.0	
32.0							24.7/30.7	23.3	23.0	22.6	22.5	22.4	22.0	21.8	21.7	21.4	21.3	21.1	20.8	20.8	
34.0								22.0/33.3	21.2	20.8	20.6	20.5	20.1	19.9	19.8	19.5	19.4	19.2	18.9	18.8	
36.0									19.6/35.9	19.1	18.9	18.8	18.4	18.3	18.2	17.8	17.7	17.5	17.2	17.2	
38.0										17.7	17.5	17.4	17.0	16.8	16.7	16.3	16.3	16.0	15.7	15.7	
40.0										17.3/38.6	16.2	16.1	15.7	15.5	15.4	15.0	14.9	14.7	14.4	14.3	
42.0											15.5/41.2	14.9	14.5	14.3	14.2	13.8	13.8	13.5	13.2	13.1	
44.0												13.9/43.9	13.5	13.3	13.2	12.8	12.7	12.5	12.1	12.1	
46.0													12.5	12.3	12.2	11.8	11.7	11.5	11.2	11.1	
48.0													12.3/46.5	11.5	11.3	11.0	10.9	10.6	10.3	10.2	
50.0														11.1/49.1	10.6	10.2	10.1	9.8	9.5	9.4	
52.0															9.9/51.8	9.5	9.3	9.1	8.7	8.7	
54.0																8.8	8.7	8.4	8.0	7.9	
56.0																8.7/54.4	8.1	7.8	7.3	7.2	
58.0																	7.7/57.1	7.1	6.7	6.5	
60.0																		6.6/59.7	6.1	5.9	
62.0																			5.5	5.3	
64.0																			5.4/62.3	4.8	
66.0																				4.6/65.0	

(EC401054)

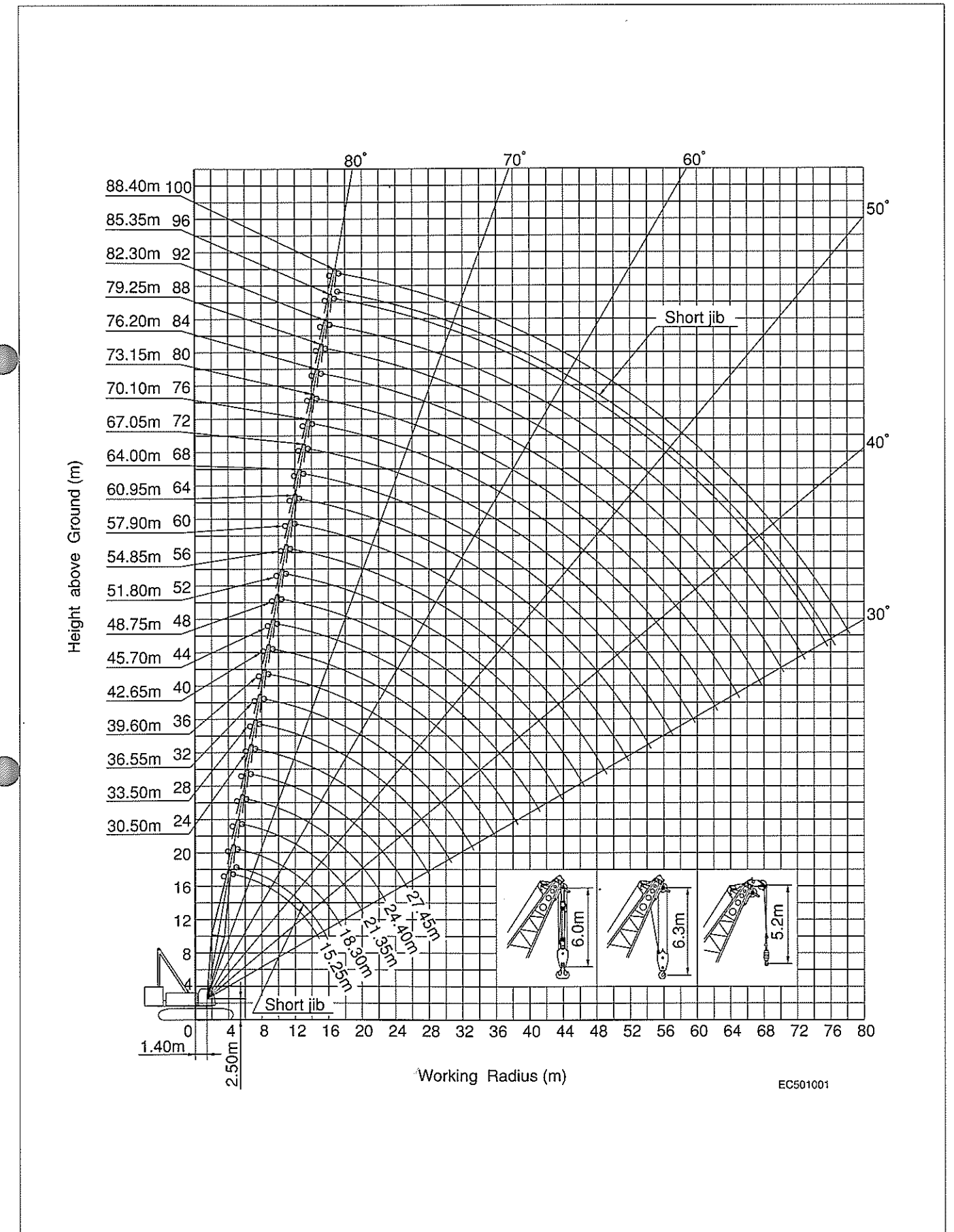
■ w/9.15m Tapered Crane Light Top Section

Boom length (m) Working radius (m)	73.15	76.20	79.25	82.30	85.35	88.40
14.0	37.5/14.5	34.5/15.0	32.7/15.5			
16.0	35.9	33.5	32.1	31.5/16.1	25.0/16.5	25.0/17.0
18.0	34.3	31.7	30.4	29.7	25.0	25.0
20.0	32.9	30.2	28.9	28.2	25.0	24.1
22.0	31.6	28.9	27.5	26.9	25.0	23.2
24.0	30.2	27.7	26.3	25.7	24.2	22.1
26.0	28.5	26.2	25.3	24.6	23.1	20.9
28.0	26.0	24.9	24.4	23.5	22.1	20.0
30.0	23.8	23.4	23.1	22.3	21.0	18.9
32.0	21.6	21.7	21.6	20.9	19.9	17.9
34.0	19.8	19.8	19.7	19.7	18.7	16.9
36.0	18.2	18.1	18.1	18.1	17.6	15.9
38.0	16.7	16.6	16.6	16.6	16.3	14.8
40.0	15.3	15.3	15.2	15.2	15.2	13.9
42.0	14.2	14.1	14.1	14.1	14.0	13.1
44.0	13.1	13.0	13.0	13.0	12.9	12.3
46.0	12.1	12.1	12.0	12.0	12.0	11.6
48.0	11.2	11.2	11.1	11.1	11.1	10.9
50.0	10.4	10.4	10.3	10.3	10.3	10.2
52.0	9.7	9.7	9.6	9.6	9.5	9.5
54.0	9.0	9.0	8.9	8.9	8.9	8.9
56.0	8.4	8.4	8.3	8.3	8.3	8.3
58.0	7.8	7.8	7.7	7.7	7.7	7.7
60.0	7.3	7.2	7.1	7.1	7.1	7.1
62.0	6.7	6.6	6.6	6.6	6.6	6.6
64.0	6.2	6.1	6.0	6.0	6.0	6.0
66.0	6.0/64.9	5.6	5.6	5.6	5.6	5.6
68.0		5.3/67.5	5.1	5.1	5.1	5.1
70.0			4.7	4.7	4.7	4.7
72.0			4.6/70.2	4.3	4.3	4.3
74.0				4.1/72.8	3.9	3.9
76.0					3.7/74.8	3.5
78.0						3.2/77.4

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Notes — Liftcrane capacities

- Capacities included in this chart are the maximum allowable, and are based on machine standing level on firm supporting surface under ideal job conditions.
- Capacities are in metric tons, and are not more than 78% of minimum tipping loads except the figures surrounded by bold lines which are based on other factor of machine structural strength limitation.
- Capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, and operating speeds. Operator must reduce load ratings to take such conditions into account. Deduction from rated capacities must be made for weight of hook block, weighted ball/hook, sling, spreader bar, or other suspended gear. SUMITOMO's hook block weight is as follows:
200/125t.....3.0/2.5ton 80t.....1.4ton 35/15t.....0.9ton 13.5t.....0.6ton
- All capacities are rated for 360° swing.
- Least stable rated condition is over the side.
- Counterweight must be 86.3ton for all capacities on this chart together with 14.0ton lower frame.
- Attachment must be erected and lowered over the ends of the crawler mounting.
- Main boom length must not exceed 88.40m. Maximum boom length when mounting auxiliary short jib is 85.35m.
- Capacities when handling load off main boom head sheaves in case of mounting auxiliary short jib on top of boom are detailed; if required, please consult us or nearest distributor.
- Capacities apply only to machine as originally manufactured and normally equipped by Sumitomo Heavy Industries Construction Crane Co., Ltd.



Boom Combination Diagram for Liftcrane

MEMO

Boom length (m)	Boom combination
15.25	
18.30	
21.35	
24.40	
27.45	
30.50	
33.50	
36.55	
39.60	
42.65	
45.70	
48.75	
51.80	
54.85	
57.90	
60.95	
64.00	
67.05	
70.10	
73.15	
76.20	
79.25	
82.30	
85.35	
88.40	

Note:
The meaning of figures and symbols shown above are as follows:

- | | |
|--|---|
| : 7.60m heavy-duty bottom section | : 4.55m tapered boom extension |
| : 7.60m heavy-duty tapered top section | : 9.15m special heavy-duty boom extension |
| : 9.15m light-duty tapered top section | : 6.10m special heavy-duty boom extension |
| : 9.15m heavy-duty boom extension | : 9.15m light-duty boom extension |
| : 6.10m heavy-duty boom extension | : 6.10m light-duty boom extension |
| : 3.05m heavy-duty boom extension | : 3.05m light-duty boom extension |