

SUMITOMO LS-368RH-5

Note: We are constantly improving our products and therefore reserve the right to change designs and specifications.

SUMITOMO



LS-368RH-5

250-M ton Hydraulic Crawler Crane Lifting Crane Attachment

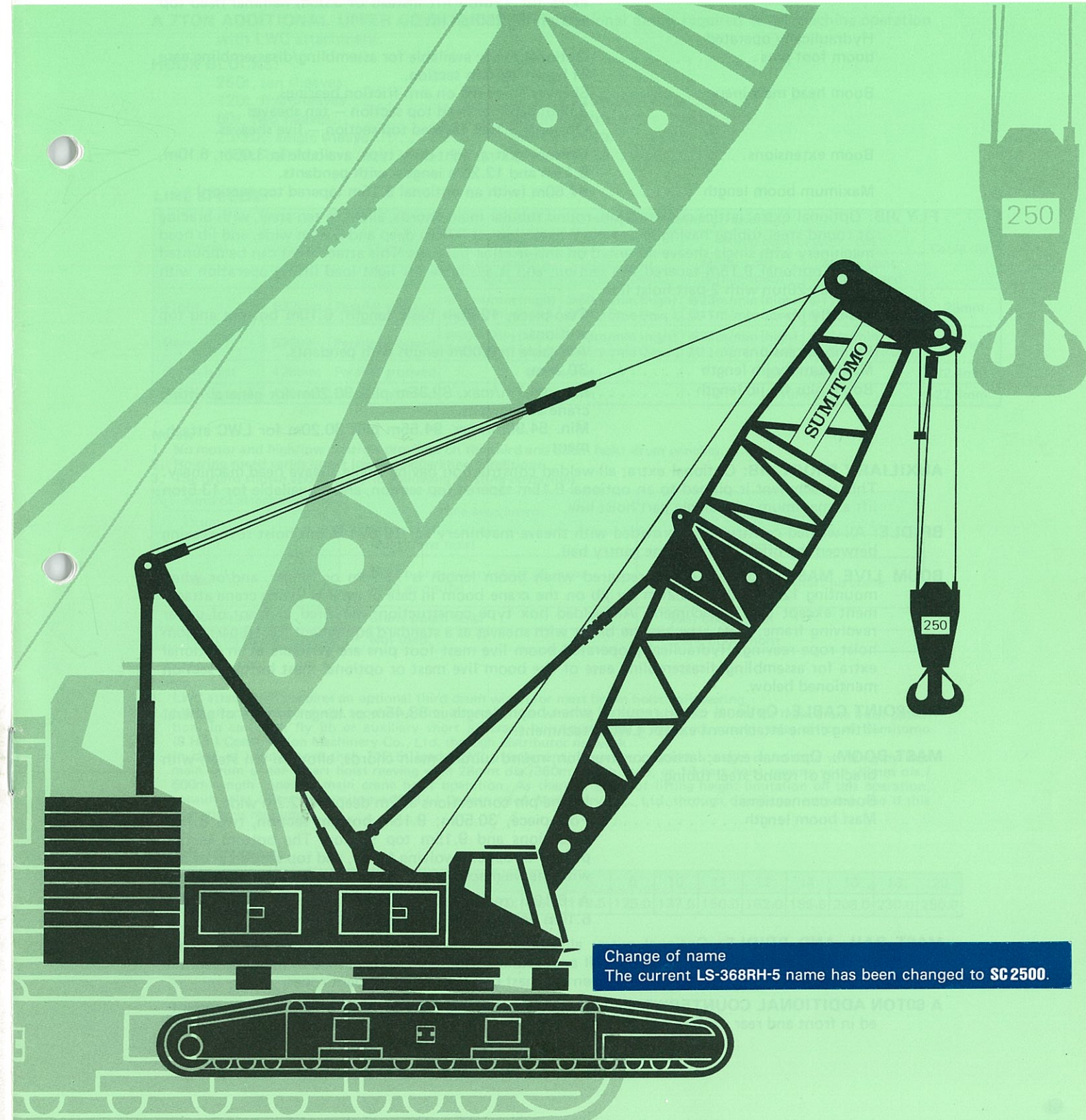
 **SUMITOMO (S.H.I.) CONSTRUCTION MACHINERY CO., LTD.**

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SUMITOMO (S.H.I.) CONSTRUCTION MACHINERY CO., LTD.

K & T Bldg. 1-28-44, Shinkawa, Chuo-ku, Tokyo 104, Japan
Phone: (03) 3297-8833 Fax: (03) 3297-9849 Telex: J 27961 SHIKENKI

Address Inquires to:

Printed in Japan
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Change of name
The current LS-368RH-5 name has been changed to **SC2500**.

Specifications

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

- Boom connections In-line pin connections at 2m deep and 2.2m wide.
- Basic boom Three-piece, 12.20m basic length; 7.625m bottom section, one 1.525m extension and 3.05m hammer-head crane top section.
A 9.15m tapered top section is available as an optional extra for 120ton lift instead of 3.05m hammer-head top section for 250ton lift.
- Hydraulically operated boom foot pins Optional extra; available for assembling/disassembling ease of boom bottom section.
- Boom head machinery Sheaves mounted on anti-friction bearings.
3.05m hammer-head top section – ten sheaves.
Optional 9.15m tapered top section – five sheaves.
- Boom extensions Optional extra; light-duty type, available in 3.05m, 6.10m, 9.15m and 12.20m lengths with pendants.
- Maximum boom length 97.60m (with an optional 9.15m tapered top section)

FLY JIB: Optional extra; lattice construction, round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing having in-line pin connections at 0.90m deep and 0.90m wide, and jib head machinery with single sheave mounted on anti-friction bearings. This attachment can be mounted on an optional 9.15m tapered top section, and is available for light load lifting operation with less than 20ton with 2-part hoist line.

- Basic fly jib Two-piece, 12.20m basic length; 6.10m bottom and top sections.
- Fly jib extensions Available in 6.00m length with pendants.
- Maximum fly jib length 30.20m.
- Boom plus fly jib length Min. 45.7m/max. 82.35m plus 30.20m for general lifting crane attachment.
Min. 54.90m/max. 94.55m plus 30.20m for LWC attachment.

AUXILIARY SHORT JIB: Optional extra; all-welded construction having single sheave head machinery. This attachment is pinned to an optional 9.15m tapered top section, and is available for 13.5ton lift as maximum with single part hoist line.

BRIDLE: All-welded construction; provided with sheave machinery for 18-part boom hoist rope reeving between the bridle and A-frame gantry bail.

BOOM LIVE MAST: Optional extra; required when boom length is 73.20m or longer, and/or when mounting 12.20m thru 30.20m fly jib on the crane boom in case of general lifting crane attachment except LWC attachment. All-welded box type construction; mounted in front of upper revolving frame. Mast attaches the bridle with sheaves as a standard equipment for 18-part boom hoist rope reeving. Hydraulically operated boom live mast foot pins are available as an optional extra for assembling/disassembling ease of the boom live mast or optional mast bottom section mentioned below.

MID-POINT CABLE: Optional extra; required when boom length is 88.45m or longer in case of general lifting crane attachment except LWC attachment.

MAST BOOM: Optional extra; lattice construction, round tubular main chords, alloy, hi-ten steel, with bracing of round steel tubing.

- Boom connections In-line pin connections at 2m deep and 2.2m wide.
- Mast boom length Four-piece, 30.50m; 9.15m bottom section, two 6.10m extensions and 9.15m top section. The bottom section pinned to upper revolving frame, and top section provided with sheave machinery for guiding boom hoist cable.
A 6.10m mast extension is common to the optional 6.10m boom extension mentioned above.

MAST BAIL AND BRIDLE: Optional extra; all-welded construction providing sheave machinery for 8-part rope reeving between mast bail and bridle. The mast bail is pinned to mast top section, and the mast bridle is suspended between the mast bail and boom pendant ropes.

A 60TON ADDITIONAL COUNTERWEIGHT: Optional extra; two 30ton with steel plates make, mounted in front and rear of the carbody.

* These attachments of MAST TOP AND BOTTOM SECTIONS, MAST BAIL AND BRIDLE, and A 60 TON ADDITIONAL COUNTERWEIGHT are available for the crane operation requiring bigger lifting crane capacities, and are called LOWER WEIGHT SPEC CRANE (LWC) attachment.

Max. lifting capacity of LWC attachment is 120ton at 9.0m working radius with 36.60m boom. This type attachment, however, can perform about 36% greater lifting capacities than that of the general lifting crane attachment in any ranges of working radius under boom length from 36.60m through 94.55m.

UPPER COUNTERWEIGHTS: 65.5ton in total.

A 7TON ADDITIONAL UPPER COUNTERWEIGHT: Optional extra; required when machine operation with LWC attachment.

HOOK BLOCKS:

- 250t, ten sheaves Standard.
- 120t, five sheaves Optional extra.
- 60t, two sheaves Optional extra.
- 25/20t, single sheave Optional extra.
- 13.5t, ball hook Optional extra.

LINE SPEEDS:

Drums	Root dia.	Type	Line speeds (Hoisting, lowering)				Cable dia.
			Pump control with "OFF"		Pump control with "ON"		
			Motor cont. w/high speed	Motor cont. w/low speed	Motor cont. w/high speed	Motor cont. w/low speed	
Front	532mm	Parallel grooved	@90m/min (high) @45m/min (low)	@69m/min (high) @35m/min (low)	@23m/min (high) @11m/min (low)	@17m/min (high) @ 9m/min (low)	28mm
Rear	532mm	Parallel grooved	@90m/min (high) @45m/min (low)	@69m/min (high) @35m/min (low)	@23m/min (high) @11m/min (low)	@17m/min (high) @ 9m/min (low)	28mm
Boom hoist	426mm	Parallel grooved	@40m/min		@10m/min		22.4mm
Third (option)	426mm	Parallel grooved	@40m/min		@10m/min		22.4mm

Notes:

1. No motor and high/low controls provided on the third and boom hoist drum winches.
2. Hoisting speed varies under load and operating conditions.
3. The drums shown above apply to following hoisting operations:

Kind of attachment	Crane attachment	LWC attachment
Drums		
Front	Main crane hoist	Main crane hoist
Rear	Fly jib or auxiliary short jib crane hoist as option	Main crane hoist Fly jib or auxiliary short jib crane hoist as option
Boom hoist	Crane boom hoist	Mast boom hoist
Third (option)	Not used	Crane boom hoist

Notes:

1. LWC attachment requires an optional third drum winch for mast boom hoisting/lowering.
2. LWC attachment generally requires a simultaneous rope winding by front and rear drums for main crane hoist operation. In case that fly jib or auxiliary short jib crane hoist operation is required, consult sales office of Sumitomo (S.H.I.) Construction Machinery Co., Ltd. through distributor network.
3. In case of lifting more than 112.5t load, LWC attachment, however, requires a single drum rope winding by rear main drum under 9-part hoist reeving with 28mm dia./360m length rope, or 10-part hoist reeving with 28mm dia./600m length rope for main crane hoist operation. As there is some of lifting height limitation on this operation, consult sales office of Sumitomo (S.H.I.) Construction Machinery Co., Ltd. through distributor network also if this operation is required.

HOIST REEVEING:

No. of part line	1	2	3	4	5	6	7	8	9	10	11	12	14	16	18	20
Max. load (ton)	13.5	29.5	44.0	58.5	72.5	86.0	99.0	112.5	125.0	137.5	150.0	162.0	185.5	208.0	230.0	250.0

SAFETY DEVICES: Hook over-hoist limiting device with automatic hydraulic motor locking and warning buzzer, boom over-hoist limiting device with automatic hydraulic motor locking and warning buzzer, boom backstops, boom angle indicator, drum pawl locks for front, rear and boom hoist drums, swing lock, swing warning device with buzzer and lamp, swing brake lamp, and signal horn. Over-load indication light and fly jib/auxiliary short jib hook over-hoist limiting device with automatic hydraulic motor locking and warning buzzer are available as optional extra. Mast backstops, additional boom backstops and third drum pawl lock as optional extras are required for LWC attachment.

LOAD MOMENT LIMITER: Optional extra; computerized automatic over-load preventing device consisting of load detector attached at the end of boom hoist cable, boom angle detector, amplifier with computerized load calculation device and digital type meter that indicates present lifting load/marginal lifting load/rated load, boom angle/working radius, and load ratio between rated and present lifting loads. This device also provides three warning lamps for overloading, hook overhoisting and boom overhoisting/overlowering. If lifting load is in excess of 90% of the rated load, a pre-warning is given with lamp, or if it is 100%, a warning is given with lamp and buzzer and load hoisting/boom lowering motions automatically stopped with automatic hydraulic motor locking. The machine, however, can be operated for lowering the load and hoisting the boom as safety side operation.

CABLES:

- For front drum Sraf Nuflex rope, 28mm dia./360m length, braking load 77.0ton.
- For rear drum Optional extra; Sraf Nuflex rope, 28mm dia./360m length, breaking load 77.0ton for fly jib/auxiliary short jib crane hoist operations. LWC attachment requires both 28mm dia./360m and 600m length rope as an optional extra for main crane hoist operation.
- For boom hoist drum Tough Super rope, 22.4mm dia./380m length, breaking load 42.5ton.
- For third drum Optional extra; Tough Super rope, 22.4mm dia./550m length, breaking load 42.5ton for crane boom hoisting of LWC attachment.

WORKING WEIGHTS:

With 12.20m basic crane boom, 65.5t upper counterweight, 1,118mm wide truck shoes and 250t hook block: Approx. 179ton.

With 97.60m main crane boom, 30.50m mast boom, 65.5t upper counterweight, a 60.0t additional counterweight, a 7.0t additional upper counterweight, 1,118mm wide track shoes and 60t hook block: Approx. 260ton.

GROUND PRESSURES:

0.90kg/cm² with 1,118mm track shoes and 179ton working weight mentioned above.

1.30kg/cm² with 1,118mm track shoes and 260ton working weight mentioned above.

Working radius (m)	Boom length (m)							Working radius (m)
	12.20	15.25	18.30	21.35	24.40	27.45	30.50	
4.5	250.0							4.5
5.0	211.5	203.8	168.2/5.5					5.0
6.0	175.0	174.0	167.6	157.6	144.2/6.6			6.0
7.0	148.0	147.1	146.8	146.5	144.2	132.6/7.1	122.1/7.6	7.0
8.0	126.9	125.9	125.0	124.8	124.7	124.6	122.1	8.0
9.0	106.8	106.8	106.5	106.4	106.1	106.0	105.8	9.0
10.0	90.9	90.9	90.7	90.5	90.4	90.1	90.0	10.0
12.0	69.8	69.8	69.8	69.6	69.4	69.1	68.9	12.0
14.0	68.1/12.2	56.3	56.3	56.1	56.0	55.7	55.5	14.0
16.0		50.7/15.1	47.1	46.9	46.6	46.5	46.3	16.0
18.0			41.0/17.7	40.0	39.8	39.8	39.5	18.0
20.0				34.7	34.5	34.5	34.3	20.0
22.0				34.0/20.3	30.2	30.3	30.0	22.0
24.0					28.4/23.0	26.9	26.7	24.0
26.0						24.7/25.6	23.9	26.0
28.0							21.5	28.0
30.0							21.2/28.3	30.0

(ECS00050A)

Lifting Crane Capacities (II) – Tapered Top Section

Without boom live mast:

Working radius (m)	Boom length (m)														Working radius (m)							
	18.30	21.35	24.40	27.45	30.50	33.55	36.60	39.65	42.70	45.75	48.80	51.85	54.90	57.95		61.00	64.05	67.10	70.15			
5.0	120.0	120.0/5.4																	5.0			
6.0	120.0	120.0	120.0	120.0/6.5															6.0			
7.0	115.3	115.3	115.3	115.3	115.3	105.7/7.5													7.0			
8.0	114.7	114.6	114.5	110.1	108.6	102.8	96.1/8.1	85.5/8.6											8.0			
9.0	107.2	107.1	107.1	104.3	97.6	96.1	91.8	84.4	79.4/9.1	73.6/9.7									9.0			
10.0	91.4	91.3	91.2	91.1	87.1	85.1	83.9	81.5	77.0	72.8	69.0/10.2	60.7/10.7	55.7/11.3	51.2/11.8					10.0			
12.0	70.3	70.2	70.1	70.0	70.0	69.6	68.1	66.9	66.3	64.8	62.9	58.2	55.0	50.9	46.1/12.3	43.2/12.8	39.4/13.4	34.9/13.9	12.0			
14.0	57.0	56.8	56.7	56.6	56.5	56.5	56.3	56.1	55.9	54.7	53.7	52.7	52.3	48.5	45.1	42.0	39.1	34.9	14.0			
16.0	47.6	47.5	47.4	47.2	47.2	47.1	47.0	46.8	46.8	46.6	46.1	45.5	45.1	44.2	42.8	40.0	37.2	33.4	16.0			
18.0	42.7/17.4	40.6	40.5	40.3	40.3	40.2	40.0	39.9	39.9	39.8	39.6	39.4	39.4	38.6	37.8	34.8	34.3	32.0	18.0			
20.0		35.4	35.2	35.1	35.1	35.0	34.9	34.7	34.7	34.5	34.3	34.1	34.1	33.9	33.6	31.2	30.9	30.0	20.0			
22.0			31.1	31.0	31.0	30.9	30.7	30.5	30.5	30.3	30.1	30.0	30.0	29.8	29.6	29.3	29.3	28.4	22.0			
24.0			30.0/22.6	27.6	27.6	27.5	27.4	27.2	27.2	27.0	26.8	26.6	26.6	26.4	26.2	25.9	25.9	25.5	24.0			
26.0				25.7/25.3	25.0	24.8	24.6	24.4	24.4	24.2	24.0	23.8	23.8	23.6	23.4	23.1	23.1	22.9	26.0			
28.0					21.9/27.9	21.9	21.9	21.9	21.9	21.9	21.7	21.4	21.4	21.2	21.0	20.8	20.8	20.6	28.0			
30.0						20.0	20.0	20.0	20.0	19.9	19.7	19.5	19.5	19.3	19.0	18.8	18.8	18.6	30.0			
32.0							19.1/30.6	18.5	18.3	18.3	18.1	17.9	17.7	17.7	17.5	17.3	17.1	16.9	32.0			
34.0								17.1/33.2	16.8	16.8	16.7	16.4	16.2	16.2	16.0	15.8	15.6	15.3	34.0			
36.0									14.7/35.8	15.1	15.1	15.1	14.9	14.9	14.7	14.5	14.3	14.1	36.0			
38.0										14.4	14.2	13.9	13.7	13.7	13.5	13.3	13.1	12.8	38.0			
40.0										13.9/38.5	13.1	12.9	12.6	12.6	12.5	12.3	12.1	11.9	40.0			
42.0											12.2/41.4	12.0	11.8	11.8	11.6	11.3	11.1	10.9	42.0			
44.0												10.9/43.8	10.9	10.9	10.7	10.4	10.2	10.0	44.0			
46.0													9.7	9.7	9.7	9.5	9.5	9.3	46.0			
48.0														9.4/46.4	9.3	9.2	9.0	8.8	48.0			
50.0															8.7/47.1	8.2	8.2	8.1	50.0			
52.0																7.5/51.7	7.5	7.5	52.0			
54.0																	6.8	6.8	54.0			
56.0																	6.6/54.3	6.0	56.0			
58.0																		5.6/57.0	5.5	58.0		
60.0																			5.0/59.6	4.7	60.0	
62.0																				3.9	62.0	
64.0																					3.9/62.2	64.0

(ECS00051-P1)

Lifting Crane Capacities (III) – Tapered Top Section

With boom live mast:

Working radius (m)	Boom length (m)																	Working radius (m)				
	45.75	48.80	51.85	54.90	57.95	61.00	64.05	67.10	70.15	73.20	76.25	79.30	82.35	85.40	88.45	91.50	94.55		97.60			
9.7	76.4																			9.7		
10.0	75.9	71.4/10.2	64.0/10.7	58.9/11.3	51.9/11.8															10.0		
12.0	71.1	67.3	62.2	58.6	51.9	50.0/12.3	47.3/12.8	41.3/13.4	37.2/13.9											12.0		
14.0	57.5	57.5	57.5	57.1	51.7	48.0	45.0	41.0	37.1	34.5/14.4	31.2/15.0	28.2/15.5								14.0		
16.0	47.9	47.8	47.7	47.6	47.5	47.1	43.2	40.2	35.2	33.9	30.8	28.1	25.5	23.3/16.6	21.2/17.1	19.0/17.6				16.0		
18.0	40.8	40.7	40.7	40.5	40.3	40.3	40.2	39.5	33.8	33.1	30.0	27.5	24.4	22.7	20.7	18.7	17.9/18.2	15.7/18.7		18.0		
20.0	35.4	35.3	35.2	35.1	35.0	34.9	34.8	34.7	32.4	32.4	29.4	26.8	23.2	21.7	19.8	17.9	17.4	15.4		20.0		
22.0	31.1	31.0	31.0	30.8	30.6	30.5	30.4	30.3	30.1	30.0	28.7	26.2	22.2	20.7	18.9	17.3	16.6	15.0		22.0		
24.0	27.6	27.5	27.5	27.4	27.2	27.1	27.0	26.9	26.6	26.5	26.4	25.2	21.1	19.9	18.1	16.7	15.8	14.5		24.0		
26.0	24.8	24.7	24.7	24.5	24.3	24.2	24.1	24.0	23.7	23.6	23.5	22.7	20.1	19.1	17.5	16.2	15.0	14.0		26.0		
28.0	22.4	22.3	22.2	22.1	21.9	21.8	21.7	21.5	21.3	21.2	21.1	20.9	19.3	18.4	17.1	15.8	14.3	13.5		28.0		
30.0	20.3	20.2	20.1	20.0	19.8	19.7	19.6	19.5	19.2	19.1	19.0	18.9	17.9	17.0	16.7	15.4	13.6	12.5		30.0		
32.0	18.5	18.4	18.3	18.2	18.0	17.9	17.8	17.6	17.5	17.4	17.2	17.1	16.8	15.3	15.0	14.3	13.3	11.7		32.0		
34.0	17.0	16.9	16.8	16.7	16.5	16.4	16.3	16.1	15.9	15.7	15.6	15.5	15.2	14.2	13.6	13.1	12.2	10.8		34.0		
36.0	15.6	15.5	15.4	15.3	15.1	15.0	14.9	14.8	14.5	14.4	14.3	14.2	13.9	13.1	12.4	12.1	11.3	10.0		36.0		
38.0	14.4	14.3	14.3	14.1	13.9	13.8	13.7	13.5	13.3	13.2	13.0	12.9	12.6	11.7	11.3	11.1	10.4	9.3		38.0		
40.0	13.3	13.2	13.1	13.0	12.8	12.7	12.6	12.5	12.3	12.1	12.0	11.9	11.6	10.9	10.3	10.1	9.7	8.5		40.0		
42.0	12.7/41.1	12.3	12.2	12.1	11.9	11.8	11.7	11.5	11.3	11.1	11.0	10.9	10.6	10.1	9.5	9.3	8.9	7.7		42.0		
44.0		11.4/43.8	11.3	11.2	10.9	10.8	10.7	10.6	10.3	10.2	10.1	10.0	9.8	9.5	9.1	8.5	8.1	7.1		44.0		
46.0			10.5	10.3	10.1	10.0	10.0	9.9	9.6	9.5	9.4	9.2	8.9	8.8	8.7	7.7	7.5	6.4		46.0		
48.0			10.3/46.4	9.7	9.4	9.3	9.3	9.1	8.8	8.7	8.6	8.5	8.2	8.1	7.9	7.1	6.8	5.8		48.0		
50.0				9.3/49.0	8.7	8.6	8.5	8.4	8.2	8.0	7.9	7.8	7.5	7.4	7.3	6.4	6.1	5.2		50.0		
52.0					8.2/51.7	8.0	7.9	7.8	7.5	7.5	7.4	7.2	6.9	6.7	6.5	5.8	5.4	4.7		52.0		
54.0						7.5	7.4	7.3	7.0	6.9	6.7	6.6	6.2	6.0	5.9	5.2	4.9	4.1		54.0		
56.0							7.4/54.3	6.9	6.7	6.4	6.3	6.1	5.9	5.6	5.4	4.8	4.4	3.6		56.0		
58.0								6.6/57.0	6.2	5.9	5.7	5.6	5.4	5.0	4.9	4.8	4.2	3.9	3.1		58.0	
60.0									5.8/59.6	5.3	5.2	5.0	4.9	4.6	4.4	4.2	3.7	3.4	2.6		60.0	
62.0										4.9	4.8	4.6	4.4	4.1	3.9	3.7	3.2	2.9	2.3		62.0	
64.0											4.9/62.2	4.3	4.2	4.0	3.6	3.4	3.3	2.8	2.5	1.9		64.0
66.0												4.1/64.9	3.7	3.5	3.2	3.0	2.9	2.5	2.1		66.0	
68.0													3.4/67.5	3.1	2.8	2.6	2.5	2.1			68.0	
70.0														2.7	2.5	2.3	2.1				70.0	
72.0															2.7/70.2	2.1	1.9				72.0	
74.0																2.0/72.8					74.0	

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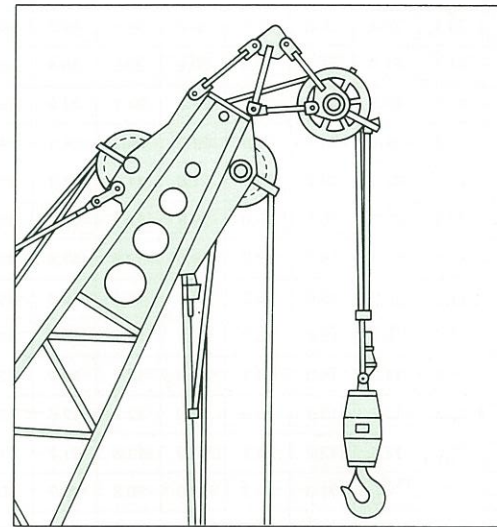
Boom Combination Diagram

Notes – Lifting crane capacities (I), (II) and (III)

- 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 75% of minimum tipping loads unless marked with a shaded color (□). Shaded color indicates capacities are based on factors other than those which would cause a tipping condition.
- Capacities are under crawler extended condition with 6,000 mm.
- 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 jib, hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
SUMITOMO's hook block weight is as follows:
250t 3.3t 120t 2.1t 60t 1.4t
25/20t 1.1t 13.5t 0.5t
- All capacities are rated for 360° swing.
- Least stable rated condition is over the side.
- Mid-point cable is required when boom length is 88.45m or longer.
- Boom live mast is also required when boom length is 73.20m or longer, and/or when mounting 12.20m thru 30.20m fly jib on crane boom from 45.75m thru 82.35m.
- Upper counterweight must be 65.5ton for all capacities on this chart.
- Attachment must be erected and lowered over the ends of the crawler mounting. When boom and/or boom plus jib combination length is more than 97.60m, two steel blocks be placed under track idler rollers each of the crawler are required for lifting off ground the attachment without any outside assistance.
- Main boom length must not exceed 97.60m.
Maximum fly jib length permitted—30.20m.
Maximum boom and fly jib combination length permitted—82.35m boom plus 30.20m fly jib.
- Determining lifting crane capacities with fly jib or auxiliary short jib mounted on boom:
When handling load off main boom head sheaves, the following reductions in rated lifting crane capacities must be made to compensate for fly jib weight including 20t hook block, or for auxiliary short jib including 13.5t hook block:
12.20m fly jib—3,100kg
18.20m fly jib—4,300kg
24.20m fly jib—5,500kg
30.20m fly jib—6,700kg
Auxiliary short jib—800kg
- Boom combination diagram is described herein as recommended. In configuration of boom combination, it is required to just position a 1.525m boom extension on to the 7.625m boom bottom section.
- Capacities apply only to the machine as originally manufactured and normally equipped by Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

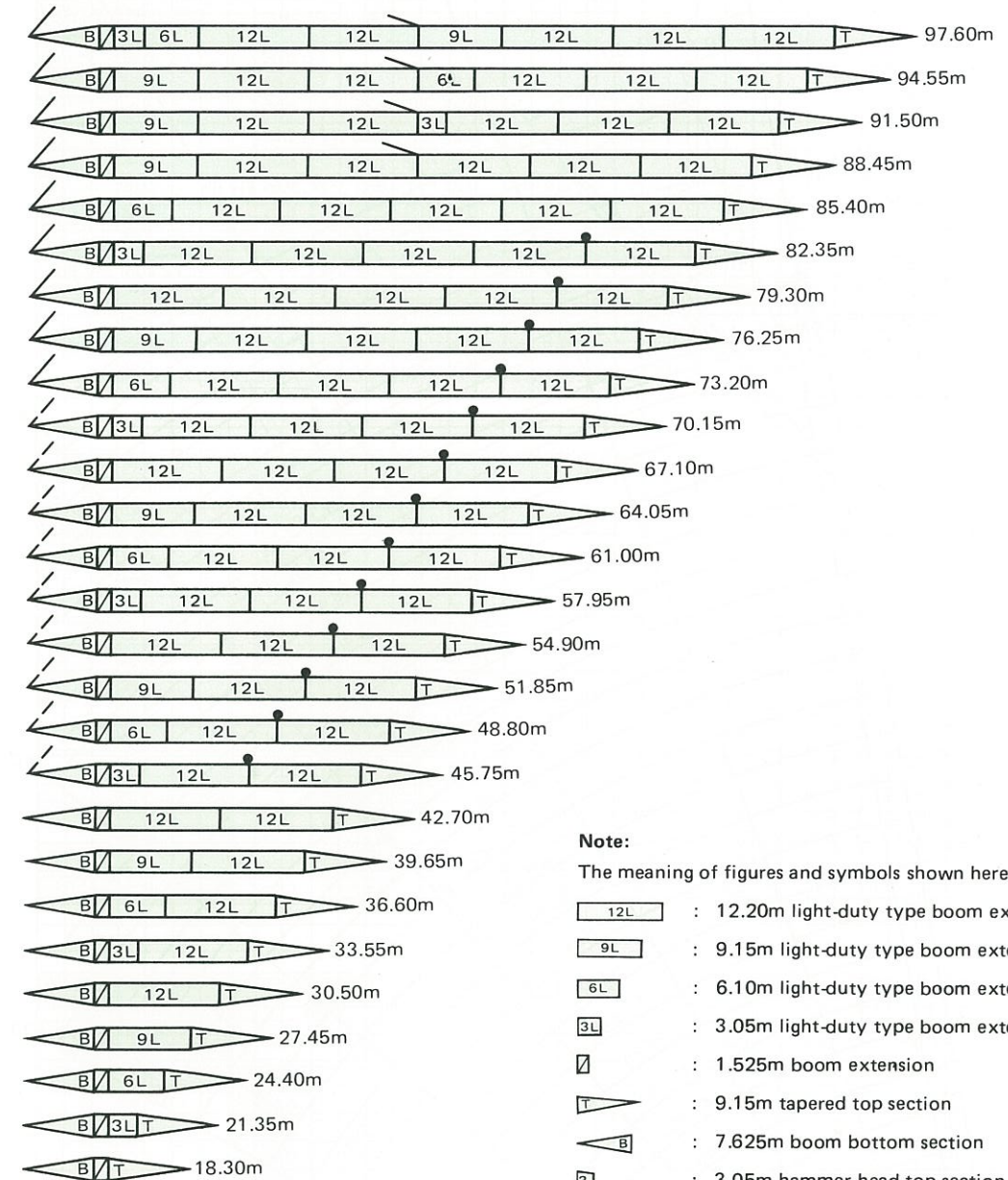
LS-368RH-5 AUXILIARY SHORT JIB CAPACITIES: Max. 13.5 ton

Note: Jib capacities is equal to the figures made by the deduction of a 300kg from the lifting crane capacities unless restricted by the maximum jib capacity shown above.



Auxiliary short jib (Option)

Boom combination with tapered crane top section

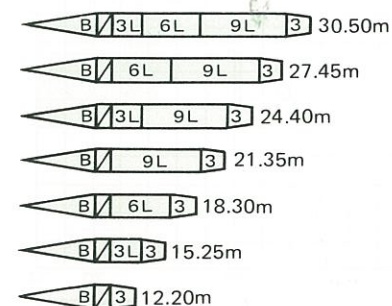


Note:

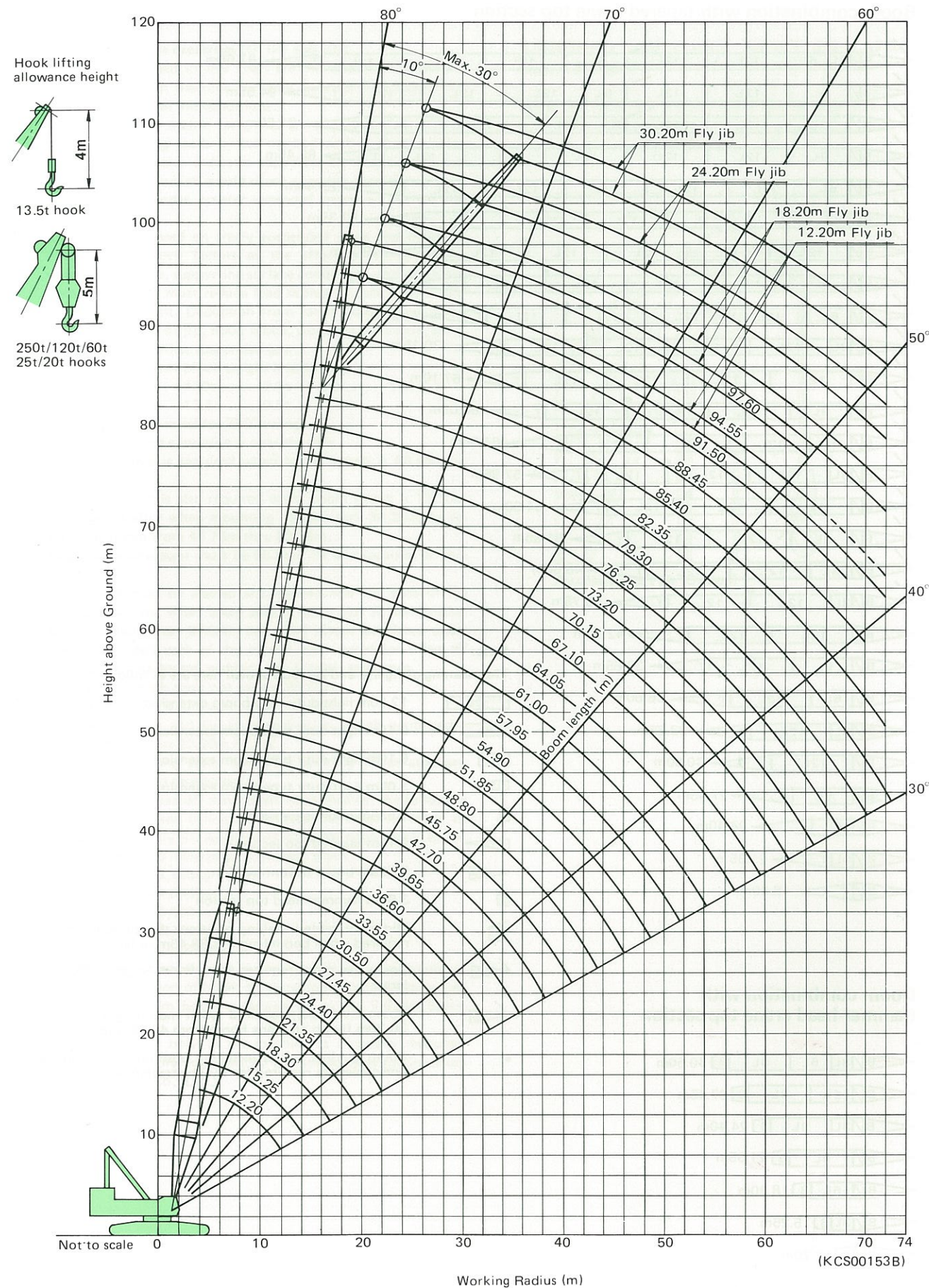
The meaning of figures and symbols shown here are as follows:

- 12L : 12.20m light-duty type boom extension
- 9L : 9.15m light-duty type boom extension
- 6L : 6.10m light-duty type boom extension
- 3L : 3.05m light-duty type boom extension
- 1.525m boom extension
- 9.15m tapered top section
- 7.625m boom bottom section
- 3 : 3.05m hammer-head top section
- Mid-point cable installing position; the mid-point table is required when boom length is 88.45m or larger
- Boom live mast; required when boom length is 73.20m or larger
- Boom live mast; required when mounting 12.20m thru 30.20m fly jib on crane boom from 45.75m to 82.35m.
- Boom guyline cables installing position; the boom guyline cables are required for fly jib attachment

Boom combination with hammer-head crane top section



Crane Working Ranges



Fly Jib Capacities

Boom length (m)	45.75							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
16.0	20.0							
18.0	20.0		16.3					
20.0	20.0	14.9	15.9		11.5			
22.0	20.0	14.1	15.6	10.5	11.1		6.7	
24.0	20.0	13.5	15.3	10.2	10.7		6.7	
26.0	20.0	12.9	15.0	9.9	10.3	7.6	6.4	
28.0	20.0	12.5	14.8	9.5	10.0	7.5	6.2	
30.0	19.2	11.5	13.8	9.1	9.8	7.3	6.0	4.3
32.0	18.5	11.5	12.9	8.8	9.5	7.1	5.8	4.2
34.0	17.0	11.3	12.3	8.5	9.2	7.0	5.6	4.1
36.0	15.6	11.0	11.7	8.2	9.0	6.9	5.4	4.0
38.0	14.4	10.7	11.1	8.0	8.7	6.8	5.2	3.9
40.0	13.3	10.4	10.6	7.8	8.5	6.7	5.1	3.8

(ECS00052A-1/13)

Boom length (m)	48.80							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
16.0	20.0							
18.0	20.0		16.3					
20.0	20.0	14.9	16.0		11.5			
22.0	20.0	14.3	15.7		11.3		6.7	
24.0	20.0	13.7	15.4	10.5	10.9		6.7	
26.0	20.0	13.2	15.1	10.0	10.5		6.5	
28.0	20.0	12.7	14.9	9.6	10.2	7.6	6.3	
30.0	19.2	12.3	14.3	9.3	10.0	7.4	6.1	
32.0	18.4	11.9	13.4	9.0	9.7	7.3	5.9	4.3
34.0	16.9	11.6	12.7	8.7	9.4	7.1	5.7	4.1
36.0	15.5	11.3	12.1	8.4	9.1	7.0	5.5	4.0
38.0	14.3	11.0	11.5	8.2	8.9	6.9	5.3	3.9
40.0	13.2	10.7	11.0	8.0	8.7	6.7	5.1	3.8
42.0	12.3	10.4	10.5	7.8	8.5	6.6	5.0	3.8

(ECS00052A-2/13)

Boom length (m)	51.85							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
16.0	20.0							
18.0	20.0		16.3					
20.0	20.0	14.9	16.3		11.5			
22.0	20.0	14.6	15.8		11.4			
24.0	20.0	14.0	15.5	10.5	11.0		6.7	
26.0	20.0	13.4	15.2	10.1	10.6		6.6	
28.0	20.0	12.9	15.0	9.8	10.3	7.6	6.4	
30.0	19.2	12.5	14.7	9.5	10.0	7.4	6.2	
32.0	18.3	12.2	14.0	9.2	9.8	7.3	6.0	4.3
34.0	16.8	11.8	13.2	8.9	9.6	7.2	5.8	4.2
36.0	15.4	11.5	12.5	8.6	9.3	7.0	5.6	4.1
38.0	14.3	11.2	12.0	8.3	9.1	6.9	5.4	4.0
40.0	13.1	10.9	11.9	8.1	8.9	6.8	5.3	3.9
42.0	12.2	10.8	11.8	7.9	8.7	6.7	5.1	3.8
44.0	11.3	10.7	11.3	7.7	8.5	6.6	5.0	3.8
46.0	10.5	10.5	10.5	7.5	8.3	6.5	5.0	3.7

(ECS00052A-3/13)

Boom length (m)	54.90							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
16.0	20.0							
18.0	20.0	14.9	16.3					
20.0	20.0	14.9	16.0		11.5			
22.0	20.0	14.2	15.7	10.5	11.2		6.7	
24.0	20.0	13.7	15.4	10.2	10.8		6.7	
26.0	20.0	13.2	15.1	9.9	10.5	7.6	6.5	
28.0	20.0	12.7	14.9	9.6	10.1	7.5	6.3	
30.0	19.2	12.4	14.4	9.3	10.0	7.3	6.1	4.3
32.0	18.2	12.0	13.7	9.0	9.7	7.2	5.9	4.2
34.0	16.7	11.7	13.0	8.7	9.4	7.1	5.7	4.1
36.0	15.3	11.4	12.5	8.5	9.2	7.0	5.5	4.0
38.0	14.1	11.1	12.4	8.3	9.0	6.9	5.3	3.9
40.0	13.0	11.0	12.3	8.1	8.8	6.8	5.2	3.8
42.0	12.1	10.9	12.1	7.9	8.6	6.7	5.1	3.8
44.0	11.2	10.8	11.2	7.7	8.4	6.6	5.0	3.7
46.0	10.3	10.3	10.3	7.5	8.3	6.5	4.9	3.6

(ECS00052A-4/13)

Boom length (m)	57.95							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
18.0	20.0							
20.0	20.0		16.3					
22.0	20.0	14.9	16.0		11.5			
24.0	20.0	14.4	15.7	10.5	11.2		6.7	
26.0	20.0	13.9	15.5	10.3	10.9		6.7	
28.0	20.0	13.4	15.2	10.0	10.6		6.6	
30.0	19.2	12.9	15.0	9.8	10.3	7.6	6.3	
32.0	18.0	12.5	14.8	9.5	10.0	7.4	6.1	
34.0	16.5	12.2	14.1	9.2	9.9	7.3	5.9	4.3
36.0	15.1	11.8	14.0	8.9	9.6	7.2	5.7	4.1
38.0	13.9	11.5	13.9	8.6	9.4	7.0	5.6	4.0
40.0	12.8	11.4	12.8	8.4	9.1	6.9	5.5	3.9
42.0	11.9	11.3	11.9	8.2	8.9	6.8	5.3	3.9
44.0	10.9	10.9	10.9	8.0	8.7	6.7	5.1	3.8
46.0	10.1	10.1	10.1	7.8	8.5	6.6	5.0	3.7
48.0	9.4	9.4	9.4	7.6	8.4	6.5	5.0	3.7
50.0	8.7	8.7	8.7	7.5	8.3	6.4	4.9	3.6

(ECS00052A-5/13)

Boom length (m)	61.00							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
18.0	20.0							
20.0	20.0		16.3					
22.0	20.0	14.9	16.3		11.5			
24.0	20.0	14.6	15.9		11.4		6.7	
26.0	20.0	14.1	15.6	10.5	11.0		6.7	
28.0	20.0	13.6	15.3	10.1	10.7		6.6	
30.0	19.2	13.1	15.0	9.8	10.4	7.6	6.4	
32.0	17.9	12.7	14.9	9.5	10.2	7.4	6.2	
34.0	16.4	12.4	14.8	9.3	10.0	7.3	6.0	4.3
36.0	15.0	12.1	14.7	9.1	9.7	7.2	5.8	4.1
38.0	13.8	11.8	13.8	8.8	9.5	7.1	5.7	4.1
40.0	12.7	11.7	12.7	8.6	9.2	7.0	5.5	4.0
42.0	11.8	11.6	11.8	8.3	9.0	6.9	5.4	3.9
44.0	10.8	10.8	10.8	8.1	8.8	6.8	5.3	3.8
46.0	10.0	10.0	10.0	7.9	8.7	6.7	5.1	3.8
48.0	9.3	9.3	9.3	7.7	8.6	6.6	5.0	3.7
50.0	8.6	8.6	8.6	7.6	8.5	6.5	5.0	3.6
52.0	8.0	8.0	8.0	7.5	8.0	6.4	4.8	3.6
54.0	7.5	7.5	7.5	7.5	7.5	6.3	4.7	3.5

(ECS00052A-6/13)

Boom length (m)	64.05							
Fly jib length (m)	12.20		18.20		24.40		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
18.0	20.0							
20.0	20.0		16.3					
22.0	20.0	14.9	16.3		11.5			
24.0	20.0	14.7	16.0		11.5		6.7	
26.0	20.0	14.3	15.7	10.5	11.1		6.7	
28.0	20.0	13.9	15.4	10.2	10.8		6.7	
30.0	19.2	13.5	15.2	10.0	10.5	7.6	6.5	
32.0	17.8	13.0	15.0	9.7	10.2	7.5	6.3	4.3
34.0	16.3	12.6	15.0	9.4	10.0	7.3	6.1	4.3
36.0	14.9	12.3	14.9	9.2	9.8	7.2	5.9	4.2
38.0	13.7	12.2	13.7	8.9	9.6	7.1	5.7	4.1
40.0	12.6	12.1	12.6	8.6	9.4	7.0	5.6	4.0
42.0	11.7	11.7	11.7	8.4	9.2	6.9	5.5	3.9
44.0	10.7	10.7	10.7	8.2	9.0	6.8	5.3	3.9
46.0	10.0	10.0	10.0	8.0	8.9	6.7	5.2	3.8
48.0	9.3	9.3	9.3	7.9	8.8	6.6	5.1	3.8
50.0	8.5	8.5	8.5	7.8	8.5	6.5	5.0	3.7
52.0	7.9	7.9	7.9	7.7	7.9	6.4	5.0	3.7
54.0	7.4	7.4	7.4	7.4	7.4	6.3	4.9	3.6
56.0	6.9	6.9	6.9	6.9	6.9	6.2	4.8	3.5

(ECS00052A-7/13)

Boom length (m)	67.10							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
18.0	20.0							
20.0	20.0		16.3					
22.0	20.0	14.9	16.3		11.5			
24.0	20.0	14.9	16.0		11.5		6.7	
26.0	20.0	14.5	15.8	10.5	11.3		6.7	
28.0	20.0	14.0	15.6	10.3	11.0		6.7	
30.0	19.2	13.6	15.3	10.0	10.7	7.6	6.5	
32.0	17.6	13.2	15.0	9.8	10.4	7.5	6.3	
34.0	16.1	12.8	15.0	9.5	10.1	7.4	6.2	4.3
36.0	14.8	12.5	14.8	9.2	10.0	7.3	6.0	4.2
38.0	13.5	12.4	13.5	9.0	9.8	7.2	5.9	4.1
40.0	12.5	12.3	12.5	8.8	9.6	7.1	5.7	4.1
42.0	11.5	11.5	11.5	8.6	9.3	7.0	5.5	4.0
44.0	10.6	10.6	10.6	8.4	9.2	6.9	5.4	3.9
46.0	9.9	9.9	9.9	8.3	9.1	6.8	5.3	3.8
48.0	9.1	9.1	9.1	8.2	9.0	6.7	5.2	3.8
50.0	8.4	8.4	8.4	8.1	8.4	6.6	5.1	3.7
52.0	7.8	7.8	7.8	7.8	7.8	6.5	5.0	3.7
54.0	7.3	7.3	7.3	7.3	7.3	6.4	4.9	3.6
56.0	6.7	6.7	6.7	6.7	6.7	6.3	4.8	3.6
58.0	6.2	6.2	6.2	6.2	6.2	6.2	4.7	3.5

(ECS00052A-8/13)

Boom length (m)	70.15							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
18.0	20.0							
20.0	20.0							
22.0	20.0	14.9	16.3					
24.0	20.0	14.9	16.1		11.5			
26.0	20.0	14.6	15.9	10.5	11.5		6.7	
28.0	20.0	14.2	15.7	10.5	11.1		6.7	
30.0	19.2	13.8	15.4	10.1	10.8	7.6	6.7	
32.0	17.5	13.4	15.3	9.9	10.5	7.6	6.4	
34.0	15.9	13.0	15.2	9.6	10.2	7.5	6.2	4.3
36.0	14.5	12.9	14.5	9.4	10.0	7.4	6.1	4.3
38.0	13.3	12.8	13.3	9.2	9.9	7.2	5.9	4.2
40.0	12.3	12.3	12.3	9.0	9.7	7.1	5.7	4.1
42.0	11.3	11.3	11.3	8.8	9.6	7.0	5.6	4.0
44.0	10.3	10.3	10.3	8.5	9.5	6.9	5.5	3.9
46.0	9.6	9.6	9.6	8.4	9.4	6.8	5.4	3.9
48.0	8.8	8.8	8.8	8.3	8.8	6.7	5.3	3.8
50.0	8.2	8.2	8.2	8.2	8.2	6.6	5.1	3.8
52.0	7.5	7.5	7.5	7.5	7.5	6.5	5.0	3.7
54.0	7.0	7.0	7.0	7.0	7.0	6.4	5.0	3.7
56.0	6.4	6.4	6.4	6.4	6.4	6.3	4.9	3.6
58.0	5.9	5.9	5.9	5.9	5.9	5.9	4.8	3.6
60.0	5.3	5.3	5.3	5.3	5.3	5.3	4.7	3.5
62.0	4.9	4.9	4.9	4.9	4.9	4.9	4.6	3.5

(ECS00052A-9/13)

Boom length (m)	73.20							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
20.0	20.0							
22.0	20.0	14.9	16.3					
24.0	20.0	14.9	16.3		11.5			
26.0	20.0	14.9	16.0	10.5	11.5		6.7	
28.0	19.2	14.3	15.7	10.5	11.2		6.7	
30.0	19.1	13.9	15.5	10.2	10.9	7.6	6.7	
32.0	17.4	13.5	15.4	10.0	10.6	7.6	6.5	
34.0	15.7	13.1	15.3	9.7	10.3	7.5	6.4	4.3
36.0	14.4	13.0	14.4	9.5	10.1	7.4	6.2	4.3
38.0	13.2	12.9	13.2	9.3	10.0	7.3	6.0	4.2
40.0	12.1	12.1	12.1	9.1	9.8	7.2	5.8	4.1
42.0	11.1	11.1	11.1	8.9	9.7	7.1	5.7	4.0
44.0	10.2	10.2	10.2	8.8	9.6	7.0	5.6	4.0
46.0	9.5	9.5	9.5	8.7	9.5	6.9	5.5	3.9
48.0	8.7	8.7	8.7	8.6	8.7	6.8	5.3	3.8
50.0	8.0	8.0	8.0	8.0	8.0	6.7	5.2	3.8
52.0	7.5	7.5	7.5	7.5	7.5	6.6	5.1	3.7
54.0	6.9	6.9	6.9	6.9	6.9	6.5	5.0	3.7
56.0	6.3	6.3	6.3	6.3	6.3	6.3	5.0	3.6
58.0	5.7	5.7	5.7	5.7	5.7	5.7	4.9	3.6
60.0	5.2	5.2	5.2	5.2	5.2	5.2	4.8	3.5
62.0	4.8	4.8	4.8	4.8	4.8	4.8	4.7	3.4
64.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3	3.3

(ECS00052A-10/13)

Boom length (m)	76.25							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
20.0	20.0							
22.0	20.0		16.3					
24.0	20.0	14.9	16.3		11.5			
26.0	20.0	14.9	16.0		11.5		6.7	
28.0	19.2	14.5	15.7	10.5	11.3		6.7	
30.0	19.0	14.1	15.5	10.3	11.0		6.7	
32.0	17.2	13.7	15.4	10.1	10.7	7.6	6.6	
34.0	15.6	13.6	15.3	9.9	10.5	7.5	6.4	
36.0	14.3	13.5	14.3	9.6	10.3	7.4	6.2	4.3
38.0	13.0	13.0	13.0	9.3	10.0	7.3	6.1	4.2
40.0	12.0	12.0	12.0	9.1	9.9	7.2	5.9	4.1
42.0	11.0	11.0	11.0	9.0	9.8	7.1	5.8	4.1
44.0	10.1	10.1	10.1	8.9	9.7	7.0	5.7	4.0
46.0	9.4	9.4	9.4	8.8	9.4	6.9	5.5	4.0
48.0	8.6	8.6	8.6	8.6	8.6	6.8	5.4	3.9
50.0	7.9	7.9	7.9	7.9	7.9	6.7	5.3	3.9
52.0	7.4	7.4	7.4	7.4	7.4	6.6	5.2	3.8
54.0	6.7	6.7	6.7	6.7	6.7	6.5	5.1	3.7
56.0	6.1	6.1	6.1	6.1	6.1	6.1	5.0	3.7
58.0	5.6	5.6	5.6	5.6	5.6	5.6	5.0	3.6
60.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	3.6
62.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	3.5
64.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.5
66.0	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.4

(ECS00052A-11/13)

Boom length (m)	79.30							
Fly jib length (m)	12.20		18.20		24.20		30.20	
Fly jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
20.0	20.0							
22.0	20.0		16.3					
24.0	20.0	14.9	16.3					
26.0	19.2	14.9	16.0		11.5		6.7	
28.0	18.4	14.7	15.8	10.5	11.5		6.7	
30.0	17.4	14.2	15.6	10.5	11.1		6.7	
32.0	16.7	13.8	15.5	10.1	10.8	7.6	6.6	
34.0	15.5	13.7	15.4	9.9	10.6	7.6	6.4	
36.0	14.2	13.6	14.2	9.7	10.4	7.5	6.3	4.3
38.0	12.9	12.9	12.9	9.4	10.1	7.4	6.2	4.3
40.0	11.9	11.9	11.9	9.2	10.0	7.3	6.0	4.2
42.0	10.9	10.9	10.9	9.1	10.0	7.2	5.9	4.1
44.0	10.0	10.0	10.0	9.0	9.9	7.1	5.7	4.0
46.0	9.2	9.2	9.2	8.9	9.2	7.0	5.6	3.9
48.0	8.5	8.5	8.5	8.5	8.5	6.9	5.5	3.9
50.0	7.8	7.8	7.8	7.8	7.8	6.8	5.4	3.8
52.0	7.2	7.2	7.2	7.2	7.2	6.7	5.2	3.8
54.0	6.6	6.6	6.6	6.6	6.6	6.6	5.1	3.8
56.0	5.9	5.9	5.9	5.9	5.9	5.9	5.0	3.7
58.0	5.4	5.4	5.4	5.4	5.4	5.4	5.0	3.7
60.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3.6
62.0	4.4	4.4	4.4	4.4	4.4	4.4	4.4	3.6
64.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5
66.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
68.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
70.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

(ECS00052A-12/13)

Boom length (m)	82.35							
Fly Jib length (m)	12.20		18.20		24.20		30.20	
Fly Jib offset angle (°)	10	30	10	30	10	30	10	30
Working radius (m)								
20.0	20.0							
22.0	20.0							
24.0	19.2	14.9	16.3					
26.0	18.5	14.9	16.3		11.5			
28.0	16.6	14.9	16.0	10.5	11.5		6.7	
30.0	15.6	14.4	15.6	10.5	11.2		6.7	
32.0	15.0	14.3	15.0	10.3	10.9	7.6	6.7	
34.0	14.4	14.2	14.4	10.0	10.7	7.6	6.5	
36.0	13.6	13.6	13.6	9.8	10.5	7.5	6.3	4.3
38.0	12.6	12.6	12.6	9.6	10.4	7.4	6.2	4.3
40.0	11.6	11.6	11.6	9.5	10.3	7.3	6.1	4.2
42.0	10.6	10.6	10.6	9.4	10.2	7.2	5.9	4.1
44.0	9.8	9.8	9.8	9.3	9.8	6.9	5.8	4.0
46.0	8.9	8.9	8.9	8.9	8.9	7.0	5.7	4.0
48.0	8.2	8.2	8.2	8.2	8.2	6.9	5.5	3.9
50.0	7.5	7.5	7.5	7.5	7.5	6.8	5.4	3.9
52.0	6.9	6.9	6.9	6.9	6.9	6.7	5.3	3.8
54.0	6.2	6.2	6.2	6.2	6.2	6.2	5.2	3.8
56.0	5.6	5.6	5.6	5.6	5.6	5.6	5.1	3.7
58.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	3.7
60.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	3.6
62.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	3.5
64.0	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.4
66.0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
68.0	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
70.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
72.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1

(ECS00052A-13/13)

Notes – Fly jib 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 based on 75% of minimum tipping loads unless marked with a shaded color (□). Shaded color indicates capacities are based on factors other than those which would cause a tipping condition.
- Capacities are under crawler extended condition with 6,000 mm.
- 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 jib capacities must be made for weight of hook block, weighted ball/hook, sling, load weighing devices, or other suspended gear.
SUMITOMO's hook block weight is as follows:
20t1.1t 13.5t0.5t
- All capacities are rated for 360° swing.
- Least stable rated condition is over the side.
- Boom live mast must be installed for all fly jib length.
- Upper counterweight must be 65.5ton for all capacities on this chart.
- Attachment must be erected and lowered over the ends of the crawler mounting. When boom and/or boom plus jib combination length is more than 97.60m, two steel blocks be placed under track idler rollers each of the crawler are required for lifting off ground the attachment without any outside assistance.
- Maximum fly jib length permitted is 30.20m, and maximum boom and fly jib combination length permitted is 82.35m boom plus 30.20m fly jib.
- Capacities apply only to the machine as originally manufactured and normally equipped by Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

Lifting Crane Capacities – LWC Attachment

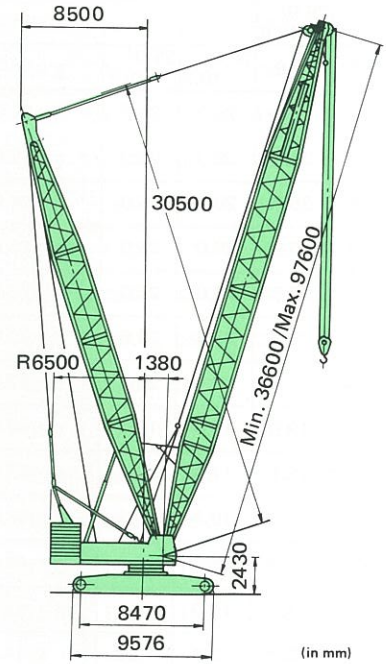
Mast length (m)	30.50																				Mast length (m)			
Boom length (m)	36.60	39.65	42.70	45.75	48.80	51.85	54.90	57.95	61.00	64.05	67.10	70.15	73.20	76.25	79.30	82.35	85.40	88.45	91.50	94.55	97.60	Boom length (m)		
Working radius (m)																					Working radius (m)			
8.0	120.0/8.1	120.0/8.6																					8.0	
9.0	120.0	120.0	110.6/9.1	101.0/9.7																			9.0	
10.0	104.2	104.1	104.0	101.0	91.3/10.2	82.7/10.7	76.9/11.3	72.1/11.8															10.0	
12.0	83.4	83.3	83.5	83.2	83.1	82.7	76.9	72.1	66.3/12.3	61.5/12.8	56.7/13.4												12.0	
14.0	69.6	69.4	69.3	69.0	68.9	68.8	68.7	68.4	66.3	61.5	56.7	51.9	48.1/14.4	43.3/15.0	40.4/15.5								14.0	
16.0	59.0	58.9	58.8	58.5	58.4	58.3	58.1	58.1	57.8	57.6	56.7	51.9	48.1	43.3	40.4	37.5	33.7/16.6	30.8/17.1	26.9/17.6				16.0	
18.0	51.3	51.3	51.1	50.8	50.7	50.6	50.4	50.1	50.0	49.9	49.7	49.4	48.1	43.3	40.4	37.5	33.7	30.8	26.9	26.0/18.2	25.0/18.7		18.0	
20.0	45.1	45.0	44.8	44.5	44.4	44.2	44.1	43.8	43.8	43.8	43.8	43.5	43.4	43.2	40.4	37.5	33.7	30.8	26.9	26.0	25.0		20.0	
22.0	40.3	40.2	40.1	39.8	39.6	39.5	39.3	39.0	38.9	38.8	38.7	38.4	38.3	38.1	37.9	37.5	33.7	30.8	26.9	26.0	25.0		22.0	
24.0	36.2	36.1	35.9	35.6	35.5	35.3	35.2	34.9	34.8	34.6	34.4	34.1	34.0	33.8	33.7	33.4	33.3	30.8	26.9	26.0	25.0		24.0	
26.0	32.7	32.6	32.4	32.1	32.0	31.8	31.6	31.4	31.3	31.2	31.0	30.7	30.6	30.4	30.4	30.2	30.1	29.9	26.9	26.0	25.0		26.0	
28.0	29.7	29.6	29.4	29.1	29.0	29.0	29.0	28.8	28.7	28.5	28.3	28.0	27.9	27.7	27.5	27.2	27.1	26.9	26.5	26.0	25.0		28.0	
30.0	27.4	27.3	27.1	26.8	26.7	26.6	26.4	26.2	26.1	25.9	25.7	25.4	25.3	25.1	24.9	24.6	24.5	24.3	23.9	23.8	23.6		30.0	
32.0	25.1	25.0	24.9	24.6	24.5	24.3	24.2	23.9	23.8	23.7	23.5	23.2	23.1	22.9	22.7	22.4	22.2	22.0	21.7	21.5	21.3		32.0	
34.0	23.9/33.2	23.1	3.0	22.7	22.5	22.4	22.2	21.9	21.8	21.7	21.5	21.3	21.1	21.0	20.8	20.4	20.3	20.1	19.8	19.6	19.3		34.0	
36.0		21.5/35.8	21.2	21.0	20.8	20.7	20.5	20.2	20.1	20.0	19.8	19.5	19.4	19.2	19.0	18.7	18.6	18.4	18.1	17.9	17.6		36.0	
38.0			19.6	19.4	19.3	19.1	18.9	18.7	18.6	18.5	18.3	18.0	17.9	17.7	17.5	17.1	17.0	16.8	16.5	16.3	16.1		38.0	
40.0			19.3/38.5	18.0	17.9	17.8	17.6	17.3	17.2	17.0	16.8	16.5	16.4	16.3	16.1	15.8	15.7	15.7	15.5	15.3	15.0		40.0	
42.0				17.3/41.1	16.6	16.5	16.3	16.1	16.0	15.9	15.7	15.4	15.2	15.1	15.1	14.8	14.7	14.5	14.2	14.0	13.8		42.0	
44.0					15.7/43.8	15.4	15.2	15.0	14.9	14.7	14.5	14.5	14.4	14.2	14.0	13.7	13.6	13.4	13.1	12.9	12.6		44.0	
46.0						14.3	14.2	14.1	14.0	13.9	13.8	13.5	13.4	13.2	13.0	12.6	12.5	12.3	12.0	11.8	11.5		46.0	
48.0						14.1/46.4	13.5	13.2	13.1	13.0	12.8	12.5	12.4	12.2	12.0	11.6	11.5	11.3	11.1	10.9	10.6		48.0	
50.0							13.0/49.0	12.3	12.2	12.0	11.9	11.6	11.4	11.3	11.2	10.8	10.7	10.5	10.2	10.0	9.7		50.0	
52.0								11.6/51.7	11.4	11.3	11.1	10.8	10.7	10.5	10.3	10.0	9.9	9.7	9.3	9.2	8.9		52.0	
54.0									10.7	10.5	10.3	10.0	9.9	9.7	9.5	9.2	9.1	8.9	8.7	8.5	8.2		54.0	
56.0									10.6/54.3	9.8	9.6	9.3	9.2	9.0	8.8	8.6	8.5	8.3	7.9	7.6	7.5		56.0	
58.0										9.5/57.0	9.0	8.7	8.6	8.5	8.3	7.9	7.8	7.6	7.3	7.1	6.8		58.0	
60.0											8.5/59.6	8.1	8.0	7.8	7.6	7.3	7.2	7.0	6.7	6.5	6.3		60.0	
62.0												7.5	7.4	7.3	7.1	6.7	6.6	6.4	6.2	6.0	5.7		62.0	
64.0													7.5/62.2	6.9	6.7	6.5	6.3	6.2	6.0	5.7	5.5	5.2		64.0
66.0														6.7/64.9	6.3	6.1	5.8	5.7	5.5	5.1	5.0	4.7		66.0
68.0															5.9/67.5	5.6	5.3	5.2	5.0	4.7	4.5	4.2		68.0
70.0																5.2	4.9	4.7	4.6	4.2	4.1	3.8		70.0
72.0																								72.0
74.0																	4.3/72.8	3.9	3.8	3.5	3.4	3.0		74.0
76.0																		3.7/75.4	3.5	3.1	3.0	2.7		76.0
78.0																			3.1	2.7	2.6	2.3		78.0
80.0																				2.4	2.3	1.9		80.0
82.0																					2.3/80.7	2.0		82.0

(ECS00077B)

Notes – Lifting crane capacities with LWC attachment

- 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 based on machine structural limitation factors other than those which would cause a tipping condition that regulates 75% of minimum tipping loads.
- Capacities are under crawler extended condition with 6,000mm.
- 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 jib, hook block, weighted ball/hook, sling, spreader bar, or other suspended gear.
SUMITOMO's hook block weight is as follows:
120t 2.1t 60t 1.4t
25/20t 1.1t 13.5t 0.5t
- All capacities are rated for 360° swing.
- Least stable rated condition is over the side.
- LWC attachment requires 30.50m mast for all capacities shown on this chart. Boom live mast is not necessary for LWC attachment vice versa.
- LWC attachment requires 72.5ton upper counterweight for all capacities on this chart.
- Main boom length can be extended up to 97.60m as maximum. Maximum fly jib length permitted is 30.20m.
- Maximum boom and fly jib combination length permitted is 94.55m boom plus 30.20m fly jib. When mounting 12.20m thru 30.20m fly jib on boom from 79.30m through 94.55m, it, however, requires outside assistance for erection and lowering, if boom angle is more than 40° in terms of boom strength.
- Determining lifting crane capacities with fly jib mounted on boom:
When handling load off main boom head sheaves, the following reductions in rated lifting crane capacities must be made to compensate for fly jib weight including 20t hook block.
12.20m fly jib—3,100kg
18.20m fly jib—4,300kg
24.20m fly jib—5,500kg
30.20m fly jib—6,700kg
- As to fly jib capacities, consult sales office of Sumitomo (S.H.I.) Construction Machinery Co., Ltd. through distributor network.
- Boom combination diagram is described herein as recommended. In configuration of boom combination, it is required to just position a 1.525m boom extension on to 7.625m boom bottom section.
- Capacities apply only to the machine as originally manufactured and normally equipped by Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

Boom Combination Diagram – LWC Attachment



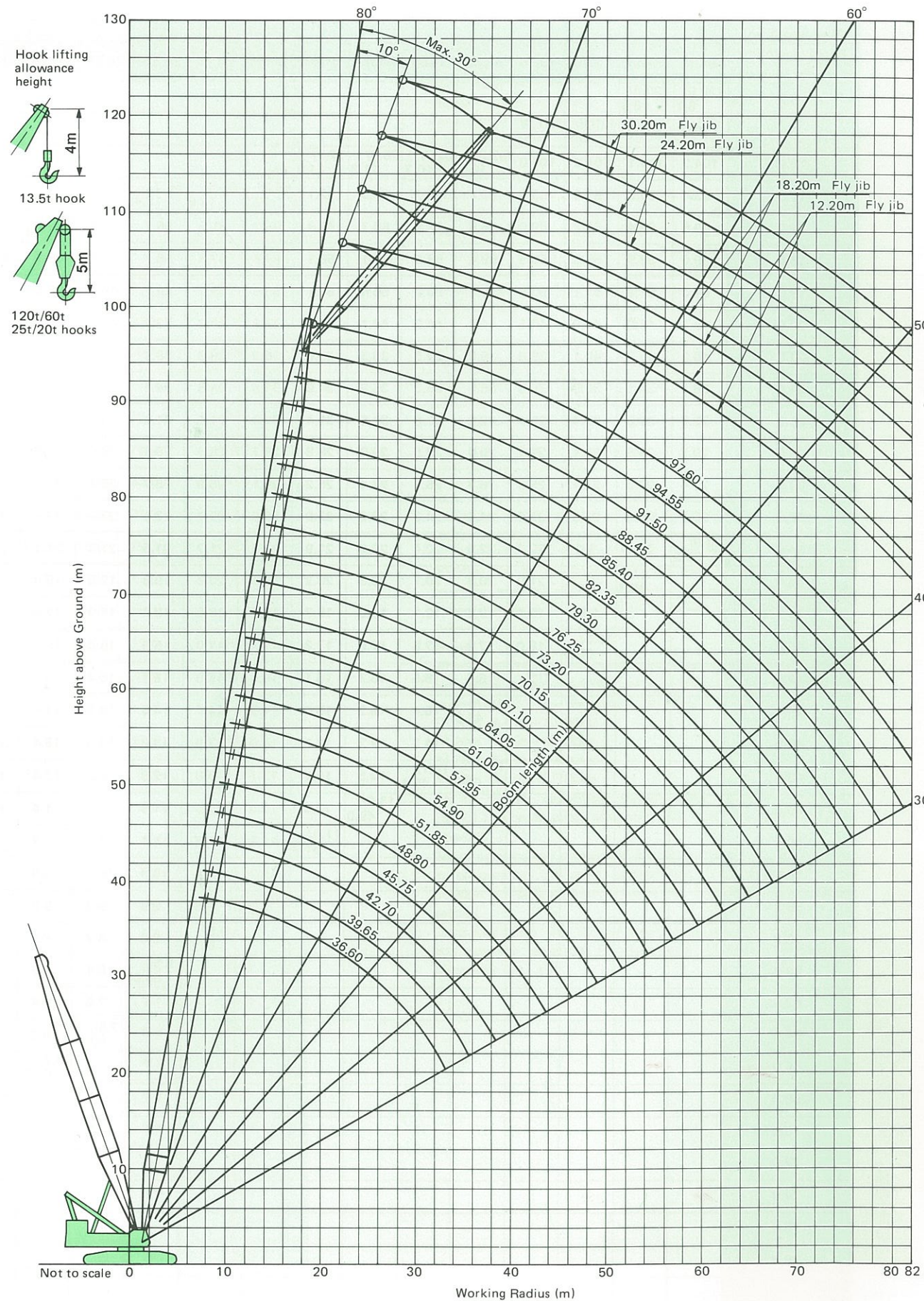
LS-368RH-5 with LWC Attachment
General Arrangement

Note:

The meaning of figures and symbols shown here are as follows:

- 12L : 12.20m light-duty boom extension
- 9L : 9.15m light-duty boom extension
- 6L : 6.10m light-duty boom extension
- 3L : 3.05m light-duty boom extension
- / : 1.525m boom extension
- T : 9.15m tapered top section
- B : 7.625m boom bottom section
- : Boom guyline cables installing position; the boom guyline cables are required for fly jib attachment which can be mounted on boom from 54.90m up to 94.55m.

Crane Working Ranges – LWC Attachment



Standard and Optional Equipments

	Standard equipments	Optional equipments
Upper Machinery	<ul style="list-style-type: none"> ● Mitsubishi 6D22TC diesel ● Hydraulic system with two variable displacement axial piston pumps and one fixed displacement triplicate tandem gear pump ● Control system with two quadruplicate tandem valves and floor type levers ● Main/auxiliary hoist drum winches with hydraulic motors and external contracting band type brakes w/ automatic and free fall braking modes, and automatically engaged/disengaged clutches ● Boom hoist drum winch with hydraulic motor and wet-disc type automatic brake ● Swing mechanism with 3-hydraulic motor with wet-disc type brake and quick disconnect type turntable bearing ● A-frame type gantry with bail and hydraulic cylinders ● Upper counterweights; 65.5 ton ● Machinery cab with hinged doors ● 24-volt electrical system with two 12-volt batteries ● Full-vision type operator's cab with reclining type seat and floor mat ● Cigarette lighter ● Ash tray ● Interior cab light ● Electric socket; 24V ● Manual holder ● Engine monitoring lamps ● Fuel gauges; provided in cab gauge panel and fuel tank ● Engine glow indication lamp ● Engine tachometer ● Thermometer ● Hydraulic oil pressure gauge ● Hydraulic oil temperature gauge ● Level gauge ● Foot/hand throttles ● Wind wipers with blade; provided on front and roof wind glasses ● Two headlights ● Two back mirrors ● Catwalks along both sides of machinery cab ● Superstructure under-cover; provided at lower parts of cab and engine 	<ul style="list-style-type: none"> ● Upper machinery jack-up device with 4-hydraulic jack cylinder ● Third drum winch with hydraulic motor and wet-disc type automatic brake; required when machine operation with LWC attachment ● Third drum cable; 22.4mm dia./550m length ● Wire reeving winch ● A 7ton additional counterweight; required when machine operation with LWC attachment ● Anemometer ● Monitor television ● Radio ● Cab heater ● Air-conditioner ● Drum rotation indicators ● Fire extinguisher ● Cab fan ● Sunvisor ● Sunshade ● Radiophone ● Microphone with loud-speaker ● Blige pump

	Standard equipments	Optional equipments
Upper Machinery – continued –	<ul style="list-style-type: none"> ● Slipless mats; provided on machinery house upper-part ● Spare parts and tools 	
Undercarriage	<ul style="list-style-type: none"> ● 6,000mm gauge by 9,576mm long crawler lower with removable/retractable side frames ● Hydrostatic crawler drive units with wet-disc type automatic brakes ● 1,118mm wide track shoes ● Automatic track tension adjusting device ● Lifetime lubricated track components ● Level gauge 	<ul style="list-style-type: none"> ● Side frame retract cylinder ● Carbody jack-up cylinders ● Special tools; recommended for disassembling axles of carbody ● Two steel blocks; necessary when boom and/or boom plus jib length is 97.60m or longer for erection and lowering
Crane Attachment	<ul style="list-style-type: none"> ● 12.20m basic crane boom; 7.625m bottom section, one 1.525m extension and 3.05m hammer-head crane top section ● Boom bridle ● 250ton hook block ● Main crane hoist cable; 28mm dia./360m length ● Boom hoist cable; 22.4mm dia./380m length ● Cord reel; provided for crane boom electric wiring ● Crane boom skywalks; provided on all booms 	<ul style="list-style-type: none"> ● Light-duty type boom extensions; available in 3.05, 6.10, 9.15 and 12.20m with pendants * Max. crane boom length is 97.60m with an optional 9.15m tapered ● A 9.15m tapered top section with pendants; required when extending the boom length in from 33.55m to 97.60m, and/or when maximum lift is up to 120ton ● 12.20m basic fly jib; 6.10m bottom and top sections ● Fly jib extensions; available in 6.00m * Max. fly jib length is 30.20m ● 25/20ton hook block; necessary for fly jib operation ● Cable; 28mm dia./360m length as necessary for fly jib or auxiliary short jib operations ● Hydraulically operated tower boom foot pins ● Hydraulically operated boom live mast foot pins ● 120ton hook block; necessary for crane lifting operation with an optional 9.15m tapered top section ● 60ton hook block ● Auxiliary short jib ● 13.5ton hook block; necessary for auxiliary short jib operation ● Boom live mast; required when boom length is 73.20m or longer, and/or when mounting 12.20m thru 30.20m fly jib on crane boom from 45.75m thru 82.35m for general lifting crane attachment ● Mid-point cable; necessary when boom length is 88.45m or longer in case of general lifting crane attachment

	Standard equipments	Optional equipments
Crane Attachment – continued –		<p>Following optional items are for LWC attachment:</p> <ul style="list-style-type: none"> ● 9.15m mast bottom section; lattice type ● 9.15m mast top section; lattice type ● Two 6.10m mast boom extensions ● A 60ton additional counterweight ● Main crane hoist cable; 28mm dia./600m length ● Mast bail ● Boom bridle
Safety Devices	<ul style="list-style-type: none"> ● Main/auxiliary hoist drum locks ● Boom hoist drum lock ● Third drum lock; applied only for LWC attachment ● Swing lock ● Main crane hook over-hoist limiting device with alarm ● Crane boom over-hoist limiting device with alarm ● Crane boom backstops ● Mast boom backstops; applied only for LWC attachment ● Additional boom backstops; applied only for LWC attachment ● Crane boom angle indicator ● Swing warning device with buzzer/light ● Swing brake lamp ● Signal horn 	<ul style="list-style-type: none"> ● Load moment limiter ● Over-load indication light ● Fly jib/auxiliary short jib hook over-hoist limiting device with alarm