



SUMITOMO

PAX Series

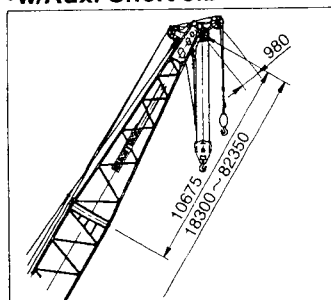
SC 1500-2

150-M ton Hydraulic Crawler Crane

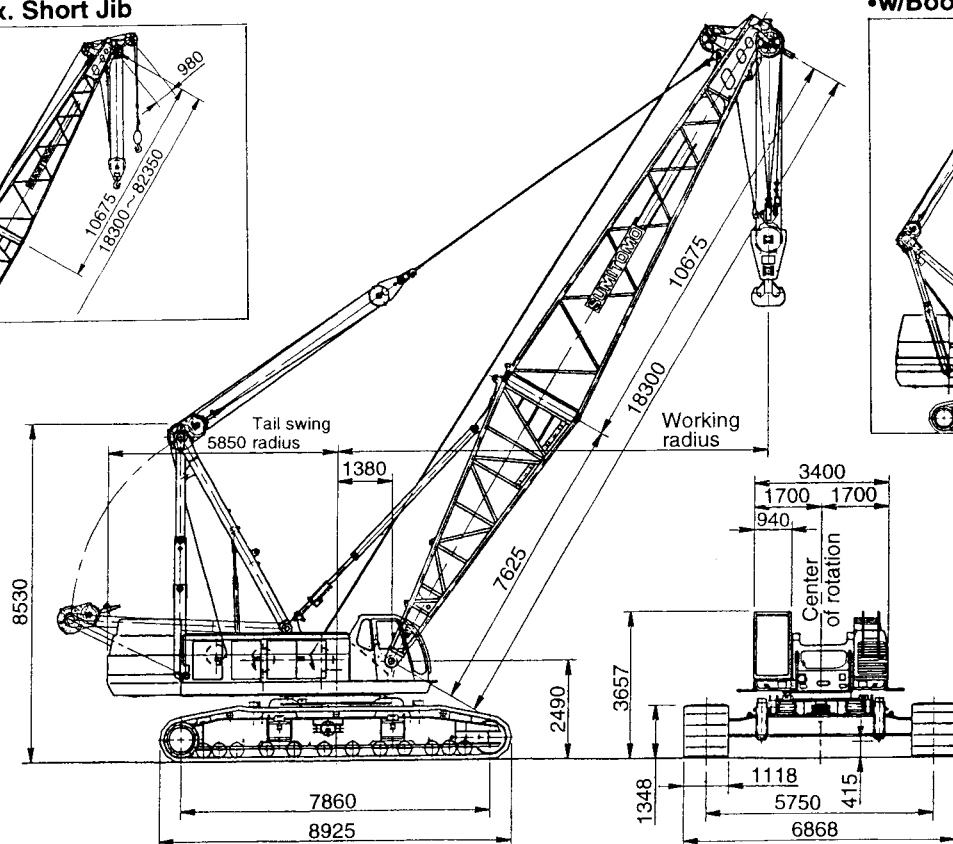
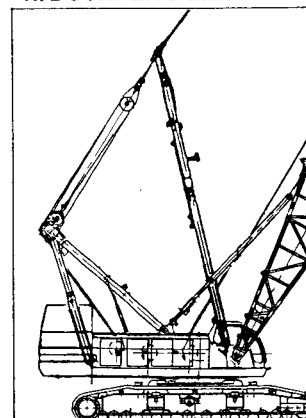
Technical Data

■ General Dimensions:

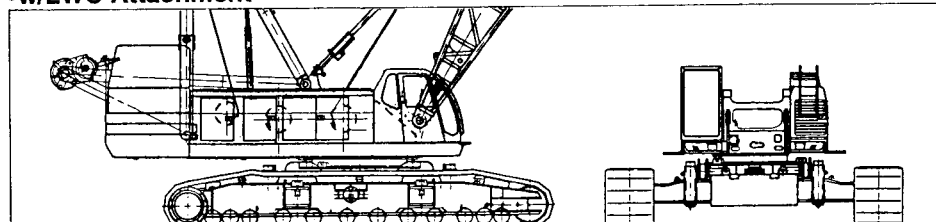
•w/Aux. Short Jib



•w/Boom Live Mast



•w/LWC Attachment





Liftcrane 150 metric tons

**SUMITOMO
SC 1500-2****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 2.1m deep and 2.1m wide.

Basic boom Two-piece, 18.30m basic length; 7.625m bottom section and 10.675m tapered crane top section.

Boom head machinery Five head sheaves and two guide sheaves mounted on anti-friction bearings.

Two hanger sheaves Optional extra; each mounted on anti-friction bearing at both ends of boom head shaft outside five head sheaves, and required in a case of 150ton lift.

Heavy-duty boom extensions Optional extra; available in 3.05m, 6.10m and 9.15m lengths with dual pendants.

Light-duty boom extension Optional extra; available in 12.20m lengths with dual pendants.

Maximum boom length 85.40m

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 0.762m deep and 0.914m wide, jib strut w/backstops, rope guide sheave and guyline cables, and jib head machinery with single sheave mounted on anti-friction bearings. This attachment can be mounted on 10.675m tapered top section, and is available for light load lifting operation with less than 15ton with 2-part hoist line (or less than 13.5ton with single part hoist line).

Basic fly jib Two-piece, 12.20m basic length; 6.10m bottom and top sections.

Fly jib extensions Available in 6.10m length with pendants.

Maximum fly jib length 30.50m

Boom plus fly jib length Max. 73.20m + 30.50m

AUXILIARY SHORT JIB:

Optional extra; all-welded construction having single sheave head machinery. This attachment pinned to 10.675m tapered top section, and is available for 13.5ton lift as maximum with single part hoist line.

HOOK BLOCKS:

150t, five sheaves plus one in-lined hanger sheave with duplex hook Optional extra.

100t, five sheaves with duplex hook Optional extra; available from an 150ton hook block by dismounting an in-lined hanger sheave.

80t, three sheaves Optional extra.

35t, single sheave Optional extra.

13.5t, ball hook Optional extra.

BOOM LIVE MAST:

Optional extra; All-welded, box type construction, mounted in front of upper revolving frame. This mast attaches bridle with larger sheaves of a 21.4 D/d ratio for 16-part boom hoist rope reeving. Boom live mast is required when boom length is over 70.15m, and/or when mounting fly jib from 12.20m thru 30.50m on boom of 70.15m and 73.20m and is also available in range of boom length from 48.80m thru 67.10m for upgrading crane capacity.

BAIL AND BRIDLE:

All-welded construction; provided with larger sheaves of a 21.4 D/d ratio on both bail and bridle for 16-part boom hoist rope reeving. Bail mounted on A-frame gantry, and bridle suspended between a 16-part boom hoist rope and pendant ropes connecting to tip of a 10.675m tapered top section.

DRUM DATA:

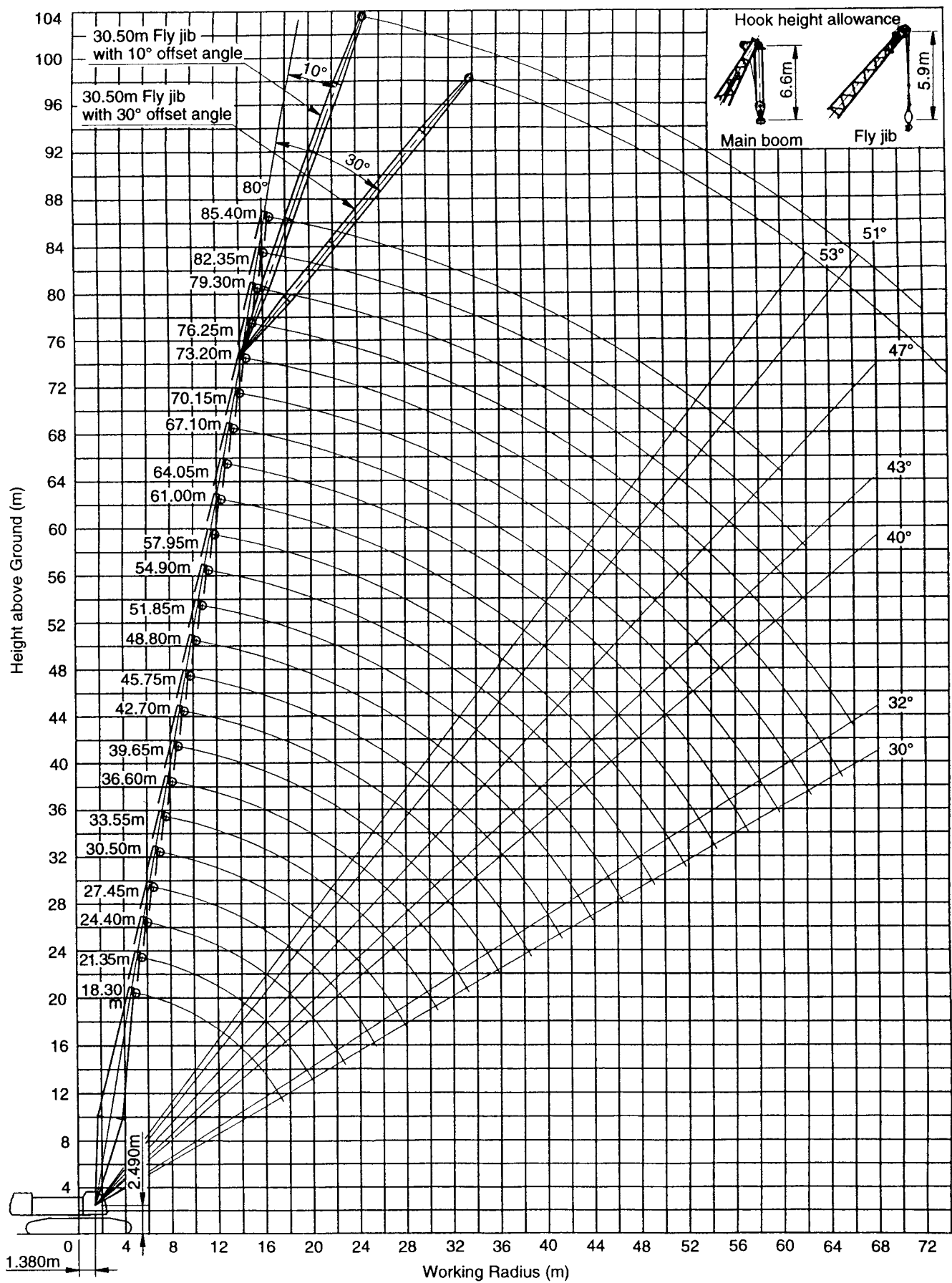
Drum	Root dia.	Type	Line speed (Hoisting, Lowering)	Cable
Front (main crane hoist)	571mm	Parallel grooved	100 ~ 2mpm	28mm
Rear (aux. crane hoist)	571mm	Parallel grooved	100 ~ 2mpm	28mm
Boom hoist	504mm	Parallel grooved	(23~1mpm) × 2-line	22.4mm

Notes:

1. Line speed is based on drum first layer and rated engine rpm.
2. Hoisting line speed varies under load and operating conditions.

Liftcrane Working Ranges

SUMITOMO
SC 1500-2





Liftcrane Capacities

■ w/Std. Counterweight – w/o Boom Live Mast

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
5.0	150.0																
5.5	148.0	140.6/5.6															
6.0	146.0	138.8	130.0/6.1														
6.5	144.1	135.9	130.0	122.6/6.6													
7.0	136.6	133.5	129.7	120.9	112.2/7.2	100.0/7.7											
8.0	112.6	112.5	112.5	112.5	109.3	100.0/8.6	90.0/8.2	88.9/8.7									
9.0	93.6	93.5	93.5	93.4	93.3	93.3	90.0	88.1	80.0/9.5	75.0/9.8							
10.0	80.0	79.8	79.8	79.7	79.5	79.6	79.6	79.4	79.4	75.0	70.8/10.3	66.1/10.9	61.9/11.4	57.9/11.9			
12.0	61.6	61.5	61.4	61.3	61.1	61.1	61.1	60.9	60.8	60.8	60.6	60.4	60.3	57.7	53.5/12.5	47.0/13.0	41.6/13.5
14.0	49.9	49.7	49.6	49.5	49.2	49.3	49.3	49.0	49.0	48.9	48.7	48.5	48.4	48.2	48.0	44.2	41.2
16.0	41.8	41.6	41.4	41.3	41.0	41.1	41.0	40.8	40.7	40.6	40.4	40.2	40.1	39.9	39.7	39.6	39.4
18.0	37.5/17.4	35.6	35.4	35.3	35.0	35.0	35.0	34.7	34.6	34.5	34.3	34.1	34.0	33.8	33.6	33.5	33.3
20.0		31.0	30.8	30.7	30.4	30.4	30.4	30.1	30.0	29.9	29.6	29.4	29.3	29.1	28.9	28.8	28.6
22.0			27.2	27.1	26.7	26.7	26.7	26.4	26.3	26.2	25.9	25.7	25.7	25.4	25.2	25.1	24.9
24.0			26.1/22.7	24.1	23.8	23.8	23.7	23.5	23.3	23.2	23.0	22.7	22.7	22.4	22.2	22.1	21.9
26.0				22.5/25.3	21.4	21.4	21.3	21.0	20.9	20.8	20.5	20.3	20.2	19.9	19.7	19.6	19.4
28.0					19.4	19.3	19.3	19.0	18.8	18.7	18.4	18.2	18.1	17.8	17.6	17.5	17.3
30.0					17.6	17.5	17.2	17.1	16.9	16.7	16.4	16.3	16.1	15.8	15.8	15.8	15.5
32.0					17.2/30.6	16.0	15.7	15.6	15.4	15.1	14.9	14.8	14.5	14.3	14.3	14.2	14.0
34.0						15.2/33.2	14.4	14.3	14.1	13.8	13.6	13.5	13.2	13.0	12.9	12.9	12.6
36.0							13.4/35.9	13.1	13.0	12.7	12.4	12.3	12.0	11.8	11.7	11.4	
38.0								12.1	12.0	11.7	11.4	11.3	11.0	10.8	10.7	10.4	
40.0								11.9/38.5	11.1	10.7	10.5	10.4	10.1	9.9	9.8	9.5	
42.0									10.6/41.2	9.9	9.7	9.6	9.3	9.0	8.9	8.7	
44.0										9.3/43.8	9.0	8.8	8.5	8.3	8.2	7.9	
46.0											8.3	8.2	7.9	7.6	7.5	7.2	
48.0											8.2/46.5	7.6	7.3	7.0	6.9	6.6	
50.0												7.3/49.1	6.7	6.5	6.3	6.1	
52.0													6.3/51.7	6.0	5.8	5.5	
54.0														5.5	5.4	5.1	
56.0														5.4/54.4	4.9	4.6	
58.0															4.8/57.0	4.3	
60.0																3.8/59.7	
62.0																	
64.0																	
66.0																	
No. of part line	13	13	11	11	11	10	8	8	7	6	6	6	5	5	5	4	4

(ECP00146B/147B)

■ w/Std. Counterweight & LWC Att. – w/o Boom Live Mast

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
5.0	150.0																
5.5	148.0	140.6/5.6															
6.0	146.0	138.8	130.0/6.1														
6.5	144.1	135.9	130.0	122.6/6.6													
7.0	136.6	133.5	129.7	120.9	112.2/7.2	100.0/7.7											
8.0	112.6	112.5	112.5	112.5	109.3	100.0/8.6	90.0/8.2	88.9/8.7									
9.0	101.3	101.0	100.7	100.4	95.4	95.0	90.0	88.1	80.0/9.5	75.0/9.8							
10.0	90.7	89.7	88.7	88.4	88.2	88.2	88.0	82.0	79.4	75.0/10.7	70.8/10.3	66.1/10.9	61.9/11.4	57.9/11.9			
12.0	72.3	72.2	72.0	71.9	71.7	71.9	71.7	71.6	71.5	69.0	64.0	60.4	60.3	57.7	53.5/12.5	47.0/13.0	41.6/13.5
14.0	59.7	59.5	59.3	59.2	59.0	59.0	59.0	58.8	58.7	58.6	58.4	57.5	53.5	49.5	48.0	44.2	41.2
16.0	49.6	49.5	49.4	49.3	49.3	49.3	49.3	49.0	48.9	48.9	48.6	48.4	48.4	44.5	43.7	40.3	39.4
18.0	43.3/17.4	42.8	42.6	42.4	42.2	42.2	42.2	41.9	41.8	41.7	41.5	41.2	41.2	40.2	40.0	38.0	35.0
20.0		37.4	37.1	37.0	36.7	36.7	36.7	36.4	36.3	36.2	36.0	35.7	35.7	35.4	35.2	35.2	33.0
22.0			32.9	32.7	32.4	32.4	32.4	32.1	32.0	31.9	31.6	31.4	31.3	31.1	30.8	30.8	30.5
24.0			31.6/22.7	29.2	28.9	28.9	28.9	28.6	28.5	28.4	28.1	27.9	27.8	27.5	27.3	27.2	27.0
26.0				27.3/25.3	26.1	26.1	26.0	25.7	25.6	25.5	25.2	25.0	24.9	24.6	24.4	24.3	24.1
28.0					23.7	23.7	23.6	23.3	23.1	23.0	22.7	22.5	22.4	22.1	21.9	21.9	21.6
30.0						21.6	21.5	21.2	21.1	20.9	20.7	20.4	20.3	20.1	19.8	19.8	19.5
32.0					21.1/30.6	19.8	19.4	19.3	19.2	18.9	18.6	18.5	18.3	18.0	18.0	18.0	17.7
34.0						18.8/33.2	17.9	17.7	17.6	17.3	17.1	17.0	16.7	16.5	16.4	16.1	
36.0							16.6/35.9	16.4	16.2	15.9	15.7	15.6	15.3	15.1	15.0	14.7	
38.0								15.2	15.0	14.7	14.5	14.4	14.1	13.9	13.8	13.5	
40.0								14.9/38.5	14.0	13.7	13.4	13.3	13.0	12.8	12.7	12.4	
42.0									13.4/41.2	12.7	12.5	12.3	12.0	11.8	11.7	11.4	
44.0										11.9/43.8	11.6	11.5	11.2	10.9	10.8	10.5	
46.0											10.8	10.7	10.4	10.1	10.0	9.7	
48.0											10.7/46.5	10.0	9.7	9.4	9.3	9.0	
50.0												9.8/49.1	9.0	8.8	8.6	8.4	
52.0													8.5/51.7	8.2	8.0	7.7	
54.0														7.6	7.5	7.2	
56.0														7.5/54.4	7.0	6.7	
58.0															6.8/57.0	6.2	
60.0																5.2/59.7	
62.0																	
64.0																	
66.0																	
No. of part line	13	13	11	11	11	10	8	8	7	6	6	6	5	5	5	4	4

(ECP00157B/158B)

Note:
The LWC attachment can perform about 27% greater lifting crane capacity than that of standard counterweight throughout the most widely used working range under boom length from 18.30m through 85.40m by means of adding counterweights of 12.0 ton for upper and 18.0 ton for undercarriage onto standard unit with no other specification changes for crane boom and so on. Thus, the unit with LWC attachment can realize bigger lifting capacities as almost same as those of a 230 ton class crawler crane.