SUMITOMO

PĀX Series

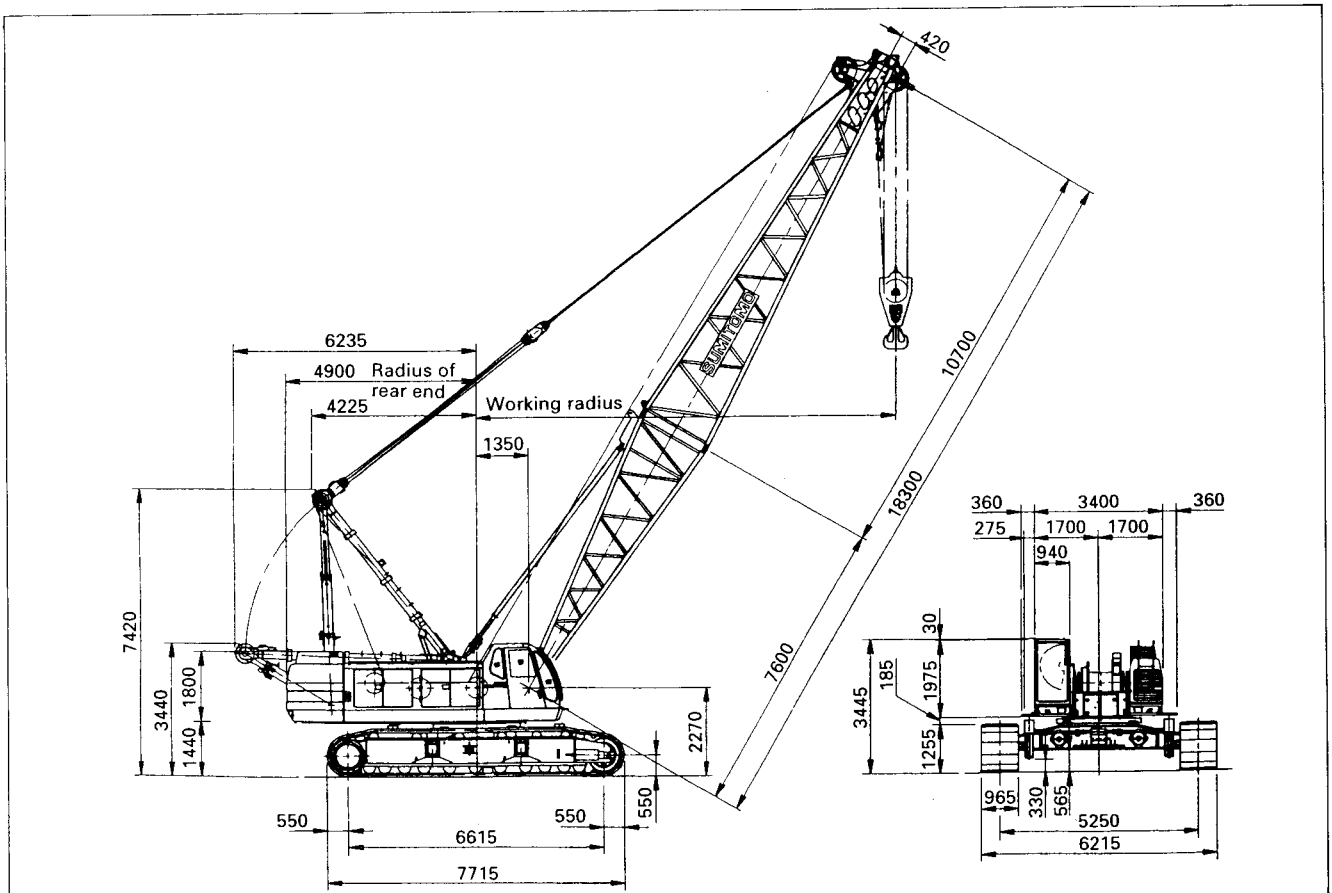
SC 1000-2

100-M ton Hydraulic Crawler Crane

General Specifications & Crane/Luffing Tower Capacities

■General Dimensions:

(in mm)



Crane

Crane Attachment

CRANE BOOMS:

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

Boom connections — In-line pin connections.

Basic Boom — Two-piece, 18.30 m basic length: 7.60m bottom and 10.70 m top section; 1,850 mm deep and 1,850 mm wide at connections.

Boom point machinery — Five head sheaves mounted on antifriction bearings.

Boom extensions — Optional extra; available in 3.05 m, 6.10 m and 9.15 m lengths with pendants. Maximum boom length 73.15 m.

Basic fly Jib — Optional extra; two-piece; 12.20 m basic length with 6.10 m long bottom and top sections, 760 mm deep and 910 mm wide at connections.

Fly jib extension — Optional extra; available in 6.10 m. Maximum fly jib length 24.40 m.

Boom plus fly jib length — 39.60 m+24.40 m/64.00 m +18.30 m (max.)

HOOK BLOCKS:

100 t with five sheaves — Optional extra.

50 t with two sheaves — Optional extra.

30 t with one sheave — Optional extra.

11 t ball hook — Optional extra.

TAGLINE WINDER:

Optional extra; for clamshell bucket job application.

Hydraulic type — mounted in front of upper revolving frame.

GANTRY:

Retractable high gantry.

DRUM DATA:

Drums	Root dia.	Type	Line Speed (Hoisting, lowering)	Cable dia.
Main hoist (Front)	530 mm	Parallel grooved	90~2 m/min.	26 mm
Aux. hoist (Rear)	530 mm	Parallel grooved	90~2 m/min.	26 mm
3rd drum	457 mm	Parallel grooved	65~4 m/min.	22.4 mm
Boom hoist	504 mm	Parallel grooved	46~2 m/min.	22.4 mm

Notes: 1. Above line speed varies with load.
2. Above line speed is based on first layer.

HOIST REEVING:

	Max. load (t)									
No. of parts of line	10	9	8	7	6	5	4	3	2	1
100 t hook	100.0	90.0	80.0	70.0	60.0	50.0	40.0	30.0	20.0	11.0
50 t hook	—	—	—	—	—	50.0	40.0	—	—	11.0
30/20 t hook	—	—	—	—	—	—	—	30.0	20.0	11.0
11 t hook	—	—	—	—	—	—	—	—	—	11.0

WORKING WEIGHT AND GROUND PRESSURE:

Shoe width	Weight	Pressure
965 mm	111.5 t	0.83 kg/cm²

With basic boom and counterweight.

COUNTERWEIGHT:

43.5 t in total.

SAFETY DEVICES:

Hook over hoist limiting device, dual boom over hoist limiting device, boom angle indicator, boom backstops, electrically operated drum pawl lock for main/aux. and boom hoist drum, swing warning flash lamps with buzzer, fool proof shut off main hydraulic line, individual control lever locks, safe and durable non-asbestos lining, key lock mode selector switch, non-skid surfaces on roof, load moment limiter with annunciator-type overload preventing system, and optional three color percentage indicator on load weighing device.

GRADEABILITY:

30% (17°) with basic boom and counterweight.

■CRANE CAPACITIES :

Working radius (m)	Boom length (m)																	
	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
5.0	100.0/5.1																		
5.5	100.0	90.0/5.7																	
6.0	90.8	90.0	80.0	70.0/6.7															
7.0	75.1	75.0	74.9	70.0	60.0/7.2	53.1/7.7													
8.0	60.6	61.0	60.8	60.7	60.0	52.7	50.0/8.3	42.4/8.8											
9.0	50.6	52.1	52.0	51.8	51.7	50.1	50.0	42.1	40.0/9.3	40.0/9.8									
10.0	43.4	45.4	45.3	45.1	45.0	44.8	44.6	40.8	40.0	40.0	30.0/10.3	30.0/10.9	25.0/11.4	25.0/11.9					
12.0	33.7	36.0	35.9	35.7	35.5	35.4	35.2	35.0	34.8	34.7	30.0	30.0	25.0	25.0	20.0/12.4	20.0/12.9	18.0/13.5		
14.0	27.4	29.4	29.2	29.1	28.9	28.7	28.5	28.4	28.2	28.0	27.8	27.7	25.0	25.0	20.0	20.0	18.0	16.0	15.7/14.5
16.0	22.9	24.4	24.2	24.1	23.9	23.7	23.5	23.3	23.2	23.0	22.8	22.6	22.4	22.3	20.0	20.0	18.0	16.0	14.5
18.0	21.2/17.3	21.0	20.8	20.6	20.5	20.3	20.1	19.9	19.7	19.5	19.3	19.2	19.0	18.8	18.6	18.4	16.2	15.0	13.0
20.0		19.0	18.0	17.8	17.7	17.5	17.3	17.1	16.9	16.7	16.6	16.4	16.2	16.0	15.8	15.6	15.4	13.5	11.7
22.0			15.8	15.7	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.5	13.3	12.3	10.5
24.0			15.3/22.5	13.9	13.7	13.6	13.4	13.2	13.0	12.8	12.6	12.4	12.2	12.1	11.9	11.7	11.5	11.3	9.6
26.0				13.1/25.0	12.2	12.1	11.9	11.7	11.5	11.3	11.1	10.9	10.7	10.5	10.4	10.2	10.0	9.8	8.8
28.0					11.3/27.5	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1	9.0	8.8	8.6	8.0
30.0						9.9	9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.8	7.7	7.5	7.3
32.0						9.7/30.4	8.6	8.4	8.2	8.0	7.8	7.6	7.4	7.3	7.1	7.0	6.8	6.7	6.5
34.0							8.2/33.0	7.6	7.4	7.2	7.1	6.9	6.8	6.6	6.5	6.3	6.1	5.9	5.7
36.0								7.1/35.6	6.9	6.7	6.5	6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.0
38.0									6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.0	4.8	4.6	4.4
40.0									6.3/38.3	5.7	5.5	5.3	5.1	4.9	4.7	4.5	4.3	4.1	3.9
42.0										5.4/40.9	5.1	4.8	4.6	4.4	4.2	4.0	3.8	3.6	3.4
44.0											4.7/43.5	4.3	4.2	3.9	3.7	3.5	3.3	3.0	2.8
46.0												3.9	3.8	3.5	3.3	3.0	2.8	2.6	
48.0												3.9/46.2	3.4	3.1	2.9	2.6	2.4		
50.0													3.3/48.8	2.8	2.5	2.3			
52.0														2.5/51.5	2.2				

Notes:

1. Capacities shown are in metric tons and are based on 78% of minimum tipping loads—over the side—with machine standing level on firm supporting surface under ideal job conditions unless marked with a shaded color (□) that indicates capacities are based on factors other than those which would cause a tipping condition. Deductions from the lifting crane capacities must be made for weight of hook block, and other suspended gear.

Kind of hook block	100 t	50 t	30 t	11 t
Weight of hook block (t)	1.4	0.9	0.73	0.4

2. Gantry must be set to high position for all operating conditions.
3. Capacities shown above are based on 43.5t counterweight.
4. All capacities are rated for 360° swing.

■WORKING RANGES FOR CRAWLER CRANE :