

SUMITOMO



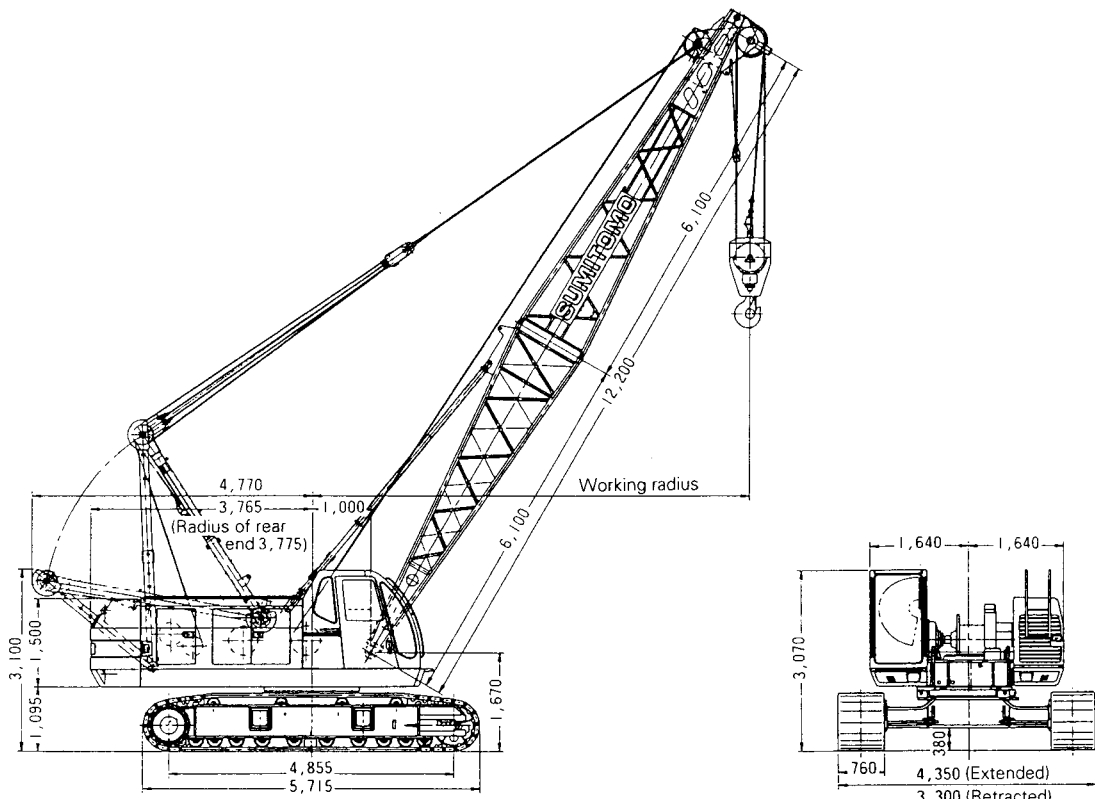
PAX Series

SC 500-2

50-M ton Hydraulic Crawler Crane

General Specifications & Crane Capacities

General Dimensions:



New Version

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, 12.20 m basic length: 6.10 m base and 6.10 m top section; 1,200 mm deep and 1,270 mm wide at connections.

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

Boom extensions — Optional extra; available in 3.05 m and 6.10 m lengths with pendants. Maximum boom length 51.80 m.

Basic fly Jib — Optional extra; two-piece; 6.10 m basic length with 3.05 m long base and top sections, 500 mm deep and 610 mm wide at connections.

Fly jib extension — Optional extra; available in 3.05m. Maximum fly jib length 15.25 m.

Boom plus fly jib length — 42.65m+15.25m (max.)

AUXILIARY SHORT JIB:

Optional extra; this is available to pin on top of boom in range of boom length from 12.20 m thru 48.75 m, and is available for 5.8ton lift as maximum under single part hoist line.

HOOK BLOCKS:

50 t with four sheaves — Standard.

15 t with one sheave — Optional extra.

5.8 t ball hook — Optional extra.

TAGLINE WINDER:

Optional extra; available in three (3) kinds of types for clamshell bucket job application.

Hydraulic type — mounted in front of upper revolving frame.

Mechanical type — spring-wound, single stage drum type, mounted on boom.

Mechanical type — spring-wound, double stage drum type, mounted on boom.

FIARLEAD:

Optional extra; full-revolving type; available for dragline bucket job application.

GANTRY:

Retractable high gantry.

DRUM DATA:

Drums	Root dia.	Type	Line Speed (Hoisting, Lowering)	Cable dia.
Main hoist (Front)	480 mm	Parallel grooved	110~2.0 m/min.	20 mm
Aux. hoist (Rear)	480 mm	Parallel grooved	110~2.0 m/min.	20 mm
3rd drum	400 mm	Parallel grooved	60~3.0 m/min.	20 mm
Boom hoist	320 mm	Parallel grooved	62~3.0 m/min.	16 mm

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

HOIST REEVING:

No. of parts of line	Main hoist								Aux. hoist
	9	8	7	6	5	4	3	2	1
Max. load (t)	50.0	44.8	39.2	33.6	28.0	22.4	16.8	11.2	5.8

WORKING WEIGHT AND GROUND PRESSURE:

Shoe width	Weight	Pressure
760 mm	52.9 t	68kPa < 0.69 kg/cm ² >

With basic boom and counterweight.

COUNTERWEIGHT:

17.2t in total.

SAFETY DEVICES:

Hook over hoist limiting device, dual boom over hoist and lowering limiting device, boom angle indicator, boom back stop, electrically operated drum pawl lock for front/aux. drums, automatic drum pawl-locking devices for boom hoist drum, audio visual type swing alarm, fool proof shut off main hydraulic line, key lock mode selector switch, individual control lever locks, safe and durable non-asbestos lining, non-skid surfaces on roof, computer-ized automatic over-load preventing system of SUMITOMO Model SML-06 Load Moment Limiter with annunciating alarms and optional three color percentage indicator on load weighing device.

GRADEABILITY:

40% (22°) with basic boom and counterweight.

■ CRANE CAPACITIES :

Working Radius (m)	Boom length (m)														Working radius (m)	
	12.20	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		
3.6	50.0															3.6
4.0	50.0	48.7/4.1														4.0
4.5	43.4	43.4	40.5/4.7													4.5
5.0	36.5	36.4	36.2	34.2/5.2	29.4/5.7											5.0
6.0	27.6	27.4	27.3	27.2	27.1	25.3/6.2	21.7/6.8									6.0
7.0	22.1	21.9	21.8	21.7	21.5	21.5	21.4	20.3/7.3	17.9/7.8							7.0
8.0	18.4	18.2	18.1	17.9	17.9	17.8	17.7	17.7	17.6	16.5/8.4	14.8/8.9					8.0
9.0	15.7	15.5	15.4	15.3	15.2	15.1	15.1	15.0	14.9	14.8	14.7	12.7/9.4				9.0
10.0	13.7	13.5	13.4	13.3	13.2	13.2	13.1	13.0	12.9	12.8	12.8	12.2	9.8	7.8/10.5	10.0	10.0
12.0	11.3/11.7	10.6	10.6	10.5	10.4	10.3	10.2	10.2	10.1	10.0	9.9	9.8	8.6	7.2	12.0	12.0
14.0		8.7	8.7	8.6	8.5	8.4	8.3	8.3	8.2	8.1	8.0	7.9	7.6	6.4	14.0	14.0
16.0		8.5/14.3	7.3	7.2	7.1	7.0	7.0	6.9	6.8	6.7	6.6	6.5	6.4	5.7	16.0	16.0
18.0			6.8/17.0	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	5.4	5.3	4.9	18.0	18.0
20.0				5.5/19.6	5.3	5.2	5.1	5.0	4.9	4.8	4.7	4.6	4.5	4.4	20.0	20.0
22.0					4.6	4.5	4.4	4.3	4.2	4.1	4.0	3.9	3.8	3.7	22.0	22.0
24.0					4.5/22.3	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	24.0	24.0
26.0						3.8/24.9	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	26.0	26.0
28.0							3.1/27.5	3.0	2.9	2.8	2.7	2.6	2.5	2.4	28.0	28.0
30.0								2.6	2.5	2.4	2.3	2.2	2.1	2.0	30.0	30.0
32.0								2.6/30.2	2.3	2.2	2.1	2.0	1.8	1.7	32.0	32.0
34.0									2.1/32.8	1.9	1.8	1.7	1.5	1.4	34.0	34.0
36.0										1.7/35.5	1.5	1.4	1.3	1.1	36.0	36.0
38.0											1.3	1.2	1.1		38.0	38.0
No. of part line	9	9	8	7	6	5	4	4	4	3	3	3	2	2	No. of part line	

Notes — Crane capacities:

- Capacities included in these charts 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 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:

50t.....0.75t 15t0.35t 5.8t.....0.12t

- All capacities are rated for 360° swing.
- Least stable rated conditions is over the side.
- Crawler side frame must be fully extended for all operating conditions.
- Counterweight must be 17.2ton for all capacities.
- Attachment must be erected and lowered over the ends of the crawler mounting.
- Main boom length must not exceed 51.80m.
Maximum fly jib length permitted—15.25m.
Maximum boom and fly jib combination length permitted—42.65m boom plus 15.25m fly jib.
- Capacities apply only to machine as originally manufactured and normally equipped by Sumitomo (S.H.I.) Construction Machinery Co., Ltd.

WORKING RANGES :

