

SUMITOMO



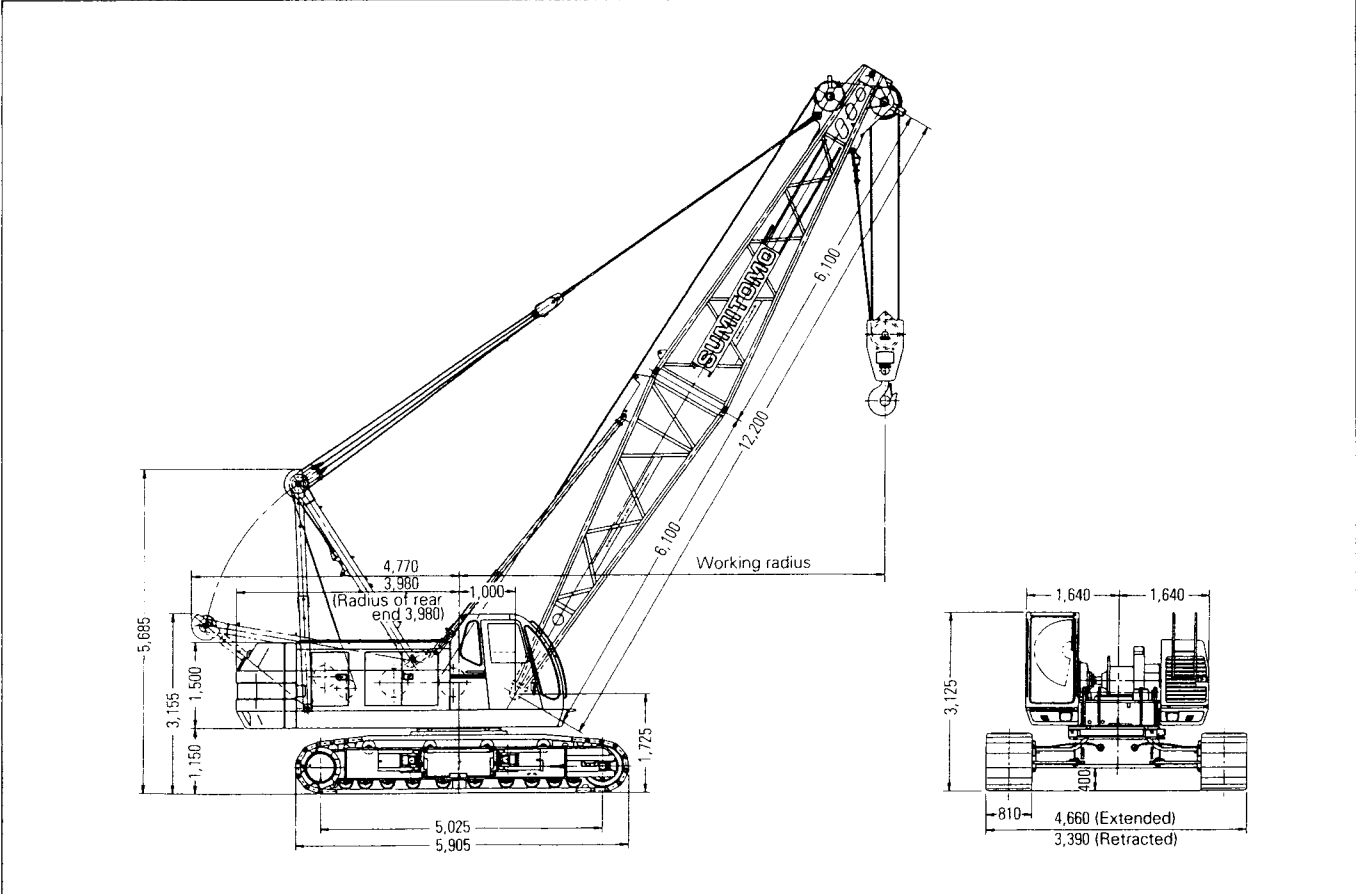
PAX Series

SC 700-2

70-M ton Hydraulic Crawler Crane

General Specifications & Crane Capacities

■ General Dimensions:



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; 1,380 mm deep and 1,380 mm wide at connections.

Boom point machinery — Six 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 54.85 m.

Basic fly Jib — Optional extra; two-piece; 9.15 m basic length with 4.55 m long base and top sections, 609 mm deep and 812 mm wide at connections.

Fly jib extension — Optional extra; available in 4.55 m. Maximum fly jib length 18.30 m.

Boom plus fly jib length — 42.65m+18.30m (max.)

HOOK BLOCKS:

70 t with five sheaves — Standard.

20 t with one sheave — Optional extra.

6.5 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	90~3 m/min.	22.4 mm
Aux. hoist (Rear)	480 mm	Parallel grooved	90~3 m/min.	22.4 mm
3rd drum	400 mm	Parallel grooved	60~4 m/min.	20 mm
Boom hoist	320 mm	Parallel grooved	62~4 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
	11	10	9	8	7	6	5	4	3	2	1
Max. load (t)	70.0	65.0	58.5	52.0	45.5	39.0	32.5	26.0	19.5	13.0	6.5

WORKING WEIGHT AND GROUND PRESSURE:

Shoe width	Weight	Pressure
810 mm	64.0 t	0.73 kg/cm ²

With basic boom and counterweight.

COUNTERWEIGHT:

22.0t 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 main/aux. and boom hoist drum, audio visual type swing alarm, 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:

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

■ CRANE CAPACITIES :

Working radius (m)	Boom length														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		54.85
3.7	※70.0															3.7
4.0	※68.0	65.0/4.1														4.0
4.5	55.8	55.0	54.1/4.6													4.5
5.0	46.6	46.4	46.3	43.9/5.2												5.0
5.5	39.9	39.8	39.7	39.6	38.7/5.7											5.5
6.0	34.9	34.8	34.7	34.6	34.5	33.1/6.2										6.0
7.0	27.8	27.7	27.6	27.5	27.4	27.2	27.1	24.7/7.5								7.0
8.0	23.0	22.9	22.8	22.7	22.6	22.5	22.4	22.3	22.2	20.5/8.5						8.0
9.0	19.6	19.5	19.4	19.3	19.2	19.1	19.0	18.9	18.8	18.7	18.5					9.0
10.0	17.1	17.0	16.9	16.8	16.7	16.6	16.5	16.4	16.3	16.2	16.1	16.0	15.6	14.5/10.5	11.0/11.0	10.0
12.0	14.0/11.7	13.3	13.2	13.1	13.0	12.9	12.8	12.7	12.6	12.5	12.4	12.3	12.2	12.1	10.5	12.0
14.0		10.9	9.0	10.7	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.8	9.7	9.6	14.0
16.0			8.3/17.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9	7.8	16.0
18.0				7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.5	18.0
20.0				6.9/19.6	6.6	6.4	6.3	6.2	6.1	6.0	5.9	5.8	5.7	5.6	5.5	20.0
22.0					5.7	5.6	5.5	5.4	5.3	5.2	5.1	5.0	4.9	4.8	4.7	22.0
24.0						4.9	4.8	4.7	4.6	4.5	4.4	4.3	4.2	4.1	3.9	24.0
26.0						4.5/24.9	4.3	4.2	4.1	4.0	3.8	3.7	3.6	3.5	3.4	26.0
28.0							3.8/27.5	3.7	3.6	3.5	3.3	3.2	3.1	3.0	2.9	28.0
30.0								3.3	3.2	3.1	2.9	2.8	2.7	2.6	2.5	30.0
32.0									2.9	2.8	2.6	2.5	2.3	2.2	2.0	32.0
34.0										2.8/32.8	2.5	2.3	2.2	2.0	1.7	34.0
36.0											2.3/35.5	2.0	1.9	1.7	1.4	36.0
38.0												1.7	1.6	1.4	1.1	38.0

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 an asterisk (※) 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, or other suspended gear.

2. Side frame must be extended for all operating conditions.
3. When handling loads by main hoist line on boom with jib fitted, the following deductions must be made from above crane capacities.

Jib length (m)	9.15	13.70	18.30	Aux. short jib
Weight to be deducted (t)	1.5	2.1	2.8	0.3

Kind of hook block	70 t	20 t	6.5 t
Weight of hook block (t)	0.85	0.4	0.33

■ WORKING RANGES :

