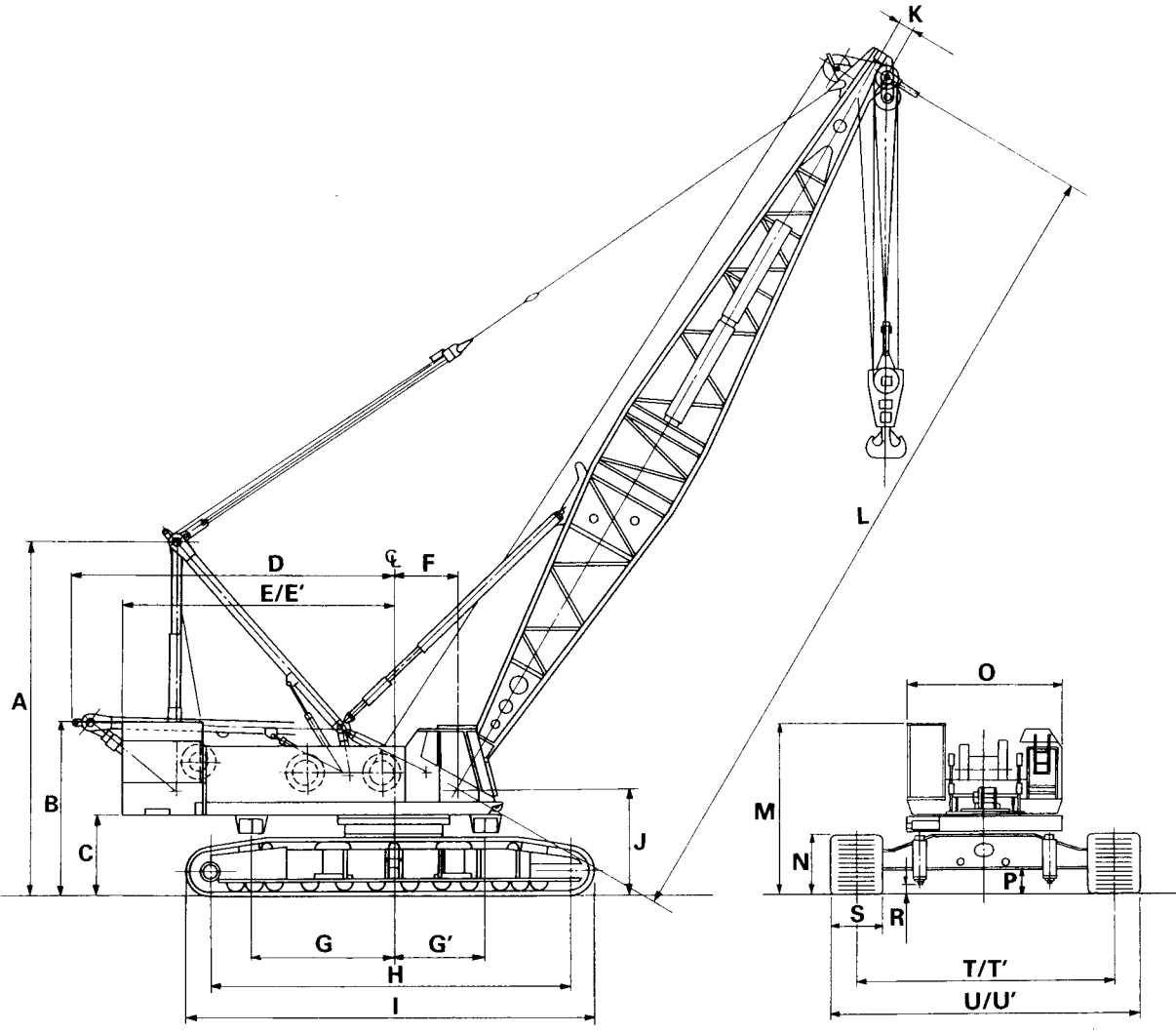


General Dimensions

SUMITOMO
SC 1500



A : Height of gantry unit at operating position	7.830m
B : Height of counterweight upper surface	3.850m
C : Ground clearance of superstructure	1.780m
D : Center of rotation to gantry unit at lowered position	7.005m
E : Center of rotation to counterweight rear end	5.940m
E' : Radius of counterweight rear end	6.000m
F : Center of rotation to boom foot pin center	1.380m
G : Center of rotation to center of superstructure rear outrigger	3.100m
G' : Center of rotation to center of superstructure front outrigger	2.020m
H : Center to center distance of tumbler	7.860m
I : Overall length of crawlers	8.965m
J : Height of boom foot pin center	2.330m
K : Offset of 9.15m tapered crane top section sheave machinery	0.340m
L : Length of standard basic boom w/9.15m tapered crane top section	18.300m
M : Height of operator's cab	3.785m
N : Height of crawler side frames	1.315m
O : Width of machinery cab	3.400m
P : Ground clearance of carbody frame	0.540m
R : Ground clearance of lower jack-up cylinders	0.230m
S : Width of track shoes	1.120m
T : Gauge of crawler extended	5.620m
T' : Gauge of crawler retracted	4.780m
U : Overall width of crawler extended	6.740m
U' : Overall width of crawler retracted	5.900m

LINE SPEEDS: (with optional power unit and two-speed type main/aux. crane hoist motors):

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 (main crane hoist)	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 (aux. crane hoist)	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

Notes:

1. No high/low control provided on boom hoist drum winch.
2. Hoisting line speed varies under load and operating conditions.

HOIST REEVING:

No. of part line	Main hoist											Aux. hoist
	12	11	10	9	8	7	6	5	4	3	2	1
Max. load (ton)	150.0	138.5	127.0	115.5	103.0	90.5	78.0	65.5	53.0	40.0	27.0	13.5

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.

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. This device functions that 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 Tough Nuflex rope, 28mm dia./360m length, breaking load 71.2ton.
 For rear drum Optional extra; Tough Nuflex rope, 28mm dia./310m length, breaking load 71.2ton.
 For boom hoist drum Tough Super rope, 22.4mm dia./310m length, breaking load 42.5ton.

WORKING WEIGHT:

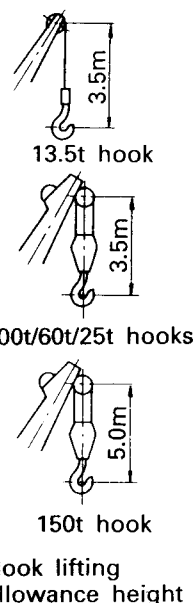
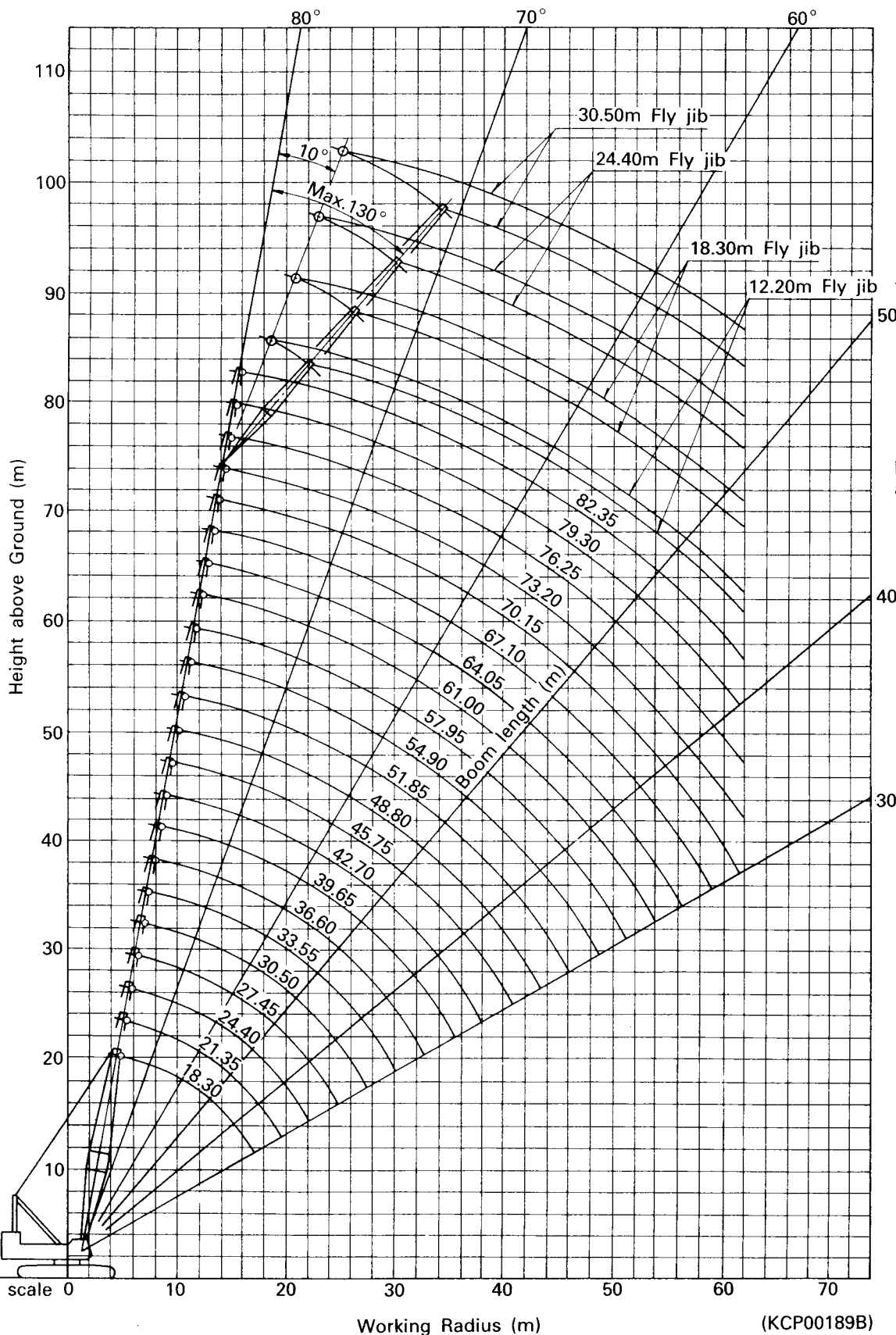
With 18.30m basic boom, 57.2 counterweight, 1,120mm wide track shoes and 150 hook block: Approx. 153.7ton.

GROUND PRESSURE:

0.87kg/cm² with 1,120mm track shoes and 158.9ton working weight mentioned above.

Crane Working Ranges

SUMITOMO
SC 1500



Not to scale 0

Working Radius (m)

(KCP00189B)

SC 1500 LIFTING CRANE CAPACITIES:

(in metric tons)

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	73.20	76.25	79.30	82.35			
5.0	150.0	133.6/5.5																					5.0		
6.0	140.0	128.1	116.8	104.3/6.5																			6.0		
7.0	123.6	121.7	111.5	102.5	94.4	85.2/7.5																	7.0		
8.0	99.2	98.9	98.8	96.2	90.7	83.8	77.8	70.1/8.5															8.0		
9.0	82.6	82.4	82.3	82.1	81.9	78.9	75.2	69.6	64.0	58.4/9.5													9.0		
10.0	70.6	70.4	70.3	70.2	70.1	70.0	69.3	66.5	62.3	57.8	52.3	48.0/10.5											10.0		
12.0	54.7	54.4	54.3	54.1	53.9	53.8	53.6	53.4	53.3	52.3	49.7	46.9	44.3/11.0	40.0	38.0/12.5	36.7/13.0	33.7/13.5						12.0		
14.0	44.6	44.3	44.1	44.0	43.7	43.6	43.3	43.2	43.0	42.8	42.7	41.8	40.3	38.1	37.0	36.2	33.5	30.3	28.7/14.5	25.3/15.0	23.0/15.5		14.0		
16.0	37.6	37.2	37.1	36.9	36.6	36.5	36.4	36.3	36.2	36.1	36.0	35.9	35.8	35.7	35.6	35.2	32.7	29.6	27.1	25.0	22.8	20.3	16.0		
18.0	34.5/17.0	32.1	31.9	31.7	31.4	31.2	31.1	31.0	30.9	30.8	30.8	30.7	30.6	30.5	30.4	30.3	30.2	28.8	26.4	24.4	22.1	19.7	18.0		
20.0		28.0	27.9	27.7	27.4	27.2	27.0	26.9	26.8	26.7	26.7	26.6	26.5	26.4	26.3	26.2	26.1	26.0	25.9	23.8	21.6	19.2	20.0		
22.0			24.8	24.5	24.3	24.1	23.8	23.7	23.6	23.5	23.4	23.3	23.2	23.1	23.0	22.9	22.8	22.7	22.5	22.4	21.0	18.6	22.0		
24.0				22.0	21.7	21.5	21.2	21.0	20.9	20.8	20.7	20.6	20.5	20.4	20.3	20.1	20.0	20.0	19.8	19.7	19.6	18.0	24.0		
26.0				21.0/25.0	19.6	19.4	19.1	18.9	18.8	18.6	18.5	18.4	18.3	18.2	18.1	18.0	17.9	17.8	17.6	17.5	17.4	16.9	26.0		
28.0					17.8	17.6	17.3	17.1	17.0	16.8	16.7	16.6	16.5	16.4	16.3	16.2	16.1	16.0	15.7	15.6	15.5	15.4	28.0		
30.0						16.2	15.8	15.6	15.5	15.2	15.1	15.0	14.9	14.8	14.7	14.6	14.5	14.4	14.1	14.0	13.9	13.8	30.0		
32.0							14.5	14.3	14.1	13.9	13.7	13.6	13.5	13.4	13.3	13.2	13.1	13.0	12.7	12.6	12.5	12.5	32.0		
34.0							13.5/33.0	13.2	13.0	12.8	12.7	12.4	12.3	12.2	12.1	12.0	11.9	11.8	11.5	11.4	11.2	11.2	34.0		
36.0								12.2	12.0	11.8	11.6	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.5	10.4	10.1	10.0	36.0		
38.0									11.2	10.9	10.7	10.5	10.4	10.3	10.2	10.1	10.0	9.9	9.5	9.3	9.1	9.1	38.0		
40.0										10.2	9.9	9.7	9.6	9.5	9.4	9.3	9.2	9.0	8.6	8.5	8.3	8.2	40.0		
42.0										9.8/41.0	9.2	9.0	8.8	8.7	8.6	8.4	8.2	8.2	7.9	7.8	7.6	7.3	42.0		
44.0											8.7/43.5	8.3	8.2	8.1	8.0	7.7	7.6	7.5	7.2	7.1	6.9	6.6	44.0		
46.0												7.8	7.5	7.4	7.4	7.0	7.0	6.9	6.6	6.4	6.2	6.0	46.0		
48.0													7.0	6.8	6.8	6.4	6.4	6.3	6.0	5.8	5.6	5.3	48.0		
50.0														6.7/49.0	6.3	6.2	5.9	5.9	5.7	5.4	5.3	5.0	50.0		
52.0															5.9/51.5	5.8	5.4	5.4	5.2	4.9	4.7	4.5	4.3	52.0	
54.0																5.4	5.0	5.0	4.7	4.4	4.2	4.0	3.8	54.0	
56.0																	4.5	4.5	4.3	4.0	3.8	3.5	3.4	56.0	
58.0																		4.3/57.0	4.1	3.9	3.6	3.4	3.1	2.9	58.0
60.0																			3.7/59.5	3.5	3.2	3.0	2.7	2.5	60.0
62.0																				3.2	2.8	2.6	2.4	2.2	62.0