

New Dimensions
in Motion

SPECIFICATIONS

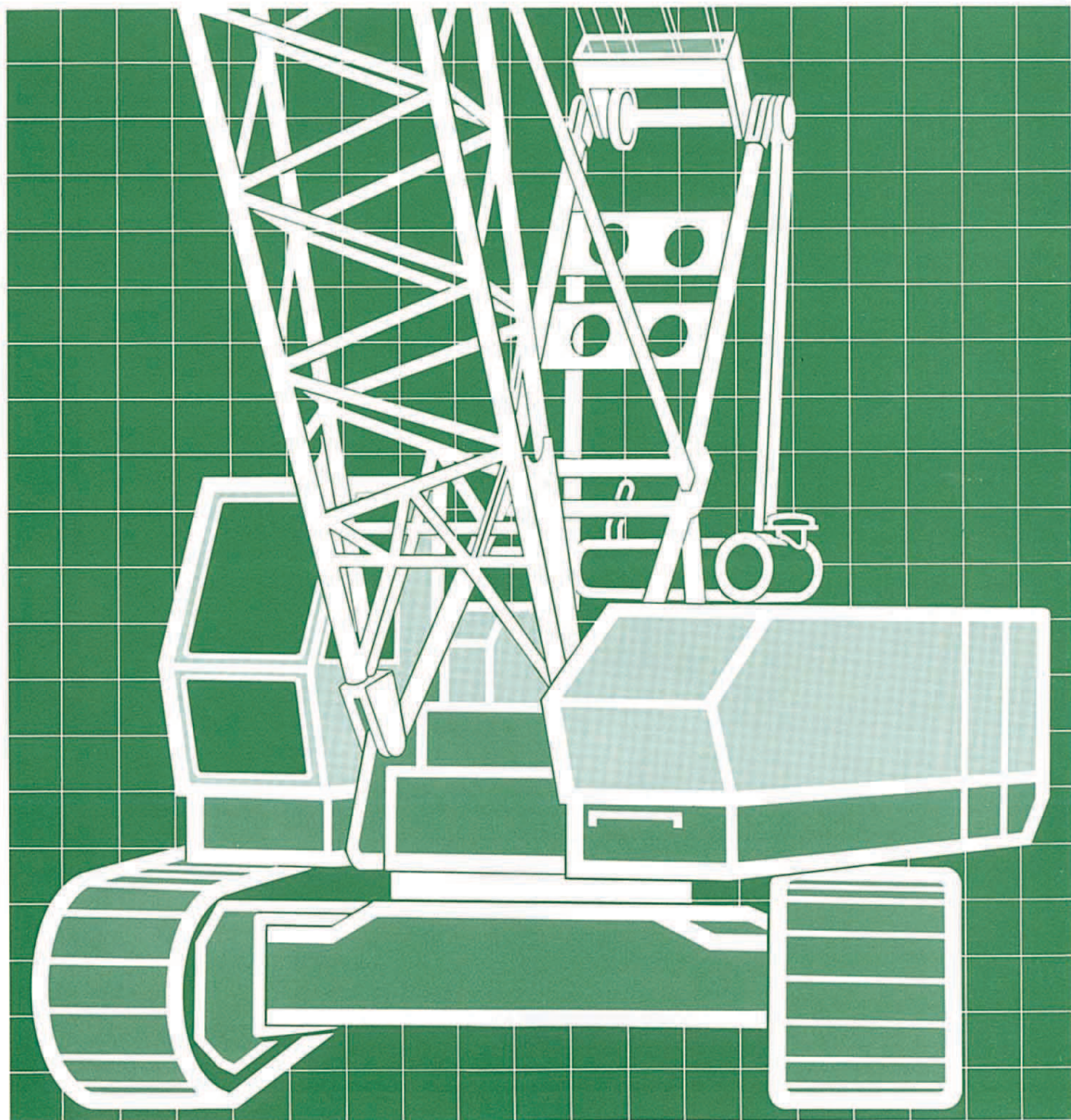


HITACHI

KH180-3

HYDRAULIC CRAWLER CRANE

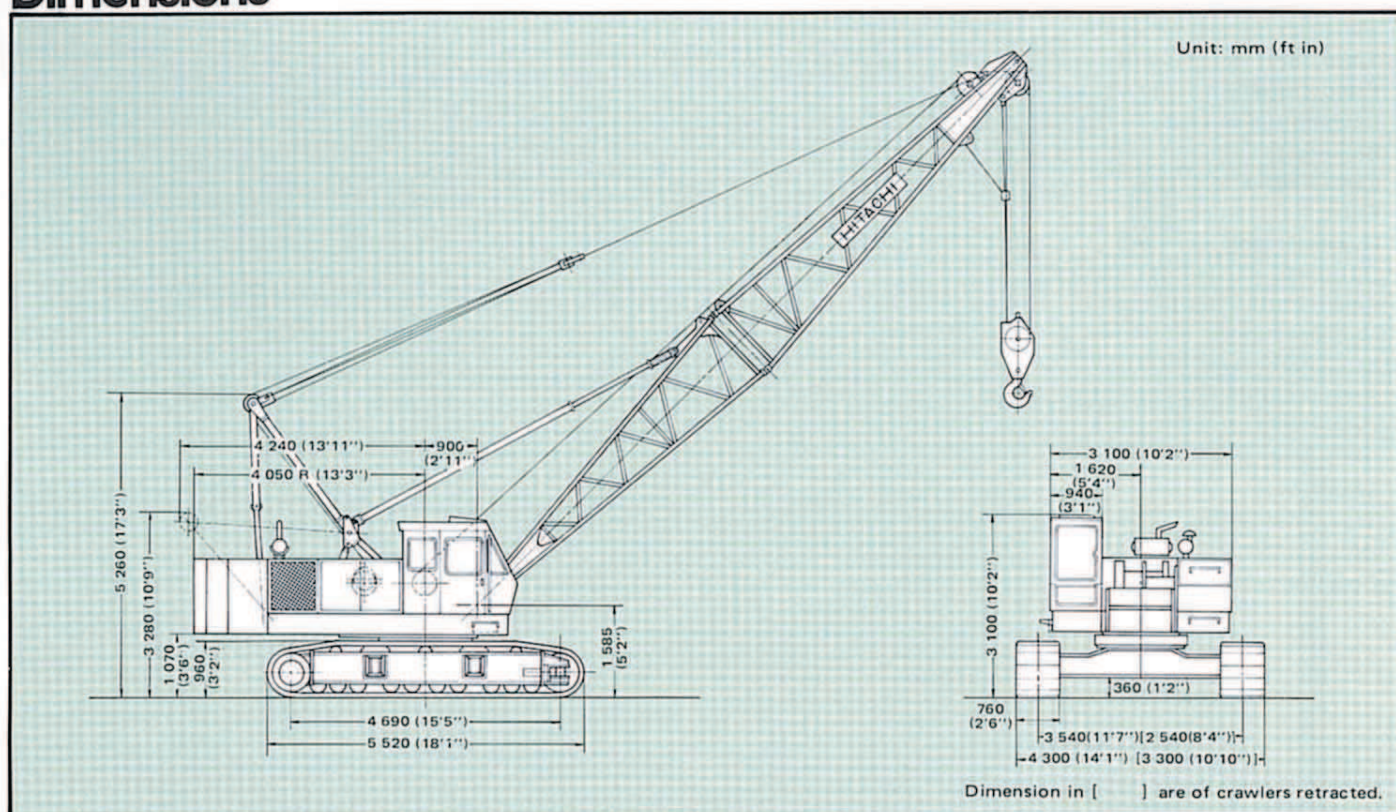
Max. Rated Load : 50 000 kg



CRAWLER CRANE

With Tubular Chord CRANE Boom

Dimensions



Specifications

Maximum rated load		50 000 kg (110 200 lb) at 3.7 m (12'2") working radius
Boom	Basic boom length	13.0 m (42'8")
	Max. boom length	52.0 m (170'7")
	Jib length	6.10 m (20'0") – 9.15 m (30'0") – 12.20 m (40'0") – 15.25 m (50'0")
	Max. boom length with jib	58.25 m (191'1") [43.0 m (141'0") + 15.25 m (50'0")]
Swing speed		0 – 3.5 min ⁻¹ (0 – 3.5 rpm)
Travel speed		0 – 1.5 km/h (0.93 mph)
Gradeability		22° (40%)
Ground pressure		0.61 bar (0.61 kgf/cm ² , 8.67 psi)
Operating weight	Equipped with basic boom, 50 000 kg (110 200 lb) capacity hook and 15 900 kg (35 100 lb) counterweight	46 900 kg (103 000 lb)
Engine	Model	HINO EM100
	Rated horsepower	110 kW (150 PS) at 2 000 min ⁻¹ (2 000 rpm)

HOOKS

Capacity	Weight	Number of hoist reeving and maximum rated loads									
		9	8	7	6	5	4	3	2	1	
50 000 kg (110 200 lb)	570 kg (1 250 lb)	50 000 kg (110 200 lb)	44 800 kg (98 800 lb)	39 900 kg (87 900 lb)	34 200 kg (75 400 lb)	28 500 kg (62 800 lb)	22 800 kg (50 300 lb)	17 100 kg (37 700 lb)	11 400 kg (25 100 lb)		Standard for main boom
30 000 kg (66 100 lb)	330 kg (730 lb)				30 000 kg (66 100 lb)	28 500 kg (62 800 lb)	22 800 kg (50 300 lb)	17 100 kg (37 700 lb)	11 400 kg (25 100 lb)		Optional for main boom
15 000 kg (33 100 lb)	280 kg (620 lb)							15 000 kg (33 100 lb)	11 400 kg (25 100 lb)		
5 000 kg (11 000 lb)	130 kg (290 lb)									5 000 kg (11 000 lb)	Optional for jib or aux. jib

DRUMS

Dimensions

	Rope dia.	Width	Drum p.c.d.	Max. rope capacity
Main hoist drum	20 mm (0.787")	369 mm (14.53")	420 mm (16.54")	267 m (876')
Aux. hoist drum	20 mm (0.787")	306 mm (12.05")	420 mm (16.54")	220 m (722')

Line speed and line pull

	Max. line speed m/min (ft/min)				Effective line pull	@	Line speed	Max. starting line pull	Max. running line pull
	Hoisting		Lowering						
Main hoist drum	H	70 (230)	H	70 (230)	108 kN (11 000 kgf) (24 300 lbf)	@	34 m/min (112 ft/min)	140 kN (14 300 kgf) (31 600 lbf)	153 kN (15 600 kgf) (34 400 lbf)
	L	35 (115)	L	35 (115)					
Aux. hoist drum	H	70 (230)	H	70 (230)	108 kN (11 000 kgf) (24 300 lbf)	@	34 m/min (112 ft/min)	140 kN (14 300 kgf) (31 600 lbf)	153 kN (15 600 kgf) (34 400 lbf)
	L	35 (115)	L	35 (115)					

H: High speed range L: Low speed range

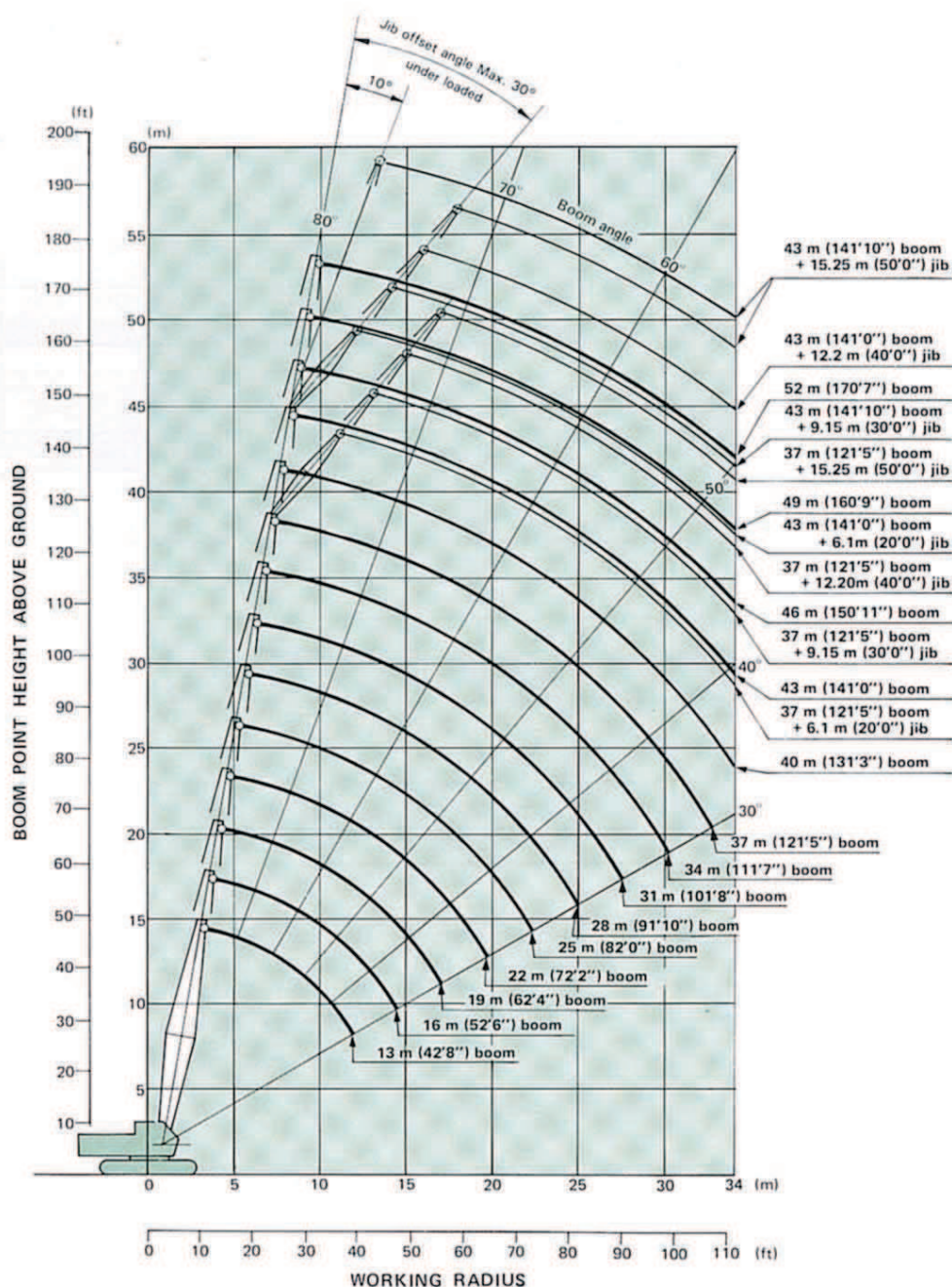
- Notes: 1) Line speed and line pull are based on first layer of winding at rated engine rpm.
 2) Hoisting line speed varies with load.
 3) Line pull is based on a single line pull in high speed range.
 4) Effective line pull is equivalent to available line pull of mechanical drive winch.

- 5) When starting, hydraulic motor is without rotating, the line pull is "Max. starting line pull" After motor rotating, the line pull becomes "Max. running line pull" shortly.

BOOM HOIST DRUM

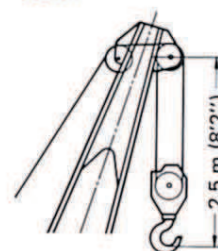
Rope diameter	Hoisting line speed	Lowering line speed
16 mm (0.63")	60 m/min (197 ft/min)	60 m/min (197 ft/min)

Working Ranges



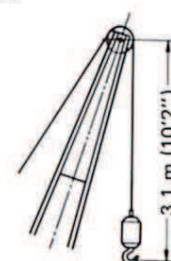
HOOK CLEARANCE

Boom



50 000 kg (110 200 lb)
Capacity hook

Jib



5 000 kg (11 000 lb)
Capacity hook

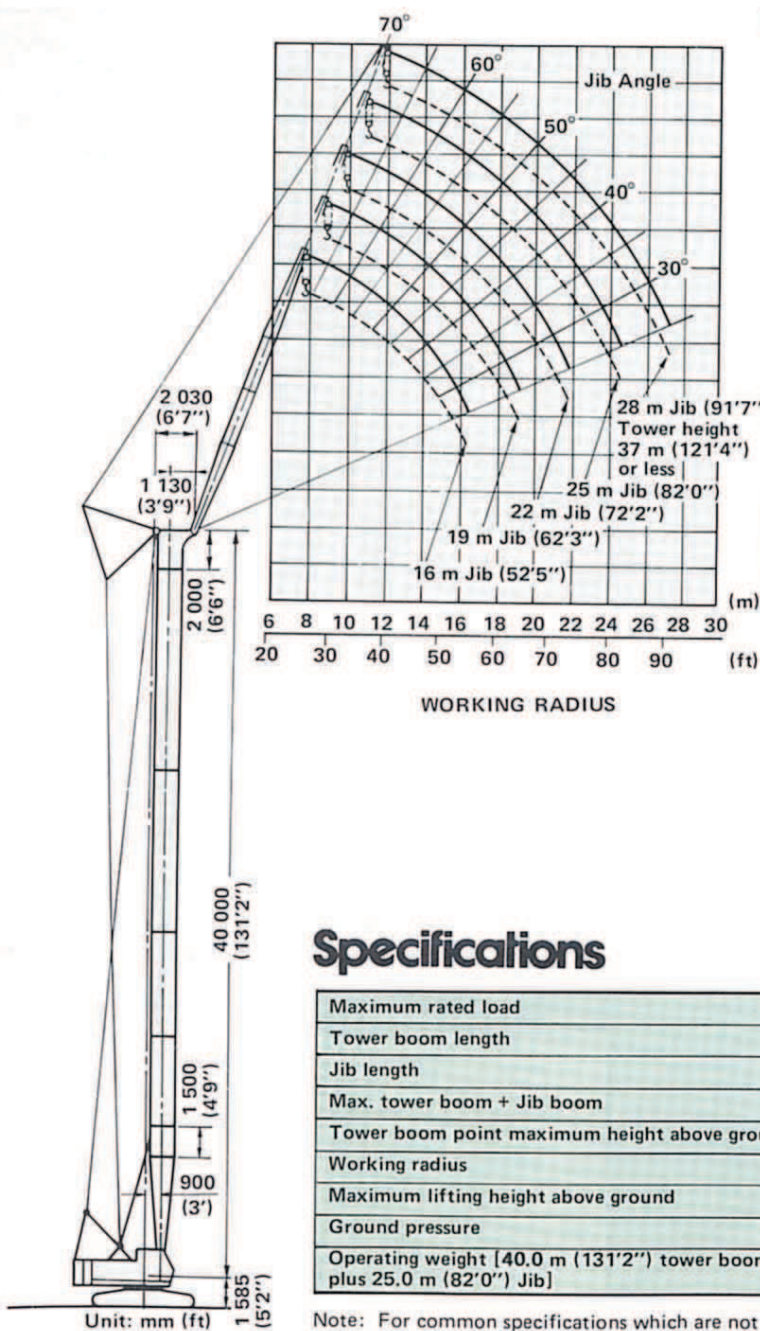
See page 12, for construction



TOWER CRANE

With Tubular Chord TOWER Boom

Working Ranges



Lifting Height Above Ground

(m)	(ft)	(m)	(ft)	(m)	(ft)
68	220	58	190	46	150
66	210	56	180	44	140
64	200	54	170	42	130
62	190	52	160	40	120
60	180	50	150	38	110
58	170	48	140	36	100
56	160	46	130	34	90
54	150	44	120	32	80
52	140	42	110	30	70
50	130	40	100	28	60
48	120	38	90	26	50
46	110	36	80	24	40
44	100	34	70	22	30
42	90	32	60	20	20
40	80	30	50	18	10

Specifications

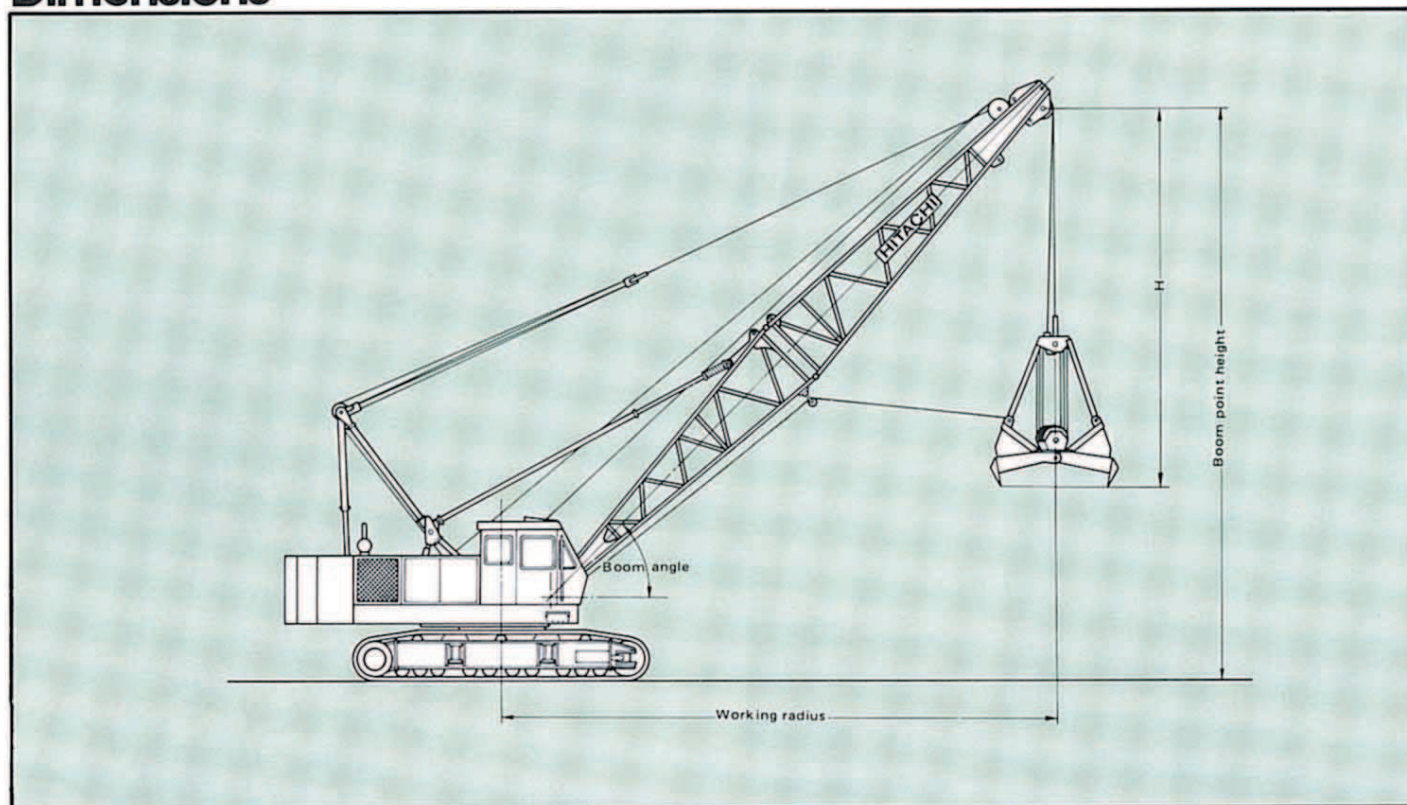
Maximum rated load	11 400 kg at 10.3 m (25 000 lb at 37'4'')
Tower boom length	19.0 m (62'3'') to 40.0 m (131'2'')
Jib length	16.0 m (52'6'') to 28.0 m (91'9'')
Max. tower boom + Jib boom	65.0 m (213'3'') [40.0 m (131'2'') + 25.0 m (82'0'')]
Tower boom point maximum height above ground	41.6 m (136'5'')
Working radius	8.5 m (27'9'') to 27.5 m (90'2'')
Maximum lifting height above ground	63.0 m (206'7'')
Ground pressure	0.68 bar (0.69 kgf/cm² 9.8 psi)
Operating weight [40.0 m (131'2'') tower boom plus 25.0 m (82'0'') jib]	52 400 kg (115 500 lb)

Note: For common specifications which are not listed above, refer to P.4 and P.5.

CLAMSHELL

With Tubular CRANE Boom

Dimensions



Specifications

Bucket capacity	0.6 m ³ (0.78 cu yd), 0.8 m ³ (1.05 cu yd), 1.0 m ³ (1.31 cu yd), 1.2 m ³ (1.57 cu yd)
Boom length	13.0 m (42'8"), 16.0 m (52'6"), 19.0 m (62'4")
Gradeability	22° (40%)
Ground pressure	0.64 bar (0.64 kgf/cm ² , 9.10 psi)
Operating weight	48 400 kg (106 700 lb) When equipped with 13.0 m (42'8") boom, 1.0 m ³ (1.31 cu yd) bucket and 15 900 kg (35 100 lb). counterweight

Note: For common specifications which are not listed above, refer to p. 4 and p. 5.