



100t Hydraulic Crawler Crane

### **FEATURES**

### **Computer Aided Crane Design**

Hi-tech analysis provided the optimum design criteria and material specifications for manufacture.

Maximum machine life and reliability are ensured.

### **Deluxe Operator's Command Centre**

Designed to provide the ultimate in operator safety and comfort, insulated against noise and vibration.

Fully adjustable reclining seat harmonises with the joystick controls.

Audible, visible indicators alert operator to non-standard performance of major functions. Cab heater, window wipers and washers are standard.

### Control

The control mode of both drums can be selected by the operator through Servo Hydraulic Controls.

In the crane mode, hoisting and lowering uses the hydraulic system. Clutches remain set and braking of the drum is fully automatic

Selecting excavator mode allows the drums to free fall, and the clutches release automatically when the control is in neutral. Braking in this mode is controlled by the power assisted foot pedals.

### **Load Sensing Hydraulics**

Twin variable displacement pumps with load sensing control is used for load hoist, boom hoist and travel. One displacement pump is used in the swing circuit. One gear pump is used in the control system.

### **Tandem Drums**

Large capacity grooved tandem drums are independently driven by piston motors. "Micro" positioning of loads is ensured with load sensing variable displacement hydraulic system. Single lever controls wide range of drum speeds. Two ratios available.

### **Load Hoist System**

Tandem Drums – each powered by large capacity hydraulic motor through high efficiency single gear reduction.

Clutches - internally expanding hydraulically set.

 $\ensuremath{\mathsf{Brakes}}$  – externally control power assisted. Free fall available by security key switch.

Zollan winches are also available as optional extra.

# **Boom Hoist**

The boom hoist is fully independent and the drum is driven in each direction by bent axis motor and multi stage planetary gear reduction.

The drum is equipped with spring set hydraulically released brake, ensuring safe and precise control of the boom. The rope drum is equipped with a locking pawl. Rear A frame is self erecting.

### **Third Drum**

A high powered hydraulically driven third drum is available as optional equipment. Consult RB Cranes Ltd for details.

# Micro Swing System

High torque independent hydraulics allow the machine's swing speed to be precisely controlled by the operator.

A spring set hydraulically released brake is operated electronically by a button mounted on the swing lever.

A positive mechanical swing lock is fitted as standard equipment for travel mode 2 position. Machine has a single row ball swing circle with internal cut swing gear.

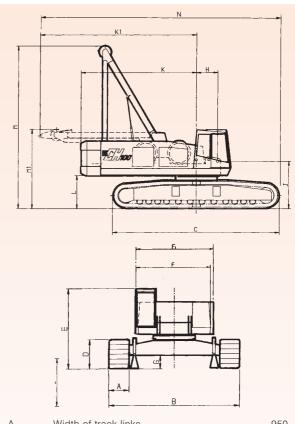
### Long and Wide Crawlers

The extra long and wide crawlers are constructed of superior quality steel. The all welded truck frame, integral axles and side frames provide immense strength coupled with exceptional stability for high lift capacity at long radii.

Lower rollers are sealed and maintenance free. Four cylinders fixed on the car body are used for assembly and disassembly of the crawler frames when loading 'on' and 'off' the low loader. Each crawler is driven by a bent axis motor and multi stage gear box, steering and pivot turns are controlled by a single individual lever.

Crawler removal, powered by crane's hydraulics, is available as optional equipment.

### **MACHINE DIMENSIONS**



Α	_	Width of track links	950
В	_	Width of tracks	6100
С	_	Length of tracks	7900
D	_	Height of tracks	1360
Ε	_	Height of operator's cab	3740
F	_	Width of cab	3480
F1	_	Width of counterweight	3580
G	_	Clearance under machine	635
Н	_	Boom foot pin from centre of rotation	1000
J	_	Height of boom pin foot	2235
K	_	Radius of rear end	5500
K1	_	Radius over folded A frame	7350
L	_	Clearance under rev. frame	1560
М	_	Height over A frame	7680
M1	_	Height over folded A frame	3740
Ν	_	Length	11250

Swing speed	Low 0 – 1.1rpm	High 0 – 2.2rpm
Travel speed	0 – 1.74kmh	



# **MACHINE WEIGHTS**

Machine	Working weight (t)	Counterweight (t)
Lift Crane Dragline Clamshell	114.2	33500kg
Ground Bearing Pressure Gradeability	0.86kg/sq.cm./950mm Plates 25%	

Weights are given with basic boom only.

# **POWER UNIT**

Make and model	Cummins M11 - C -335
Туре	6 cyl water cooled 6Zyl
Engine kW(hp)	250 (335)
Engine speed (rpm)	1800
Fuel tank capacity (litres)	500
Hydraulic tank capacity	300

# **DRUM DATA - ROPE PULLS & SPEEDS**

Drums	Pitch dia	Rope dia	Rope pull(t)	Line speed Standard	High
Main hoist	546mm	26mm	19.5*	0 – 38mpm	0 - 76m/m +
Fly jib hoist	546mm	26mm	19.5*	0 – 38mpm	0 - 76m/m +
Boom hoist	462mm	22mm	11.5	0 – 58mpm	

<sup>\*</sup> Maximum running rope pull + Independent operation only

# **MAXIMUM AVAILABLE LOADS FOR MAIN HOIST REEVING**

Hoist Rope* Load t Last in t Charge t	1 part	2 part	3 part	4 part	5 part	6 part	7 part	8 part	9 part	10 part
BSS 1757 Load in tonnes	12.46	24.48	35.8	46.8	57.4	67.5	77.21	86.4	95.3	100
75% load in tonnes	12.0	23.50	34.6	45.2	55.4	65.1	74.4	83.8	91.9	100

<sup>\*</sup> Based on STD Hoist rope 60T BL

# **SERVICE NOTES**

### Published Ratings.

The main boom working loads given for each machine are for the machine standing on firm level ground. Loads must be freely suspended. The radii specified are loaded radii and the working loads listed are for booms without fly jibs. Published ratings are with maximum counterweight and include blocks, hooks, slings and other equipment used in handling loads.

Proper care must be exercised by the operator at all times to avoid shock or side loadings on the boom (and jib when fitted) which might hazard crane stability, particularly when operating with long boom at low angles.

### **British Standards**

The published ratings for lift cranes are with maximum counterweight fitted and are based on BSS recommendations and do not exceed BS 1757, 1986, Class A1, ISO 4305 1981 DIN 15019 Part 2.

# **U.S Rating Factors**

The published ratings do not exceed 75% of the tipping load. Ratings apply only to machines having booms in first class condition built and recommended by RB Cranes Ltd. The machines should not be operated outside the range of published ratings, appropriate to the service and the equipment fitted.

### **Hook Blocks**

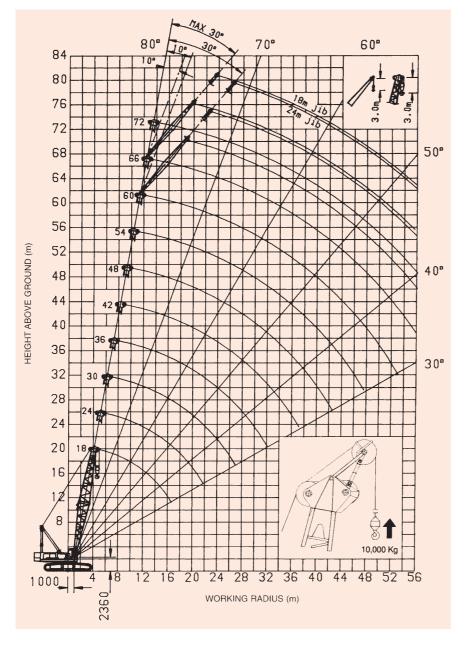
The weight of the hook block in use, together with any slings or other fitting tackle, must be deducted from the published ratings to arrive at the actual (net) load fitting capacity for any boom length and radius.

# **Hook Block Weights (Kg)**

100t	=	1300
50t	=	800
30t	=	500
10t	=	250

# **LIFT CRANE RANGE DIAGRAM**

# **FLY JIB RATINGS**



	Rated Ic	ads in	metric	tonne	s 360°	rotatio	n.
	Main Boom (m)		39			42	
	Fly Jib (m)	12	18	24	12	18	24
	14	10.00	10.00/14.25		10.00	10.00/14.75	
	18	10.00	9.97	7.30	10.00	10.00	7.35
	22	10.00	9.49	6.93	10.00	9.59	6.99
	26	10.00	9.08	6.59	10.00	9.18	6.66
res	30	10.00	7.96	6.14	10.00	8.29	6.36
RADIUS (metres)	34	8.56	7.07	5.42	8.37	7.37	5.63
S	38	7.06	6.36	4.84	6.86	6.63	5.04
Q V	42	5.86	5.76	4.38	5.67	6.01	4.55
Œ	46		5.16	3.99	4.69	5.02	4.15
	50			3.67		4.20	3.82
	54			3.40			3.54

Rated loads in metric tonnes 360° rotation.

58

24
24
45/16.75
7.35
6.99
6.66
6.36
5.82
5.27
4.77
4.33
3.94
3.59

Some loads are restricted by factors not related to stability. Rated loads are gross loads. Deduct weight of Hooks, Slings ect. where applicable. Optional offset 30 for details contact RB Cranes Technical Support +44 (0)1777 711 630

The tables shown indicate maximum boom & fly jib combinations for the fly jib lengths available. Other combinations of boom and fly jib length are possible. Please contact RB Cranes for details and lifting capacities.

See Service Notes relating to Publishing Ratings

BSS	1757	: 1986	stability	ratinç	gs.	Fly Jib	Offse	et 10°																
	45			48			51			54			57			60			63			66		Main Boom (m)
12	18	24	12	18	24	12	18	24	12	18	24	12	18	24	12	18	24	12	18	24	12	18	24	Fly Jib (m)
10.00	10.00/15.25	5																						14
10.00	10.00	740	10.00	10.00	7.43	10.00	10.00		10.00	9.95		10.00	10.00		10.00	10.00		10.00			10.00			18
10.00	9.67	7.04	10.00	9.75	7.10	10.00	9.83	7.15	10.00	9.90	7.19	10.00	9.96	7.23	10.00	10.00	7.27	10.00	10.00		10.00	10.00		22
10.00	9.27	6.73	10.00	9.36	6.79	10.00	9.45	6.84	10.00	9.52	6.90	10.00	9.60	6.95	10.00	9.66	6.99	10.00	9.73		10.00	9.79		26
10.00	8.61	6.43	10.00	8.93	6.50	10.00	9.10	6.56	9.99	9.19	6.62	9.81	9.26	6.68	9.63	9.34	6.73	9.49	9.41		9.32	9.47		30
8.55	7.66	5.83	8.37	7.95	6.03	8.18	8.23	6.22	8.04	8.49	6.37	7.85	8.31	6.43	7.67	8.14	6.48	7.53	8.00		7.35	7.83		34
7.05	6.90	5.23	6.86	6.88	5.41	6.68	6.70	5.59	6.53	6.97	5.77	6.34	6.79	5.94	6.16	6.61	6.11	6.01	6.47		5.83	6.29		38
5.85	5.86	4.73	5.66	5.67	4.90	5.47	5.48	5.07	5.33	5.75	5.23	5.14	5.57	5.40	4.95	5.39	5.56	4.80	5.24		4.61	5.06		42
4.88	4.87	4.32	4.69	4.68	4.48	4.49	4.63	4.63	4.35	4.76	4.79	4.16	4.58	4.75	3.97	4.39	4.57	3.82	4.24		3.63	4.06		46
	4.05	3.97	3.87	3.86	4.05	3.68	3.68	3.86	3.53	3.94	4.10	3.34	3.75	3.91	3.15	3.56	3.73	3.00	3.41		2.80	3.23		50
		3.54		3.16	3.35		2.96	3.16	2.84	3.24	3.39	2.65	3.05	3.21	2.46	2.87	3.03	2.31	2.71		2.11	2.53		54
		2.94			2.75			2.15			2.79			2.61			2.42							58
75%	stabi	lity.	Fly Jib	Offse	et 10°																			
	45			48			51			54			57			60			63			66		Main Boom (m)
12	18	24	12	18	24														00					
					24	12	18	24	12	18	24	12	18	24	12	18	24	12	18	24	12	18	24	Fly Jib (m)
10.00					24	12	18	24	12	18	24	12		24	12	18	24	12		24	12		24	Fly Jib (m)
10.00			10.00		24		18 10.00/16.4		12		24	12	18	24	12	18	24	12	18	24	12		24	
	10.00	7.44/17.5		10.00		10.00			10.00/14.75	i	24		18			18			18	24	12		24	12
		7.44/17.5	10.00	10.00		10.00	10.00/16.4		10.00/14.75	5 10.00/17.0		10.00/15.4	18		10.00		7.42/20.0	10.00/16.4	18	24		18	24	12 14
10.00	10.00		10.00	10.00	7.43	10.00	10.00/16.4	7.44/18.4	10.00/14.75	5 10.00/17.0 9.90	7.43/19.0	10.00/15.4	18 4 10.00/17.4 9.96	7.42/19.5	10.00	10.00	7.42/20.0	10.00/16.4	18	24	10.00	18	24	12 14 18
10.00	9.67	7.04	10.00 10.00 10.00	10.00	7.43 7.10	10.00 10.00 10.00	10.00/16.4	7.44/18.4	10.00/14.75	5 10.00/17.0 9.90	7.19	10.00/15.4	18 4 10.00/17.4 9.96	7.42/19.5	10.00	10.00	7.42/20.0	10.00/16.4 10.00 10.00	18	24	10.00	18	24	12 14 18 22
10.00 10.00	9.67	7.04 6.73	10.00 10.00 10.00	10.00 9.75 9.36	7.43 7.10 6.79	10.00 10.00 10.00	10.00/16.4 10.00 9.83 9.45	7.44/18.4 7.15 6.84	10.00/14.75 10.00 10.00 10.00	9.90 9.52	7.43/19.0 7.19 6.90	10.00/15.4 10.00 10.00 10.00	18 4 10.00/17.4 9.96 9.60 9.26	7.42/19.5 7.23 6.95	10.00 10.00 10.00	10.00 10.00 9.66	7.42/20.0 7.27 6.99	10.00/16.4 10.00 10.00 10.00 9.34	10.00	24	10.00 10.00 10.00 9.20	18 10.00 9.79	24	12 14 18 22 26
10.00 10.00 10.00 8.37	9.67 9.27 8.91	7.04 6.73 6.43	10.00 10.00 10.00	10.00 9.75 9.36 9.01	7.43 7.10 6.79 6.50	10.00 10.00 10.00 10.00 9.88	10.00/16.4 10.00 9.83 9.45 9.10	7.44/18.4 7.15 6.84 6.56	10.00/14.75 10.00 10.00 10.00 9.77	9.90 9.52 9.19	7.19 6.90 6.62	10.00/15.4 10.00 10.00 10.00 9.61	18 4 10.00/17.4 9.96 9.60 9.26 8.18	7.42/19.5 7.23 6.95 6.68	10.00 10.00 10.00 9.46	10.00 10.00 9.66 9.34	7.42/20.0 7.27 6.99 6.73	10.00/16.4 10.00 10.00 10.00 9.34	10.00 9.73 9.41	24	10.00 10.00 10.00 9.20	18 10.00 9.79 9.47	24	12 14 18 22 26 30
10.000 10.000 10.000 8.37 6.97	9.67 9.27 8.91 8.41	7.04 6.73 6.43 6.01	10.00 10.00 10.00 10.00 8.21 6.81	10.00 9.75 9.36 9.01 8.25	7.43 7.10 6.79 6.50 6.18	10.00 10.00 10.00 10.00 9.88 8.06	10.00/16.4 10.00 9.83 9.45 9.10 8.10	7.44/18.4 7.15 6.84 6.56 6.30	10.00/14.75 10.00 10.00 10.00 9.77 7.94	9.90 9.52 9.19 8.33	7.19 6.90 6.62 6.37	10.00/15.4 10.00 10.00 10.00 9.61 7.78	18 4 10.00/17.4 9.96 9.60 9.26 8.18	7.42/19.5 7.23 6.95 6.68 6.43	10.00 10.00 10.00 9.46 7.63	10.00 10.00 9.66 9.34 8.03	7.42/20.0 7.27 6.99 6.73 6.48	10.00/16.4 10.00 10.00 10.00 9.34 7.51	10.00 9.73 9.41 7.91	24	10.00 10.00 10.00 9.20 7.36	10.00 9.79 9.47 7.77	24	12 14 18 22 26 30 34
10.00 10.00 10.00 8.37 6.97 5.85	9.67 9.27 8.91 8.41 6.99	7.04 6.73 6.43 6.01 5.46	10.00 10.00 10.00 10.00 8.21 6.81	10.00 9.75 9.36 9.01 8.25 6.83 5.70	7.43 7.10 6.79 6.50 6.18 5.63	10.00 10.00 10.00 10.00 9.88 8.06 6.65	10.00/16.4 10.00 9.83 9.45 9.10 8.10 6.67	7.44/18.4 7.15 6.84 6.56 6.30 5.80	10.00/14.75 10.00 10.00 10.00 9.77 7.94 6.53	9.90 9.52 9.19 8.33 6.91	7.19 6.90 6.62 6.37 5.96	10.00/15.4 10.00 10.00 10.00 9.61 7.78 6.37	18 4 9.96 9.60 9.26 8.18 6.75	7.42/19.5 7.23 6.95 6.68 6.43 6.11	10.00 10.00 10.00 9.46 7.63 6.21	10.00 10.00 9.66 9.34 8.03 6.60	7.42/20.0 7.27 6.99 6.73 6.48 6.26	10.00/16.4 10.00 10.00 10.00 9.34 7.51 6.09	18 10.00 9.73 9.41 7.91 6.48	24	10.00 10.00 10.00 9.20 7.36 5.93 4.80	18 10.00 9.79 9.47 7.77 6.33	24	12 14 18 22 26 30 34 38
10.00 10.00 10.00 8.37 6.97 5.85	9.67 9.27 8.91 8.41 6.99 5.85	7.04 6.73 6.43 6.01 5.46 4.96	10.00 10.00 10.00 10.00 8.21 6.81 5.68 4.77	10.00 9.75 9.36 9.01 8.25 6.83 5.70	7.43 7.10 6.79 6.50 6.18 5.63 5.14	10.00 10.00 10.00 10.00 9.88 8.06 6.65 5.53	10.00/16.4 10.00 9.83 9.45 9.10 8.10 6.67 5.54	7.44/18.4 7.15 6.84 6.56 6.30 5.80 5.31	10.00/14.75 10.00 10.00 10.00 9.77 7.94 6.53 5.40	9.90 9.52 9.19 8.33 6.91 5.77	7.19 6.90 6.62 6.37 5.96 5.48	10.00/15.4 10.00 10.00 10.00 9.61 7.78 6.37 5.24	18 9.96 9.60 9.26 8.18 6.75 5.61	7.42/19.5 7.23 6.95 6.68 6.43 6.11 5.63	10.00 10.00 10.00 9.46 7.63 6.21 5.08	10.00 10.00 9.66 9.34 8.03 6.60 5.46	7.42/20.0 7.27 6.99 6.73 6.48 6.26 5.62	10.00/16.4 10.00 10.00 10.00 9.34 7.51 6.09 4.96	10.00 9.73 9.41 7.91 6.48 5.34	24	10.00 10.00 10.00 9.20 7.36 5.93 4.80	10.00 9.79 9.47 7.77 6.33 5.18	24	12 14 18 22 26 30 34 38 42

2.83

# Fly Jib Service Notes

3.11

Working load education to fly jib.

2.95

The published ratings over the main boom sheaves, at any radius, must be reduced by the weights shown right in the following tabulation when fly-jib is fitted with single part block (but not in use).

2.79

2.99

Jib length m	12m	18m	24m
Weight Reduction kg	1300	1600	1900

2.68

Hook blocks kg

100t = 1300

50t = 800

30t = 500

10t = 250

58

# LIFTING CAPACITIES ON MAIN BOOM

Boom (m)	18	21	24	27	30	33	36	39	42	45	48	51	
4.7	100.00												
5	100.00	98.56/5.2											
6	100.00	95.77	89.28	82.54/6.2									
7	88.31	88.36	86.21	80.32	71.17								
8	71.24	71.25	71.25	71.23	71.23	62.41							
9	59.56	59.54	59.52	59.47	59.45	59.42	50.42						
10	51.06	51.03	50.98	50.92	50.88	50.83	50.42	50.42	50.42	50.42/9.4	38.18	38.01/10.40	
12	39.54	39.47	39.40	39.31	39.24	39.18	39.20	39.05	38.89	38.79	38.18	35.94	
14	32.09	32.00	31.91	31.80	31.72	31.63	31.64	31.48	31.31	31.20	31.18	31.02	
16	26.90	26.79	26.67	26.55	26.45	26.35	26.35	26.19	26.01	25.99	25.86	25.58	
18	24.86/17.00	22.95	22.81	22.67	22.56	22.46	22.45	22.27	22.09	21.96	21.92	21.74	
20		21.39/19.00	19.86	19.70	19.58	19.46	19.44	19.26	19.07	18.94	18.89	18.71	
22			17.54	17.36	17.22	17.08	17.08	16.88	16.68	16.99	16.49	16.31	
24				15.47	15.31	15.17	15.13	14.94	14.75	14.61	14.55	14.36	
26					13.74	13.58	13.54	13.34	13.14	13.01	12.93	12.74	
28						12.25	12.20	12.00	11.80	11.66	11.58	11.38	
30						11.13	11.06	10.86	10.65	10.51	10.42	10.22	
32							10.09	9.88	9.66	9.52	9.43	9.23	
34								9.03	8.81	8.56	8.56	8.36	
36									8.06	7.91	7.80	7.60	
38									7.41	7.25	7.13	6.92	
40										6.67	6.53	6.32	
42											6.00	5.79	
44											0.00	5.31	
46												4.88	
48												1100	
50													
52													
54													
J4													
Rated loa	ads in met	tric tonnes 3	360° rotat	ion. 75% st	ability rati	ngs.							
Boom (m)	18	21	24	27	30	33	36	39	42	45	48	51	
4.7	100.00												
5	100.00	98.56/5.2											
6	100.00	95.77	89.28	82.54/6.2									
7	82.97	83.04	83.09	80.32	75.53	70.14/7.3							
8	66.98	67.00	67.02	67.01	67.03	67.03	64.79	60.94/8.3					
9	56.03	56.03	56.02	55.99	55.98	55.97	56.02	55.84	50.61/9.4				
10	48.06	48.04	48.02	47.97	47.95	47.92	47.96	47.86	47.75	43.25	38.01/10.4		
12	37.26	37.21	37.16	37.09	37.04	36.99	37.02	36.90	36.78	36.69	36.69	35.94	
	01.20	01.21	01.10	01.00	01.01	00.00	29.94	00.00	00.10	00.00	00.00	00.01	

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Во	om (m)	18	21	24	27	30	33	36	39	42	45	48	51	54
4.7	7	100.00												
5		100.00	98.56/5.2											
6		100.00	95.77	89.28	82.54/6.2									
7		82.97	83.04	83.09	80.32	75.53	70.14/7.3							
8		66.98	67.00	67.02	67.01	67.03	67.03	64.79	60.94/8.3					
9		56.03	56.03	56.02	55.99	55.98	55.97	56.02	55.84	50.61/9.4				
10		48.06	48.04	48.02	47.97	47.95	47.92	47.96	47.86	47.75	43.25	38.01/10.4		
12		37.26	37.21	37.16	37.09	37.04	36.99	37.02	36.90	36.78	36.69	36.69	35.94	32.05
14		30.27	30.21	30.14	30.05	29.99	29.92	29.94	29.81	29.67	29.58	29.57	29.43	29.34
16		25.40	25.32	25.23	25.13	25.05	24.98	24.98	24.84	24.70	24.60	24.58	24.43	24.33
18		23.49/17.00	21.71	21.61	21.50	21.41	21.32	21.32	21.17	21.02	20.92	20.89	20.74	20.63
20			20.25/19.00	18.84	18.71	18.61	18.51	18.50	18.35	18.20	18.09	18.05	17.94	17.79
22				16.65	16.51	16.40	16.29	16.27	16.12	15.96	15.85	15.80	15.65	15.53
24					14.73	14.60	14.49	14.46	14.31	14.14	14.03	13.98	13.82	13.70
22 24 26 28					13.97/25.00	13.13	13.00	12.97	12.81	12.64	12.52	12.47	12.30	12.19
20						12.49/27.00	11.75	11.71	11.54	11.37	11.26	11.19	11.03	10.91
30 32 34							10.70	10.64	10.47	10.30	10.18	10.11	9.94	9.82
32								9.72	9.55	9.37	9.25	9.17	9.01	8.89
34									8.75	8.57	8.45	8.36	8.19	8.07
36									8.39/35.00	7.87	7.74	7.65	7.48	7.35
38										7.25	7.12	7.02	6.84	6.72
40											6.57	6.46	6.28	6.16
42												5.96	5.78	5.65
44													5.33	5.20
46													4.92	4.79
48														4.42
50														
52														
54														

57	60	63	66	69	72	Boom (m)
						4.7
						5
						6
						7
						8
						9
						10
25.71	24.22					12
25.25	22.71	20.18	18.48/13.0	16.03/13.5	13.92	14
22.79	20.62	18.67	16.71	14.69	12.95	16
20.75	18.76	18.97	15.28	13.74	12.06	18
18.57	17.19	15.54	13.96	12.52	11.22	20
16.15	15.83	14.30	12.82	11.47	10.25	22
14.19	14.01	13.22	11.83	10.55	9.40	24
12.57	12.39	12.25	10.86	9.74	8.65	26
11.20	11.02	10.88	10.19	9.03	7.98	28
10.04	9.85	9.71	9.50	8.39	7.39	30
9.03	8.84	8.70	8.51	7.81	6.86	32
8.15	7.96	7.82	7.63	7.28	6.37	34
7.38	7.19	7.05	6.85	6.66	5.89	36
6.70	6.51	6.36	6.17	5.97	5.40	38
6.09	5.90	5.75	5.56	5.36	4.94	40
5.55	5.35	5.21	5.01	4.81	4.53	42
5.06	4.86	4.71	4.51	4.32	4.16	44
4.61	4.42	4.27	4.07	3.87	3.71	46
4.21	4.01	3.86	3.66	3.46	3.31	48
3.85	3.64	3.49	3.29	3.09	2.93	50
	3.31	3.16	2.95	2.75	2.59	52
	3.00	2.85	2.64	2.44	2.28	54

57	60	63	66	69	72	Boom (m)
						4.7
						5
						6
						7
						8
						9
						10
27.27	24.22	21.2/12.5				12
25.25	22.71	20.18	15.48/13.0	16.03/13.5	13.92	14
22.79	20.62	18.67	16.71	14.69	12.95	16
20.63	18.76	16.97	15.28	13.74	12.06	18
17.78	17.19	15.54	13.96	12.52	11.22	20
15.52	15.37	14.30	12.82	11.47	10.25	22
13.68	13.53	13.22	11.83	10.55	9.40	24
12.16	12.01	11.89	10.96	9.74	8.65	26
10.88	10.73	10.61	10.19	9.03	7.98	28
9.79	9.63	9.51	9.35	8.39	7.39	30
8.85	8.63	8.57	8.41	7.81	6.96	32
8.02	7.86	7.74	7.58	7.28	6.37	34
7.30	7.14	7.02	6.85	6.69	5.89	36
6.66	6.50	6.38	6.21	6.05	5.40	38
6.09	5.93	5.81	5.64	5.47	4.94	40
5.58	5.41	5.29	5.12	4.96	4.53	42
5.12	4.95	4.83	4.66	4.49	4.16	44
4.70	4.53	4.41	4.24	4.07	3.82	46
4.32	4.16	4.03	3.96	3.69	3.50	48
3.99	3.87	3.68	3.51	3.34	3.21	50
	3.49	3.37	3.19	3.02	2.89	52
	3.20	3.07	2.90	2.73	2.60	54

Some loads are restricted by factors not related to stability. Rated loads are gross loads. Deduct weight of hooks, slings etc. where applicable. Optional offset  $30^{\circ}$ .

# **BUCKET SERVICE RATINGS**

	BOOM LENGTH													
	18m			21m			24m			27 m			30m	
RAD	BOOM ANGLE	LOAD TONNE												
9m	66	10.0												
10m	63	10.0	11m	64	10.0									
12m	55	10.0	12m	61	10.0	12m	65	10.0	13m	65	10.0			
14m	47	10.0	14m	54	10.0	14m	59	10.0	14m	63	10.0	14m	66	10.0
16m	37	10.0	16m	47	10.0	16m	54	10.0	16m	58	10.0	16m	62	10.0
			18m	38	10.0	18m	47	10.0	18m	53	10.0	18m	57	10.0
						20m	40	10.0	20m	47	10.0	20m	52	10.0
						21m	36	10.0	22m	41	10.0	22m	47	10.0
									23m	37	10.0	24m	41	9.0
												25m	38	8.1

CAPA	CITY	WEIGHT	EMPTY	MATERIAL DENSITY	APPLICATION
Cu.m	Cu.Yd	KG	LB	Tonne Cu.m	
2.35	3.00	4475	9870	2.0	HEAVY
2.50	3.25	4610	10160	1.8	MED/HEAVY
3.50	4.70	3175	7000	1.6	MEDIUM
4.00	5.18	4075	8980	1.4	LIGHT

MATERIAL		DENSITY	Kg/cu.m
		WET	DRY
SAND	LOOSE SOLID	1760 1920	1440 1600
EARTH	LOOSE SOLID	1520 1600	1215 1520
GRAVEL	LOOSE SOLID	176 192	
		HEAVY	LIGHT
COAL	LOOSE SOLID	960 1600	720 1200

# **Bucket Service Notes**

Published ratings listed are for the machine standing on firm level ground with the boom in the least favourable position. Loads should be reduced when working in soft or uneven ground, for bucket suction, or unfavourable operating conditions.

### **Clamshell Service**

Published ratings listed are for the machine standing on firm level ground with the boom in the least favourable position.

# **British Standards**

The published rating are based on BS 1757 1986 class A3 and do not exceed 80% of the fitting crane safe working load, at the same load radius.

The published ratings do not exceed 68% of the tipping load.



# WEIGHTS AND DIMENSIONS OF MAJOR COMPONENTS

# Upper works = 39,990 kg

10150

# Counterweight (4 pieces)

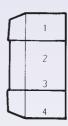
1 = 8060 kg

2 = 7360 kg

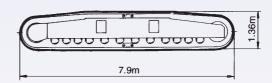
3 = 8770 kg

4 = 9360kg

Total = 33,560kg



Crawlers = 17,500kg each



### **Boom Inserts**

3m = 455kg

6m = 745kg

9m = 980kg

Truck frame = 11,500kg



### Basic boom Pendant Weight

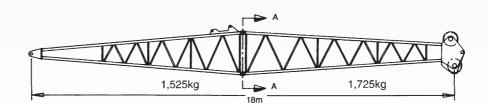
 $A.A = 1.875m \times 1.875m$ 

Basic = 230kg

3m = 120kg

6m = 190kg

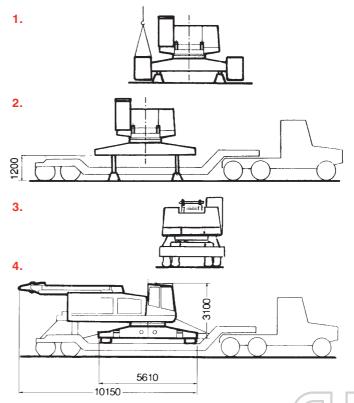
9m = 245kg



# **TRANSPORTATION**

- 1 Remove front end and counterweights. Boom suspension bridle to be placed in storage cradle.
   Fold A-frame to transport position.
  - Lift base machine using vertical jacks.
  - Disconnect hydraulic pipes to propel motors, and remove crawler.
  - Repeat operation for removal of opposite crawler side frame.
- 2 Lift base machine with vertical jacks to provide sufficient clearance for access of low loader.
  - Block low loader for safety.
- **3** Lower crane superstructure onto low loader and firmly remove.
  - Retract vertical jacks and lock into transport position.
- **4** Rotate crane superstructure through 90° and engage cab lock.
  - Block and secure crane superstructure ready for transportation.

To reassemble crane, reverse above procedures.



### STANDARD EQUIPMENT

### SAFETY EQUIPMENT

- BOOM HOIST DRUM LOCK
- CAB PROTECTION
- ISOLATOR BAR
- LOAD HOIST DRUM LOCKS
- POWER LOAD LOWERING
- SWING LOCK
- SWING WARNING DEVICE
- TELESCOPIC BACKSTOPS

### INSTRUMENTATION

### VISUAL AND AUDIBLE WARNINGS FOR:-

- ELECTRO HYDRAULIC CONTROLLER
- ENGINE OIL TEMPERATURE PRESSURE AIR CLEANER BLOCKED (All located, in LH Console stand)
- FUEL LEVEL HYDRAULIC OIL LEVEL PRESSURE -TEMPERATURE/FILTER BLOCKED
- SERVO PRESSURE

### OTHER STANDARD FEATURES

- BASIC BOOM 18m LONG
- BOOM JOINT BUSHES

- CAST STEEL PLAIN FACE TRACK LINKS
- DUAL LEVER TRAVEL CONTROL
- ELECTRO HYDRAULIC CONTROLLER
- FOLDABLE ACCESS STEPS RADIO CIGARETTE LIGHTER -WINDSHIELD WIPERS
- FOOT THROTTLE HAND THROTTLE
- HEATER/DEFROSTER
- HYDRAULIC 'A' FRAME ERECTION
- FUEL FILLING PUMP
- HYDRAULIC FILLING PUMP
- NYLON 'NO MAINTENANCE' SHEAVES
- SEALED LOWER ROLLERS
- SLIDING DOOR
- SUN VISOR TINTED GLASS RECLINING OPERATOR SEAT
- SWING LOCK WARNING HORN
- TOOL BOX PLUG SOCKET
- TRACTOR TYPE LOW MAINTENANCE' TRACKS
- TRANSPORT LIFTING JACKS
- TWO SPEED HOIST TWO SPEED SWING -
- LOW NOISE CAB HYDRAULIC POWER ASSIST BRAKES
- LOAD HOIST

# **OPTIONAL EQUIPMENT**

- ADDITIONAL BOOM POINT DEFLECT SHEAVE
- AIR CONDITIONING
- BIODEGRADABLE OIL (FIRST FILL)
- BOOM FLOODLIGHTS
- BOOM INSERTS 3.0m 6.0m 9.0m
- CATWALKS
- CLAMSHELL CONVERSION
- CRAWLER REMOVAL RAMS
- DRUM LIGHTS
- DRUM ROTATION INDICATORS
- FIRE EXTINGUISHER
- FLY JIBS 12m, 18m, 24m AT 10° OR 30° OFFSET
- 1m LONG STUB JIB
- HOOK BLOCKS 100T, 50T, 30T, 10T
- 'LOAD LIFTED' DATA LOGGER
- 'LOAD MOMENT' INDICATOR WITH AUDIBLE & VISUAL DISPLAY

- BOOM CABLE STORAGE DRUM
- OPTIONAL HOOK HEIGHT INDICATOR, OVERHOIST CUT-OUTS
- MECHANICAL BOOM ANGLE INDICATOR
- REAR VIEW MIRRORS
- ROTATING SAFETY LIGHTS
- SPECIAL PAINT/SIGNWRITING
- THIRD DRUM
- VARIOUS LIGHTS
- ZOLLAN WINCHES





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