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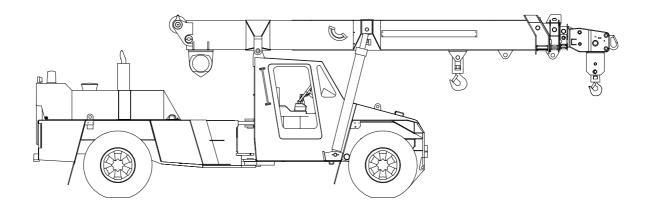


CRANE RATING MANUAL MODEL AT-20

BOOK PART NUMBER 16C1320-

HYDRAULIC ALL TERRAIN PICK & CARRY CRANE

20 TONNE MAXIMUM CAPACITY



Do not operate this crane unless you have read and understood the information in this book.

16C1320-RATING CHART BOOK AT-20

ALL PAGES LISTED MUST BE INCLUDED IN THIS BOOK.

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LMI DUTY 05 & 6 : FLYJIB (0° OFFSET) LMI DUTY 07 & 8 : FLYJIB (12.5° OFFSET)

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SECTION 4 - CRANE DATA

MACHINE DIMENSIONS HYDRAULIC DATA

SECTION 1 WARNINGS

CAUTION NOTE
DEFINITIONS
WARNINGS

! CAUTION!

IMPROPER CRANE USE, CARE OR OPERATION CAN CAUSE INJURY, DEATH OR PROPERTY DAMAGE.

DO NOT OPERATE THIS MACHINE UNLESS YOU HAVE READ AND UNDERSTAND THE OPERATOR'S MANUAL, SAFE OPERATING PRACTICES BOOKLET AND CRANE RATING MANUAL.

COPIES OF OPERATOR'S MANUALS, SAFE OPERATING PRACTICES BOOKLET AND CRANE RATING MANUAL MAY BE OBTAINED FROM:



DEFINITIONS

Articulation – The crane pivots in the middle to allow steering and slewing the load. Working areas for the purpose of load rating are less than 10° articulation either way and greater than 10° (up to 40° articulation is possible either way). see working area diagram

Freely Suspended Load – Load hanging free with no direct external force applied except by the hoist line.

Load Radius – Horizontal distance from the centre of the front wheels forwards to the centre of the hoist line or tackle with load applied.

Loaded Boom Angle – This is given to assist in setting up the crane only. It gives only an approximation of the radius for a specified boom length. No allowance is made for boom or tyre deflection. The ratings are for the boom length and Load Radius shown.

Rated Lifting Capacity – The total suspended load, including the weight of material and load handling equipment, that the machine can safely lift under ideal conditions at a given boom length and load radius.

Side Load – Any external force applied either to the boom or load in a horizontal direction.

Work Areas – Area measured in an arc about the centre pivot as shown on the working area diagram. Lamps on the dash indicate which zone the crane is in.

! WARNING !

SPECIAL PRECATIONS FOR ARTICULATED CRANES

THERE IS A POTENTIAL FOR CRUSHING BETWEEN FRONT AND REAR CHASSIS WHEN THE MACHINE ARTICULATES. NEVER STAND IN THE PIVOT AREA WHEN THE ENGINE IS RUNNING OR EMERGENCY STEERING PUMP IS OPERATING. ALWAYS REMOVE THE KEY FROM THE IGNITION BEFORE WORKING IN THE PIVOT AREA.

DO NOT LEAVE IGNITION KEY SWITCHED ON WITH ENGINE STOPPED AND PARK BRAKE OFF, AS EMERGENCY HYDRAULIC STEERING PUMP WILL ACTIVATE.

GENERAL

- 1. This machine has been designed to meet the requirements of AS1418.1 & 1418.5 and has been tested in accordance with these standards for pick and carry operation on tyres.
- 2. Rated lifting capacities shown are for this machine as originally manufactured by Terex Lifting Australia Pty Ltd. The lifting capacities only apply when all the instructions in this book are rigidly followed. Modifications to this machine or use of equipment other than that specified can result in a reduction of capacity.
- 3. If improperly operated or maintained, this machine can be hazardous. Operation and maintenance of this machine must be in compliance with the information in the operators, service, parts and safety manuals furnished. If these manuals are missing, obtain replacements through Terex Lifting Australia Pty Ltd or their agents.

SET-UP

- 4. Reduced crane lifting capacities for the particular job shall be established by the user with due allowance for adverse operating conditions. These conditions include the supporting surface, pendulum action of the load, jerking or sudden stops of the load and other factors affecting stability, two machine lifts, electrical wires, adverse weather, wind, hazardous surroundings, experience of personnel, etc.
- 5. Rated lifting capacities are based on freely suspended loads with the machine on a firm, level (max. 1% slope / 0.6°) and uniform surface. Lifting or travelling with a load on soft or uneven ground can be hazardous and will reduce the capacity of the crane. No attempt shall be made to drag the load along the ground in any direction.

! WARNING !

- 6. Rated lifting capacities above the red line are based on the machine's hydraulic or structural competence and not on machine stability. Rated capacities below the red line are based on machine stability.
- 7. The Rated lifting capacities include the weight of hooks, blocks, slings and auxiliary lifting devices. Their weight must be subtracted from the listed rating to determine the net load that can be lifted.
- 8. Loaded boom angles at specified boom lengths give only an approximation of the operating radius. The boom angle before loading should be greater to account for boom deflection increasing the radius as the load is lifted.

OPERATION

- 9. Side loading of the machine and load swing out may cause structural failure or machine tip-over. Side loads may be generated by: lifting when not level; sudden acceleration or deceleration in articulating with a load; dragging a load; pushing a load; wind forces on load and boom structure.
- 10. The capacity of the manual extension is structurally limited. The boom may be retracted and extended with the manual set, however the rating does not change from the fully extended position for the given boom angle.
- 11. It is safe to attempt to telescope any load within the limits of the rating chart. The maximum load that may be telescoped is limited by hydraulic pressure, boom angle and powered boom sections lubrication.
- 12. Do not allow the winch rope to unwind fully. Always ensure a minimum of two (2) wraps of rope remain on the winch drum. Note the areas on the range diagram where the fall block cannot reach the ground on four (4) or three (3) parts of rope.
- 13. Crane lifting capacities on tyres depend on tyre capacity, condition of the tyres and tyre air pressure. Tyres must be inflated to the recommended pressure before lifting.
- 14. Pick & carry operation is permitted through the full articulation range, however capacity is reduced above 10° articulation. Use the reduced ratings in the chart if entering this articulation range during the operation.
- 15. The maximum speed for pick & carry operation is 0.4m/s (1.6km/h). The transmission shall be set to low range.
- 16. Operation of this crane in excess of rating configuration charts and disregard of the instructions is hazardous.

SECTION 2 OPERATIONS

ATTACHMENT NOTICE

WORKING AREAS & RANGE DIAGRAM

OPERATION (ON TYRES)

WEIGHT OF HOOKS

WINCH LINE PULL

TYRE INFLATION PRESSURES

NOTICE

WRITTEN AUTHORISATION IS REQUIRED FROM TEREX LIFTING AUSTRALIA PTY LTD PRIOR TO THE USE OF ANY ATTACHMENT NOT SPECIFIED IN THE MANUAL.

OPERATION

- 1. Read and understand all warnings and instructional notes.
- 2. Rated lifting capacities above the red line are based on the machine's hydraulic or structural competence and not on machine stability. Rated capacities below the red line are based on machine stability.
- 3. Do not tip the machine to determine allowable lifting capacities.
- 4. The Rated lifting capacities include the weight of hooks, blocks, slings and auxiliary lifting devices. Their weight must be subtracted from the listed rating to determine the net load that can be lifted.
- 5. Crane lifting capacities on tyres depend on tyre capacity, condition of the tyres and tyre air pressure. Tyres must be inflated to the recommended pressure before lifting.
- 6. Pick & carry operation is permitted through the full articulation range, however capacity is reduced above 10° articulation. Use the reduced ratings in the chart if entering this articulation range during the operation.
- 7. Loads may be lifted from the main boom head on the winch or the rhino hook, the fixed lug, or either of the two sliding lugs on the boom. A flyjib is also available to extend the maximum boom length and a manbasket can be pinned to the head of the boom. Always use the correct rating chart for the lifting point in use and ensure the LMI is set to the correct duty.
- 8. Lifting from more than one lifting point simultaneously is neither intended nor approved.
- 9. When either the boom length or radius or both are between values listed, the smallest load shown at either the next larger radius or boom length shall be used, or the interpolated value shown on the LMI may be used
- 10. The winch rope is fully compensated for boom extension. The only exception is when the manual extension is being set. Refer to the operator's manual for the manual setting procedure. Once it is set the compensation is fully functional.
- 11. The maximum speed for pick & carry operation is 0.4m/s (1.6km/h). The transmission shall be set to low range.
- 12. Handling of personnel from the boom is neither intended nor approved, except in a Terex Lifting Australia supplied manbasket, correctly installed on the head of the boom, or other approved arrangement.

HOOK BLOCK WEIGHTS

SINGLE PART HOOK BLOCK	30 kg
TWO/THREE PART HOOK BLOCK	95 kg
FOUR PART HOOK BLOCK	125 kg
20 METRIC TONNE HOOK	15 kg

NOTE: THESE WEIGHTS APPLY ONLY TO TEREX LIFTING AUSTRALIA PTY LTD SUPPLIED EQUIPMENT.

WINCH LOAD CHART

Number of Parts	Permissible Winch
of Rope	Load (kg)
1	4 200
2	8 400
3	12 600
4	16 800

Wire Rope : 14mm 35W x 7 Non-rotating Compak Minimum Breaking Force 165 kN

TYRE INFLATION CHART

Position	Construction &	Inflation Pressure - PSI				
Position	Ply Rating	Pick & Carry	Highway Travel			
Front	12.00 – 20 x 20 Ply	125	125			
Rear	12.00 – 20 x 20 Ply	90	90			

SECTION 3

LIFTING CAPACITY

RANGE DIAGRAM (ALL LIFTS)

LMI DUTY 01 : LIFTING CAPACITY ON WINCH -POWERED SECTIONS

LMI DUTY 03 : LIFTING CAPACITY ON WINCH -MANUAL EXTENSION

LMI DUTY 02 : LIFTING CAPACITY ON RHINO HOOK -POWERED SECTIONS

LMI DUTY 04 : LIFTING CAPACITY ON RHINO HOOK – MANUAL EXTENSION

LMI DUTY 05 : LIFTING CAPACITY ON FLYJIB

(0° OFFSET) - POWERED SECTIONS

LMI DUTY 06 : LIFTING CAPACITY ON FLYJIB
(0° OFFSET) - MANUAL EXTENSION

LMI DUTY 07 : LIFTING CAPACITY ON FLYJIB (12.5° OFFSET) - POWERED SECTIONS

LMI DUTY 08 : LIFTING CAPACITY ON FLYJIB (12.5° OFFSET) - MANUAL EXTENSION

LMI DUTY 09: LIFTING CAPACITY ON FIXED LUG ON BUTT

LMI DUTY 10: LIFTING CAPACITY ON INNER LUG ON FIRST EXT.

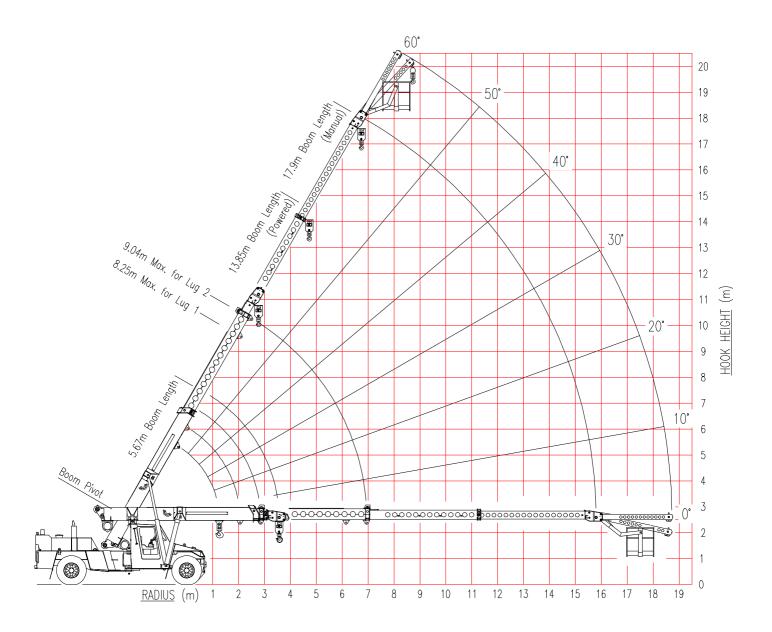
LMI DUTY 11: LIFTING CAPACITY ON OUTER LUG ON FIRST EXT.

LMI DUTY 12 : LIFTING CAPACITY IN MAN BASKET – POWERED SECTIONS

LMI DUTY 13 : LIFTING CAPACITY IN MAN BASKET – MANUAL EXTENSION

RANGE DIAGRAM AT-20

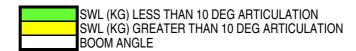
SHOWING ALL LIFT CONFIGURATIONS



LMI Duty Lifting on WINCH

	BOOM LENGTH (m)																	
RADIUS	5.67	6.00	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50	13.85
		16250																
1.6	12600		12600															
	48	51	54	57	45400	4.4700	44050											
2.0	16800 12600	16800 12600	16500 12600	12600	15100 12600	12600	14350 12600											
2.0	42	46	<u>12600</u> 50	53	56	58	60											
		13900						13200	13000									
2.5	12150	12150	12100	12100				12050										
	34	39	44	48	51	54	56	58	60									
	11450	11450	11450	11400		11400		11400										
3.0	9950	9950	9950	9950	9950	9950	9900	9900	9900	9900 59	9900							
	25 9650	31 9650	37 9650	42 9650	46 9650	49 9650	52 9650	55 9650	57 9650	9650	60 9500	8150	7500					
3.5	8400	8400	8400	8400	8400	8400	8400	8400	8350	8350	8350	8150	7500					
0.0	8	20	29	36	41	45	48	51	53	55	57	59	60					
	9450	8550	8350	8350	8350	8350	8350	8350	8300	8300	8300	7600	7000	6700	6450			
4.0	8200	7450	7250	7250	7250	7250	7250	7250	7200	7200	7200	7200	7000	6700	6450			
	(3.57)	(3.90)	19	28	35	39	43	47	49	52	54	56	57	59	60	5000	5050	
4.5			7500 6500	7300 6350	7300 6350	7300 6350	7300 6350	7300 6350	7300 6300	7300 6300	7300 6300	7150 6300	6550 6300	6250 6250	6050 6050	5800 5800	5650 5650	
4.5			(4.40)	19	27	34	38	42	45	48	50	52	54	56	58	59	60	
			(4.40)	6650	6500	6500	6500	6500	6500	6500	6500	6500	6150	5900	5650	5450	5300	5150
5.0				5750	5600	5600	5600	5600	5600	5600	5600	5600	5600	5600	5600	5450	5300	5150
				(4.90)	18	27	33	37	41	44	47	49	51	53	55	56	58	59
					5950	5350	5250	5250	5250	5250	5250	5250	5250	5250	5050	4850	4700	4600
6.0					5100 (5.40)	4600 (F.00)	4550 17	4550	4550	4500	4500 39	4500 42	4500 45	4500	4500	4500 51	4500	4500
					(5.40)	(5.90)	4850	25 4450	31 4400	35 4400	4400	4400	4400	47 4350	49 4350	51 4350	53 4200	54 3950
7.0							4200	3800	3750	3750	3750	3750	3750	3750	3750	3750	3750	3750
110							(6.40)	(6.90)	16	24	29	34	37	40	43	45	47	48
									4100	3750	3700	3700	3700	3700	3700	3700	3700	3600
8.0									3500	3200	3150	3150	3150	3150	3150	3150	3150	3150
									(7.40)	(7.90)	15 3500	23 3250	28 3200	32 3200	36 3200	38 3200	41 3200	43 3200
9.0											2950	2750	2700	2700	2700	2700	2700	2700
9.0											(8.40)	(8.90)	15	22	27	31	34	36
											,55/	,5.537	3000	2800	2800	2800	2800	2800
10.0													2550	2400	2350	2350	2350	2350
													(9.40)	(9.90)	14	21	26	29
110															2650	2500	2450	2450
11.0															2200 (10.40)	2100 (10.90)	2050 13	2050 18
															(10.40)	(10.90)	2350	2250
11.75																	1950	1850
																		(11.75)

SWL (KG) LESS THAN 10 DEG ARTICULATION SWL (KG) GREATER THAN 10 DEG ARTICULATION BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE) Weight of slings & hook block to be added to load
Read and understand warning notes before operating crane
Loads above bold red line are structural



MANUAL EXT'N					
MAX LENG	GTH 17.90				
MAX	SWL				
RADIUS	2550				
6.74	2550				
	60				
	2250				
9.31	2250				
	50				
	2050				
11.53	2050				
	40				
	1900				
13.34	1700				
	30				
	1800				
14.67	1500				
	20				
	1650				
15.51	1350				
	10				
	1600				
15.80	1300				
	0				

NOTE:

17.9m Boom length includes Manual 3rd extension. Ratings for Manual extension are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the manual extended.

BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE) Loads above bold red line are structural	SWL (KG) GREATER THAN 10 DEG ARTICULATION	SWL (KG) LESS THAN 10 DEG ARTICULATION
Loads above bold red line are structural	Read and understand warning notes before operating crane	Weight of slings & hook block to be added to load

	BOOM LENGTH (m)																	
RADIUS	5.97	6.50	7.00	7.50	8.00	8.50	9.00	9.50	10.00	10.50	11.00	11.50	12.00	12.50	13.00	13.50	14.00	14.16
	10000	10000		10000														
1.6	10000	10000		10000														
	51 10000	54 10000	57 10000	60 10000	10000	10000												
2.0	10000	10000	10000	10000	10000	10000												
2.0	46	50	53	56	58	60												
	10000	10000	10000	10000		10000	10000	10000										
2.5	10000		10000	10000	10000	10000	10000											
	39	44	48	51	54	57	59	60										
0.0	10000	10000		10000		10000	10000		10000	10000								
3.0	10000 30	10000 37	10000 42	10000 46	10000 50	10000 52	9950 55	9950 57	9950 59	9950 60								
	9750	9750	9750	9700	9700	9700	9700	9700	9700	9650	8850	7650						
3.5	8500	8500	8450	8450	8450	8450	8450	8400	8400	8400	8400	7650						
0.0	19	30	36	41	45	48	51	53	55	57	59	60						
	8700	8400	8400	8400	8400	8400	8400	8350	8350	8350	8100	7100	6750	6500				
4.0	7550	7300	7300	7300	7300	7300	7300	7250	7250	7250	7250	7100	6750	6500				
	(3.88)	19	29	35	40	43	47	49	52	54	56	57	59	60	5050	F700		
4.5		7550 6550	7400 6400	7400 6400	7350 6400	7350 6400	7350 6400	7350 6350	7350 6350	7350 6350	7350 6350	6650 6350	6300 6300	6100 6100	5850 5850	5700 5700		
4.5		(4.40)	19	28	34	38	42	45	48	50	53	54	56	58	59 59	60		
		(4.40)	6700	6550	6550	6550	6550	6550	6550	6500	6500	6250	5950	5700	5500	5350	5150	5100
5.0			5800	5650	5650	5650	5650	5650	5650	5650	5650	5650	5600	5600	5500	5350	5150	5100
			(4.90)	18	27	33	37	41	44	47	49	51	53	55	56	58	59	59
				6000	5400	5300	5300	5300	5300	5300	5300	5300	5300	<u>5100</u>	4900	4750	4600	4550
6.0				<u>5150</u>	4650	<u>4550</u>	<u>4550</u>	<u>4550</u>	4 <u>550</u>	<u>4550</u>	<u>4550</u>	4 <u>550</u>	4550	<u>4550</u>	<u>4550</u>	<u>4550</u>	<u>4550</u>	<u>4550</u>
				(5.40)	(5.90)	17 4900	25 4500	31 4400	35 4400	39 4400	42 4400	45 4400	47 4400	49 4400	51 4400	53 4250	54 4000	55 3950
7.0						4200	3850	3800	3800	3800	3800	3800	3800	3750	3750	3750	3750	3750
7.0						(6.40)	(6.90)	16	24	29	34	37	40	43	45	47	49	50
						•		4100	3800	3750	3750	3750	3750	3750	3750	3750	3600	3550
8.0								3550	3250	3200	3200	3200	3200	3200	3200	3200	3200	3200
								(7.40)	(7.90)	15	23	28	32	36	39	41	43	44
9.0										3500 3000	3250 2800	3250 2750	3250 2750	3250 2750	3250 2750	3250 2750	3250 2750	3250 2750
9.0										(8.40)	(8.90)	15	22	2750	31	34	37	38
										(0.70)	(0.30)	3050	2850	2800	2800	2800	2800	2800
10.0												2600	2400	2400	2400	2400	2400	2400
												(9.40)	(9.90)	14	21	26	30	31
														2650	2500	2500	2500	2500
11.0														2250	2100	2100	2100	2100
														(10.40)	(10.90)	14	20	22
12.00																2350 1950	2200 1850	2200 1850
12.00																	(11.90)	
																(I I . TU)	(11.30)	112.00/

SWL (KG) LESS THAN 10 DEG ARTICULATION
SWL (KG) GREATER THAN 10 DEG ARTICULATION
BOOM ANGLE

Weight of slings & hook block to be added to load Read and understand warning notes before operating crane Loads above bold red line are structural

MANUAL EXT'N						
MAX LEN	MAX LENGTH 18.20					
MAX	SWL					
RADIUS	2400					
6.91	2400					
	60					
	2100					
9.52	2100					
	50					
	1900					
11.78	1900					
	40					
	1800					
13.62	1650					
	30					
	1750					
14.97	1450					
	20					
	1550					
15.81	1350					
	10					
	1550					
16.11	1300					
	0					

NOTE:

18.2m Boom length includes Manual 3rd extension. Ratings for Manual extension are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the manual extended.

Lifting on FLYJIB (0 offset)

FLYJIB					
MAX LENG	GTH 16.78				
MAX	SWL				
RADIUS	1500				
6.23	1500				
	60				
	1200				
8.62	1200				
	50				
	970				
10.69	970				
	40				
	850				
12.37	850				
	30				
	770				
13.62	770				
	20				
	750				
14.40	750				
	10				
44.00	750				
14.68	<u>750</u>				
	0				

SWL (KG) LESS THAN 10 DEG ARTICULATION
SWL (KG) GREATER THAN 10 DEG ARTICULATION
BOOM ANGLE

Weight of slings & hook block to be added to load Read and understand warning notes before operating crane

Loads above bold red line are structural

NOTE:

16.78m Boom length includes Flyjib.
Ratings for Flyjib are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the Flyjib installed

LMI Duty

06

Lifting on FLYJIB (0 offset)

MANUAL EXT'N						
MAX LENGTH 20.83						
MAX	SWL					
RADIUS	1500					
8.25	1500					
	60					
	1200					
11.22	1200					
	50					
40.70	970					
13.79	970					
	40					
15.88	850					
13.00	850 30					
	770					
17.43	770					
17.40	20					
	750					
18.39	750					
10.39	10					
18.73	750					
	750					
	0					

SWL (KG) LESS THAN 10 DEG ARTICULATION
SWL (KG) GREATER THAN 10 DEG ARTICULATION
BOOM ANGLE

Weight of slings & hook block to be added to load Read and understand warning notes before operating crane

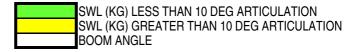
Loads above bold red line are structural

NOTE:

20.83m Boom length includes Manual 3rd extension & Flyjib. Ratings for Flyjib are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the manual extended.

Lifting on FLYJIB (12.5 deg offset)

FLYJIB						
MAX LENG	GTH 16.71					
MAX	SWL					
RADIUS	1500					
6.71	1500					
	60					
	1200					
9.04	1200					
	50					
	970					
11.03	970					
	40					
10.60	850					
12.63	850 20					
	770					
13.78	770					
10.70	20					
	750					
14.46	750					
	10					
	750					
14.64	750					
	0					



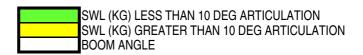
Weight of slings & hook block to be added to load Read and understand warning notes before operating crane Loads above bold red line are structural

NOTE:

16.71m Boom length includes Flyjib.
Ratings for Flyjib are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the Flyjib installed

LMI Duty Lifting on FLYJIB (12.5 deg offset) 08

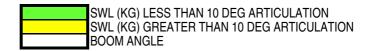
MANUAL EXT'N				
MAX LENGTH 20.76				
MAX	SWL			
RADIUS	1300			
8.73	1300			
	60			
	1120			
11.64	1120			
	50			
	920			
14.13	920			
	40			
	820			
16.14	820			
	30			
	770			
17.59	770			
	20			
	750			
18.45	750			
	10			
	750			
18.69	750			
	0			



Weight of slings & hook block to be added to load Read and understand warning notes before operating crane Loads above bold red line are structural

NOTE:

20.76m Boom length includes Manual 3rd extension & Flyjib. Ratings for Flyjib are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the manual extended.



FIXED LUG			
BOOM LENGTH 3.36			
MAX	SWL		
RADIUS			
	20000		
0.86	20000		
	30		
1.09	20000		
1.09	20000		
	20000		
1.23	20000		
	10		
1.26	20000		
	20000		
	0		

SWL (KG) LESS THAN 10 DEG ARTICULATION
SWL (KG) GREATER THAN 10 DEG ARTICULATION
BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE)

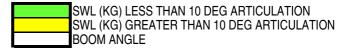
	BOOM LENGTH (m)								
RADIUS	4.16	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.25
	20000	20000	20000	19300	18100	17200			
1.4	16000	16000	16000	16000	16000	16000			
	34	40	46	51	55	58			
	19000	19000	19000	18700	17600	16500	15600	15000	
1.7	16000	16000	16000	16000	16000	16000	15600	15000	
	25	33	41	47	51	55	58	60	
	16950	16900	16800	16700	16650	16000	14650	14100	
2.0	14750	14700	14600	14500	14400	14350	14300	14100	
	11	25	36	43	48	52	55	57	
	16400	13800	13150	13100	13050	12950	12900	12750	11350
2.5	14300	11950	11400	11350	11250	11200	11150	11100	11050
	(2.06)	(2.40)	24	34	41	46	50	53	57
			11100	10700	10650	10600	10550	10500	10450
3.0			9600	9200	9150	9100	9050	9000	8950
			(2.90)	23	33	39	44	48	52
				9200	8900	8850	8800	8800	8750
3.5				7900	7650	7600	7550	7500	7450
				(3.40)	22	31	38	42	48
					7800	7550	7550	7500	7450
4.0					6700	6450	6450	6400	6350
					(3.90)	21	30	36	43
						6700	6550	6500	6450
4.5						5700	5550	5500	5500
						(4.40)	20	29	37
							5850	5700	5650
5.0							4950	4800	4800
							(4.90)	19	31
								5150	5000
5.5								4350	4200
								(5.40)	23
6.0									4450
									3700
									11
									4300
6.15									3600
									(6.15)

SWL (KG) LESS THAN 10 DEG ARTICULATION
SWL (KG) GREATER THAN 10 DEG ARTICULATION
BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE)

		ВС	OOM LENG	TH (m) - R	EAD OFF S	SCALE FOR	R INNER LU	JG	
RADIUS	4.16	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.25
	20000	20000	20000	19900					
1.4	16000	16000	16000	16000					
	46	50	54	57					
	19000	19000	19000	18850	17400	15650			
1.7	16000	16000	16000	16000	16000	15650			
	41	45	50	54	57	59			
	17400	17300	17150	17050	16350	14700	13400		
2.0	15200	15100	14950	14850	14750	14650	13400		
	35	40	46	50	54	56	59		
	13700	13600	13500	13400	13300	13250	12350	11150	10150
2.5	11950	11850	11750	11650	11550	11500	11400	11150	10150
	23	31	38	44	48	52	54	57	60
	11850	11150	11050	11000	10900	10850	10750	10300	9350
3.0	10300	9700	9600	9500	9450	9350	9300	9250	9150
	(2.85)	17	29	37	42	46	50	53	56
		10350	9300	9250	9150	9100	9050	9000	8650
3.5		9000	8050	8000	7900	7850	7800	7750	7650
		(3.20)	16	28	35	41	45	48	52
			8700	7900	7850	7800	7750	7700	7650
4.0			7550	6800	6750	6700	6650	6600	6550
			(3.70)	15	27	34	39	43	48
				7450	6850	6800	6750	6700	6650
4.5				6400	5850	5800	5750	5750	5650
				(4.20)	15	26	33	38	44
					6500	6000	5950	5900	5850
5.0					5550	5100	5050	5000	4950
					(4.70)	14	25	32	39
						5700	5250	5250	5200
5.5						4850	4450	4450	4400
						(5.20)	14	24	33
							5050	4700	4650
6.0							4250	3950	3900
							(5.70)	13	27
								4500	4200
6.5								3750	3500
								(6.20)	19
									3800
6.9									3150
									(6.94)

LMI Duty Lifting in MANBASKET

MANBASKET			
MAX LENGTH 13.85			
MAX	SWL		
RADIUS	250		
6.18	250		
	60		
	250		
8.36	250		
	50		
40.00	250		
10.22	<u>250</u>		
	40		
11.71	250 250		
11.71	30		
	250		
12.79	250		
	20		
	250		
13.42	250		
	10		
	250		
13.58	<u>250</u>		
	0		



Read and understand warning notes before operating crane Loads above bold red line are structural

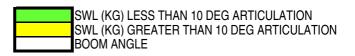
NOTE:

13.85m Boom length does not include Manbasket. Ratings for Manbasket are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the Manbasket installed

LMI Duty
Lifting in MANBASKET

13

MANUAL EXT'N				
MAX LENG	MAX LENGTH 17.90			
MAX	SWL			
RADIUS	250			
8.20	250			
	60			
	250			
10.96	250			
	50			
	250			
13.32	250			
	40			
15.22	250			
	<u>250</u>			
	30 250			
16.59	250			
10.00	20			
	250			
17.41	250			
	10			
	250			
17.63	250			
	0			



Read and understand warning notes before operating crane Loads above bold red line are structural

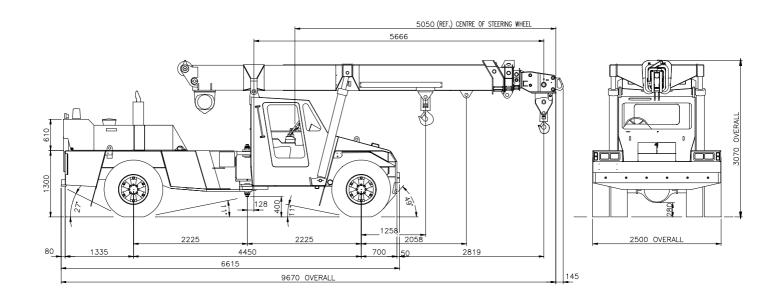
NOTE:

17.90m Boom length includes Manual 3rd extension but not Manbasket. Ratings for Manbasket are structural & based on Boom Angle, not radius. The ratings do not change if the power sections are retracted with the manual extended.

SECTION 4 CRANE DATA

MACHINE DIMENSIONS
HYDRAULIC DATA

INFORMATIONAL DATA



Crane Dimensions

Length (carrier)	6 615
Width	2 500
Height (with Boom)	3 070
Length Overall	9 670
Wheelbase	4 450
Front Axle Weight	8 000 kg
Rear Axle Weight	11 500 kg

HYDRAULIC DATA

MACHINE IS DESIGNED TO OPERATE AT THESE MAXIMUM PRESSURES.

FUNCTION	PUMP STANDBY PRESSURE	PUMP PRESSURE COMPEN- SATOR	STEERING RELIEF	TELE PORT RELIEF
SETTING (BAR)	30	220	175	210
TEST POINT	G1	G1	G2	G3

HYDRAULIC OIL TEMPERATURE MUST BE BETWEEN PLUS 20°C AND 40°C WHEN SETTING ABOVE PRESSURES.

PRESSURES TO BE CHECKED AT 1000 RPM – STANDBY PRESSURE CAN BE CHECKED AT IDLE.

DO NOT HOLD ON RELIEF MORE THAN 10 SECONDS TO AVOID OVERHEATING THE OIL AND HYDRAULIC COMPONENT DAMAGE.

UNAUTHORISED PRESSURE SETTINGS IN EXCESS OF THE ABOVE VALUES WILL RESULT IN DENIAL OF WARRANTY CLAIMS.

PRESSURES TO BE WITHIN 5 BAR OF THE ABOVE VALUES.