



TEREX LIFTING AUSTRALIA PTY LTD

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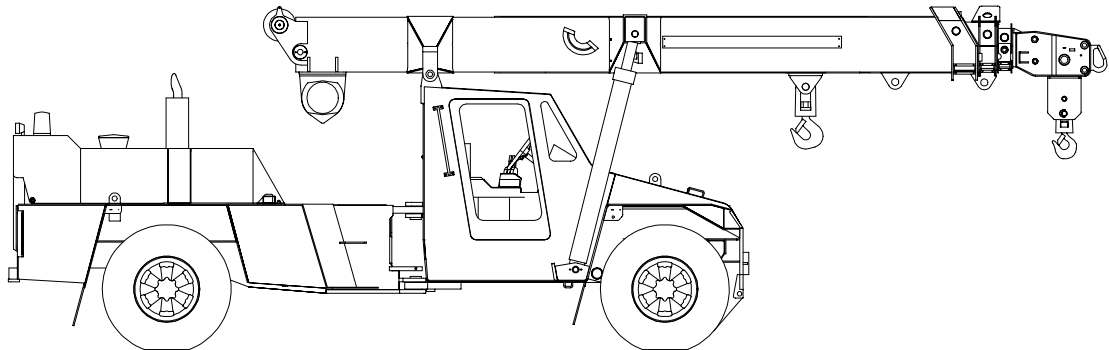
CRANE RATING MANUAL

MODEL AT-20

BOOK PART NUMBER 16C1320-

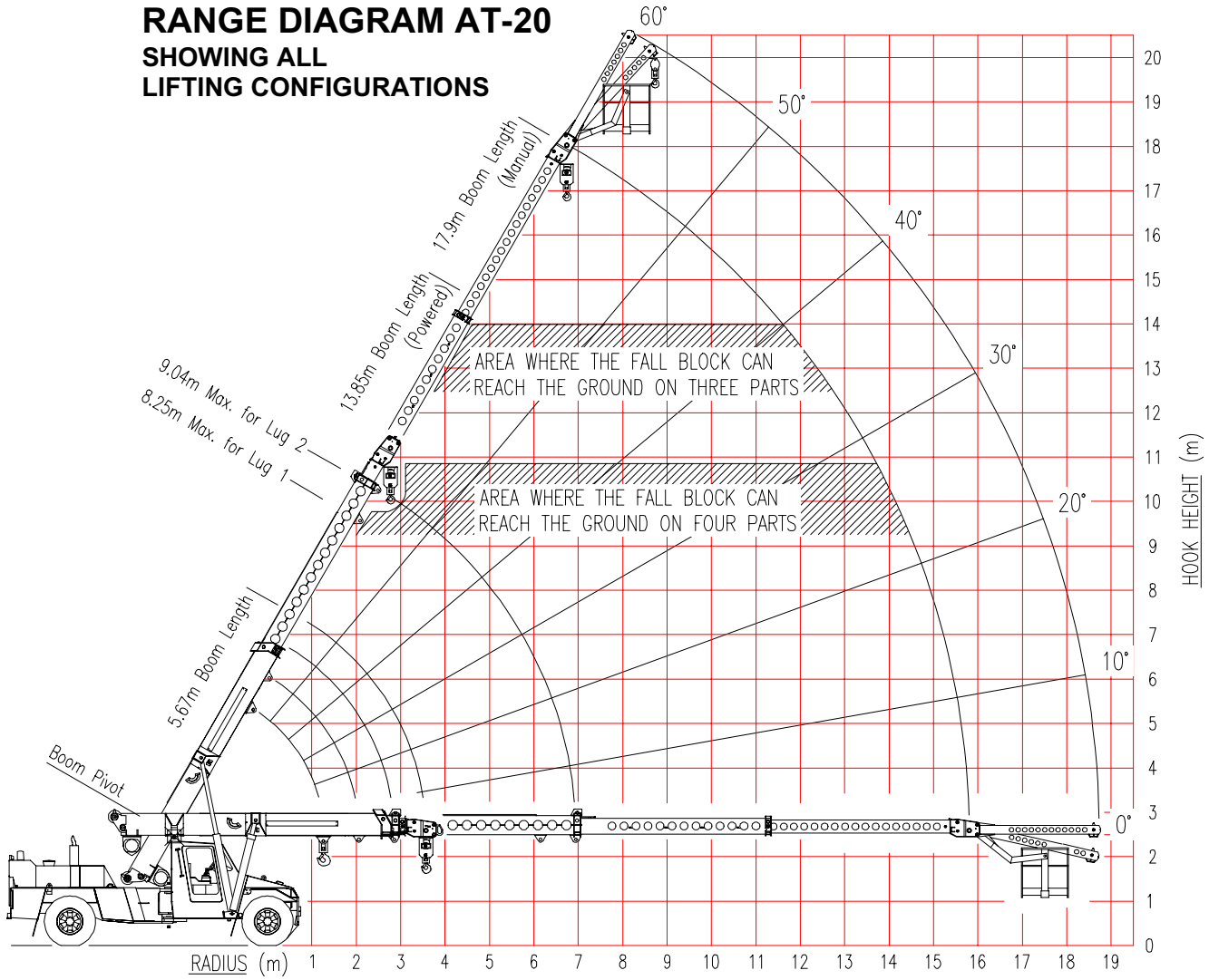
HYDRAULIC ALL TERRAIN PICK & CARRY CRANE

20 TONNE MAXIMUM CAPACITY

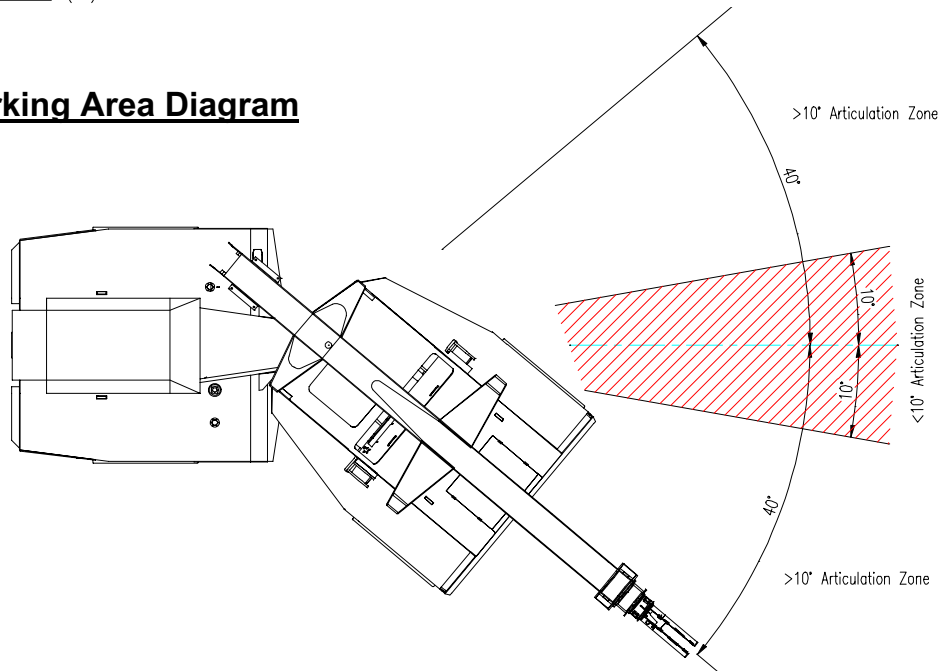


**Do not operate this
crane unless you have
read and understood
the information in this
book.**

RANGE DIAGRAM AT-20 SHOWING ALL LIFTING CONFIGURATIONS



Working Area Diagram



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

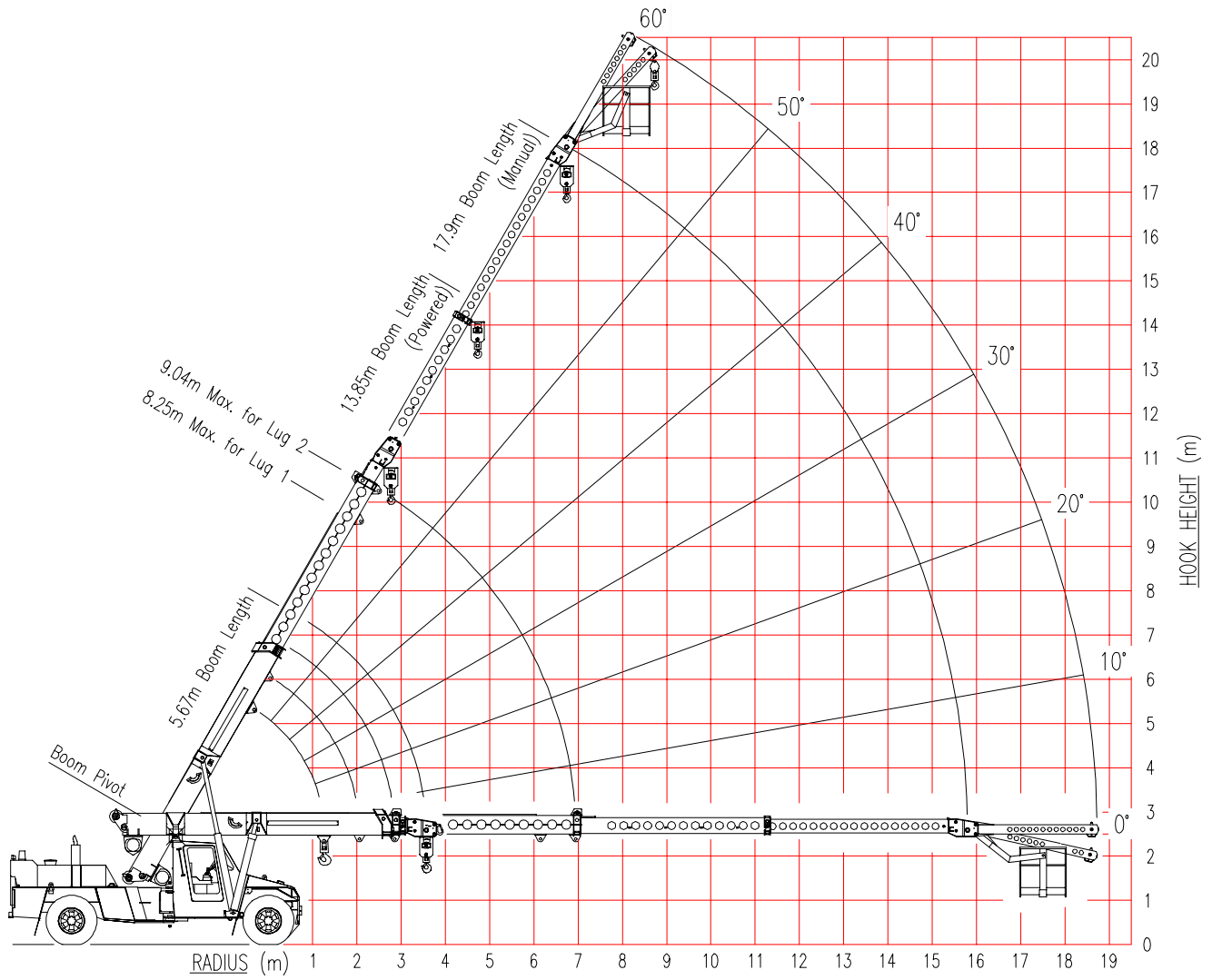
**Wire Rope : 14mm 35W x 7 Non-rotating Compak
Minimum Breaking Force 165 kN**

TYRE INFLATION CHART

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

RANGE DIAGRAM AT-20

SHOWING ALL LIFT CONFIGURATIONS



16C1320-3-3

RADIUS	BOOM LENGTH (m)																	
	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
1.6	16800	16250	15450	14900														
	12600	12600	12600	12600														
2.0	48	51	54	57														
	16800	16800	16500	15700	15100	14700	14350											
2.5	12600	12600	12600	12600	12600	12600	12600											
	42	46	50	53	56	58	60											
3.0	13900	13900	13900	13850	13850	13850	13850	13200	13000									
	12150	12150	12100	12100	12100	12100	12100	12050	12050									
3.5	34	39	44	48	51	54	56	58	60									
	11450	11450	11450	11400	11400	11400	11400	11400	11400	11150	10250							
4.0	9950	9950	9950	9950	9950	9950	9900	9900	9900	9900	9900							
	25	31	37	42	46	49	52	55	57	59	60							
4.5	9650	9650	9650	9650	9650	9650	9650	9650	9650	9650	9500	8150	7500					
	8400	8400	8400	8400	8400	8400	8400	8400	8350	8350	8350	8150	7500					
5.0	8	20	29	36	41	45	48	51	53	55	57	59	60					
	9450	8550	8350	8350	8350	8350	8350	8300	8300	8300	8300	7600	7000	6700	6450			
5.5	8200	7450	7250	7250	7250	7250	7250	7200	7200	7200	7200	7200	7000	6700	6450			
	(3.57)	(3.90)	19	28	35	39	43	47	49	52	54	56	57	59	60			
6.0			7500	7300	7300	7300	7300	7300	7300	7300	7300	7150	6550	6250	6050	5800	5650	
			6500	6350	6350	6350	6350	6350	6300	6300	6300	6300	6300	6250	6050	5800	5650	
6.5			(4.40)	19	27	34	38	42	45	48	50	52	54	56	58	59	60	
				6650	6500	6500	6500	6500	6500	6500	6500	6500	6150	5900	5650	5450	5300	5150
7.0				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
7.5					5950	5350	5250	5250	5250	5250	5250	5250	5250	5250	5050	4850	4700	4600
					5100	4600	4550	4550	4550	4500	4500	4500	4500	4500	4500	4500	4500	4500
8.0					(5.40)	(5.90)	17	25	31	35	39	42	45	47	49	51	53	54
							4850	4450	4400	4400	4400	4400	4400	4400	4350	4350	4350	4200
8.5							4200	3800	3750	3750	3750	3750	3750	3750	3750	3750	3750	3950
							(6.40)	(6.90)	16	24	29	34	37	40	43	45	47	48
9.0																		
9.5																		
10.0																		
10.5																		
11.0																		
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

LMI Duty
 Lifting on WINCH
 01

	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 LENGTH 17.90	
MAX RADIUS	SWL
6.74	2550
	2550
	60
9.31	2250
	2250
	50
11.53	2050
	2050
	40
13.34	1900
	1700
	30
14.67	1800
	1500
	20
15.51	1650
	1350
	10
15.80	1600
	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.

	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 LENGTH 18.20	
MAX RADIUS	SWL
6.91	2400
	2400
	60
9.52	2100
	2100
	50
11.78	1900
	1900
	40
13.62	1800
	1650
	30
14.97	1750
	1450
	20
15.81	1550
	1350
	10
16.11	1550
	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.

LMI Duty
Lifting on FLYJIB (0 offset)

05

FLYJIB	
MAX LENGTH 16.78	
MAX RADIUS	SWL
6.23	1500
	1500
	60
8.62	1200
	1200
	50
10.69	970
	970
	40
12.37	850
	850
	30
13.62	770
	770
	20
14.40	750
	750
	10
14.68	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 :
 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
Lifting on FLYJIB (0 offset)

06

MANUAL EXT'N	
MAX LENGTH 20.83	
MAX RADIUS	SWL
8.25	1500
	1500
	60
11.22	1200
	1200
	50
13.79	970
	970
	40
15.88	850
	850
	30
17.43	770
	770
	20
18.39	750
	750
	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.

LMI Duty
Lifting on FLYJIB
(12.5 deg offset)

07

FLYJIB	
MAX LENGTH 16.71	
MAX RADIUS	SWL
6.71	1500
	1500
9.04	60
	1200
	1200
11.03	50
	970
	970
12.63	40
	850
	850
13.78	30
	770
	770
14.46	20
	750
	750
14.64	10
	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 :
 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 RADIUS	SWL
8.73	1300
	1300
11.64	60
	1120
	1120
14.13	50
	920
	920
16.14	40
	820
	820
17.59	30
	770
	770
18.45	20
	750
	750
18.69	10
	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 :
 20.76m 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.

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

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

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

LMI Duty
Lifting on OUTER LUG

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




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

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

LMI Duty
Lifting in MANBASKET

12

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

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




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

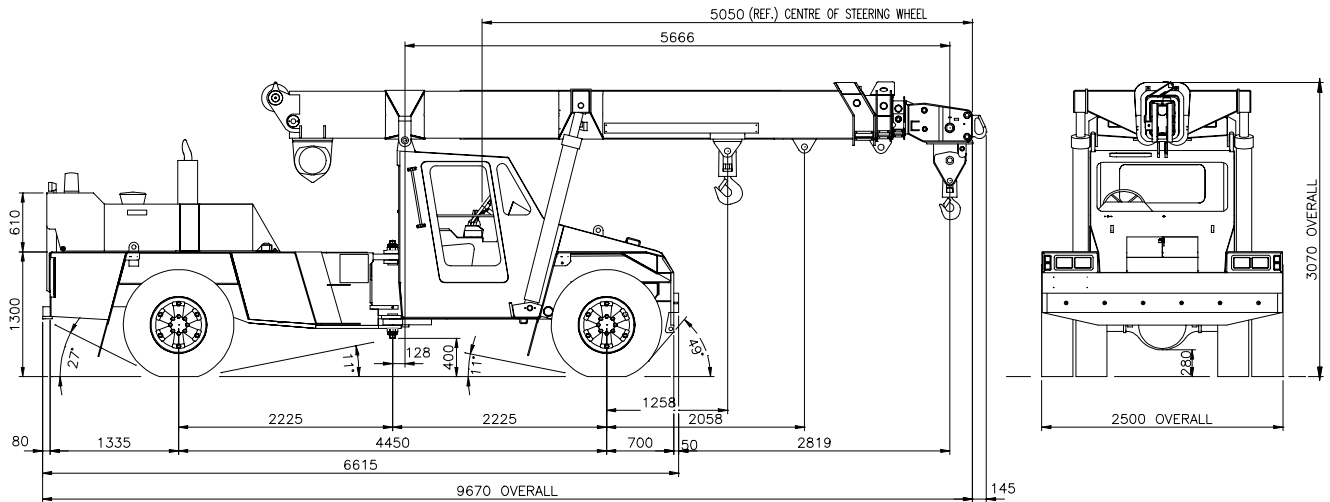
MANUAL EXT'N	
MAX LENGTH 17.90	
MAX RADIUS	SWL
8.20	250
	250
	60
10.96	250
	250
	50
13.32	250
	250
	40
15.22	250
	250
	30
16.59	250
	250
	20
17.41	250
	250
	10
17.63	250
	250
	0

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

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.

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