

LMI Duty
Lifting on WINCH

01

	RC (KG) LESS THAN 10 DEG ARTICULATION
	RC (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

RADIUS	BOOM LENGTH (m)																	
	5.66	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	13.86
1.6	10500	10500	10500	10500	10500													
	10500	10500	10500	10500	10500													
	48	50	54	57	59													
2.0	10500	10500	10500	10500	10500	10500	10500											
	10500	10500	10500	10500	10500	10500	10500											
	42	46	50	53	56	58	60											
2.5	10400	10350	10350	10350	10350	10350	10350	9950	9650									
	9250	9250	9250	9250	9250	9250	9250	9200	9200									
	34	39	44	48	51	54	56	58	60									
3.0	8500	8500	8500	8500	8500	8500	8500	8500	8500	8300	7350							
	7600	7600	7600	7600	7600	7550	7550	7550	7550	7550	7350							
	25	31	37	42	46	49	52	55	57	58	60							
3.5	7200	7200	7200	7200	7200	7200	7150	7150	7150	7150	6750	5950	5650					
	6400	6400	6400	6400	6400	6400	6400	6400	6350	6350	6350	5950	5650					
	9	20	30	36	41	45	48	51	53	55	57	59	60					
4.0	6950	6250	6200	6200	6200	6200	6200	6200	6200	6150	6150	5500	5250	5000	4800			
	6150	5550	5500	5500	5500	5500	5500	5500	5500	5500	5500	5450	5250	5000	4800			
	(3.61)	(3.95)	20	28	35	39	43	46	49	52	54	56	57	59	60			
4.5			5450	5400	5400	5400	5400	5400	5400	5400	5400	5150	4900	4650	4500	4300	4150	
			4850	4800	4800	4800	4800	4800	4800	4800	4800	4800	4800	4650	4500	4300	4150	
			(4.45)	19	28	34	38	42	45	48	50	52	54	56	57	59	60	
5.0				4300	4250	4250	4250	4250	4250	4250	4250	4250	4250	4200	4200	4050	3900	3800
				(4.95)	18	27	33	37	41	44	47	49	51	53	55	56	58	59
					4300	3900	3850	3850	3850	3850	3850	3850	3850	3850	3700	3550	3300	3200
6.0																		
				(5.45)	4300	3450	3400	3400	3400	3400	3400	3400	3400	3400	3400	3400	3300	3200
7.0																		
8.0																		
9.0																		
10.0																		
11.0																		
11.81																		

	RC (KG) LESS THAN 10 DEG ARTICULATION
	RC (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 17.91	
MAX RADIUS	RC
6.72	1850
	1850
	60
9.29	1600
	1600
	50
11.53	1300
	1300
	40
13.35	1150
	1150
	30
14.70	1050
	1050
	20
15.54	1050
	950
	10
15.86	1050
	950
	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.

LMI Duty Lifting on RHINO HOOK

02

	RC (KG) LESS THAN 10 DEG ARTICULATION
	RC (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

NOTE: When using the rhino hook, ensure the winch rope is fully tensioned.

RADIUS	BOOM LENGTH (m)																	
	5.95	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	14.15
1.6	8000	8000	8000	8000														
	8000	8000	8000	8000														
2.0	50	54	57	59														
	8000	8000	8000	8000	8000													
2.5	8000	8000	8000	8000	8000													
	45	50	53	56	58	60												
3.0	8000	8000	8000	8000	8000	8000	8000	8000										
	38	44	48	51	54	56	58	60										
3.5	7750	8000	8000	8000	8000	8000	8000	8000	8000	7950								
	7650	7650	7650	7650	7600	7600	7600	7600	7600	7600								
4.0	30	37	42	46	49	52	55	57	59	60								
	7250	7250	7250	7250	7200	7200	7200	7200	7200	7200	6300	5700						
4.5	6450	6450	6450	6450	6450	6450	6400	6400	6400	6400	6300	5700						
	19	30	36	41	45	48	51	53	55	57	59	60						
5.0	6400	6250	6250	6250	6250	6250	6200	6200	6200	6200	5850	5300	5050	4850				
	5700	5550	5550	5550	5550	5550	5500	5500	5500	5500	5300	5050	4850					
5.5	(3.90)	20	29	35	39	43	46	49	52	54	56	57	59	60				
	5500	5450	5450	5450	5450	5450	5450	5450	5450	5450	4950	4700	4550	4350	4200			
6.0	4900	4850	4850	4850	4850	4850	4850	4850	4800	4800	4800	4800	4700	4550	4350	4200		
	(4.45)	19	28	34	38	42	45	48	50	52	54	54	56	57	59	60		
6.5	4300	4300	4300	4300	4300	4300	4300	4250	4250	4250	4250	4250	4250	4250	4100	3950	3800	3750
	(4.95)	19	27	33	37	41	44	47	49	51	53	55	56	58	59	59		
7.0	4350	3950	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900	3900	3750	3600	3500	3200	3200
	3850	3450	3450	3450	3450	3450	3450	3450	3450	3450	3400	3400	3400	3400	3400	3200	3200	
7.5	(5.45)	17	25	31	35	39	42	45	47	49	51	53	54	55	54	54	55	
	3550	3250	3250	3250	3250	3250	3250	3250	3250	3250	3200	3100	3000	2900	2850	2800	2800	
8.0	3150	2850	2850	2850	2850	2850	2850	2850	2850	2850	2850	2850	2800	2800	2800	2800	2800	
	(6.45)	17	24	29	34	37	40	43	45	47	49	51	53	54	54	55		
8.5	3000	2750	2750	2750	2750	2750	2750	2750	2750	2700	2700	2700	2700	2600	2550	2350	2350	
	2600	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2350	2350	2350	
9.0	(7.45)	16	23	28	32	36	38	41	43	45	47	49	51	53	54	54	55	
	2550	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	
9.5	2200	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	2050	
	(8.45)	15	22	27	31	34	37	40	43	45	47	49	51	53	54	54	55	
10.0	1900	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	
	(9.45)	15	21	26	30	31	31	31	31	31	31	31	31	31	31	31	31	
10.5	1650	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	
	(10.45)	14	20	25	29	31	31	31	31	31	31	31	31	31	31	31	31	
11.0	1400	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	
	(11.45)	14	20	25	29	31	31	31	31	31	31	31	31	31	31	31	31	
11.5	1400	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	
	(11.95)	14	20	25	29	31	31	31	31	31	31	31	31	31	31	31	31	
12.00	1400	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	1350	
	(12.00)	14	20	25	29	31	31	31	31	31	31	31	31	31	31	31	31	

LMI Duty
Lifting on RHINO HOOK
MANUAL EXTENDED

04

	RC (KG) LESS THAN 10 DEG ARTICULATION
	RC (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	RC
7.01	1750
	1750
9.58	60
	1500
	1500
11.82	50
	1200
	1200
13.64	40
	1050
	1050
14.99	30
	1000
	1000
15.83	20
	1000
	950
16.15	10
	1000
	900
	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
MANUAL RETRACTED

05

FLYJIB	
MAX LENGTH 16.46	
MAX RADIUS	RC
6.04	750
	750
	60
8.40	700
	700
	50
10.44	650
	650
	40
12.11	600
	600
	30
13.35	550
	550
	20
14.13	500
	500
	10
14.41	500
	500
	0

	RC (KG) LESS THAN 10 DEG ARTICULATION
	RC (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 :

16.46m 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
MANUAL EXTENDED

06

MANUAL EXT'N	
MAX LENGTH 20.51	
MAX RADIUS	RC
8.07	750
	750
	60
11.00	700
	700
	50
13.54	650
	650
	40
15.62	600
	600
	30
17.15	550
	550
	20
18.11	500
	500
	10
18.46	500
	500
	0

	RC (KG) LESS THAN 10 DEG ARTICULATION
	RC (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 :

20.51m 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

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

RADIUS	BOOM LENGTH (m)								
	3.65	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.75
1.6	15000	15000	15000	14500	13650	12550	11700	11200	
	13900	13950	13850	13800	13650	12550	11700	11200	
	(1.60)	24	36	43	48	53	56	59	
2.0		12550	12250	12200	12150	11500	10700	10250	9700
		11150	10850	10800	10750	10700	10650	10250	9700
		(1.95)	26	36	43	48	51	55	59
2.5			9700	9500	9450	9400	9350	9250	8750
			8550	8350	8350	8300	8250	8250	8200
			(2.45)	25	34	41	46	49	54
3.0				7800	7650	7600	7600	7550	7550
				6850	6700	6700	6650	6650	6600
				(2.95)	23	33	39	44	49
3.5					6450	6350	6300	6300	6250
					5650	5550	5500	5500	5450
					(3.45)	22	31	38	44
4.0						5400	5350	5350	5300
						4700	4650	4650	4600
						(3.95)	22	30	39
4.5							4650	4600	4550
							4000	3950	3950
							(4.45)	21	32
5.0								4000	3950
								3450	3400
								(4.95)	25
5.5									3450
									2950
									13
5.7									3300
									2800
									(5.70)

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

[illegible]

LMI Duty
Lifting in MANBASKET
MANUAL RETRACTED

12

MAXIMUM MANBASKET RC: 275 KG (SEE NOTE BELOW)
BASKET WEIGHT: 225 KG

*Read and understand warning notes before
operating crane*

NOTE:

**THE TOTAL WEIGHT OF THE MANBASKET PLUS
MEN AND EQUIPMENT IS NOT TO EXCEED 1/3 OF
THE SAFE WORKING LOAD AS READ ON LOAD
CHART (LIFTING ON THE WINCH - DUTY 01) FOR
THE BOOM LENGTH AND RADIUS BEING USED.**

LMI Duty
Lifting in MANBASKET
MANUAL EXTENDED

13

MANUAL EXT'N	
MAX LENGTH	17.91
MAX	RC
RADIUS	275
7.98	275
	60
	275
10.71	275
	50
	205
13.05	205
	40
	155
14.93	155
	30
	125
16.30	125
	20
	125
17.11	90
	10
	125
17.34	90
	0

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

*Read and understand warning notes before
operating crane*

Loads above bold red line are structural

NOTE :

17.91m 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.

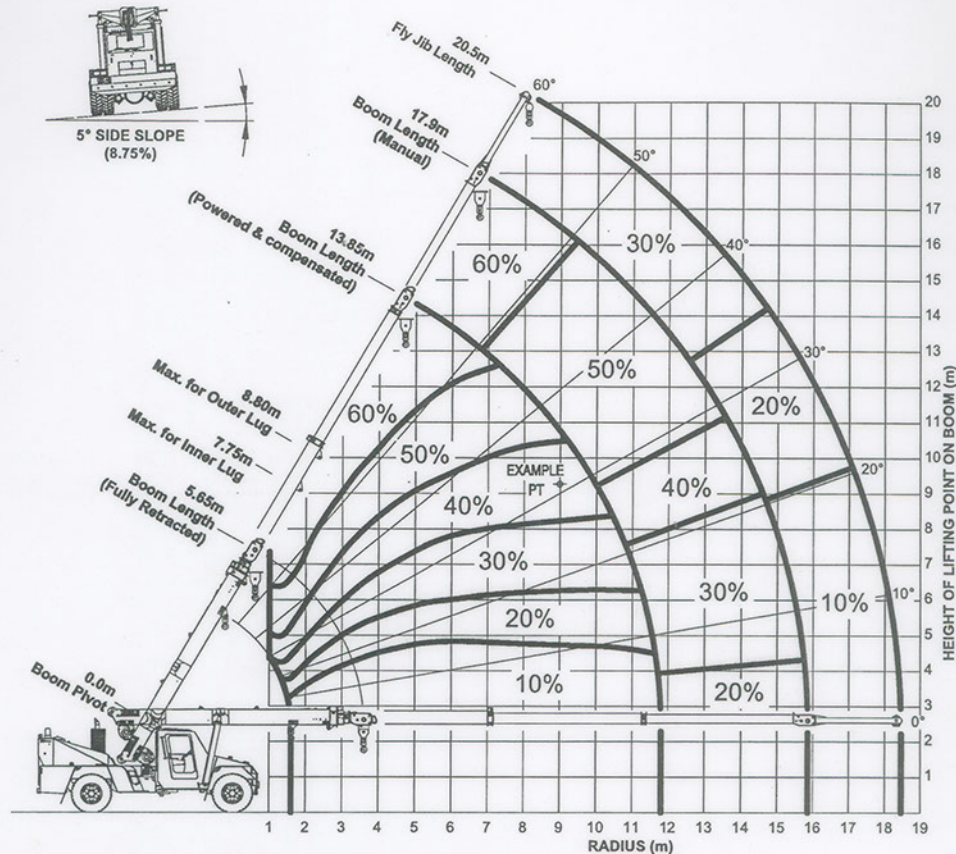


Figure 1: Percentage Deration Chart for AT-15 at 5° Side Slope

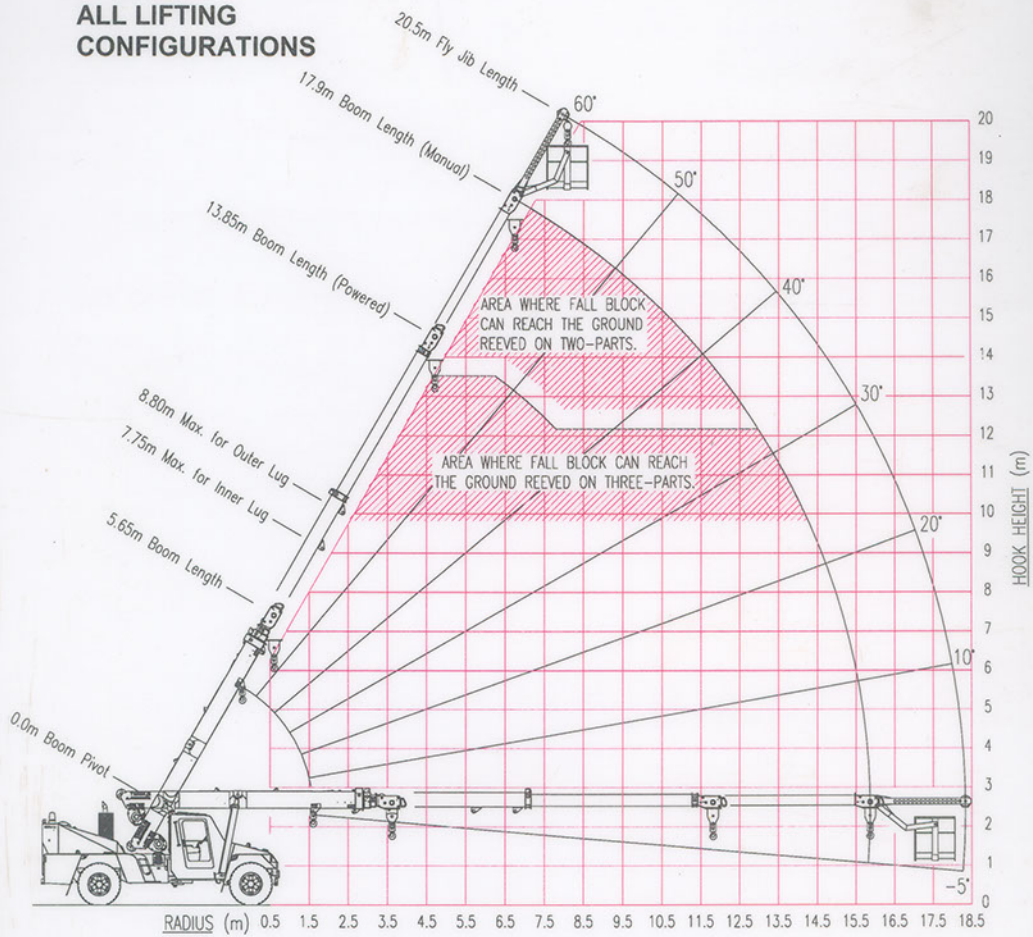
Note:

1. Percentage deration chart is based on 66.6% stability as per AS 1418.5 with the crane on a firm side slope of 5° (8.75% Gradient).
2. The percentage deration is dependent upon the location of the lifting point on the boom.
3. The percentage deration should be applied to the Rated Capacity as read off the Rated Capacity chart for the applicable boom length, Loaded Boom Angle, Load Radius and Articulation angle.

Example (For AT-15 Series II Crane, Rated Capacity manual C1406-):

Lifting condition:-	
Boom Length:	13.0 m
Loaded Boom Angle:	31°
Load Radius:	9.0 m
Articulation Angle:	Greater than 10°
RC (Level ground):	2000 kg (From Load Chart LMI Duty 01, for above lifting conditions)
Percentage Deration:	40 % (From Figure 1: Percentage Deration Chart)
RC (5° Slide Slope)	$= \text{RC (as per Rated Capacity chart)} - \text{Percentage Deration} \times \text{RC (as per Rated Capacity chart)} / 100 \%$ $= 2000 \text{ kg} - 40\% \times 2000 \text{ kg} / 100\%$ $= 1200 \text{ kg}$

RANGE DIAGRAM AT-15 **SHOWING** **ALL LIFTING** **CONFIGURATIONS**



WORKING AREA DIAGRAM

