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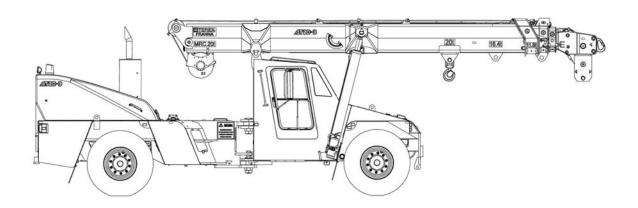
Terex Lifting Australia Pty. Ltd.

# RATED CAPACITY MANUAL MODEL AT-20

**BOOK PART NUMBER 16C1320B** 

# 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.

## 16C1320B RATED CAPACITY MANUAL AT-20

### ALL PAGES LISTED MUST BE INCLUDED IN THIS BOOK.

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# SECTION 1 WARNINGS

**CAUTION NOTE** 

ATTACHMENT NOTICE

**DEFINITIONS** 

**WARNINGS** 

**OPERATION ON SIDE SLOPES** 



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 AND CRANE RATED CAPACITY MANUAL.

COPIES OF OPERATOR'S MANUALS AND CRANE RATED CAPACITY MANUAL MAY BE OBTAINED FROM:





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

## **DEFINITIONS**

**Articulation** – The crane pivots in the middle to allow steering and slewing of the load. Working Areas for the purpose of determining Rated Capacity are less than 10° Articulation, and greater than 10° Articulation, in either direction, from straight ahead. Up to 40° Articulation is possible in either direction. See Working Area diagram

**Deration** – A decrease in the Rated Capacity due to external influences, expressed as a percentage.

**Freely Suspended Load** – Load hanging free with no direct external force applied except by the winch rope.

**Load Radius** – Horizontal distance from the centre of the front wheels forwards to the centre of the winch rope or tackle with load applied. "Radius" on Rated Capacity charts refers to the Load Radius in metres.

**Loaded Boom Angle** – This is given to assist in setting up the crane only. It gives only an approximation of the Load Radius for a specified boom length. No allowance is made for boom or tyre deflection. "Boom Angle" on Rated Capacity charts refers to the Loaded Boom Angle in degrees.

**Load Moment Indicator (LMI) -** A system that indicates, visually and audibly, to the operator when the Rated Capacity is approached and reached.

Rated Capacity (RC) – The total Freely Suspended Load, including the mass 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. The "Articulation (green/amber)" icon on the LMI indicates which zone the crane is in. Green indicates less than 10° Articulation. Amber indicates greater than 10° Articulation.

## **A** DANGER

### SPECIAL PRECAUTIONS 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

- 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.
- Rated Capacities shown are for this machine as originally manufactured by Terex Lifting Australia Pty Ltd. The Rated 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 in Rated 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 documented in the operators, service and parts manuals furnished. If these manuals are missing, obtain replacements through Terex Lifting Australia Pty Ltd or their agents.

### SET-UP

- 4. Reduced crane Rated Capacities for the particular job shall be established, by the operator, 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 Capacity is 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 Rated Capacity of the crane. Refer to the "OPERATION ON SIDE SLOPES" in this manual. No attempt shall be made to drag the load along the ground in any direction.
- 6. Wind forces on the boom, resulting from winds up to 10 m/s (36 km/h), are incorporated in the Rated Capacity. Any additional Side Loading due to wind forces on the load will reduce the Rated Capacity, and must be considered.

## **A** DANGER

- 7. Rated 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.
- 8. Rated Capacities include the mass of hooks, blocks, slings and auxiliary lifting devices. Their mass must be subtracted, from the listed Rated Capacity, to determine the equivalent net load.
- Loaded Boom Angles at specified boom lengths give only an approximation of the Load Radius. The Boom Angle before loading should be greater to account for boom deflection increasing the Load Radius as the load is lifted.

### **OPERATION**

- 10. Read and understand all warnings and instructional notes.
- 11. Do not tip the machine to determine allowable lifting capacities.
- 12. Loads may be lifted from the main boom head on the winch, 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 Rated Capacity chart for the lifting point in use and ensure the LMI is set to the correct duty. Written authorisation from Terex Lifting Australia Pty Ltd is required prior to the use of any attachment not specified in the manual.
- 13. Lifting from more than one lifting point simultaneously is neither intended nor approved.
- 14. 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.
- 15. When either the boom length or Load Radius or both are between values listed, the smallest load shown at either the next larger Load Radius or boom length shall be used, or the interpolated value shown on the LMI may be used.
- 16. 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.
- 17. Rated Capacity of the manual extension is determined by Loaded Boom Angle. The boom may be retracted and extended with the manual set, however, the Rated Capacity does not change from the fully extended position for the given Loaded Boom Angle.
- 18. It is safe to attempt to telescope any load within the limits of the Rated Capacity Manual. The maximum load that may be telescoped is limited by hydraulic pressure, Loaded Boom Angle and powered boom sections lubrication.

## **A** CAUTION

- 19. 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.
- 20. Do not allow the winch rope to unwind fully. Always ensure a minimum of 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 4 or 3 parts of rope.
- 21. Rated Capacity depends on tyre rating, tyre condition and tyre inflation pressure. All tyres must be in good condition and must be inflated to the recommended pressure before attempting a lift.
- 22. Pick & carry operation is permitted through the full Articulation range, however, Rated Capacity is reduced above 10° Articulation. Use the reduced capacities in the chart if entering this Articulation zone during the operation.
- 23. The maximum speed for pick & carry operation is 0.4m/s (1.44km/h). The transfer case shall be set to low range.
- 24. Operation of this crane in excess of the Rated Capacity and disregard of the instructions is hazardous.

## **OPERATION ON SIDE SLOPES**

Mobile Cranes are primarily designed to be used on firm, flat, level ground (to within 1% gradient), according to AS 1418.5, any deviation from this requires that the Rated Capacity shall be reduced accordingly. As per AS 2550.5 – negotiation of slopes by mobile cranes travelling with Freely Suspended Loads should be avoided. The following precautions should be taken when operating on side slopes of up to 5° (8.75% gradient) – **REMEMBER** surface depressions and potholes will create the same effect as a side slope.

- Ensure the tyres are correctly **INFLATED** as per the rated capacity manual.
- Ensure the ground condition is **FIRM** enough to support the axle loads.
- REDUCE the Rated Capacity of the crane by the percentage value for the crane as shown in figure 1 for operating on side slopes up to 5° (8.75% gradient) - REMEMBER the crane's load indicator will NOT automatically derate the Rated Capacity.
- Use the crane's side slope inclinometer as a guide only, it is most accurate when the crane's Articulation is straight ahead without suspending a load. All Articulated chassis cranes will show some degree of side tilt, when Articulated with a load this should not be confused with the ground's side slope.
- Use the **MINIMUM** boom length and Loaded Boom Angle practical to keep the boom tip as close to the ground as possible.
- Keep the load as CLOSE to the ground as possible.
- Use the MINIMUM Articulation angle practical REMEMBER the crane will side tilt and hence the hook will move towards the direction of Articulation whilst steering.
- Keep the load on the UPHILL side of the crane where possible, especially when Articulated – REMEMBER the working Load Radius will increase if the load is suspended in the downhill position.
- Load swing greatly reduces stability REMEMBER to tagline loads to prevent pendulum motion of the load. Travel and crane motions should be applied gently to minimise this effect.

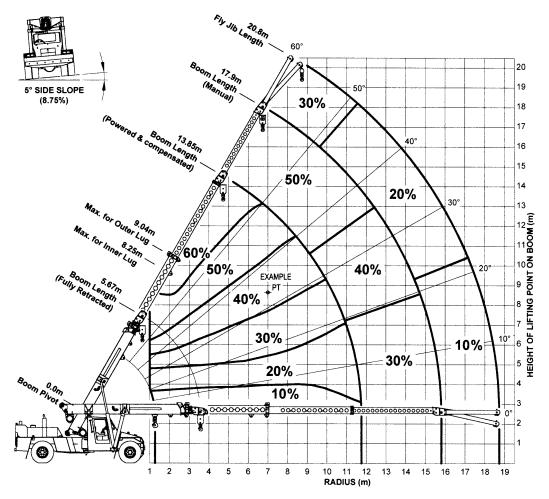


Figure 1: Percentage Deration Chart for AT-20 at 5° Side Slope

## 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 Manual for the applicable boom length, Loaded Boom Angle, Load Radius and Articulation angle.

#### Example (For AT-20 Crane, Rated Capacity Manual 16C1320):

Lifting condition:

Boom Length: 11.0 m Loaded Boom Angle: 34.0° Load Radius: 7.0 m

Articulation Angle: Greater than 10°

RC (Level ground): 3750 kg (From Rated Capacity Manual LMI Duty 01, for

above lifting conditions)

Percentage Deration: 40 % (From Figure 1: Percentage Deration Chart)

RC (5° Slide Slope) = RC (as per Rated Capacity Manual) – Percentage Deration

x RC (as per Rated Capacity Manual) / 100 %

= 3750 kg - 40% x 3750 kg / 100%

= 2250 kg

# SECTION 2 OPERATIONS

**RANGE DIAGRAM AT-20** 

**WORKING AREA DIAGRAM** 

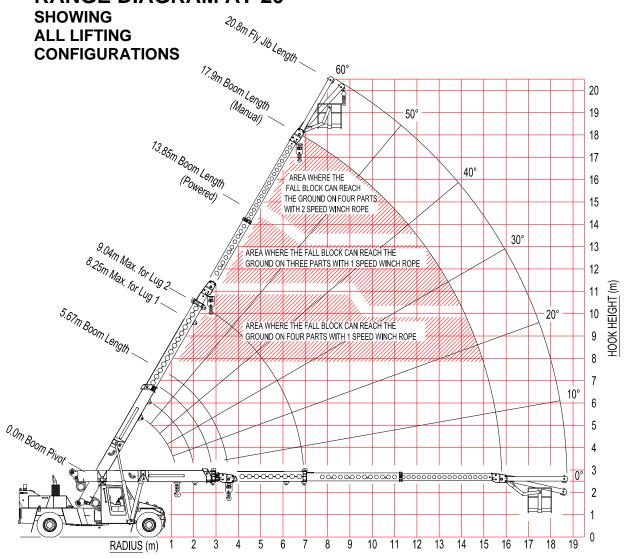
ATTACHMENT MASSES

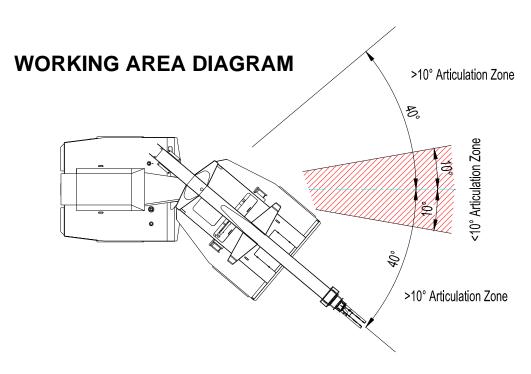
HOOK BLOCK RC

TYRE SPECIFICATIONS

TYRE INFLATION CHART

## **RANGE DIAGRAM AT-20**





## **ATTACHMENT MASSES**

SINGLE PART HOOK BLOCK	PL16M2090	30 kg
TWO/THREE PART HOOK BLOCK	PL16A3010	95 kg
FOUR PART HOOK BLOCK	PL16A3058	125 kg
FOUR PART HOOK BLOCK	PL16A3074	180 kg
20 METRIC TONNE HOOK	PP2190100	15 kg
12 METRIC TONNE SPREADER BAR	PL16A3035	94 kg
15 METRIC TONNE SPREADER BAR	PL15A8023	107 kg

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

## **HOOK BLOCK RC**

Number of Parts of Rope	Maximum Hook Block RC (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

1 Speed Winch - 65m 2 Speed Winch - 100m

## **TYRE SPECIFICATIONS**

Condition	Speed	Load Rating
Pick & Carry	<1.44 km/h	8680 kg per tyre at 120psi (dual fitment)
Highway	90 km/h	3000 kg per tyre at 100psi (dual fitment)

## **TYRE INFLATION CHART**

Position	Construction	Inflation Pressure – psi					
Position	Construction	Pick & Carry	Highway Travel				
Front	12.00 x 20	120	120				
Rear	12.00 x 20	100	100				

## **SECTION 3**

## RATED 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.

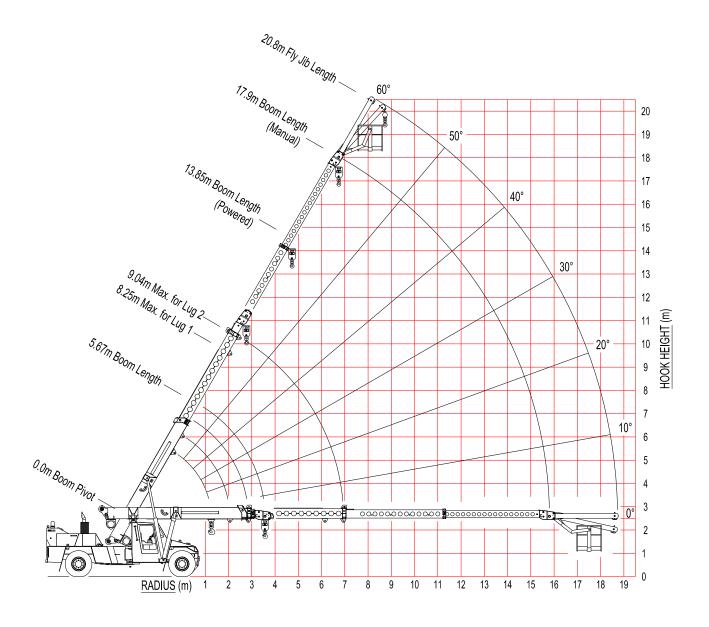
LMI DUTY 11: LIFTING CAPACITY ON OUTER LUG ON FIRST EXT.

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

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

## **RANGE DIAGRAM AT-20**

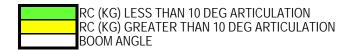
## **SHOWING ALL LIFT CONFIGURATIONS**



Litting on WINCH block to be added to load warning notes before operating crane
warning notes before operating crane

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

	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
	16800	16250	15450															
1.6	12600	12600	12600	12600														
	48	51	54	57														
	16800	16800	16500			14700												
2.0	<u>12600</u>	12600	<u>12600</u>	<u>12600</u>	<u>12600</u>		<u>12600</u>											
	42	46	50	53	56	58	60	42200	42000									-
2.5	12150	13900 12150	12100	12100	12100		12100		13000 12050									$\vdash$
2.5	34	39	44	48	51	54	56	58	60									
	11450	11450	11450	11400	11400	11400	11400	11400		11150	10250							
3.0	9950	9950	9950	9950	9950	9950	9900	9900	9900	9900	9900							
	25	31	37	42	46	49	52	55	57	59	60							
	9650	9650	9650	9650	9650	9650	9650	9650	9650	9650		8150	7500					
3.5	8400	8400	8400	8400	8400	8400	8400	8400	8350	8350	8350	8150	7500					
	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	E000	FCFO	
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 59	60	$\vdash$
			(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
0.0				(4.90)	18	27	33	37	41	44	47	49	51	53	55	56	58	59
				( 1100)	5950	5350	5250	5250	5250	5250	5250	5250	5250	5250	5050	4850	4700	4600
6.0					5100	4600	4550	4550	4550	4500	4500	4500	4500	4500	4500	4500	4500	4500
					(5.40)	(5.90)	17	25	31	35	39	42	45	47	49	51	53	54
							4850	4450	4400	4400	4400	4400	4400	4350	4350	4350	4200	3950
7.0							4200	3800	3750	3750	3750	3750	3750	3750	3750	3750	3750	3750
							(6.40)	(6.90)	16	24	29	34	37	40	43	45	47	48
									4100	3750	3700	3700	3700	3700	3700	3700 3150	3700 3150	3600
8.0									3500 (7.40)	3200 (7.90)	3150 15	3150 23	3150 28	3150 32	3150 36	3150	<u>3150</u> 41	3150 43
									(7.40)	(7.30)	3500	3250	3200	3200	3200	3200	3200	3200
9.0											2950	2750	2700	2700	2700	2700	2700	2700
											(8.40)	(8.90)	15	22	27	31	34	36
													3000	2800	2800	2800	2800	2800
10.0													2550	2400	2350	2350	2350	2350
													(9.40)	(9.90)	14	21	26	29
															2650	2500	2450	2450
11.0															2200	2100	2050	2050
															(10.40)	(10.90)	13	18
44 75																	2350	2250
11.75															1		1950 (44,40)	1850
															l		(11.40)	(11.75)



MANUAL EXT'D							
MAX LENGTH 17.90							
MAX	RC						
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						

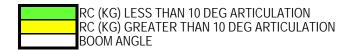
#### NOTE:

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)	RC (KG) GREATER THAN 10 DEG ARTICULATION	RC (KG) LESS THAN 10 DEG ARTICULATION
Loads above bold red line are structural	Read and understand warning notes before operating crane	Mass 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	10000														
1.6	10000	10000	10000															
	51	54	57	60														
	10000	10000				10000												
2.0	10000	10000	10000	10000	10000	10000												
	46 10000	50 10000	53 10000	56 10000	58 10000	10000	10000	10000										
2.5	10000	10000	10000		10000	10000		10000										
2.0	39	44	48	51	54	57	59	60										
	10000	10000	10000		10000	10000	10000	10000	10000	10000								
3.0	10000	10000	10000	10000	10000	10000	9950	9950	9950	9950								
	30	37	42	46	50	52	55	57	59	60								
	9750	9750		9700	9700	9700	9700	9700	9700	9650	8850	7650						
3.5	<u>8500</u>	<u>8500</u>	8450	8450	8450	8450	8450	8400	8400	8400	8400	<u>7650</u>						
	19 <b>8700</b>	30 8400	36 8400	41 8400	45 8400	48 <b>8400</b>	51 8400	53 8350	55 <b>8350</b>	57 <b>8350</b>	59 <b>8100</b>	60 7100	6750	CEOO				
4.0	7550	7300	7300	7300	7300	7300	7300	7250	7250	7250	7250	7100	6750	6500 6500				
4.0	(3.88)	19	29	35	40	43	47	49	52	54	56	57	59	60				
	(0.00)	7550	7400	7400	7350	7350	7350	7350	7350	7350	7350	6650	6300	6100	5850	5700		
4.5		6550	6400	6400	6400	6400	6400	6350	6350	6350	6350	6350	6300	6100	5850	5700		
		(4.40)	19	28	34	38	42	45	48	50	53	54	56	58	59	60		
			6700	6550	6550	6550	6550	6550	6550	6500	6500	6250	5950	5700	5500	5350	5150	5100
5.0			5800	<u>5650</u>	<u>5650</u>	<u>5650</u>	<u>5650</u>	5650	5650	<u>5650</u>	<u>5650</u>	<u>5650</u>	<u>5600</u>	5600	5500	<u>5350</u>	<u>5150</u>	<u>5100</u>
			(4.90)	18 <b>6000</b>	27 5400	33 5300	37 <b>5300</b>	41 5300	44 5300	47 5300	49 <b>5300</b>	51 5300	53 <b>5300</b>	55 5100	56 4900	58 4750	59 <b>4600</b>	59 <b>4550</b>
6.0				5150	4650	4550	4550	4550	4550	4550	4550	4550	4550	4550	4550	4750 4550	4550	4550 4550
0.0				(5.40)	(5.90)	17	25	31	35	39	42	45	47	49	51	53	<del>54</del>	55
				(01.07	(0.00)	4900	4500	4400	4400	4400	4400	4400	4400	4400	4400	4250	4000	3950
7.0						4200	3850	3800	3800	3800	3800	3800	3800	3750	3750	3750	3750	3750
						(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 <b>3500</b>	23 3250	28 3250	32 3250	36 <b>3250</b>	39 <b>3250</b>	41 3250	43 <b>3250</b>	44 3250
9.0										3000	2800	2750	2750	2750	2750	2750	2750	2750
3.0										(8.40)	(8.90)	15	22	27	31	34	37	38
										(01.10)	(0.00)	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 2350	20 2200	22 2200
12.00																1950	1850	1850
12.00			<del> </del>					<del> </del>							1	(11.40)		
														•				= /

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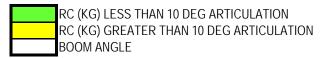


MANUAL EXT'D								
MAX LENGTH 18.20								
MAX	RC							
RADIUS	2400							
6.91	2400							
	60							
	2100							
9.52	2100							
	50							
	1900							
11.78	1900							
	40							
	1800							
13.62	1650							
	30							
	1750							
14.97	1450							
	20							
	1550							
15.81	1350							
	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.

FLYJIB			
MAX LENGTH 16.78			
MAX	RC		
RADIUS	1500		
6.23	1500		
	60		
	1200		
8.62	1200		
	50		
	970		
10.69	970		
	40		
	850		
12.38	850		
	30		
	770		
13.63	770		
	20		
	750		
14.40	750		
	10		
	750		
14.68	750		
	0		



#### 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.



06

MANUAL EXT'D				
MAX LENGTH 20.83				
MAX	RC			
RADIUS	1500			
8.25	1500			
	60			
	1200			
11.22	1200			
	50			
	970			
13.79	970			
	40			
	850			
15.88	850			
	30			
	770			
17.43	770			
	20			
	750			
18.39	750			
	10			
	750			
18.73	750			
	0			

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

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

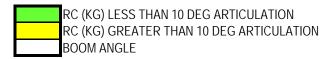
Loads above bold red line are structural

#### 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 and Flyjib installed.

#### Lifting on FLYJIB (12.5 deg offset)

FLYJIB			
MAX LENG	STH 16.74		
MAX	RC		
RADIUS	1500		
6.70	1500		
	60		
	1200		
9.03	1200		
	RC 1500 1500 60 1200		
	970		
11.03	970		
	40		
	850		
12.63	850		
	30		
	770		
13.78	770		
	20		
	750		
14.46	750		
	10		
	750		
14.64	750		
	0		



Mass 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:

16.74m 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)
MANUAL EXTENDED

80

MANUAL EXT'D				
MAX LENGTH 20.79				
MAX	RC			
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			

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

Mass 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:

20.79m 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 and Flyjib installed.



FIXED LUG			
BOOM LE	NGTH 3.36		
MAX	RC		
RADIUS			
	20000		
0.86	20000		
0.00	30		
	20000		
1.09	20000		
	20		
	20000		
1.23	20000		
	10		
	20000		
1.26	20000		
	0		

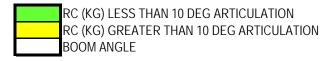
RC (KG) LESS THAN 10 DEG ARTICULATION
RC (KG) GREATER THAN 10 DEG ARTICULATION
BOOM ANGLE OR (RADIUS AT 0 DEG BOOM ANGLE)

	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
									4450
6.0									3700
									11
									4300
6.15									3600
									(6.15)

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

	BOOM LENGTH (m)								
RADIUS	4.95	5.30	5.80	6.30	6.80	7.30	7.80	8.30	9.04
	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)

MANBASKET		
MAX LENG	STH 13.85	
MAX	RC	
RADIUS	275	
6.06	275	
	60	
	275	
8.24	275	
	50	
	275	
10.10	275	
	40	
	275	
11.59	275	
	30	
	275	
12.67	275	
	20	
	275	
13.30	275	
	10	
	275	
13.46	275	
	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.



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MANUAL EXT'N				
MAX LENG	MAX LENGTH 17.90			
MAX	RC			
RADIUS	275			
8.09	275			
	60			
	275			
10.85	275			
	50			
	275			
13.21	275			
	40			
	275			
15.10	275			
	30			
	275			
16.46	275			
	20			
	275			
17.29	225			
	10			
	275			
17.51	205			
	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:

17.90m 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 and Manbasket installed.



## AFTERMARKET DEPARTMENT KEY CONTACTS LIST

## National Technical Support Contact 24/7

PH: 1800 837 395 (1800TEREXL)

## **Aftermarket Manager**

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## **Customer Service Manager**

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## Please have the following information available before calling:

- ✓ Company name, contact name, phone number and e-mail
- ✓ Crane model and serial number
- ✓ Crane hours and kilometers

A FULL LIST OF CONTACTS IS AVAILABLE ON REQUEST PLEASE CALL YOUR NEAREST BRANCH OFFICE