



## CRANE SPECIFICATION

# 25T TIDD PC25

### COMPREHENSIVE LIFTING SOLUTIONS

We look forward to providing a full heavy lift engineering and crane solution for your next project. Our heavy lift engineers and on site personnel are experienced in managing and organising highly de-manding lift requirements.

Contact us to discuss your lifting requirements and a free quote.

#### BRISBANE (HQ)

07 3907 5800  
37 Paringa Rd, Murarrie, QLD, 4172

#### BALLINA

02 6686 7748  
5 Convair Ave, Ballina, NSW, 2478

#### GLADSTONE

07 4829 5219  
7 Morgan St, Gladstone, QLD, 4680

#### ROMA

07 4622 5522  
8 Wormwell Drive, Roma QLD 4455

#### TOWNSVILLE

07 4779 4088  
16 Mackley St, Garbutt QLD 4814

#### RICHLANDS

07 3907 5800  
462 Boundary Rd, Richlands QLD 4077

#### ROCKHAMPTON

07 4939 1095  
39-42 Johnson St, Park Hurst, QLD, 4702

#### BILOELA

07 4939 1095  
67 Dawson Hwy, Biloela QLD 4715

#### SUNSHINE COAST

0409 595 618  
562 Maroochydore Rd, Kunda Park, QLD, 4556

#### MACKAY

07 4952 6998  
135 Diesel Drive, Paget QLD 4740





# TIDD PC25 RATED CAPACITY MANUAL

PC - D28



**WARNING**

**Do not operate this crane without reading and understanding the information contained in this document.**

## PC - D28

### Contents

#### **1. Warnings.**

Definitions

Operations on side slopes

#### **2. Operations.**

Range diagram

Working area diagram

#### **3. Rated capacity.**

LC01 Main hoist manual extension retracted

LC02 Rhino hook with manual extension retracted

LC03 Main hoist manual extension extended

LC04 Rhino hook with manual extension extended

LC05 Tele boom 1 with 20T lifting lug

LC06 Base boom 1 with 25T lifting lug

LC07 Side Slope Deration 5°

LC08 Man basket manual retracted

LC09 Man basket manual extended



## DANGER

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

**DO NOT OPERATE THIS MACHINE UNLESS YOU HAVE READ AND  
UNDERSTOOD THE OPERATING AND RATED CAPACITY MANUAL**

**TIDD**  
**CRANE ///**



## CAUTION

**WRITTEN AUTHORISATION IS REQUIRED FROM THE  
MANUFACTURER PRIOR TO THE USE OF ANY  
ATTACHMENT NOT SPECIFIED IN THE MANUAL**

**Articulation** – The crane pivots in the middle to allow steering and slewing of a lifted load. Working areas for the purpose of rated capacities are less than 10° of articulation and greater than 10° of articulation, in either direction from straight ahead. Up to 42° articulation is possible in either direction - see the working area diagram.

**Deration** – External influences that result in a decrease to the rated capacity, are expressed as a factor to multiply the rated capacity (RC) by. E.g.  $RC \times \text{Factor} = \text{Derated capacity}$ .

**Freely suspended load** – A load hanging free with no forces other than the connection to the hook.

**Load Radius** – Is the forward horizontal distance between the centre of the front wheels to the vertical centre of the winch rope with a load applied. 'Radius' on the rated capacity charts refers to the load radius in meters.

**Loaded boom angle** – This is for reference to set up the crane only. It gives an approximation of the load radius for a given boom length, with no allowance given for deflection of the boom or tyres. 'Boom angle' on rated capacity charts refers to the loaded boom angle.

**Load moment indicator (LMI)** – An Operator's visual and audible indicator for when the rated capacity is approached and reached.

**Rated capacity (RC)** – The total load including the load equipment freely suspended in ideal conditions that the crane can safely lift at a given boom length and load radius.

**Side load** – Any external, horizontal force applied to the boom or load.

**Work areas** – The work area given in the working range diagram is taken from the centre pivot. The LMI display indicates the current steer angle and will automatically update the allowable load at 10°.



**DANGER**

#### **CRUSH HAZARD**

**There is a crush hazard between the front and rear sections of the crane when articulating. Never stand in the pivot area with the crane engine is running or the emergency pump is operating. Always remove the key, tag and lock out isolator switches located at the right hand side before carrying out any tasks within the pivot area.**

#### **General**

1. This machine has been designed tested to standards AS1418.1 and 1418.5 for pick and carry operation on tyres.
2. The rated capacities given are for this crane as standard from factory and when all directions are strictly followed in this document. Any deviation from the intended use given in this document or modification of the crane from standard could result in the rated capacity being reduced.
3. This crane can be hazardous if operated or maintained in a manner outside of the parameters set out in the operating, service and parts manuals. If any of these manuals are missing contact your local authorised TIDD agent for replacements.

#### **Set up**

4. Reduced rated capacities for a task shall be dictated by the operator with allowance for adverse conditions such as but not limited to:
  - The supporting surface
  - Load pendulum actions
  - Jerking
  - Sudden stopping of the load
  - Weather
  - Dual lifting
  - Electrical wires
  - Hazardous surroundings

- Experience of personnel

5. Rated capacities are based on perfect scenarios with flat, level and firm ground (max of 1% slope/0.6°). Lifting or travelling with a load on uneven or soft ground can be hazardous and reduces the rated capacity of the crane. Refer to '*Operation on cross slopes*' in this document.

**Never attempt to drag the load.**

6. Wind forces of up to 10 m/s or 36 km/h have been factored into the rated capacity. Any additional wind force should be taken into account and allowance given to the rated capacity.

7. The rated capacities given in the charts above the red line are based on the structural and hydraulic competence of the machine. **Exceeding the rated capacity of the lift chart above red structural line will lead to damage of the crane.** The Capacities given below the red line take into account the cranes stability.

8. The rated capacities given include the mass of the hooks, slings, blocks and auxiliary lifting devices. The mass of these components **must be subtracted** from the capacity given on the chart to give the net load weight.

9. Loaded boom angles at specified lengths are an approximation only of the radius - The boom angle should be increased to allow for 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 can be lifted from;

- Main boom head
- Rhino hook
- Fixed 25T lug on base boom
- 20T lug on tele boom 1

A man basket may also be attached to the head of the boom. Always use the correct rated capacity chart for the lifting point being used and ensure the LMI is set to the correct duty. Any attachment not specified in the manual needs to be authorised in writing by TIDD prior to use.

13. Lifting from more than one point simultaneously is prohibited.



14. Personnel should never be handled via the boom except in an approved TIDD man basket. The basket should be fitted according to TIDD attachment specifications unless authorised to do otherwise.

15. When the boom length or radius are between given values use the lower rated capacity. The LMI interpolated value may also be taken.

16. Side loading the machine can result in structural failure or tip over. Side loads can be generated by;

- Lifting when not level
- Sudden acceleration or deceleration when articulating a load
- Dragging or pushing a load
- Wind forces on the load and boom structure.

17. The manual extension rated capacity will vary depending on the loaded boom angle. The boom may be retracted and extended with the manual set. The rated capacity does not change for the fully extended position for any given loaded boom angle.

18. It is safe and acceptable to attempt to telescope any load within the limits of the rated capacity manual. The maximum load that may be telescoped is limited by;

- Loaded boom angle
- Hydraulic pressure
- Lubrication of the boom sections
- Boom length



#### CAUTION

19. The winch rope is fully compensated by the boom with exception of setting the manual extension. Check the operators manual for setting the extension, once set the compensation is fully functional.

20. Do not allow the winch to fully unwind, always ensure a minimum of 3 coils of rope remain on the winch drum. The winch is fitted with a 3 wrap indicator.

21. Rated capacity is dictated by tyre condition, rating and pressure. All the tyres must be in good condition, inflated to the correct pressure and of the correct rating before attempting a lift.

22. Pick and carry is available through full articulation, the rating decreases when above 10° articulation. Use reduced capabilities in the chart if going above 10° articulation.

23. The maximum speed for pick and carry operation is 1.5 km/h

24. Using this crane outside of the rated capacity or given instructions is hazardous.

Mobile cranes are designed to be used primarily on firm, flat and level ground (within 1° gradient) according to AS 1418.5. Any deviation from this requires an adjustment to the rated capacity. Freely suspended loads should be avoided above this gradient (AS 2550.5). The following precautions should be adhered to when negotiating side slopes up to 5° (8.75% gradient).

Surface depressions and potholes will create the same effect as a side slope.

- Ensure the tyres are **inflated** to 130psi.
- Ensure the ground condition is **hard** enough to support the axle loads.
- Reduce the rated capacity of the crane by the deration factor for the crane as shown in the operating on cross slopes up to 5° (8.75% gradient) *fig.1 page 11*. The crane side load indicator will not automatically adjust the rated capacity.
- Use the crane slope inclinometer as a guide only, it is more accurate in a straight ahead position unloaded. The crane will show incline if articulated - this could easily be confused with the grounds slope.
- Use the minimum boom length and boom angle to keep the boom tip as close as possible to the ground.
- Keep the load as close as possible to the ground.
- Use the minimum of articulation as possible, the crane when steered will also move the hook equally as much.
- If possible keep the load uphill of the crane especially when articulated. The working radius will increase with a suspended downhill positioned load.
- Load swing will give greater instability, where possible tag line loads to prevent the pendulum type action of the load. Movements of the crane should be as smooth as possible.

## **Rated capacity deration on 5° cross slope**

- The deration factor is a function of boom angle
- From the Rated Capacity Manual or LMI. The rated capacity of the lift you are undertaking can be read.
- From Fig 1. Range Diagram the deration factor can be found.
- Multiply the Rated Capacity by deration factor to calculate the derated capacity

- Example load case: (From PC25-LC01 load chart)
- Boom angle = 53°
- Boom length = 10.0m
- Radius = 3.5m
- Rated Capacity = 9520kg 0<10° articulation

**9520 kg x 0.4 = 3808 kg Derated Capacity**

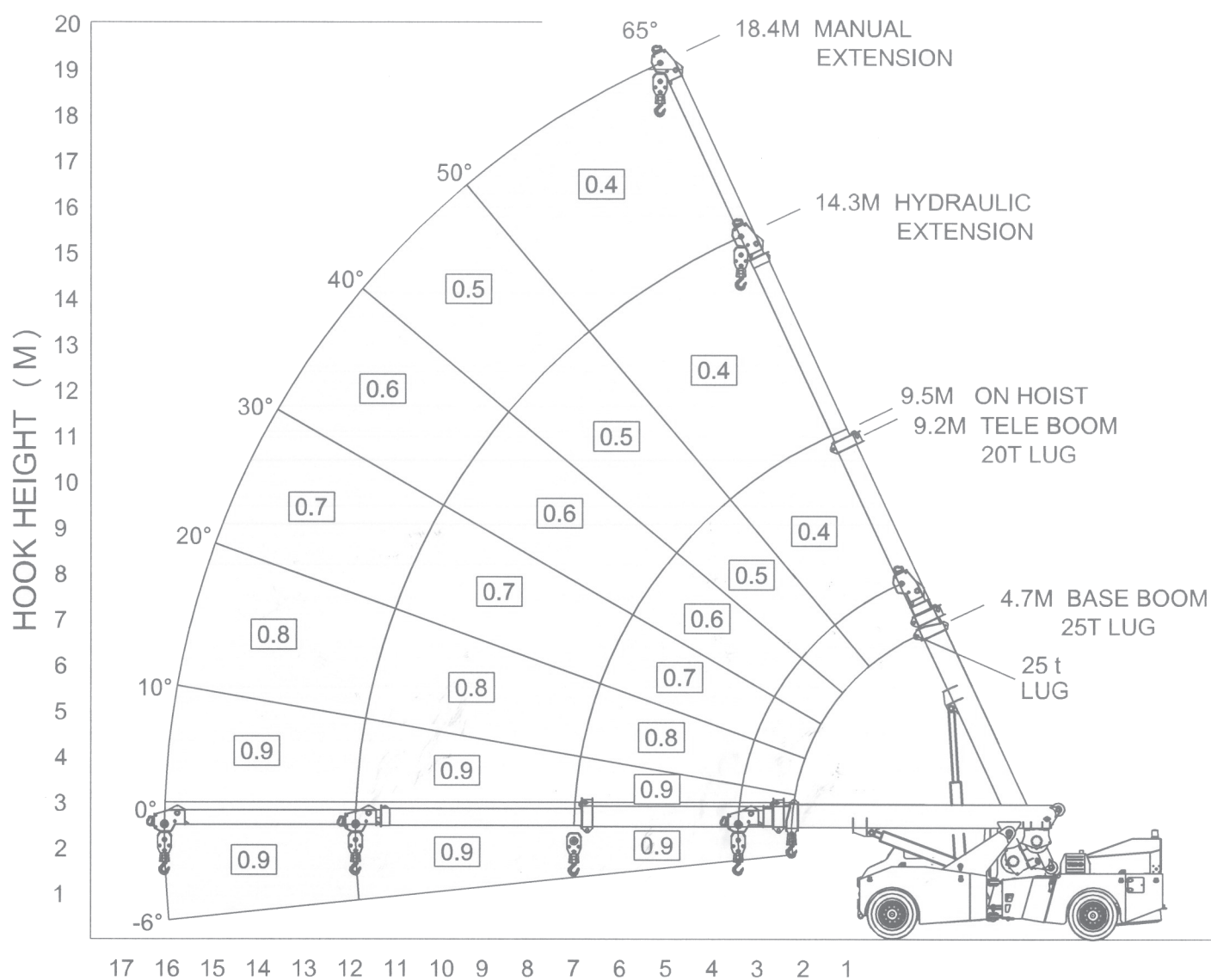


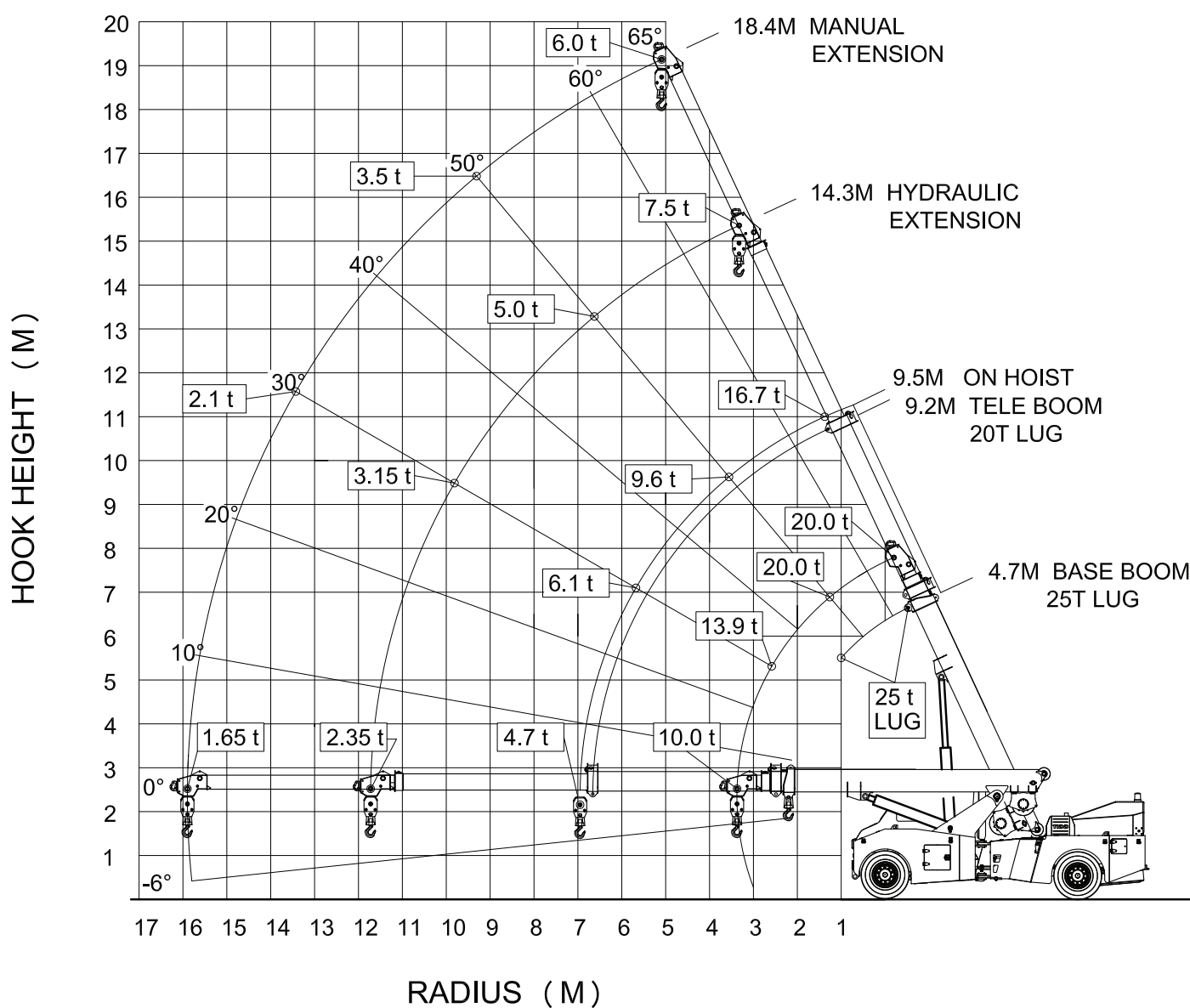
Fig. 1 RADIUS (M)

## Range diagram

### RANGE DIAGRAM PC25

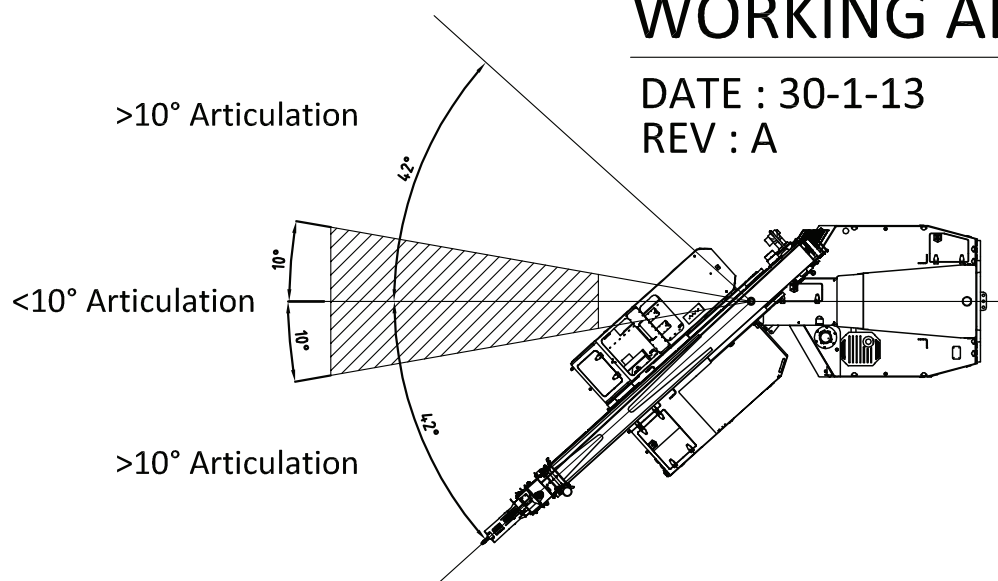
DATE : 30-1-13

REV : A



## WORKING AREA DIAGRAM

DATE : 30-1-13  
REV : A



ATTACHMENT MASSES		
	PART #	MASS
4 PART 20T HOOK BLOCK	PC22-517	135 KG
19 METRIC TONNE HOOK	PC-8-175N-0-15	17 KG
10 TONNE RHINO HOOK	PC22-519	18 KG
15 METRIC TONNE SPREADER BAR	PC22-559	110 KG

The weight specifications given in the table are for TIDD standard equipment.

WIRE ROPE	
18.4T	20.0T
14mm Dyform 34LR RH4LL 2160 N/mm2	14mm Dyform 34LR RH4LL 2160 N/mm2

TYRE SPECIFICATIONS		
USE	SPEED	LOAD RATING
PICK & CARRY	0-2 Km/h	8695 KG
STATIC	0 KM/H	9250 KG
HIGHWAY	80 Km/h	3000KG

TYRE INFLATION CHART			
POSITION	SIZE	INFLATION PRESSURE (PSI)	
		PICK & CARRY	HIGHWAY TRAVEL
FRONT	12.00 X 20	130	130
REAR	12.00 X 20	130	130

### 3. RATED CAPACITY.

---

RATED CAPACITY  
PC - D28

#### **LMI DUTY**

**LC01 MAIN HOIST MANUAL EXTENSION RETRACTED**

**LC02 RHINO HOOK WITH MANUAL EXTENSION RETRACTED**

**LC03 MAIN HOIST MANUAL EXTENSION EXTENDED**

**LC04 RHINO HOOK WITH MANUAL EXTENSION EXTENDED**

**LC05 TELE BOOM 1 WITH 20T LIFTING LUG**

**LC06 BASE BOOM 1 WITH 25T LIFTING LUG**

**LC07 SIDE SLOPE DERATION 5°**

**LC08 MAN BASKET MANUAL RETRACTED**

**LC09 MAN BASKET MANUAL EXTENDED**



# LC01 MAIN HOIST MANUAL EXTENSION RETRACTED

## LMI DUTY 01

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY 66.6% OF TIPPING LOAD
- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT ADVANCE WARNING
- LIFTING IS TO BE VERTICAL ONLY
- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND BEFORE HOISTING
- STANDARD HOIST ROPE SPECIFICATION UP TO 18400KG (4 PARTS) 14MM 34 X 7 GRADE 1960 N/mm2 NON ROTATING MIN BREAKING FORCE 18400KG
- OPTIONAL HOIST ROPE SPECIFICATION UP TO 20000KG (4 PARTS) 14MM 34 X 7 GRADE 2160 N/mm2 NON ROTATING MIN BREAKING FORCE 20000KG
- TYRE SPECIFICATION FRONT AND REAR  
SIZE 12.00 R20  
CREEP LOAD RATING 8695KG @ 0.2 KPH  
STATIC LOAD RATING 9250KG @ 0 KPH  
TYRE PRESSURE 130 PSI
- MASS OF SLINGS AND HOOK BLOCK TO BE ADDED
- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H
- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING
- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL
- LOADS ABOVE THE BOLD RED LINE ARE LIMITED STRUCTURALLY
- LOADS BELOW THE BOLD RED LINE ARE LIMITED BY STABILITY

Rated capacity (kg) for <10° articulation  
Rated capacity (kg) for >10° articulation  
Boom angle in degrees

REV: C  
8/07/2013

PC25 MOBILE CRANE: MAIN HOIST MANUAL RETRACTED **PC25-LC01**

RADIUS	BOOM LENGTH (M)															
	5.9	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	14.3
1.0	20000	20000	20000	20000												
	18400	18400	18400	18400												
1.5	53	57	60	62												
	20000	20000	20000	20000												
	18400	18400	18400	18400												
2.0	47	51	55	57	60	62										
	17200	17130	17060	16990	16920	16850	16780	16710								
	15480	15420	15350	15290	15220	15150	15080	15010								
2.5	40	46	49	53	55	58	60	61								
	13900	13870	13840	13800	13770	13740	13710	13670	13640	13610						
	11820	11790	11760	11730	11710	11680	11650	11620	11590	11560						
3.0	32	39	44	48	51	54	56	58	60	61						
	11450	11400	11360	11310	11270	11220	11180	11130	11080	11040	10990	10950	10900			
	9730	9690	9650	9620	9580	9540	9500	9460	9420	9380	9340	9300	9260	9220	9180	9140
3.5	20	31	38	42	46	49	52	54	56	58	60	61	62			
	10000	9940	9880	9820	9760	9700	9640	9580	9520	9460	9400	9340	9280	9220	9160	9100
	8500	8450	8400	8350	8300	8250	8190	8140	8090	8040	7990	7940	7890	7840	7790	7740
4.0	0	21	30	36	41	45	48	50	53	55	57	58	60	61	62	63
	8800	8720	8630	8540	8450	8360	8270	8180	8090	8000	7910	7820	7730	7640	7550	7500
	7480	7410	7330	7260	7190	7120	7050	6980	6910	6840	6770	6700	6630	6560	6490	6420
4.5	0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61
	7610	7550	7490	7430	7370	7310	7250	7190	7130	7070	7010	6950	6890	6830	6770	6710
	6470	6420	6370	6320	6270	6220	6170	6120	6070	6020	5970	5920	5870	5820	5770	5710
5.0	0	0	0	0	19	27	33	37	41	44	47	49	51	53	54	56
	6920	6860	6800	6740	6680	6620	6560	6500	6440	6380	6320	6260	6200	6140	6080	6020
	5880	5830	5780	5730	5680	5630	5580	5530	5480	5430	5370	5320	5260	5200	5140	5080
6.0	0	0	0	0	0	18	26	31	35	39	42	45	47	49	51	53
	5650	5600	5550	5500	5450	5400	5350	5300	5250	5200	5150	5100	5050	5000	4950	4900
	4800	4750	4700	4650	4600	4550	4500	4450	4400	4350	4300	4250	4200	4150	4100	4050
7.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4700	4680	4660	4640	4620	4600	4580	4560	4540	4520	4500	4480	4460	4440	4420	4400
	4000	3980	3960	3940	3920	3900	3880	3860	3840	3820	3800	3780	3760	3740	3720	3700
8.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3980	3970	3960	3950	3940	3930	3920	3910	3900	3890	3880	3870	3860	3850	3840	3830
	3380	3370	3360	3350	3340	3330	3320	3310	3300	3290	3280	3270	3260	3250	3240	3230
9.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3380	3370	3360	3350	3340	3330	3320	3310	3300	3290	3280	3270	3260	3250	3240	3230
10.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3380	3370	3360	3350	3340	3330	3320	3310	3300	3290	3280	3270	3260	3250	3240	3230
11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3380	3370	3360	3350	3340	3330	3320	3310	3300	3290	3280	3270	3260	3250	3240	3230
11.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

# LC02 RHINO HOOK WITH MANUAL EXTENSION RETRACTED

## LMI DUTY 02

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY  
66.6% OF TIPPING LOAD

- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE  
CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING  
WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT  
ADVANCE WARNING

- LIFTING IS TO BE VERTICAL ONLY

- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND  
BEFORE HOISTING

- STANDARD HOIST ROPE SPECIFICATION UP TO 18400KG (4 PARTS)  
14MM 34 X 7 GRADE 1960 N/mm2 NON ROTATING  
MIN BREAKING FORCE 18400KG

- OPTIONAL HOIST ROPE SPECIFICATION UP TO 20000KG (4 PARTS)  
14MM 34 X 7 GRADE 2160 N/mm2 NON ROTATING  
MIN BREAKING FORCE 20000KG

- TYRE SPECIFICATION FRONT AND REAR  
SIZE 12.00 R20  
CREEP LOAD RATING 8695KG @ 0.2 KPH  
STATIC LOAD RATING 9250KG @ 0 KPH  
TYRE PRESSURE 130 PSI

- MASS OF SLINGS AND HOOK BLOCK TO BE ADDED

- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H

- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING

- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL

- LOADS ABOVE THE BOLD RED LINE ARE LIMITED STRUCTURALLY

- LOADS BELOW THE BOLD RED LINE ARE LIMITED BY STABILITY

**Rated capacity (kg) for <10° articulation**  
**Rated capacity (kg) for >10° articulation**  
**Boom angle in degrees**

REV: C  
8/07/2013

PC25 MOBILE CRANE: RHINO HOOK MANUAL RETRACTED PC25-LC02

RADIUS	5.9	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.3
1.0	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
1.5	53	57	60	62	64	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
2.0	47	51	55	57	60	62	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000
2.5	40	46	49	53	55	58	60	61	10000	10000	10000	10000	10000	10000	10000	10000	10000
3.0	32	39	44	48	51	54	56	58	60	61	10000	10000	10000	10000	10000	10000	10000
3.5	20	31	38	42	46	49	52	54	56	58	60	61	62	63	64	65	66
4.0	0	21	30	36	41	45	48	50	53	55	57	58	60	61	62	63	64
4.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
5.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
5.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
6.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
6.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
7.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
7.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
8.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
8.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
9.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
9.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
10.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
10.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
11.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
11.5	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63
12.0	0	21	29	35	40	43	46	49	51	53	55	57	58	60	61	62	63

## LC03 MAIN HOIST MANUAL EXTENSION EXTENDED

PC25 MOBILE CRANE: MAIN HOIST  
MANUAL EXTENDED **PC25-LC03**

LMI DUTY **03**

RADIUS FROM FRONT AXLE (M)	BOOM LENGTH 18.45M
5.1	6000
	6000
	65
6.0	6000
	5700
	62
7.0	4900
	4410
	59
8.0	4090
	3470
	55
9.0	3510
	2980
	51
10.0	3110
	2640
	47
11.0	2710
	2300
	43
12.0	2390
	2030
	38
13.0	2110
	1790
	33
14.0	1930
	1640
	26
15.0	1760
	1500
	18
15.9	1650
	1400
	0

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY 66.6% OF TIPPING LOAD
- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT ADVANCE WARNING
- LIFTING IS TO BE VERTICAL ONLY
- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND BEFORE HOISTING
- STANDARD HOIST ROPE SPECIFICATION UP TO 18400KG (4 PARTS) 14MM 34 X 7 GRADE 1960 N/mm2 NON ROTATING MIN BREAKING FORCE 18400KG
- OPTIONAL HOIST ROPE SPECIFICATION UP TO 20000KG (4 PARTS) 14MM 34 X 7 GRADE 2160 N/mm2 NON ROTATING MIN BREAKING FORCE 20000KG
- TYRE SPECIFICATION FRONT AND REAR SIZE 12.00 R20 CREEP LOAD RATING 8695KG @ 0-2 KPH STATIC LOAD RATING 9250KG @ 0 KPH TYRE PRESSURE 130 PSI
- MASS OF SLINGS AND HOOK BLOCK TO BE ADDED
- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H
- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING
- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL
- LOADS ABOVE THE BOLD RED LINE ARE LIMITED STRUCTURALLY
- LOADS BELOW THE BOLD RED LINE ARE LIMITED BY STABILITY
- WHEN IN THE STRUCTURAL REGION, DETERMINED LOAD FOR MANUAL EXTENSIONS ARE BASED ON LUFFING ANGLE, NOT RADIUS
- WHEN IN THE STABILITY REGION, DETERMINED LOADS FOR MANUAL EXTENSION ARE BASED ON LOAD RADIUS, NOT LUFFING ANGLE

	Rated capacity (kg) for <10° articulation
	Rated capacity (kg) for >10° articulation
	Boom angle in degrees

REV : C  
8/07/2013

## LC04 RHINO HOOK WITH MANUAL EXTENSION EXTENDED

PC25 MOBILE CRANE: RHINO HOOK  
MANUAL EXTENDED **PC25-LC04**

LMI DUTY **04**

RADIUS FROM FRONT AXLE (M)	BOOM LENGTH 18.77M
5.2	6000
	6000
	65
6.0	6000
	5700
	63
7.0	4900
	4410
	59
8.0	4090
	3470
	56
9.0	3510
	2980
	52
10.0	3110
	2640
	48
11.0	2710
	2300
	44
12.0	2390
	2030
	39
13.0	2110
	1790
	34
14.0	1930
	1640
	28
15.0	1760
	1500
	21
16.0	1630
	1390
	9
16.2	1610
	1370
	0

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY 66.6% OF TIPPING LOAD
- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT ADVANCE WARNING
- LIFTING IS TO BE VERTICAL ONLY
- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND BEFORE HOISTING
- STANDARD HOIST ROPE SPECIFICATION UP TO 18400KG (4 PARTS) 14MM 34 X 7 GRADE 1960 N/mm2 NON ROTATING MIN BREAKING FORCE 18400KG
- OPTIONAL HOIST ROPE SPECIFICATION UP TO 20000KG (4 PARTS) 14MM 34 X 7 GRADE 2160 N/mm2 NON ROTATING MIN BREAKING FORCE 20000KG
- TYRE SPECIFICATION FRONT AND REAR SIZE 12.00 R20 CREEP LOAD RATING 8695KG @ 0-2 KPH STATIC LOAD RATING 9250KG @ 0 KPH TYRE PRESSURE 130 PSI
- MASS OF SLINGS AND HOOK BLOCK TO BE ADDED
- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H
- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING
- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL
- LOADS ABOVE THE BOLD RED LINE ARE LIMITED STRUCTURALLY
- LOADS BELOW THE BOLD RED LINE ARE LIMITED BY STABILITY
- WHEN IN THE STRUCTURAL REGION, DETERMINED LOAD FOR MANUAL EXTENSIONS ARE BASED ON LUFFING ANGLE, NOT RADIUS
- WHEN IN THE STABILITY REGION, DETERMINED LOADS FOR MANUAL EXTENSION ARE BASED ON LOAD RADIUS, NOT LUFFING ANGLE

	Rated capacity (kg) for <10° articulation
	Rated capacity (kg) for >10° articulation
	Boom angle in degrees

REV : C  
8/07/2013

# LC05 TELE BOOM 1 WITH 20T LIFTING LUG

## LMI DUTY 05

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY
- 66.6% OF TIPPING LOAD
- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT ADVANCE WARNING
- LIFTING IS TO BE VERTICAL ONLY
- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND BEFORE HOISTING
- STANDARD HOIST ROPE SPECIFICATION UP TO 18400KG (4 PARTS) 14MM 34 X 7 GRADE 1960 N/mm2 NON ROTATING
- MIN BREAKING FORCE 18400KG
- OPTIONAL HOIST ROPE SPECIFICATION UP TO 20000KG (4 PARTS) 14MM 34 X 7 GRADE 2160 N/mm2 NON ROTATING
- MIN BREAKING FORCE 20000KG
- TYRE SPECIFICATION FRONT AND REAR SIZE 12.00 R20
- CREEP LOAD RATING 8695KG @ 0.2 KPH
- STATIC LOAD RATING 9250KG @ 0 KPH
- TYRE PRESSURE 130 PSI
- MASS OF SLINGS AND HOOK BLOCK TO BE ADDED
- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H
- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING
- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL
- LOADS ABOVE THE BOLD RED LINE ARE LIMITED STRUCTURALLY
- LOADS BELOW THE BOLD RED LINE ARE LIMITED BY STABILITY

REV : C  
8/07/2013

Rated capacity (kg) for <10° articulation  
Rated capacity (kg) for >10° articulation  
Boom angle in degrees

PC25 MOBILE CRANE: TELE BOOM 1 - 20T LIFTING LUG PC25-LC05										
BOOM LENGTH LUG LENGTH	5.9	6.9	7.9	8.9	9.9	10.9	11.9	12.9	13.9	14.3
RADIUS 1.0	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.2
	20000	20000	20000	19800	19800	18300	15100			
	19000	19000	19000	18800	18800	17300	14300			
1.5	45	50	54	57	60	62	64			
	20000	20000	20000	17500	17500	15500	12800	12700	11100	11100
	18000	18000	18000	16600	16600	14700	12100	12000	10500	10500
2.0	36	43	48	51	55	57	60	62	63	64
	16700	16400	16100	15800	15600	13700	12800	10800	9400	9400
	14100	13900	13700	15000	14800	13000	12100	10200	8900	8900
2.5	25	34	41	46	49	53	55	58	60	60
	13400	13400	13400	13400	13400	12300	11300	9500	8300	8300
	11300	11300	11300	12000	12000	11600	10700	9000	78000	7800
3.0	0	23	33	39	44	48	51	54	56	57
		11000	11000	11000	11000	11000	10100	8500	8200	7900
		9300	9300	9300	9300	10400	9500	8000	7700	7500
3.5		0	22	31	38	42	46	49	52	53
			9200	9200	9200	9200	9200	7800	6800	7400
			7800	7800	7800	8200	8700	7400	6400	7000
4.0			0	21	30	36	41	45	48	49
				7800	7800	7800	7000	7200	6800	6800
				6600	6600	6600	7000	6800	6400	6400
4.5				0	21	29	35	40	43	45
					6800	6800	6800	6800	6600	6400
					5700	5700	5700	6100	6200	6000
5.0					0	20	28	34	38	40
						6000	6000	6000	6000	6000
						5100	5100	5100	5700	5700
5.5						0	19	27	33	35
							5300	5300	5300	5300
							4500	4500	4700	5000
6.0							0	19	27	29
								4700	4700	4700
								3900	3900	4200
6.5								0	18	22
									4300	4300
									3600	3600
7.0									0	11
										4100
										3400
										0

## LC06 BASE BOOM 1 WITH 25T LIFTING LUG

PC25 MOBILE CRANE: BASE BOOM  
- 25T LIFTING LUG **PC25-LC06**

LMI DUTY **06**

LUG LENGTH (M)	4.748
RADIUS (M) 1.0	25000
	20800
1.5	42
	18000
2.0	15000
	31
2.2	16000
	13300
2.2	17
	15100
2.2	12500
	0

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY 66.6% OF TIPPING LOAD
- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT ADVANCE WARNING
- LIFTING IS TO BE VERTICAL ONLY
- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND BEFORE HOISTING
- STANDARD HOIST ROPE SPECIFICATION UP TO 18400KG (4 PARTS) 14MM 34 X 7 GRADE 1960 N/mm2 NON ROTATING MIN BREAKING FORCE 18400KG
- OPTIONAL HOIST ROPE SPECIFICATION UP TO 20000KG (4 PARTS) 14MM 34 X 7 GRADE 2160 N/mm2 NON ROTATING MIN BREAKING FORCE 20000KG
- TYRE SPECIFICATION FRONT AND REAR SIZE 12.00 R20 CREEP LOAD RATING 8695KG @ 0-2 KPH STATIC LOAD RATING 9250KG @ 0 KPH TYRE PRESSURE 130 PSI
- MASS OF SLINGS AND HOOK BLOCK TO BE ADDED
- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H
- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING
- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL
- LOADS ABOVE THE BOLD RED LINE ARE LIMITED STRUCTURALLY
- LOADS BELOW THE BOLD RED LINE ARE LIMITED BY STABILITY

	Rated capacity (kg) for <10° articulation
	Rated capacity (kg) for >10° articulation
	Boom angle in degrees

REV : C  
8/07/2013

## LC07 DERATION 5°

### PC25 MOBILE CRANE: DERATION 5° SIDE SLOPE **PC25-LC07**

#### SIDE SLOPE DERATION @ 5° PC25

DATE : 31/5/13  
REV : A

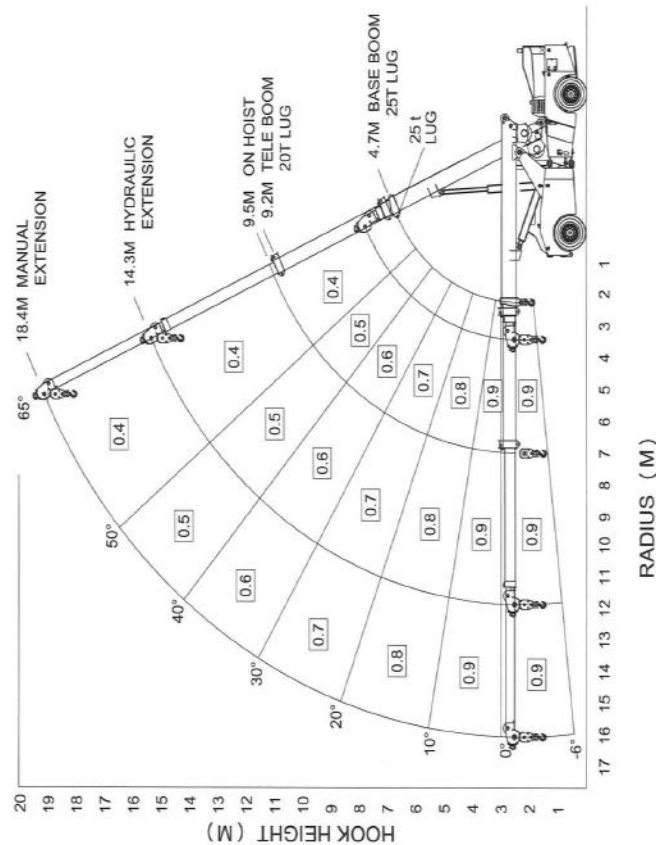


Fig 1. Deration Range Diagram

#### CRANE USAGE ON SIDE SLOPES

A reduction in rated capacity is required when working on side slopes greater than 0.57° (1% gradient) AS1418.5

Use this chart and information to calculate the Derated capacity of the crane on a 5° side slope (8.75% gradient)

#### RATED CAPACITY DERATION ON 5° SIDE SLOPE

- The deration factor is a function of boom angle
- From the Rated Capacity Manual or LMI the rated capacity of the lift you are undertaking can be read.
- From Fig 1. Range Diagram the deration factor can be found.
- Multiply the Rated Capacity by deration factor to calculate the new Derated Capacity for working on a side slope.

- Example load case: (From PC25-LC01 load chart)

Boom angle = 53°

Boom length = 10.0m

Radius = 3.5m

Rated Capacity = 9520kg 0<10° articulation

**9520 kg x 0.4 = 3808 kg Derated Capacity**

#### SAFETY PRECAUTIONS FOR WORKING ON SIDE SLOPES

- TYRES ARE INFLATED TO 130 PSI.
- THE GROUND IS FIRM AND CAN SUPPORT THE CRANE.
- USE THE MINIMUM BOOM LENGTH AND TIP HEIGHT AS POSSIBLE.
- KEEP THE LOAD AS CLOSE TO THE GROUND AS POSSIBLE.
- TAGLINE LOADS TO REDUCE LOAD SWING.

REV: C  
10/09/2013

# LC08 Man basket manual retracted

08

## LMI DUTY

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY  
66.6% OF TIPPING LOAD

- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE  
CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING  
WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT  
ADVANCE WARNING

- LIFTING IS TO BE VERTICAL ONLY

- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND  
BEFORE HOISTING

- TYRE SPECIFICATION FRONT AND REAR  
SIZE 12.00 R20  
CREEP LOAD RATING 8695KG @ 0.2 KPH  
STATIC LOAD RATING 9250KG @ 0 KPH  
TYRE PRESSURE 130 PSI

- MUST USE A TRT APPROVED MAN BASKET

- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H

- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING

- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL

Rated capacity (kg) for <10° articulation  
Rated capacity (kg) for >10° articulation  
Boom angle in degrees



REV : A  
8/07/2013

### PC25 MOBILE CRANE: MAN BASKET MANUAL RETRACTED PC25-LC08

RADIUS	BOOM LENGTH (M)															
	5.9	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	14.3
1.0	350	350	350	350	350	350										
1.5	350	350	350	350	350	350	350									
2.0	350	350	350	350	350	350	350	350								
2.5	350	350	350	350	350	350	350	350	350							
3.0	350	350	350	350	350	350	350	350	350	350						
3.5	350	350	350	350	350	350	350	350	350	350	350					
4.0	350	350	350	350	350	350	350	350	350	350	350	350				
4.5	350	350	350	350	350	350	350	350	350	350	350	350	350			
5.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350		
6.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
7.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
8.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
9.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
10.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
10.5	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
11.0	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	
11.8	350	350	350	350	350	350	350	350	350	350	350	350	350	350	350	



## LC09 Man basket manual extended

PC25 MOBILE CRANE: MAN BASKET  
MANUAL EXTENDED **PC25-LC09**

**LMI DUTY 09**

RADIUS FROM FRONT AXLE (M)	BOOM LENGTH 18.45M
5.1	350
	350
	65
6.0	350
	350
	62
7.0	350
	350
	59
8.0	350
	350
	55
9.0	350
	350
	51
10.0	350
	350
	47
11.0	350
	350
	43
12.0	350
	350
	38
13.0	350
	350
	33
14.0	350
	350
	26
15.0	350
	350
	18
15.9	350
	350
	0

- STABILITY AS PER AS 1418.5 2002 TABLE 9.3.2 PICK AND CARRY 66.6% OF TIPPING LOAD
- OPERATION OF THIS MACHINE WITH HEAVIER LOADS THAN THE CAPACITIES LISTED IS STRICTLY PROHIBITED. MACHINE TIPPING WITH BOOM EXTENSION OCCURS RAPIDLY AND WITH OUT ADVANCE WARNING
- LIFTING IS TO BE VERTICAL ONLY
- CRANE IS TO BE POSITIONED ON FLAT EVEN GROUND BEFORE HOISTING
- TYRE SPECIFICATION FRONT AND REAR  
SIZE 12.00 R20  
CREEP LOAD RATING 8695KG @ 0-2 KPH  
STATIC LOAD RATING 9250KG @ 0 KPH  
TYRE PRESSURE 130 PSI
- MUST USE A TRT APPROVED MAN BASKET
- DURING OPERATION, WIND SPEED MUST NOT EXCEED 36 KM/H
- READ AND UNDERSTAND CRANE USER MANUALS BEFORE OPERATING
- BOOM ANGLE IS WITH RESPECT TO THE HORIZONTAL

	Rated capacity (kg) for <10° articulation
	Rated capacity (kg) for >10° articulation
	Boom angle in degrees

REV : A  
8/07/2013

