ZOOMLION

Rough Terrain Crane

OPERATOR'S MANUAL

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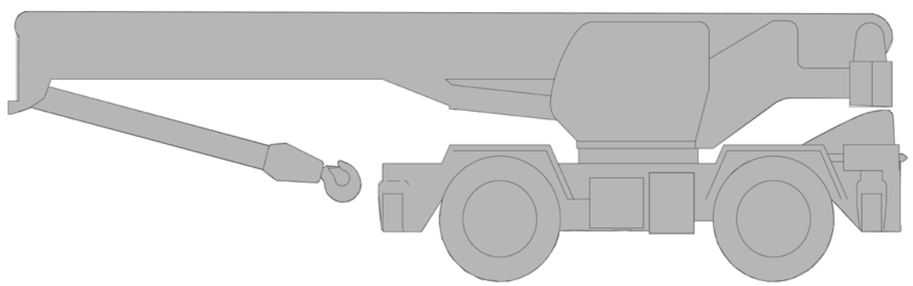
OPERATOR'S MANUAL FOR ROUGH TERRAIN CRANE



Zoomlion Heavy Industry Science and Technology Co., Ltd.

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RT75 ROUGH TERRAIN CRANE

LOAD RATINGS

(0075611-001/002)

Edition 1
2012, 07

CONTENTS

To owners, users and operators

Zoomlion Cranes appreciates your selection of the ZOOMLION Rough Terrain Crane for your application.

No one should operate the crane unless they read and understand the information in this manual.

When you follow the instructions in this manual, your crane can operate at MAXIMUM EFFICIENCY.

The operator must keep this manual in the cab of the crane.

If there is anything in the manual that you do not understand, speak with us. We (Zoomlion Cranes) are NOT responsible for damages from an operator who does not obey the instructions in the *OPERATOR'S MANUAL*.

The OPERATOR'S MANUAL is an important part of the crane. If the crane becomes the property of a different person, make sure that the manual stays in the cab of the crane.

THANK YOU!

Mobile Crane Branch Company of ZOOMLION Heavy Industry Science and Technology Co., Ltd.

Safety

Hazard Indicators

DANGER, WARNING, CAUTION, ATTENTION, NOTE, and IMPORTANT labels are on signs and decals, and as you read this manual to show important instructions. In this manual, DANGER, WARNING, and CAUTION labels are before the paragraph or item to which they apply. ATTENTION, NOTE, and IMPORTANT follow the paragraph or item they apply to. The markers are as follows:

⚠ Danger

Refers to a dangerous situation which, if you do not prevent, will cause death or injury.

⚠ Warning

Refers to a possible dangerous situation which, if you do not prevent, could cause death or injury.

⚠ Caution

Refers to a possible dangerous situation which, if you do not prevent, may cause light or moderate injury.

⚠ Attention

Refers to a situation which, if you do not prevent, may cause property or equipment damage.

⚠ Note

Refers to a tip or hint in the operation instructions.

⚠ Important

Emphasizes the importance of the data in this manual.

This symbol shows a step or procedure that is not approved and can cause a dangerous situation.

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LOAD RATINGS FOR ROUGH TERRAIN CRANE

Chapter 1　Informational data

1.1 HOIST TACKLE CHART

This chart only represents the maximum permissible hoist line load per parts of line. You must refer to the proper Lift Charts for machine rated loads.

Table 01 – 1 Line Parts

MAXIMUM PERMISSIBLE HOIST LINE LOAD										
LINE PARTS	1	2	3	4	5	6	7	8	9	10
MAXIMUM PERMISSIBLE HOIST LINE LOAD (KG)	7500	15000	22500	30000	37500	45000	52500	60000	67500	75000

Wire rope: 22NAT35(W)*K7+IWRC2160 Weight: 200kg/100m Minimum breaking strength: 42.3 T

1.2 TYRE INFLATION CHART

Table 01 – 2 Tyre Inflation Chart

RECOMMENDED TYRE PRESSURE			
TIRE SIZE	**TIRE SIZE**	**TIRE SIZE**	**TIRE SIZE**
29.5×25-34PR	525kpa	525kpa	525kpa

1.3 WEIGHTS

Table 01 – 3 Weights

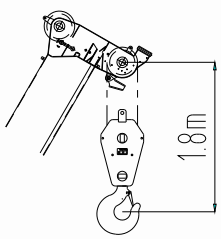
HOOK BLOCK WEIGHTS

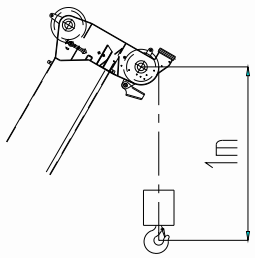
Hook weight
Main hook weight: 650kg Auxiliary hook weight: 135kg

MACHINE EQUIPMENT

1. COUNTERWEIGHT: 7500 kg
2. OUTRIGGER SPREAD: 7.38 m from center of outrigger float to center of outrigger float across the longitudinal axis of the machine; 7.3 m from center of outrigger float to center of outrigger float across the transversal axis of the machine
3. Powered boom length 12.5 m retracted to 38.5 m extended
4. Crane height 3.8 m, length 14.9 m, width 3.4 m, wheelbase 4.15 m

DIMENSIONS ARE FOR MAIN HOOK AND AUXILIARY HOOKS.





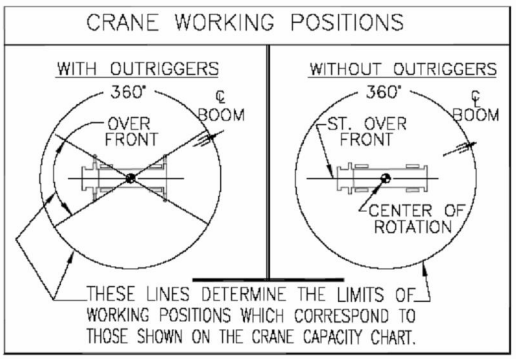
WARNING

1.4 GENERAL

1. Rated loads as shown on Lift Charts pertain to this machine as originally manufactured and equipped. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be hazardous if improperly operated or maintained. Operation and maintenance of this machine shall be in compliance with the information in the *Operator's Manual* and *Service Manual* supplied with this machine. If these manuals are missing, order replacements from the manufacturer through your distributor.
3. These warnings do not constitute all of the operating conditions for the crane. The operator and job site supervision must fully understand the *Operator's Manual* for the crane.
4. This crane and its load ratings are in accordance with GB/T6068-2008 *Truck Crane and Rough Terrain Crane Test Code*, and related standards stipulated in GB/T3811-2008.

1.5 DEFINITIONS

1. LOAD RADIUS – The horizontal distance from the axis of rotation before loading to the center of the vertical hoist line or tackle with a load applied.
2. LOAD BOOM ANGLE – It is the angle between the boom base section and the horizontal, after lifting the rated load at the rated radius. The boom angle before loading should be greater to account for deflections. The loaded boom angle combined with the boom length give only an approximation of the operating radius.

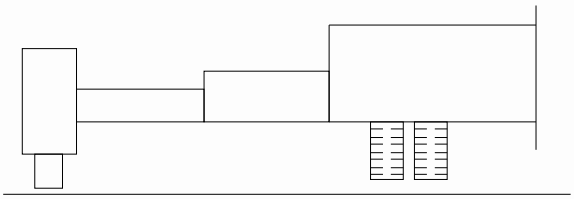


3. WORKING AREA – Areas measured in a circular arc about the centerline of rotation as shown in the diagram.
4. FREELY SUSPENDED LOAD – Load hanging free with no direct external force applied except by the hoist rope.
5. SIDE LOAD – Horizontal force applied to the lifted load either on the ground or in the air;
6. EXTRA-CAUTION ZONE – Tipping can occur with some boom/jib combinations at radii within this area without any load on the hook.
7. BOOM SIDE OF CRANE – The side of the crane over which the boom is positioned when in an OVER SIDE working position.

WARNING

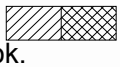
1.6 SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended / retracted, or in the case of partial extension ratings mechanically pinned in the appropriate position, and the tyres raised free of the supporting surface.



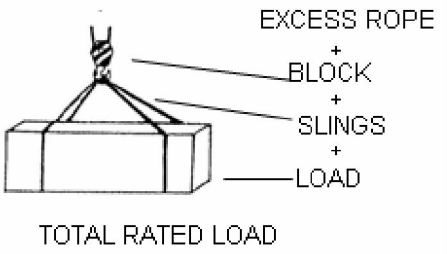
3. Crane load ratings on tyres depend on appropriate inflation pressure and the tyre conditions. Caution must be exercised when increasing air pressures in tyres. Consult *Operator's Manual* for precautions.
4. Consult appropriate section of the *Operator's Manual* for more exact description of hoist line reeving.
5. The use of more parts of line than required by the load may result in having insufficient rope to allow the hook block to reach the ground.
6. Properly maintained wire rope is essential for safe crane operation. Consult *Operator's Manual* for proper maintenance and inspection requirements.
7. When spin-resistant wire rope is used, the allowable rope loading shall be the breaking strength divided by five (5), unless otherwise specified by the wire rope manufacturer.

1.7 OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. DO NOT ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.
3. Do not operate at longer radii than those listed on the applicable Lift Chart (cross hatched areas  shown on range diagrams) as tipping can occur without a load on the hook.
4. The boom angles shown on the Lift Charts give an approximation of the operating radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. All telescopic sections must be extended synchronically.

WARNING

6. Rated loads include the weight of hook block, slings, and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted.
7. When lifting over the jib, the weight of any hood block, slings, and auxiliary lifting devices at the boom head must be added to the load.



8. Rated lifting capacities are based on correct reeving. Deductions must be made for excessive reeving. Any reeving over the minimum required, (see Hoist Tackle Chart), is considered excessive and must be accounted for. Deduct for each meter of excessive wire rope before attempting to lift a load.
9. When jibs are erected but unused, add three (3) times the weight of jib, any hook block, slings, and auxiliary lifting devices at the jib head to the load (jib weight: 952 kg).
10. Rated loads do not exceed 75% on outriggers or 67% on tyres, of the tipping load as determined by GB/T6068-2008 Truck Crane and Rough Terrain Crane Test Code. Structural strength ratings in chart are indicated with an asterisk (*).
11. Rated loads are based on freely suspended loads. No attempt shall be made to drag a load horizontally on the ground in any direction.
12. The user shall operate at reduced ratings to allow for adverse job conditions, such as: soft or uneven ground, out of level conditions, high winds, side loads, pendulum action, jerking or sudden stopping off loads, hazardous conditions, experience of personnel, two-machine lifts, traveling with loads, electric wires, etc, (side pull on boom or jib is hazardous). If wind speed is higher than the maximum permissible value (45 ft/s (13.8 m/s), grade 6) or it is fulminous during crane operation, stop working and completely retract the boom and place it on the boom support for traveling.
13. Load ratings are dependent upon the crane being maintained according to manufacturer’s specifications.
14. It is recommended that load handling devices, including hooks, and hook blocks, be kept away from boom head at all times.

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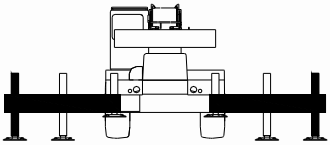
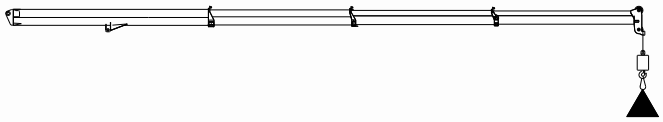
LOAD RATINGS FOR ROUGH TERRAIN CRANE

Chapter 2 Lifts with outrigger beams fully extended

2.1 MAIN BOOM RATED LOADS

USE THIS CHART ONLY WHEN ALL OUTRIGGERS ARE FULLY EXTENDED





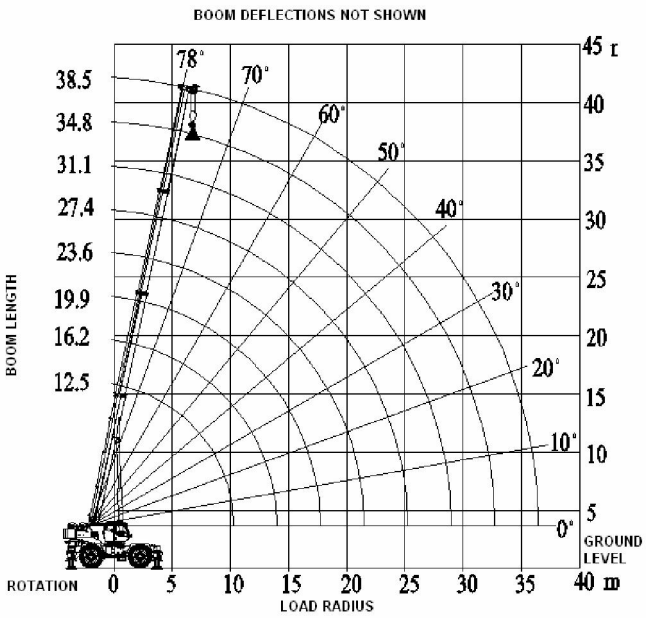
Rated loads on outriggers fully extended - 360° (Rated load unit: Kg)									
Working Radius (mm)	Boom Length (mm)								Working Radius (mm)
	12500	16214	19929	23643	27357	31071	34786	38500	
3000	75000	44860							3000
3500	75000	44860							3500
4000	68400	44860							4000
4500	61650	44860	34450						4500
5000	55950	44860	32950						5000
5500	51100	43550	31590	24700					5500
6000	46900	42050	30340	23750					6000
6500	43200	40650	29200	22850	19500				6500
7000	39990	39400	28150	22050	18850				7000
7500	35420	36350	27200	21300	18200	15740			7500
8000	30780	31650	26300	20600	17600	15240			8000
9000	24120	24890	24650	19350	16550	14350	12300		9000
10000	19590	20260	20550	18250	15590	13600	11700	10600	10000
11000		16900	17170	17250	14800	12850	11150	10150	11000
12000		14360	14610	14860	14050	12250	10600	9700	12000
14000		10800	10990	11210	11270	11150	9750	8450	14000
16000			8570	8750	8810	8970	8980	7400	16000
18000				7000	7050	7190	7200	6550	18000
20000				5700	5730	5850	5860	5850	20000
22000					4720	4820	4830	4920	22000
24000					3940	4000	4010	4090	24000
26000						3340	3330	3410	26000
28000						2810	2780	2840	28000
30000							2330	2370	30000
32000							1970	1970	32000
34000								1630	34000
36000								1370	36000

SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended / retracted, or in the case of partial extension ratings mechanically pinned in the appropriated position, and the tyres raised free of the supporting surface.

OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. NO ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.
3. EXTRA-CAUTION ZONE – Tipping can occur with some boom/jib combinations at radii within this area without any load on the hook.
4. The boom angles shown on the Lift Charts give an approximation of the operation radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Rated Loads include the weight of hook block, slings and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted. Rated lift ratings are based on correct reeving. Deductions must be made for excessive reeving. Any reeving over the minimum is considered excessive. Deduct for each foot of excessive wire rope before attempting to lift a load. See HOIST TACKLE CHART for rope information.
6. All telescopic sections must be extended synchronically.

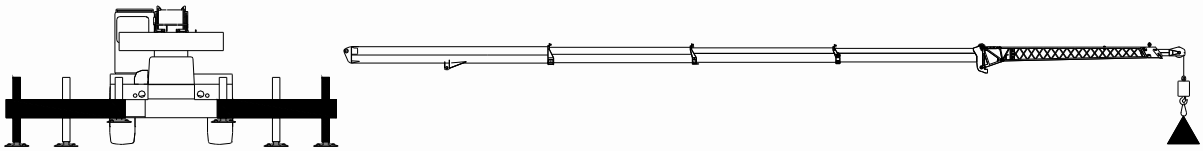


Lift Height on Outriggers Fully Extended

2.2 10 M JIB RATED LOADS

USE THIS CHART ONLY WHEN ALL OUTRIGGERS ARE FULLY EXTENDED

USE THIS CHART ONLY WHEN JIB SECTION 2 IS NOT PULLED OUT FROM JIB SECTION 1



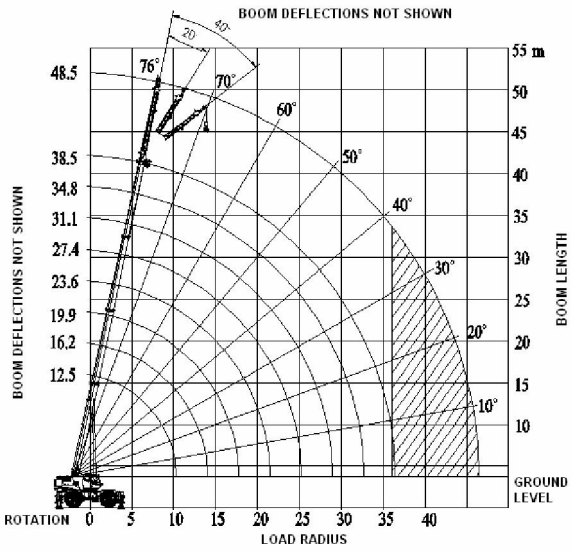
10 m jib rated loads - 360° (Rated load unit: kg Working radius unit: mm)						
Boom Angle (°)	0° Offset		20° Offset		40° Offset	
	Working Radius (mm)	360° (kg)	Working Radius (mm)	360° (kg)	Working Radius (mm)	360°(kg)
76	9634	6000	12459	3050	14684	1990
74	11269	5800	14049	2850	16197	1890
72	12888	5600	15619	2700	17689	1850
70	14489	5050	17168	2550	19156	1800
68	16070	4500	18693	2450	20597	1750
66	17628	3990	20192	2350	22010	1700
64	19163	3600	21665	2250	23394	1650
62	20671	3250	23108	2150	24747	1650
60	22152	2950	24521	2050	26068	1600
58	23603	2700	25902	1990	27354	1600
56	25023	2450	27248	1940	28604	1550
54	26410	2250	28558	1850	29816	1550
52	27762	2100	29832	1800	30990	1500
50	29078	1890	31066	1650	32124	1500
48	30356	1750	32260	1550	33215	1450
46	31594	1630	33412	1450	34264	1350
44	32791	1440	34521	1350	35269	1300
42	33946	1270	35585	1210	36228	1180
40	35057	1120	36603	1070	37140	1040
38	36122	990	37574	940	38004	920

SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended / retracted, or in the case of partial extension ratings mechanically pinned in the appropriate position, and the tyres raised free of the supporting surface.

OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. NO ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.
3. EXTRA-CAUTION ZONE – Tipping can occur with some boom/jib combinations at radii within this area without any load on the hook.
4. The boom angles shown on the Lift Charts give an approximation of the operation radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Rated Loads include the weight of hook block, slings and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted. Rated lift ratings are based on correct reeving. Deductions must be made for excessive reeving. Any reeving over the minimum is considered excessive. Deduct for each foot of excessive wire rope before attempting to lift a load. See HOIST TACKLE CHART for rope information.
6. When lifting over the jib, the weight of any hook block, slings, and any auxiliary lifting devices at the boom head must be added to the load.
7. For all boom lengths less than the maximum with the jib erected, the rated loads are determined by boom angle only in the appropriate column.
8. For all boom lengths less than the listed boom length, the rated load is to be determined by boom angle.

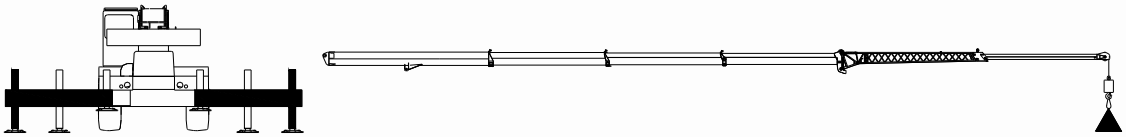


Lift Height on Jib Section 1 Erected

2.3 17 M JIB RATED LOADS

USE THIS CHART ONLY WHEN ALL OUTRIGGERS ARE FULLY EXTENDED

USE THIS CHART WHEN JIB SECTION 2 IS PULLED OUT FROM JIB SECTION 1



17 m jib rated loads - 360° (Rated load unit: kg Working radius unit: mm)						
Boom Angle (°)	0° Offset		20° Offset		40° Offset	
	Working Radius (mm)	360° (kg)	Working Radius (mm)	360° (kg)	Working Radius (mm)	360° (kg)
76	11327	3500	16372	1650	20345	1050
74	13198	3350	18162	1550	21999	990
72	15051	3000	19927	1450	23623	990
70	16883	2700	21666	1400	25216	940
68	18691	2450	23375	1300	26775	900
66	20475	2250	25053	1250	28300	900
64	22230	2100	26699	1200	29787	850
62	23956	1940	28309	1150	31235	850
60	25651	1800	29882	1100	32643	800
58	27311	1700	31416	1050	34009	800
56	28936	1550	32909	990	35330	800
54	30523	1500	34360	940	36606	750
52	32070	1400	35766	940	37835	750
50	33576	1250	37126	900	39015	750
48	35038	1150	38438	850	40145	750
46	36455	1050	39701	850	41224	700
44	37825	940	40913	800	42249	700
42	39146	900	42073	750	43221	650
40	40417	800	43179	650	44138	650
38	41636	750	44229	600	44998	600

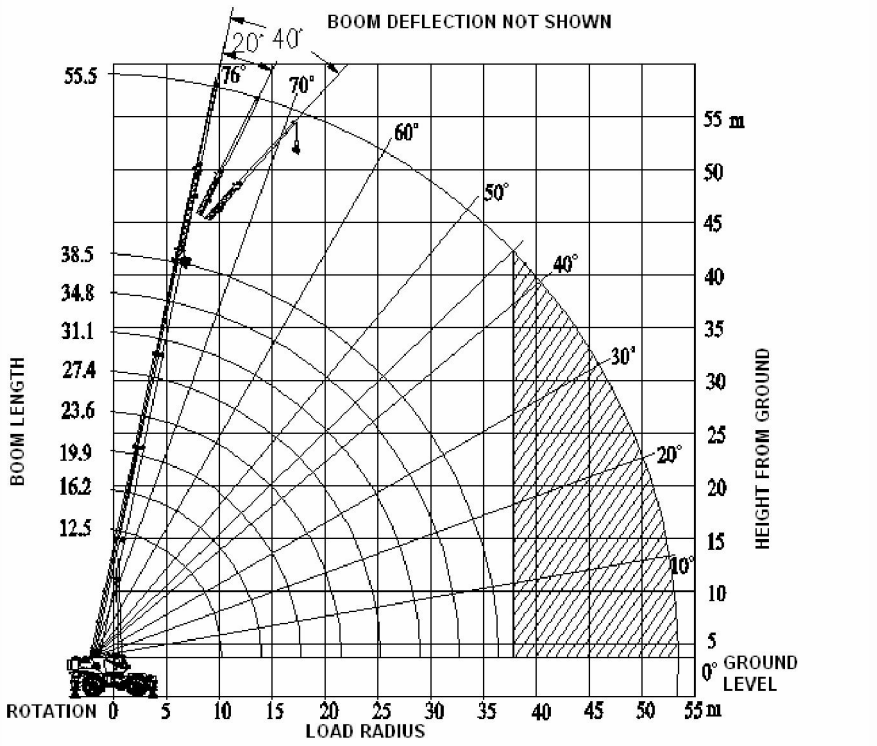
SET-UP

a) Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.

b) Crane load ratings on outriggers are based on all outriggers beams being fully extended / retracted, or in the case of partial extension ratings mechanically pinned in the appropriate position, and the tyres raised free of the supporting surface.

OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. NO ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.
3. EXTRA-CAUTION ZONE – Tipping can occur with some boom/jib combinations at radii within this area without any load on the hook.
4. The boom angles shown on the Lift Chart give an approximation of the operation radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Rated Loads include the weight of hook block, slings and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted. Rated lift ratings are based on correct reeving. Deductions must be made for excessive reeving. Any reeving over the minimum is considered excessive. Deduct for each foot of excessive wire rope before attempting to lift a load. See HOIST TACKLE CHART for rope information.
6. When lifting over the jib, the weight of any hook block, slings, and any auxiliary lifting devices at the boom head must be added to the load.
7. For all boom lengths less than the maximum with the jib erected, the rated loads are determined by boom angle only in the appropriate column.
8. For all boom lengths less than the listed boom length, the rated load is to be determined by boom angle.



Lift Height on Jib Section 2 Erected

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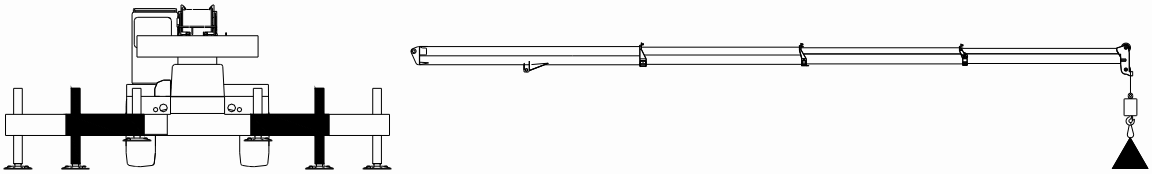
LOAD RATINGS FOR ROUGH TERRAIN CRANE

Chapter 3 Lifts with outrigger beams at mid-position

3.1 MAIN BOOM RATED LOADS

USE THIS CHART WHEN ALL OUTRIGGERS ARE PINNED IN THE MID-POSITION



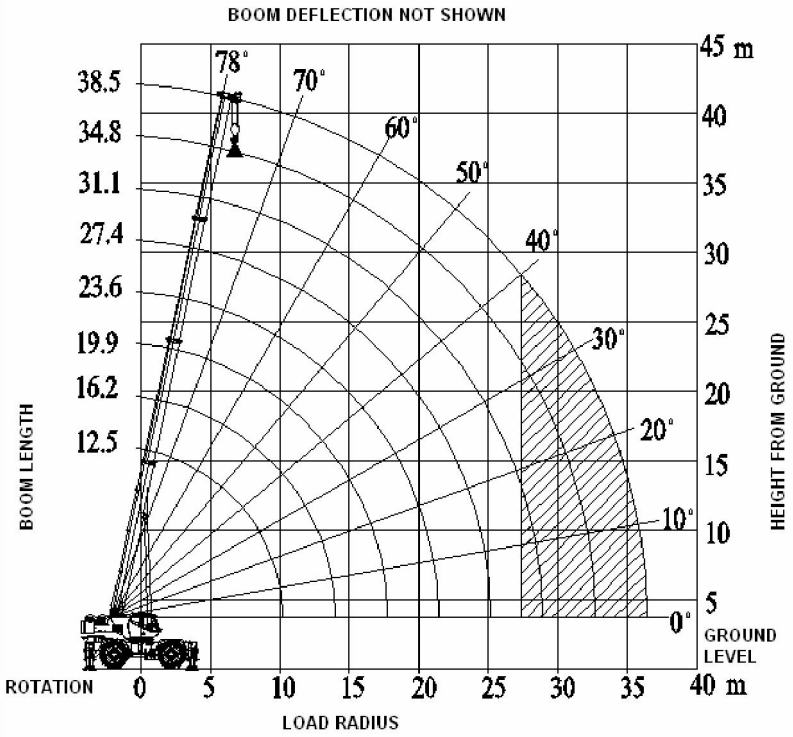
Rated loads on outriggers pinned in mid-position - 360° (Rated load unit: kg)									
Working Radius (mm)	Boom Length (mm)								Working Radius (mm)
	12500	16214	19929	23643	27357	31071	34786	38500	
3000	75000	44860							3000
3500	68800	44860							3500
4000	61100	44860							4000
4500	54750	44860	34450						4500
5000	44400	44860	32950						5000
5500	35960	36910	31590	24700					5500
6000	29980	30850	30340	23750					6000
6500	25530	26340	26640	22850	19500				6500
7000	22090	22850	23140	22050	18850				7000
7500	19340	20070	20350	20630	18200	15740			7500
8000	17110	17800	18070	18350	17600	15240			8000
9000	13690	14330	14590	14840	14890	14350	12300		9000
10000	11220	11800	12040	12290	12340	12530	11700	10600	10000
11000		9870	10110	10340	10390	10570	10580	10150	11000
12000		8360	8590	8810	8860	9040	9040	9120	12000
14000		6190	6360	6560	6620	6770	6780	6870	14000
16000			4830	4990	5050	5190	5200	5300	16000
18000				3850	3890	4030	4040	4130	18000
20000				3000	3020	3140	3150	3240	20000
22000					2340	2440	2450	2540	22000
24000					1820	1880	1890	1970	24000
26000						1430	1430	1500	26000
28000						1080	1050	1110	28000

SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended / retracted, or partial extension ratings mechanically pinned in the appropriated position, and the tyres raised free of the supporting surface.

OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. NO ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.
3. EXTRA-CAUTION ZONE – Tipping can occur with some boom/jib combinations at radii within this area without any load on the hook.
4. The boom angles shown on the Lift Charts give an approximation of the operation radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Rated Loads include the weight of hook block, slings and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted. Rated lifting capacities are based on correct reeving. Deductions must be made for excessive reeving. Any reeving over the minimum is considered excessive. Deduct for each foot of excessive wire rope before attempting to lift a load. See HOIST TACKLE CHART for rope information.
6. All telescopic sections must be extended synchronously.



Lift Height on Outriggers Pinned in the Mid-position

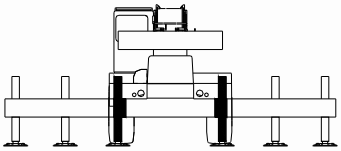
ZOOMLION

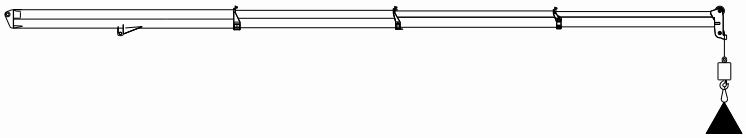
LOAD RATINGS FOR ROUGH TERRAIN CRANE

Chapter 4 Lifts with outrigger beams less than 1/2 extended

4.1 MAIN BOOM RATED LOADS

USE THIS CHART WHEN ALL OUTRIGGERS ARE LESS THAN HALF EXTENDED





Rated loads on outriggers are less than half extended - 360° (Rated load unit: kg)									
Working Radius (mm)	Boom Length (mm)								Working Radius (mm)
	12500	16214	19929	23643	27357	31071	34786	38500	
3000	51050	44860							3000
3500	37080	38020							3500
4000	28670	29510							4000
4500	23060	23840	24080						4500
5000	19060	19780	20020						5000
5500	16050	16740	16970	17240					5500
6000	13710	14370	14600	14860					6000
6500	11840	12480	12710	12950	12980				6500
7000	10310	10930	11150	11390	11430				7000
7500	9040	9640	9860	10100	10130	10310			7500
8000	7970	8550	8770	9000	9040	9210			8000
9000	6260	6810	7020	7250	7290	7460	7460		9000
10000	4980	5480	5690	5910	5950	6110	6120	6190	10000
11000		4440	4650	4850	4900	5060	5060	5130	11000
12000		3600	3800	4000	4050	4200	4210	4280	12000
14000		2380	2540	2710	2760	2910	2920	3000	14000
16000			1640	1800	1840	1980	1990	2070	16000
18000				1110	1150	1280	1290	1380	18000

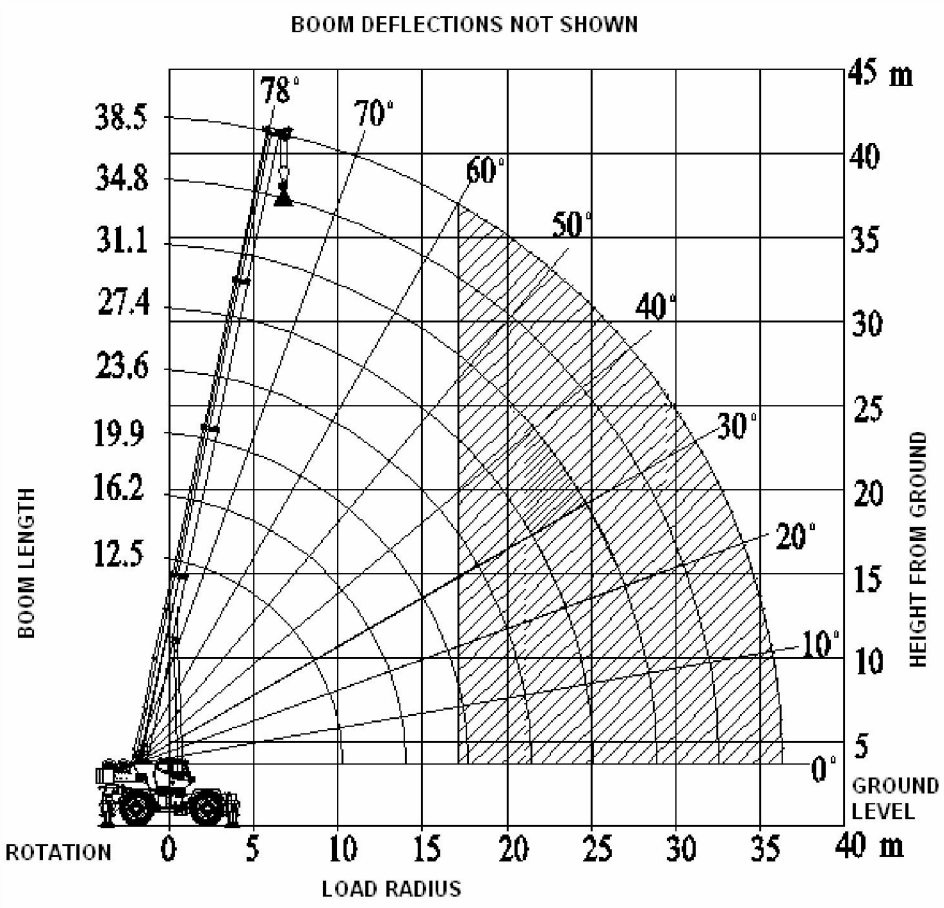
SET-UP

1. Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.
2. Crane load ratings on outriggers are based on all outrigger beams being fully extended / retracted, or partial extension ratings mechanically pinned in the appropriated position, and the tyres raised free of the supporting surface.

OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. NO ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When either radius or boom length, or both, are between listed values, the smaller of the two listed load ratings shall be used.

3. EXTRA-CAUTION ZONE – Tipping can occur with some boom/jib combinations at radii within this area without any load on the hook.
4. The boom angles shown on the Lift Charts give an approximation of the operation radius for a specified boom length. The boom angle, before loading, should be greater to account for boom deflection. It may be necessary to retract the boom if maximum boom angle is insufficient to maintain rated radius.
5. Rated Loads include the weight of hook block, slings and auxiliary lifting devices. Their weights shall be subtracted from the listed rated load to obtain the net load that can be lifted. Rated lifting capacities are based on correct reeving. Deductions must be made for excessive reeving. Any reeving over the minimum is considered excessive. Deduct for each foot of excessive wire rope before attempting to lift a load. See HOIST TACKLE CHART for rope information.
6. All telescopic sections must be extended synchronously.



Lift Height on Outriggers Are Less Than Half Extended

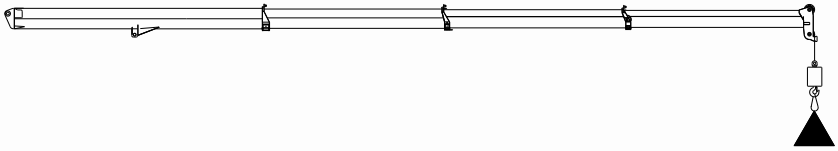
Lifts with outrigger beams less than 1/2 extended

ZOOMLION

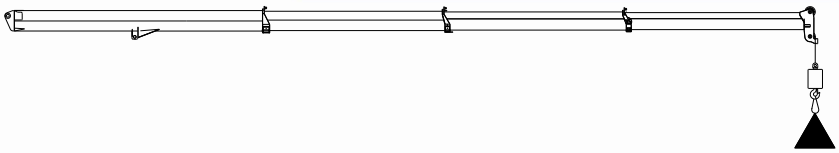
LOAD RATINGS FOR ROUGH TERRAIN CRANE

Chapter 5　Lifts on tyres

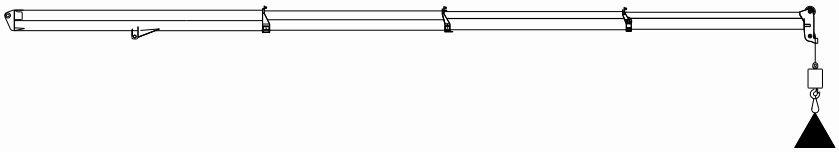
5.1 MAIN BOOM RATED LOADS



Working Radius (mm)	Rated loads on tyres (Rated load unit: kg)							
	Boom Length of 12500 mm				Boom Length of 16214 mm			
	Boom Angle (º)	360 (º)	Stationary over Front	Pick & Carry	Boom Angle (º)	360 (º)	Stationary over Front	Pick & Carry
3000	70.0	22070	35450	28500	74.8	22540	35850	28900
3500	67.4	18800	31600	25210	72.9	19350	32050	25600
4000	64.8	16270	28440	22440	71.0	16790	28850	22900
4500	62.2	14120	25720	20170	69.1	14640	26180	20630
5000	59.5	12410	23430	18230	67.1	12940	23890	18640
5500	56.6	10890	21450	16500	65.2	11440	21900	16950
6000	53.7	9670	19730	15030	63.1	10190	20180	15520
6500	50.6	8570	18170	13770	61.1	9070	18630	14230
7000	47.4	7610	16840	12640	59.0	8140	17270	13070
7500	44.0	6660	15280	11590	56.8	7230	15890	12090
8000	40.3	5730	13590	10690	54.6	6280	14170	11170
9000	31.6	4250	10950	9110	49.9	4760	11490	9590
10000	19.0	3130	9010	7630	44.9	3600	9500	8100
10430	0.0	2800	8430	7050				
11000					39.3	2680	7970	6570
12000					32.8	1950	6760	5370
14000					10.5	——	5000	3620
14137					0.0	——	4960	3580



Working Radius (mm)	Rated loads on tyres (Rated load unit: kg)							
	Boom Length of 19929 mm				Boom Length of 23643 mm			
	Boom Angle (°)	360 (°)	Stationary over Front	Pick & Carry	Boom Angle (°)	360 (°)	Stationary over Front	Pick & Carry
4500	73.2	14810	26310	20750				
5000	71.6	13110	24010	18800				
5500	70.1	11610	22050	17140	73.4	11810	22200	17290
6000	68.5	10350	20320	15660	72.1	10550	20490	15840
6500	67.0	9290	18820	14410	70.8	9470	18980	14570
7000	65.4	8350	17450	13240	69.5	8540	17650	13440
7500	63.7	7440	16110	12250	68.2	7670	16350	12450
8000	62.1	6490	14390	11330	66.8	6710	14620	11510
9000	58.7	4970	11700	9790	64.1	5180	11920	9970
10000	55.2	3800	9710	8300	61.3	4010	9920	8510
11000	51.4	2880	8170	6760	58.5	3080	8370	6970
12000	47.5	2130	6950	5550	55.5	2330	7140	5740
14000	38.7	1010	5150	3750	49.2	1190	5320	3920
16000	27.4	——	3890	2500	42.2	——	4030	2640
17847	0.0	——	3130	1750				
18000					33.9	——	3090	1700
20000					23.0	——	2380	——
21558					0.0	——	2020	——



Rated loads on tyres (Rated load unit: kg)									
Working Radius (mm)	Boom Length of 27357 mm								
	Boom Angle (°)	360 (°)	Stationary over Front	Pick & Carry					
6500	73.5	9490	19010	14590					
7000	72.4	8560	17630	13460					
7500	71.3	7690	16380	12420					
8000	70.2	6740	14650	11540					
9000	67.9	5220	11960	10000					
10000	65.6	4050	9960	8550					
11000	63.2	3120	8410	7000					
12000	60.8	2370	7190	5780					
14000	55.8	1230	5360	3960					
16000	50.4	——	4080	2670					
18000	44.6	——	3130	1720					
20000	38.0	——	2400	1000					
22000	30.1	——	1840	——					
24000	19.3	——	1400	——					
25270	0.0	——	1250	——					

SET-UP

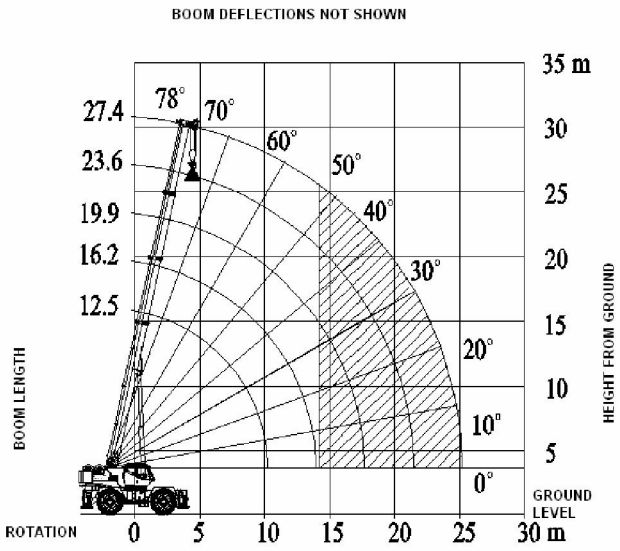
1. Crane load ratings are based on the crane being leveled and standing on a firm and uniform supporting surface.
2. Crane load ratings on tyres depend on appropriate inflation pressure and tire condition. Caution must be exercised when increasing air pressures in tyres. Consult *Operator's Manual* for precautions.
3. Use of jib is not permitted for pick-and-carry operations.

SET-UP

1. For pick-and-carry operations, boom must be centered over the front of the crane with swing and brake lock engaged. Use minimum boom point height and keep load close to ground surface. Travel must be on smooth level surface.
2. The load should be restrained from swinging. No on tire operation with jib erected.

OPERATION

1. CRANE LOAD RATINGS MUST NOT BE EXCEEDED. NO ATTEMPT TO TIP THE CRANE TO DETERMINE ALLOWABLE LOADS.
2. When radius is between listed values, the smaller of the two listed load ratings shall be used;
3. Do not operate at longer radii than those listed on the applicable *Lift Chart* as tipping can occur without a load on the hook.
4. All telescopic sections must be extended synchronously.
5. Without outriggers, never maneuver the boom beyond listed load radii for applicable tyres used to ensure stability.
6. Creep speed is crane movement of less than 61 m in 30-minutes period and not exceeding 1.6 KM/H.



Lift Heigth on Tyres