

Vision Creates Future

TRUCK CRANE

— ZMC75 —



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Contalts



Vision Creates Future

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Be reliable

We have persisted through more than fifty years of hard work and discipline, and through generations of the utmost dedication!



We have experienced innumerable glorious moments over the past fifty years, such as: showing our strength in the centennial Three Gorges Project, being highly praised for building the Antarctic Scientific Exploration Bases, challenging the extreme construction conditions on the Qinghai-Tibet Plateau, rushing to Wenchuan for earthquake disaster relief, participating in the Beijing Olympics construction projects, and having our products highlighted at China's 60th Anniversary gala event - Zoomlion Cranes possess an unrivalled, legendary history.

Looking back into the past only serves for looking forward into the future - for Zoomlion, our 50 years merely represents a new starting point from which to ascend the next peak!

Be creative

At Zoomlion, we constantly push ourselves and provide our customers with continual feedback by optimizing our crane's structural components and improving operational performance and safety.



- Improved lifting performance has been achieved, and downward deflection and sidewise bending are reduced through the newly optimized boom in U-shaped cross section, made of our top quality imported SSAB 960 and domestic HG80 steel plates.
- 44 m main boom +16 m jib contribute to the industry-leading operation scope and height.
- Our outriggers have a 7.6 m lateral span and 6 m longitudinal span, providing the overall vehicle with superb and improved stability, and with outstanding mid- and long-arm performance.
- Our rotating platform rigidity, particularly the lateral rigidity, has been significantly cemented through the adoption of a triangle stiffening structure, thereby reducing oscillation and vibration in the boom's slewing plane during slewing process, and further enhancing the slewing performance and operational safety.
- We have adopted a new slewing speed reducer and a larger diameter, external gear and small modulus slewing bearing, which have excellent bearing capacity and provide for smooth slewing and convenient maintenance.
- We have also adopted a concealed dual-range winch and 4V wire ropes, which effectively prevent wire stacking and tangling, improves rope guiding and thus prolong the wire rope's service life by about 20% under like conditions.



Be efficient

More efficient operating performance has been achieved through continual optimization of the overall vehicle's hydraulic control system.



- The stability of luffing movements has been improved. In particular, through our luffing gravity lowering design and through upgrade to the luffing hydraulic module, vibration and impact have been reduced during luffing opening and closing.
- Hook slippage at second lifting and impact at startup have been eliminated through improvements to the lifting hydraulic system design. We have incorporated variable-displacement motors into our main and auxiliary winches that feature universally compatible parts and components and a low maintenance cost.
- The slewing smoothness and inching performance of our products have been significantly improved by bettering the slewing mechanism and system, allowing a stable speed as low as 38 min/circle to be achieved.



Be safe

"Our load moment limiter combines excellent software and high quality hardware, making you safer all the way".



- We have achieved counterweight-free calibration, intelligent fault diagnosis and other functions.
- Real time data processing is ensured through our adoption of vehicle CPU and DSP processors.
- We have adopted a highly reliable pressure sensor that is manufactured by a world renown brand and that comes equipped with a full tantalum chip inside.

Our intimate and user-friendly design makes for a highly enjoyable operation process.

- With a rocker switch on the instrument desk that controls the operating pressure of the hydraulic pilot system, there is no need to continuously hold the enable switch during operation, there by reducing wrist fatigue.
- Switching between different actions can be easily and conveniently done by pressing the telescoping/auxiliary winch operation switching button on the control handle.



Environmental

"Our unique high-performance chassis makes relocation operations easier, more efficient and more eco-friendly".



- Our unique four-axle chassis four-axle slewing patent technology features a small turning radius and high trafficability.
- The power and transmission system, which has been labeled a prime power combination and has been approved by a national lab, boasts excellent power performance and is highly economic efficient.
- The engine fuel system comes equipped with a combination of fuel system protection capabilities, including an electric pump oil, heating and wax melting, dehydration and filtration. The system features rapid exhaust, unlikely misfiring and strong fuel adaptability, and the system's fault rate has been reduced considerably.
- The engine air intake system comes equipped with a triple-step combined desert air filter, which improves the air intake quality, heightens the engine's efficiency and extends the engine's service life.



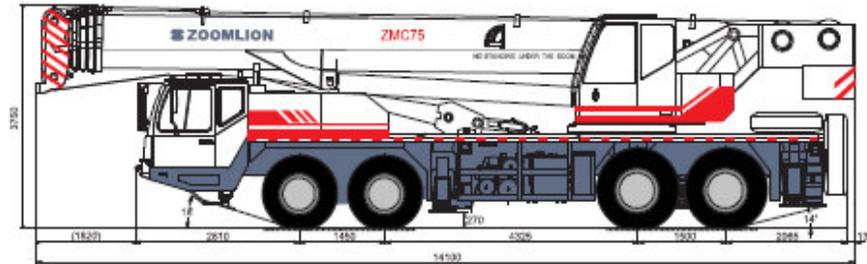
The lifting capacity fulfills the requirements of standard DIN 15019 part 2 with regard to stability.

Main Technical Parameters

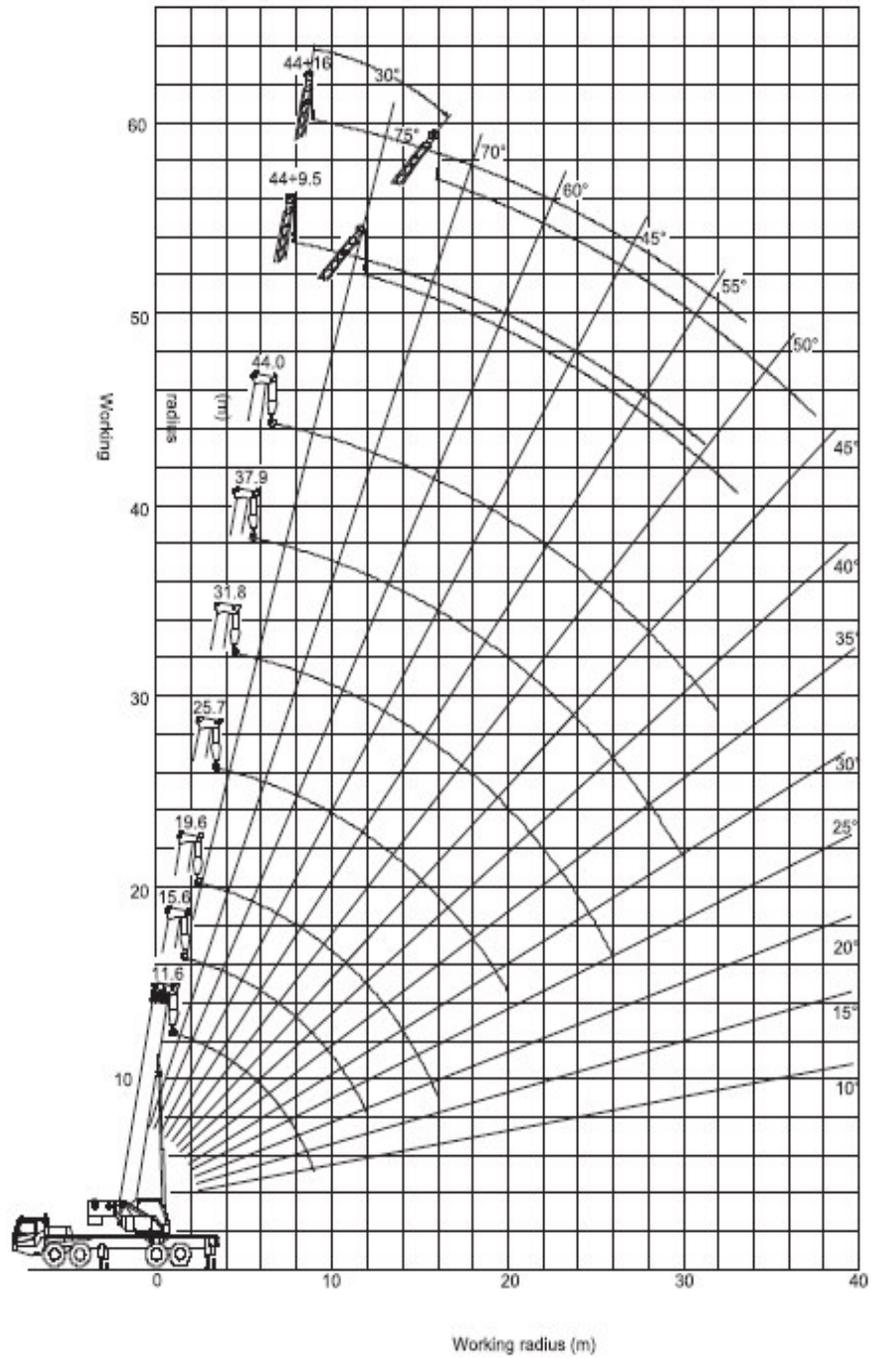
ZMC75 Main Technical Parameters

Items	Values	Remarks	
Maximum rated lifting capacity	kg	75000	
Working performance parameters	Maximum lifting moment of basic boom	MNm	2352
	Maximum lifting moment of fully extended main boom	kNm	1098
	Maximum lifting height of basic boom	m	12.2
	Maximum lifting height of main boom	m	44.2
	Maximum lifting height of jib	m	60.2
			Without considering boom deformation
Working speed	Maximum single rope speed (main winch)	m/min	135
	Maximum single rope speed (auxiliary winch)	m/min	110
	Boom detaching up time	s	57
	Boom extending time	s	107
	Swing speed	min	0~1.8
Traveling parameters	Maximum traveling speed	km/h	75
	Maximum gradeability	%	35
	Minimum turning diameter	m	20
	Minimum ground clearance	mm	270
	Fuel consumption per 100km	L	46
Weight parameters	Self weight under traveling conditions (total mass)	kg	44000
	Whole vehicle curb mass	kg	43870
	Front axle load	kg	20000
	Rear axle load	kg	24000
Dimension parameters	Overall dimensions (L x W x H)	mm	14100 x 2750 x 3750
	Outrigger longitudinal span	m	6.00
	Outrigger lateral span	m	Fully extended 7.60, semi-extended 5.04
	Rear end swing radius	mm	4020
	Length of main boom	m	11.6~44.0
	Main boom elevation angle	°	-2~80
	Jib length	m	9.5, 16
Jib set angle	°	0, 30	

Overall dimensions diagram of ZMC75 under traveling conditions (dimensional unit: mm)



ZMC75 Lifting Height Curve Diagram



The lifting capacity fulfills the requirements of standard DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Working radius (m)	Main boom (m)						
	Outrigger fully extended, cylinder I extended to 100%, sidewise and rearside operations						
	11.6	15.6	19.6	25.7	31.8	37.9	44.0
3.0	75000	50000	40000				
3.5	63000	50000	40000				
4.0	56000	47000	40000	28000			
4.5	52000	44000	40000	28000			
5.0	48000	42000	38000	27000			
5.5	43000	39000	36000	26000	18000		
6.0	39000	37000	34000	25000	18000		
6.5	35000	33000	31500	24000	18000		
7.0	30000	28700	28700	23000	18000	14000	
7.5	26500	25000	25000	22000	18000	14000	
8.0	23500	22500	22500	21000	17500	14000	
9.0	18200	18200	18200	18500	16000	14000	10000
10.0		14700	14700	15300	14500	13000	9800
11.0		12200	12200	12700	13000	12000	9500
12.0		10000	10200	11000	11500	11000	9000
14.0			7100	8200	8800	9300	8000
16.0			5300	6000	6700	7200	7000
18.0				4700	5200	5500	5900
20.0				3500	4000	4300	4600
22.0					3100	3300	3800
24.0					2300	2500	3000
26.0					1700	1900	2300
28.0						1400	1800
30.0						900	1300
32.0							1000
I	0	4.0	8.0	8.0	8.0	8.0	8.0
II	0	0	0	6.1	12.2	18.3	24.4
Parts of line	12	9	9	5	5	3	3
Hook	70t main boom						

DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Working radius (m)	Main boom (m)					
	Outriggers fully extended, cylinder I extended to 50%, sidewise and rearside operations					
	11.6	15.6	21.7	27.8	33.9	40.0
3.0	75000	50000				
3.5	63000	50000	28000			
4.0	56000	47000	28000			
4.5	52000	44000	28000			
5.0	48000	42000	27000	18000		
5.5	43000	39000	26000	18000		
6.0	39000	37000	25000	18000		
6.5	35000	33000	24000	18000	14000	
7.0	30000	28700	23000	17500	14000	
7.5	26500	25000	22000	17000	14000	
8.0	23500	22500	21000	16500	14000	9500
9.0	18200	18200	19100	16000	14000	9000
10.0		14700	15600	14500	13000	8500
11.0		12200	13000	13800	12000	8000
12.0		10000	11000	11700	11000	7500
14.0			8200	8800	9300	7000
16.0			6100	6700	7200	6500
18.0				5200	5700	6000
20.0				4100	4500	4800
22.0				3200	3600	3900
24.0					2800	3100
26.0					2200	2500
28.0					1700	2000
30.0						1500
32.0						1200
I	0	4.0	4.0	4.0	4.0	4.0
II	0	0	6.1	12.2	18.3	24.4
Parts of line	12	9	5	5	3	3
Hook	70t main boom					

The lifting capacity fulfills the requirements of standard DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Working radius (m)	Main boom (m)				
	Outriggers fully extended, cylinder I extended to 0%, sidewise and rearside operations				
	11.6	17.7	23.8	29.9	36.0
3.0	75000	28000			
3.5	63000	28000			
4.0	56000	28000	17800		
4.5	52000	28000	17600		
5.0	48000	27000	17400	14000	
5.5	43000	26000	17200	14000	
6.0	39000	25000	17000	14000	
6.5	35000	24000	16800	14000	
7.0	30000	23000	16500	14000	9000
7.5	26500	22000	16000	14000	9000
8.0	23500	21000	15500	13000	9000
9.0	18200	19800	15000	12100	8800
10.0		16300	14500	11300	8600
11.0		13700	14000	10500	8300
12.0		11700	12400	9700	8000
14.0			9400	8600	7500
16.0			7400	7600	6800
18.0				6000	6000
20.0				4900	5200
22.0				4000	4300
24.0					3500
26.0					2900
28.0					2400
I	0	0	0	0	0
II	0	6.1	12.2	18.3	24.4
Parts of fine	12	5	5	3	3
Hook	70t main boom				

The lifting capacity fulfills the requirements of standard DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Working radius (m)	Main boom (m)						
	Outrigger fully extended, cylinder I extended to 100%, sidewise and rearside operations						
	11.6	15.6	19.6	25.7	31.8	37.9	44.0
3.0	60000	50000	40000				
3.5	50000	45000	40000				
4.0	40000	40000	40000	28000			
4.5	35000	35000	35000	28000			
5.0	32800	32000	31500	27000			
5.5	26500	25700	25200	26000	18000		
6.0	21900	21200	20800	22200	18000		
6.5	18500	17800	17500	18800	18000		
7.0	15800	15200	14900	16200	17000	14000	
7.5	13700	13100	12800	14000	14800	14000	
8.0	12000	11400	11100	12300	13000	13500	
9.0	9300	8800	8500	9700	10400	10900	10000
10.0		6900	6600	7700	8400	8800	9200
11.0		5400	5100	6200	6800	7200	7600
12.0		4200	4000	5000	5600	6000	6400
14.0			2300	3300	3900	4300	4600
16.0				2000	2800	3000	3300
18.0					1700	2100	2300
20.0					1000	1400	1600
22.0						900	1100
I	0	4.0	8.0	8.0	8.0	8.0	8.0
II	0	0	0	6.1	12.2	18.3	24.4
Parts of line	12	9	9	5	5	3	3
Hook	70t main hook						

The lifting capacity fulfills the requirements of standard
DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Working radius (m)	Main boom (m)					
	Outriggers semi-extended, cylinder I extended to 50%, sidewise and rearside operations					
	11.6	15.6	21.7	27.8	33.9	40.0
3.0	60000	50000				
3.5	50000	45000	28000			
4.0	40000	40000	28000			
4.5	35000	35000	28000			
5.0	32800	32000	27000	18000		
5.5	26500	25700	26000	18000		
6.0	21900	21200	22900	18000		
6.5	18500	17800	19400	17500	14000	
7.0	15800	15200	16700	17000	14000	
7.5	13700	13100	14600	15400	14000	
8.0	12000	11400	12800	13600	13500	9500
9.0	9300	8800	10200	10800	11300	9000
10.0		6900	8200	8800	9300	8500
11.0		5400	6700	7300	7700	8100
12.0		4200	5500	6100	6500	6800
14.0			3700	4300	4700	5000
16.0				3000	3400	3700
18.0					2500	2800
20.0					1800	2000
22.0						1400
I	0	4.0	4.0	4.0	4.0	4.0
II	0	0	6.1	12.2	18.3	24.4
Parts of line	12	9	5	5	3	3
Hook	70t main boom					

DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Working radius (m)	Main boom (m)				
	Outriggers semi-extended, cylinder I extended to 0%, sidewise and rearside operations				
	11.6	17.7	23.8	29.9	36.0
3.0	60000	28000			
3.5	50000	28000			
4.0	40000	28000	17800		
4.5	35000	28000	17600		
5.0	32800	27000	17400	14000	
5.5	26500	26000	17200	14000	
6.0	21900	23800	17000	14000	
6.5	18500	20200	16800	14000	
7.0	15800	17500	16500	14000	9000
7.5	13700	15300	16000	14000	9000
8.0	12000	13500	14200	13000	9000
9.0	9300	10800	11400	11800	8800
10.0		8800	9400	9800	8600
11.0		7200	7800	8200	8300
12.0		6000	6600	7000	7200
14.0			4800	5100	5300
16.0			3500	3800	4000
18.0				2900	3100
20.0				2200	2400
22.0				1600	1800
24.0					1300
I	0	0	0	0	0
II	0	6.1	12.2	18.3	24.4
Parts of line	12	5	5	3	3
Hook	70t main boom				

The lifting capacity fulfills the requirements of standard DIN 15019 part 2 with regard to stability.

Table of Rated Lifting Capacity

Unit of measurement: kg

Main boom elevation angle	Main boom + jib (m)			
	Outriggers fully extended, sidewise and rearside operations			
	44.0 + 9.5		44.0 + 16.0	
	0°	30 °	0°	30°
80°	5000	3000	3000	1300
78°	4700	2850	2700	1200
76°	4400	2600	2400	1150
74°	4100	2450	2100	1100
72°	3800	2300	1850	1050
70°	3500	2200	1700	1000
68°	3200	2100	1600	970
66°	2800	2000	1500	940
64°	2400	1900	1400	910
62°	2100	1800	1300	880
60°	1850	1650	1200	850
58°	1600	1350	1100	800
56°	1300	1150	1000	750
54°	1000	900	800	
52°	800			
Parts of line	1			
Hook	5t auxiliary hook			

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