ZOOMLION

Zoomlion Heavy Industry Science & Technology Co.,Ltd.
Add: NO.677,Lugu Road,Zoomlion Industrial Park,Changsha,Hunan,China 410205

Copyright ©2017 Zoomlion, All rights reserved. Reproduction and copying of any part of the contents is not allowed for any purposes without Zoomlion's written approval.
Note: No product coating appearance shall be subject to sample.

Printed in China VN: EN-MC-201705-01

TRUCK CRANE
QY80V

ZOOMLION

en.zoomlion.com

Product Characteristics

1. ZOOMLION QY80V truck crane, which integrates our many years' experience in designing and manufacturing mobile cranes with advanced technology, is a new-generation and high-performance product developed to meet the market demands. Its performances, such as lifting height, main boom length, working speed and lifting capacity, have achieved advanced international level.

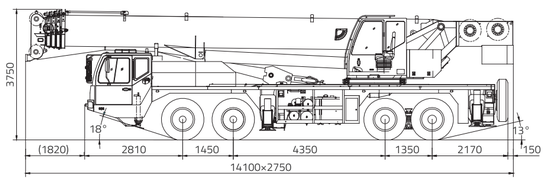
2. This product is a truck crane of full range slewing function, telescopic boom sections and pilot-operated proportional controlled systems. The crane adopts self-manufactured full-width 4-axle special purpose chassis (8×4 drive, offering convenient and flexible hydraulically powered steering), providing wide vision, spacious cab and luxurious equipment.

3. The latest directional control valve and tandem pump system ensure that each executive mechanism makes full use of its working capability. The easy-controlled, flexible, reliable and stepless speed regulated joysticks (L / R) can provide the crane with smooth simultaneous movements between "Spool winches up", "Reel winches off", "Derricking", "Slewing" and "Telescope boom in / out", which greatly improve the crane's working efficiency. The safety devices such as relief valve, balance valve, hydraulic lock and brake valve fitted in hydraulic system prevent the accidents caused by oil line overload and oil pipe ruptures.

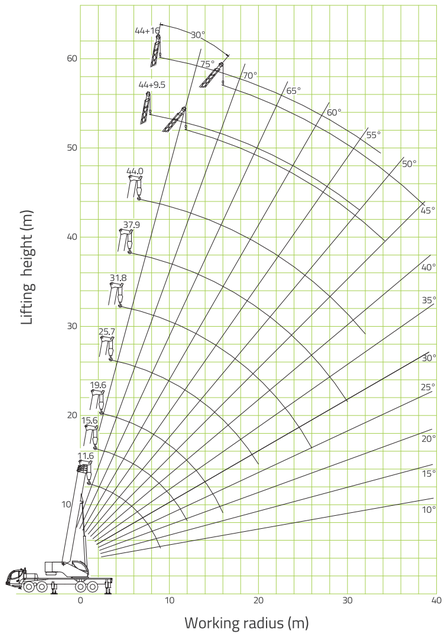
4. The safety devices such as load moment limiter and the complete lighting systems ensure your safety during operation and are convenient for night work.

5. This crane has a novel style which makes it beautiful in figure, in form and in color.

Overall View (Unit: Metric mm)



Lifting Height Chart



Technical Data

	Item	Unit	Value	Remarks
Working performance	Max. rated lifting capacity	kg	80000	
	Max. load moment of basic boom	N.m	2575	
	Max. load moment of max. length main boom	kN.m	1240	
	Max. lifting height of basic boom	m	12.2	
	Max. lifting height of main boom	m	44.2	These parameters do not include deflection of boom and jib.
	Max. lifting height of jib	m	60.2	
Working speeds	Max. hoist rope speed (Main winch)	m/min	≥135	Drum 4th layer
	Max. hoist rope speed (Auxiliary winch)	m/min	≥110	Drum 2nd layer
	Boom derricking up time	s	57	
	Boom telescoping out time	s	107	
	Max. slewing speed	r/min	1.8	
Driving	Max. driving speed	km/h	75	
	Max. gradeability	%	37	
	Min. turning diameter	m	24	
	Min. ground clearance	mm	280	
	Oil consumption per hundred kilometers	L	46	
Mass	Deadweight in driving condition	kg	45000	
	Complete vehicle kerb mass	kg	44870	
	Front axle load	kg	19000	
	Rear axle load	kg	26000	
Dimensions	Overall dimensions (L × W × H)	mm	14100×2750×3750	
	Longitudinal distance between outriggers	m	6.00	
	Transversal distance between outriggers	m	For completely extended outriggers: 7.60 m; For intermediately extended outriggers: 5.04 m	
	Tail slewing radius	mm	4020	
	Main boom length	m	11.6 – 44.0	
	Boom angle	°	-2 – 80	
	Jib length	m	9.5, 16	
	Offset	°	0, 30	

Rated Lifting Capacity Table

1. This crane is provided with several sheets of rated lifting capacity tables. The operator should select proper rated lifting load referring to resp. Lifting capacity tables according to actual working conditions.
2. The values in column "I" refer to the extendable length of telescopic cylinder I.
3. The values in column "II" refer to 3 times extendable length of telescopic cylinder II, namely, the total extendable length of boom section 3, 4 and 5.
4. Table 1 – Table 7 are the lifting capacity tables for the crane without moveable counterweight;
   Table 8 – Table 14 are the lifting capacity tables for the crane with moveable counterweight (2 t).
5. The OMs for the data indicated with an asterisk (*) in the lifting capacity tables are as follows:
   - With 80 tons hook
   - With special device.

Table 1 Unit: Metric kg

Working radius (m)	Main boom (m)						
	Telescopic cylinder I and outriggers completely extended, over side and over rear						
	11.6	15.6	19.6	25.7	31.8	37.9	44.0
3.0	80000*	51000	40000				
3.5	64000	51000	40000				
4.0	56000	51000	40000	28000			
4.5	52000	48000	40000	28000			
5.0	48000	43000	38500	28000			
5.5	43000	40000	36000	26000	18000		
6.0	39000	37000	34000	25000	18000		
6.5	35000	33000	31500	24000	18000		
7.0	30500	29000	29500	23000	18000	16000	
7.5	26500	25000	25000	22000	18000	16000	
8.0	23500	22500	22500	21000	17500	15000	
9.0	18200	18200	18200	19000	16000	14100	10000
10.0		14700	14700	15300	14500	13300	10000
11.0		12200	12200	13000	13000	12000	9600
12.0		10000	10200	11000	11500	11300	9400
14.0			7100	8200	8800	9600	8300
16.0			5300	6000	6700	7300	7750
18.0				4700	5200	5700	6100
20.0				3500	4000	4500	4800
22.0					3100	3500	4000
24.0					2300	2800	3100
26.0					1700	2200	2500
28.0						1600	2000
30.0						1200	1500
32.0							1200
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
Reevings	12	9	9	5	5	3	3
Hook	70 t main hook						

Table 2 Unit: Metric kg

Working radius (m)	Main boom (m)					
	Telescopic cylinder I intermediately extended and outriggers completely extended, over side and over rear					
	11.6	15.6	21.7	27.8	33.9	40.0
3.0	80000*	51000				
3.5	64000	51000	28000			
4.0	56000	51000	28000			
4.5	52000	48000	28000			
5.0	48000	43000	27000	18000		
5.5	43000	40000	26000	18000		
6.0	39000	37000	25000	18000		
6.5	35000	33000	24000	18000	16000	
7.0	30500	29000	23000	17500	14000	
7.5	26500	25000	22000	17000	14000	
8.0	23500	22500	21000	16500	14000	9500
9.0	18200	18200	19300	16000	14000	9000
10.0		14700	15600	14500	13000	8500
11.0		12200	13000	13800	12000	8000
12.0		10000	11000	11700	11000	7700
14.0			8200	8800	9300	7200
16.0			6100	6700	7300	6800
18.0				5200	5900	6100
20.0				4100	4700	4900
22.0				3200	3700	3900
24.0					3000	3200
26.0					2400	2600
28.0					1800	2100
30.0						1600
32.0						1300
I	0	4.0	4.0	4.0	4.0	4.0
II	0	0	6.1	12.2	18.3	24.4
Reevings	12	9	5	5	3	3
Hook	70 t main hook					

Table 3 Unit: Metric kg

Working radius (m)	Main boom (m)				
	Telescopic cylinder I completely retracted and outriggers completely extended, over side and over rear				
	11.6	17.7	23.8	29.9	36.0
3.0	80000*	28000			
3.5	64000	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	30500	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		13800	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				4100	4300
24.0					3600
26.0					3000
28.0					2500
I	0	0	0	0	0
II	0	6.1	12.2	18.3	24.4
Reevings	12	5	5	3	3
Hook	70 t main hook				

Table 4 Unit: Metric kg

Working radius (m)	Main boom (m)						
	Telescopic cylinder I completely extended and outrigger intermediately extended, over side and over rear						
	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	16000	
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	2600	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
Reevings	12	9	9	5	5	3	3
Hook	70 t main hook						

Table 5 Unit: Metric kg

Working radius (m)	Main boom (m)					
	Telescopic cylinder I and outriggers intermediately extended, over side and over rear					
	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	16000	
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
Reevings	12	9	5	5	3	3
Hook	70 t main hook					

Table 6 Unit: Metric kg

Working radius (m)	Main boom (m)				
	Telescopic cylinder I completely retracted and outrigger intermediately extended, over side and over rear				
	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
Reevings	12	5	5	3	3
Hook	70 t main hook				

Table 7 Unit: Metric kg

Boom angle	Main boom (m) + Jib (m)			
	Outriggers completely extended, over side and over rear			
	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°	1950	1650	1200	850
58°	1600	1350	1100	800
56°	1300	1150	1000	750
54°	1000	900	800	
52°	800			
Reevings	1			
Hook	5 t auxiliary hook			

Table 8 Unit: Metric kg

Working radius (m)	Main boom (m)						
	With 2 t moveable counterweight, telescopic cylinder I and outriggers completely extended, over side and over rear						
	11.6	15.6	19.6	25.7	31.8	37.9	44.0
3.0	80000*	51000	40000				
3.5	70000	51000	40000				
4.0	63500	51000	40000	28000			
4.5	56500	48000	40000	28000			
5.0	51500	45000	39000	28000			
5.5	46000	42500	36000	26000	18000		
6.0	41500	38000	34500	25000	18000		
6.5	36500	34000	31500	24000	18000		
7.0	32500	30000	29000	24000	18000	16000	
7.5	27000	26000	25000	22500	18000	16000	
8.0	25500	24500	23300	21500	17500	15000	
9.0	19500	19800	18500	19500	16000	14100	10000
10.0		16500	15100	17000	14500	13300	10000
11.0		13500	12200	14300	13000	12000	9600
12.0		11000	10400	12200	12200	11300	9400
14.0			7400	9200	9400	9600	8300
16.0			5300	7000	7300	7800	7500
18.0				5300	5500	6300	6100
20.0				4100	4300	5100	5300
22.0					3350	4100	4500
24.0					2650	3300	3600
26.0					2000	2600	2900
28.0						2000	2350
30.0						1600	1900
32.0							1500
34.0							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
Reevings	12	9	9	5	5	3	3
Hook	70 t main hook						

Table 9 Unit: Metric kg

Working radius (m)	Main boom (m)					
	With 2 t moveable counterweight, telescopic cylinder I intermediately extended and outriggers completely extended, over side and over rear					
	11.6	15.6	21.7	27.8	33.9	40.0
3.0	80000*	51000				
3.5	70000	51000	28000			
4.0	63500	51000	28000			
4.5	56500	48000	28000			
5.0	51500	45000	28000	18000		
5.5	46000	42500	26000	18000		
6.0	41500	38000	25000	18000		
6.5	36500	34000	25000	18000	16000	
7.0	32500	30000	24000	17500	14000	
7.5	27000	26000	22500	17000	14000	
8.0	25500	24500	21500	16500	14000	9500
9.0	19500	19800	20000	16000	14000	9000
10.0		16500	17500	14500	13000	8500
11.0		13500	14500	13800	12000	8000
12.0		11000	12500	13000	11000	7700
14.0			9400	10000	9300	7300
16.0			7200	7400	7600	6900
18.0				6000	6400	6200
20.0				4800	5300	5000
22.0				3600	4300	4100
24.0					3500	3700
26.0					2800	3000
28.0					2300	2500
30.0						1900
32.0						1600
I	0	4.0	4.0	4.0	4.0	4.0
II	0	0	6.1	12.2	18.3	24.4
Reevings	12	9	5	5	3	3
Hook	70 t main hook					

Table 10 Unit: Metric kg

Working radius (m)	Main boom (m)				
	With 2 t moveable counterweight, telescopic cylinder I completely retracted and outriggers completely extended, over side and over rear				
	11.6	17.7	23.8	29.9	36.0
3.0	80000*	28000			
3.5	70000	28000			
4.0	63500	28000	17800		
4.5	56500	28000	17600		
5.0	51500	27000	17400	16000	
5.5	46000	26000	17200	14000	
6.0	41500	25000	17000	14000	
6.5	36500	24000	16800	14000	
7.0	32500	23000	16500	14000	9000
7.5	27000	22000	16000	14000	9000
8.0	25500	21000	15500	13000	9000
9.0	19500	20000	15000	12100	8800
10.0		17000	14500	11300	8600
11.0		13800	14000	10500	8300
12.0		12000	13000	9700	8000
14.0			10000	8600	7500
16.0			7900	7600	6800
18.0				6500	6000
20.0				5400	5200
22.0				4400	4400
24.0					3700
26.0					3200
28.0					2650
I	0	0	0	0	0
II	0	6.1	12.2	18.3	24.4
Reevings	12	5	5	3	3
Hook	70 t main hook				

Table 11 Unit: Metric kg

Working radius (m)	Main boom (m)						
	With 2 t moveable counterweight, telescopic cylinder I completely extended and outriggers intermediately extended, over side and over						
	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	17000	15200	14900	16200	17000	16000	
7.5	14000	13100	12800	14000	14800	14000	
8.0	13000	12700	12300	13500	13000	13500	
9.0	10000	9900	9700	10800	10400	12000	10000
10.0		7900	7600	8700	9500	9900	9200
11.0		5900	5800	6800	7400	8000	7600
12.0		5000	4800	5900	6500	7000	7300
14.0			3000	4000	4700	5100	5400
16.0				2600	3400	3800	4100
18.0					2400	2800	3100
20.0					1700	2100	2300
22.0						1500	1700
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
Reevings	12	9	9	5	5	3	3
Hook	70 t main hook						

Table 12 Unit: Metric kg

Working radius (m)	Main boom (m)					
	With 2 t moveable counterweight, telescopic cylinder I and outriggers intermediately extended, over side and over rear					
	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	16000	
7.0	17000	15200	16700	17000	14000	
7.5	14000	13100	14600	15400	14000	
8.0	13000	12700	13800	13600	13500	9500
9.0	10000	9900	11200	10800	12300	9000
10.0		7900	9200	9800	10000	8500
11.0		5900	7500	8100	8500	8100
12.0		5000	6300	6900	7300	7600
14.0			4300	4900	5300	5600
16.0				3500	3900	4500
18.0					3000	3300
20.0					2200	2400
22.0						1800
I	0	4.0	4.0	4.0	4.0	4.0
II	0	0	6.1	12.2	18.3	24.4
Reevings	12	9	5	5	3	3
Hook	70 t main hook					

Table 13 Unit: Metric kg

Working radius (m)	Main boom (m)				
	With 2 t moveable counterweight, telescopic cylinder I completely retracted and outriggers intermediately extended, over side and over rear				
	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	17000	17500	16500	14000	9000
7.5	14000	15300	16000	14000	9000
8.0	13000	14500	14200	13000	9000
9.0	10000	11800	11400	12000	8800
10.0		9800	10400	10500	8600
11.0		8000	8800	8800	8300
12.0		6800	7400	7800	8000
14.0			5400	5700	5900
16.0			4000	4300	4500
18.0				3400	3600
20.0				2600	2800
22.0				2000	2200
24.0					1700
I	0	0	0	0	0
II	0	6.1	12.2	18.3	24.4
Reevings	12	5	5	3	3
Hook	70 t main hook				

Table 14 Unit: Metric kg

Boom angle	Main boom (m) + Jib (m)			
	With 2 t moveable counterweight, Outriggers completely extended, over side and over rear			
	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°	1950	1650	1200	850
58°	1800	1350	1100	800
56°	1600	1300	1000	750
54°	1300	1100	900	
52°	1100			
Reevings	1			
Hook	5 t auxiliary hook			