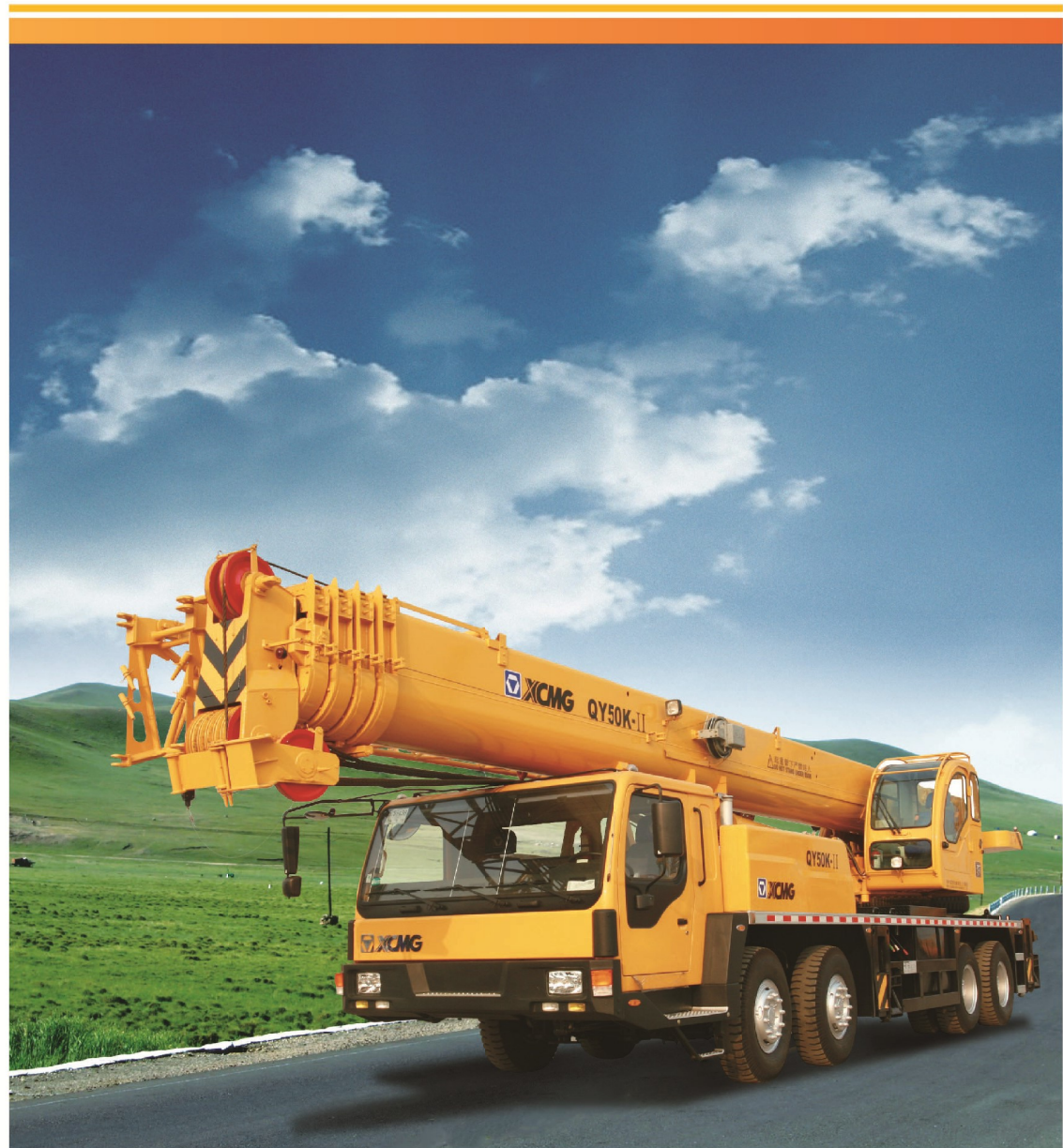




50 TONNAGE

SERIES TRUCK CRANE





QY50B.5 Five-section boom of "U"-shape cross section
Half Drives Cab
Single cylinder elevation



QY50K-I Five-section boom of "U"-shape cross section
Full Drives Cab
Single cylinder elevation, double winches
Crane pilot proportional control



Enhanced performance and quality assurance with five technology highlights.

Enhanced performance, better quality, ease of use, easy maintenance, with greater energy efficiency and environmental protection.

Highlight I: Enhanced Performance

The optimized machine layout reduces stress on major bearing components, resulting in a lifting performance that surpasses other similar products in the industry.

A telescopic mechanism is used to smoothly integrate the boom head to an embedded block, making the telescopic boom much more stable and reliable.

The boom length surpasses other options with the same tonnage, increasing the amount of work covered by up to 6%.

Employing new box legs, the design is optimized to withstand stress, cover larger distances, and offers greater rigidity and stability.

Operation efficiency is improved by 6%.

Highlight II: Better Quality

The classic K-series telescopic boom technology is used to ensure safe and reliable operations.

The lifting operation is made more reliable with the industry's more complete safety device system.

A comprehensive upgraded braking system, dual-loop pneumatic design, and improvements across all systems ensures operational safety while the vehicle is in use.

The new power steering mechanism and hydraulic design guarantees the safety of the vehicle at all times, making it more lightweight, agile, and precise.

The highly rigid turret and vehicle frame provides a balance between strength and rigidity.

The integration of design and structural elements have automated the welding process and enhanced reliability.

Highlight III: Ease of Use

The energy efficient load-sensing hydraulic system offers ergonomic and intuitive controls and delivers high precision with good micro-motion resistance.

Operation has been made simpler with an optimized rod control mechanism.

The cab uses a large arc-shaped windscreen which enables wider vision for better control.

The multi-stage centrifugal rotary gear ensures that operation of the rotary system is stable and reliable, with greater operational efficiency.

Highlight IV: Easy Maintenance

The layout and design of the pipelines have been optimized based on scientific research, greatly reducing its dismantling time and maintenance costs.

The electrical system has been comprehensively upgraded and now includes leak-proof electrical connectors, significantly extending the service life of components.

Use of the K-series technology prevents rope disruptions and enhances efficiency, reduces labour intensity and extends the service life of the rope.

The retractable steel wire rope and its protective devices prevents it from dropping and breaking.

Full aluminium-covered platforms are provided for car repairs, effectively protecting vehicle components.

Highlight V: Energy Efficiency and Environmental Protection

It uses dual control engines that are powerful and economically friendly.

In its economical mode, it can meet the engine power demanded for a typical lifting operation, while its high power mode satisfies the requirements needed for highly challenging and efficient operations.

The powerful cooling device eliminates the problem of overheated oil, and extends the service time of hydraulic oil.

Scientifically-supported advanced machine matching technology reduces losses and extends the machine's service life and equipment salvage rate.

50 TONNAGE

Series Truck Crane


Technical Specifications

Technical Specifications		QY50B	QY50B.5	QY50K	QY50K-I	QY50K-II	Unit						
Dimensions	Total length	13270	13890	13100	13050	13770	mm						
	Total width	2750	2800	2750	2800	2800	mm						
	Total height	3300	3440	3350	3430	3570	mm						
Weight	Total weight in a traveling state	39870	42000	38580	40400	41000	kg						
	Front axle load	13935	18000	12950	14500	15000	kg						
	Rear axle load	25935	26000	25630	25900	26000	kg						
Power	Engine model	Euro III Hangfa WD615.334 / Euro II Hangfa WD615.46		WD615.334 / SC9DF340Q3	Euro III Hangfa WD615.334 / Euro II Hangfa WD615.46		WD615.334 / SC9DF340Q3	WD615.334 / SC9DF340Q3 / WP10.336					
	Rated Engine Power	206/2200	266/2200	247/2200	251/2200	206/2200	266/2200	247/2200	251/2200	247/2200	251/2200	247/2200	kW/(r/min)
	Engine rated torque	1160/1300~1600	1460/1400	1350/1400	1430/1400	1100/1400	1460/1400	1350/1400	1430/1400	1350/1400	1430/1400	1350/1100-1500	N.m/(r/min)
Travel	Max. travel speed	66	75	80	66	75	75	80					km/h
	Min. turning diameter	24	24	24	24	24	24	24					mm
	Min. ground clearance	275	275	327	285	285	285	285					mm
	Approach angle	16	16	18	16	16	16	16				16/17	°
	Departure angle	10	10	11	11	11	11	11				11	°
	Max. gradeability	37	45	35	27	46	40	40				40	%
	Fuel consumption of 100km	48	48	40	42	42	42	42				42	L
Lifting performance	Max. lifting capacity	50	50	50	50	50	50	50					t
	Min. rated working radius	3	3	3	3	3	3	3					m
	Turning radius at swing tadbale tail	3.8	3.71	3.482	3.482	3.482	3.482	3.482					m
	Max. lifting torque		1800	1764	1764	1764	1764	1764					kN.m
	Basic boom lifting height	11.27	11.56	11.56	11.56	11.56	11.56	11.56					m
	Fully-extended boom lifting height	40.31	42.58	42.58	42.58	42.58	42.58	42.58					m
	Fully-extended boom+luffing jib	55.8	55.8	55.8	55.8	55.8	55.8	55.8					m
	Outrigger longitudinal distance span	5.45	5.93	5.93	5.93	5.93	5.93	5.93					m
Working speed	Outrigger lateral distance span	6.6	6.9	6.9	6.9	6.9	6.9	6.9					m
	Boom elevating time	120	88	88	88	88	88	88					s
	Boom full elevating time	184	180	180	180	180	180	180					s
	Max. slewing speed	2	2.0	2.0	2.0	2.0	2.0	2.0					r/min
	Main winch max.speed(single line)	70.8	110	110	110	110	110	110					m/min
Auxiliary winch max.speed(single line)	70.8	110	110	110	110	110	110					m/min	

50 TONNAGE


Series Truck Crane

QY50B Lifting performance table

 Lifting performance table for QY50B main boom

Fully-extended horizontal outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger, 360° swing


Working radius (m)	Basic boom	Mid-extended boom	Mid-extended boom	Mid-extended boom	Fully-extended boom
	10.70 Lifting Load (kg)	18.05 Lifting Load (kg)	25.40 Lifting Load (kg)	32.75 Lifting Load (kg)	40.10 Lifting Load (kg)
3.0	50000				
3.5	43000				
4.0	38000				
4.5	34000				
5.0	30600	24700			
5.5	28000	23500			
6.0	24000	22200	16300		
6.5	21000	20000	15000		
7.0	18500	18000	14100	10200	
8.0	14500	14000	12400	9200	7500
9.0	11500	11200	11100	8300	6500
10.0		9200	10000	7500	6000
12.0		6400	7500	6800	5200
14.0		4600	5100	5700	4800
16.0			4000	4700	3900
18.0			3100	3700	3300
20.0			2200	2900	2900
22.0			1600	2300	2400
24.0				1800	2000
26.0				1400	1500
28.0					1200
30.0					900
Parts of line	12	8	5	4	3
Weight of hook block	515kg	515kg	210kg	210kg	210kg

 Lifting performance table for QY50B luffing jib

Fully-extended horizontal outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger, 360° swing


Main boom angle (°)	Main boom 40.1m		Offset angle 0°		Offset angle 15°		Offset angle 30°	
			Luffing jib 8.5m	Luffing jib 15m	Luffing jib 8.5m	Luffing jib 15m	Luffing jib 8.5m	Luffing jib 15m
	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	
78	4000	2000	2700			2440		
75	3600	2000	2500	1400		2300	1100	
72	3200	1800	2300	1200		2200	1000	
70	2900	1700	2200	1150		2100	990	
65	2300	1400	1900	1100		1900	950	
60	1400	1200	1300	950		1200	880	
55	600	800	550	600		450	500	
Parts of line			1					
Weight of hook block			100kg					

QY50B.5 Lifting performance table

 QY50B.5 Total rated lifting load for main boom

Fully-extended outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger, 360° swing

Working Radius (m)	Basic boom	Mid-extended boom	Mid-extended boom	Mid-extended boom	Mid-extended boom	Mid-extended boom	Fully-extended boom
	11.3m	15.22m	19.15m	25.03m	30.92m	36.81m	42.7m
3.0	50000						
3.5	50000						
4.0	44000	40000	33000				
4.5	40000	37000	31200	24500			
5.0	36000	34000	29300	22500			
5.5	31500	31000	27500	21000			
6.0	26500	30000	26000	20000	16500		
7.0	22000	24500	24000	18200	15000	12800	
8.0	18900	18800	18800	16500	13800	12000	
9.0	15000	14900	14900	15300	12500	11100	9000
10.0		12100	12100	13200	11300	10100	9000
12.0		8100	8100	9200	9800	8800	7800
14.0			5600	6600	7200	7800	6800
16.0			3900	4900	5500	5900	6000
18.0				3600	4200	4600	4900
20.0				2700	3200	3600	3900
22.0					1900	2500	2800
24.0						1800	2200
26.0							1300
28.0							1300
30.0							900
32.0							900
Parts of line	12	9	8	6	4	3	3
Min. boom angle	26.7°	31.5°	27.7°	24.4°	32.3°	36.0°	43.0°

 QY50B.5 Total rated lifting load for luffing jib


Fully-extended outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger, 360° swing

Main boom angle (°)	Main boom length (m)		Luffing jib length (m)		Offset angle		
	42.7m		8.5m		15m		
	Lifting load (kg)	Lifting load (kg)	Lifting load (kg)	Lifting load (kg)	Lifting load (kg)	Lifting load (kg)	Lifting load (kg)
78	4000	2700	2400		2500	1400	1100
75	3600	2500	2300		2100	1250	1000
72	3200	2300	2200		1800	1150	990
70	2900	2200	2100		1700	1100	950
65	2300	2000	1900		1400	950	850
60	1800	1600	1500		1100	800	750
55	1000	1000	900		800	650	620
50	600	500	500		300	300	280

50 TONNAGE

Series Truck Crane

QY50K Lifting performance table

 Lifting performance table for QY50K main boom

Fully-extended horizontal outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger, 360° swing


Working radius (m)	Basic boom 10.70	Mid-extended boom 16.05	Mid-extended boom 25.40	Mid-extended boom 32.75	Fully-extended boom 40.10
	Lifting Load (kg)	Lifting Load (kg)	Lifting Load (kg)	Lifting Load (kg)	Lifting Load (kg)
3.0	50000				
3.5	50000	31000			
4.0	42500	29000			
4.5	39500	28000	20000		
5.0	36000	27000	19000		
5.5	30300	24500	18500		
6.0	25600	23000	18200	13600	
7.0	19400	18900	17000	13600	
8.0	15200	14600	15500	12500	8200
9.0	12100	11800	12800	11500	8200
10.0		9500	10600	10500	7600
12.0		6800	7700	8200	6800
14.0		4800	5800	6200	6000
16.0		3400	4400	4800	5000
18.0			3300	3800	4000
20.0			2500	3000	3200
22.0			1800	2300	2600
24.0				1800	2100
26.0				1300	1600
28.0					1200
30.0					900
Parts of line	12	8	5	4	3
Main boom angle	15.36°	17.02°	24.11°	34.21°	39.28°
Main boom angle	68.95°	76.16°	77.93°	77.99°	77.30°
Weight of hook block			515kg		

 Lifting performance table for QY50K luffing jib

Main boom 40.1m, At the side or the rear


Main boom angle(°)	Offset angle 0°					
	Offset angle 0°		Offset angle 15°		Offset angle 30°	
	Luffing jib 8.5m	Luffing jib 15m	Luffing jib 8.5m	Luffing jib 15m	Luffing jib 8.5m	Luffing jib 15m
	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)	Lift Load (kg)
78	4000	2000	2700	1400	2440	1100
75	3600	2000	2500	1200	2300	1000
72	3200	1800	2300	1150	2200	990
70	2900	1700	2200	1100	2100	950
65	2300	1400	1900	950	1900	880
60	1800	1200	1600	800	1500	830
55	1000	800	900	700	850	600
50	450		400		350	

QY50K-I Lifting performance table

 QY50K-I Total rated lifting load for main boom

Fully-extended outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger. 360°swing

Working Radius (m)	Basic boom 10.70m	Mid-extended boom 14.53m	Mid-extended boom 18.35m	Mid-extended boom 24.01m	Mid-extended boom 29.68m	Mid-extended boom 35.34m	Fully-extended boom 41.0m
	3.0	50000					
3.5	50000	37000	31500				
4.0	44000	37000	30600				
4.5	40000	32500	28500	23200			
5.0	36000	30000	27200	22000			
5.5	31000	28500	24600	20600			
6.0	25800	25300	23300	18300	15700		
7.0	20000	19000	19500	17100	14200		
8.0	15500	15000	14800	15600	12900	11000	8500
9.0	12300	12000	11900	13100	12000	10000	8300
10.0		10000	9800	11200	10800	9000	7900
12.0			7200	6900	8100	8500	7800
14.0				4900	6000	6200	6300
16.0					3500	4500	4900
18.0						3400	3900
20.0						2600	3000
22.0						2000	2400
24.0							1800
26.0							1400
28.0							1000
30.0							750
32.0							650
Parts of line	12	8	8	5	4	3	3
Min boom angle	16.6°	25.1°	20.3°	14.1°	23.7°	28.3°	36.3°
Max boom angle	69.1°	72.8°	76.5°	77.3°	76.8°	75.6°	80°
Weight of hook block							515kg

 QY50K-I Total rated lifting load for luffing jib

Fully-extended outrigger, without the 5th outrigger, boom at the side or the rear, or with the 5th outrigger. 360°swing

Main boom angle(°)	Main boom 41.0m Lifting load (kg)					
	Offset angle 0°		Offset angle 15°		Offset angle 30°	
	Luffing jib 8.5m	Luffing jib 15m	Luffing jib 8.5m	Luffing jib 15m	Luffing jib 8.5m	Luffing jib 15m
78	4000	2000	2700	1400	2440	1100
75	3600	2000	2500	1200	2300	1000
72	3200	1800	2300	1150	2200	990
70	2900	1700	2200	1100	2100	950
65	2300	1400	1900	950	1900	880
60	1800	1200	1600	800	1500	830
55	1000	800	900	700	850	600
Parts of line						1
Weight of hook block						100kg