

QY100K Truck Crane

We have been devoting to develop crane products with the most advanced technology and the features of new design, more powerful performance. QY100K truck crane is a new large-tonnage researched and developed by our company. Six-axle carrier with three for drive and three for steering, has good off-road capability; optimized oviform boom profile has excellent lifting capacity; control system with program logic controller (PLC) reliable and precise; application of new technology such as self-erecting combined counterweight, tilt-able operator's cab greatly improves the whole performance, and makes operation more comfortable and convenient. This truck crane is suitable for lifting operation and installation work in plants, mines, ports, construction sites, etc.

The features of QY100K are as follows:

1. Compact structure, reasonable arrangement, wide outrigger span, and 360° operation of the boom.
2. Six-axle off-road carrier equipped with imported Cummins engine and automatic transmission, max. grade-ability of 40%; maneuverable steering system, good pass-ability, min. turning diameter of 24m.
3. Lifting operation is controlled by integrated PLC for construction machinery. Control signals and operating performance chart of parts can be set and adjusted with digit. Working safety, reliability and efficiency are improved greatly.
4. Electric control outriggers leveled by button, and accelerator speed-up button improve working efficiency greatly.
5. Five-section boom of oviform boom profile, special blocks and aligning devices and imported high-tension steel plates, minimize the boom weight, make boom telescope smoothly and align accurately and improve the lifting capacity greatly.
6. Euro II engine for construction machinery equipped on superstructure smooth running, lower noise, powerful output and suitable for continuous work of long time.
7. Self-erecting counterbalances—can be variously combined to meet various working requirements. Various combination of counterweight improves the lifting capacity of mid-extended boom. Movable control box facilitate operation of counterweight.
8. Hydraulic system is a constant power and variable displacement system of cost energy and high efficiency. Combined with PLC, it can adjust flow and pressure of the system according to the change of load automatically, control speed precisely and sensitively.
9. Comfortable operator's cab with integrated front and roof windows, air-conditioning, roller blinds, adjustable operator's seat, noise and heat insulation. It can be tilted backwards 20°.
10. Optional automatic lubricating device. During operation, it will lubricate main positions automatically according to the preset time interval.
11. Other optional parts such as jib, single top, anti-ultraviolet rays glazing, and radio-cassette player in operator's cab are available.

Main Technical Specifications
Technical Data for Lifting Operation

Classificatory	Item		Unit	Parameter
Outline dimension	Overall length		mm	15230
	Overall width		mm	3000
	Overall height		mm	3860
Mass	Total mass in travel state		kg	65000
Travel performance	Travel speed	Max. travel speed	km/h	75
		Min. stable travel speed	km/h	0.5
	Turning diameter	Min. turning diameter	m	24
		Min. turning diameter at boom tip	m	26.6
	Power ratio		kW/t	7.3
	Min. ground clearance		mm	310
	Approach angle		(°)	23
	Departure angle		(°)	15
	Braking distance (at 30km/h)		m	≤10
	Max. grade-ability		%	40
Power	Engine rated output		kW/(r/min.)	324/1800
	Engine rated torque		N.m/(r/min.)	2100/1200

Main Technical Data for Lifting Operation

Classificatory	Item		Unit	Parameter
Lifting performance	Max. total rated lifting capacity		t	100
	Min. rated working radius		m	3
	Max. load moment	Base boom	kN.m	3238
		Fully extended boom	kN.m	1670
		Fully extended boom + Jib	kN.m	1127
	Outrigger span	Longitudinal	m	7.56
		Lateral	m	7.6
	Boom length	Base boom	m	12.8
		Fully extended boom	m	48
		Fully extended boom + Jib	m	48 + 18.1
Jib offset angle		°	0, 15, 30	
Working speed	Boom elevating time	Boom raising	s	60
	Boom telescoping time	Full extending / Full retracting	s	140
	Max. swing speed		r/min	2
	Hoist speed (single line at 4th layer)	Main winch	m/min	110
		Aux. winch	m/min	85