



# X Series Electric Tow Tractor

with capacities of 10,000 to 32,000kg



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*The World of Hangcha*





Easy/  
Efficiency/  
Economy



## Appearance

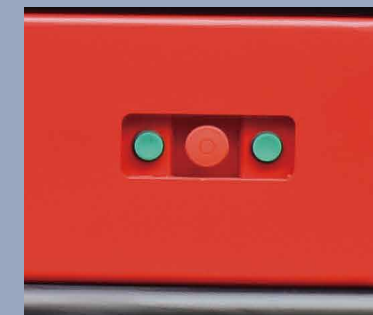
/ With the integrated steel structure, the internationally-fashionable large arc and streamline pattern is utilized. The appearance is beautiful. The vehicle is applicable to such works as traction, pushing and handling.

## Safety

- / Advanced AC control system-The high-frequency IMOTION integrated controller can guarantee stable and accurate vehicle running. The motor has fine electric control matching performance, and has such functions as stable start-up, regenerative braking, plug braking, anti-slip at ramp and so on. It is energy-saving, high-efficiency, safe and reliable.
- / With the vacuum servo braking system, double-cavity and double-pipe are arranged in X lay-out. The front and rear parts are provided with differential pressure. All wheels can be braked. The servo ratio is great, braking is safe, stable and reliable; with the vacuum bucket design, when the power is ineffective, servo braking can be reliably realized.
- / The mater electric switch is provided, the vehicle safety can be guaranteed through emergency power shut-off.

## Advancedness

- / The fully AC power system provides strong power and more accurate speed-adjusting performance. AC power system is used for both running and steering.
- / The high-efficiency power system and high-performance battery extend the operating time after one charging.
- / The LED display instrument of the international first-class brand is utilized; such instrument has functions of electric quantity display, timing meter and failure self-diagnosis. Without the handheld unit, changing vehicle performance and overhaul can be completed via the instruments. The failure will be displayed both in code and text, which is more visual and easy for reading.
- / At the vehicle rear side, there are the operating switches (front and behind electric switches, emergency power shut-off switch).
- / The vehicle battery can be replaced through being hoisted or laterally moved out, which provides convenience for use by the user(20-32t).
- / The electric system of the whole vehicle utilizes the waterproof design; the electric control utilizes the forced cooling and can also have functions of heat emission, air guide, dust prevention, waterproofing.
- / The bottom plate at the rear part of the vehicle can be used as the loading platform.



At the vehicle left rear side, there are the operating switches (front and behind electric switches, emergency power shut-off switch). The hook can be conveniently and safely manipulated



The imported and fully AC power system has advanced performance, is fully enclosed, utilizes forced air-cooling and is safe and reliable



Remote control (optional): Vehicle management system: Vehicle status enquiry and record, alarm for overspeed, door lock, radar and so on. The equipment can be provided with 7-inch touch screen. The operation is simple and convenient. With overall data display & real-time status reminding, monitoring, management and service can be realized in remote way



With the internationally-advanced and transversely-arranged driving unit, the special reduction gearbox is utilized, and the great reduction ratio design is used



## Stability

/ The battery is placed at the bottom of the vehicle frame and between the front axle and rear axle. With the ultra-low gravity center, the excellent stability of the whole vehicle is ensured.

## Comfort

/ The man-machine interactive system utilizes the new-type digital panel and combined rocker switch, the vehicle travel condition can be displayed clearly, and it is simple, reliable and visual.

/ With such special technologies for vehicle as transversely-arranged oil cylinder steering axle, fully-hydraulic steering device and so on, the steering radius is small, and the special operating force is less than 10N.

/ With the advanced chassis elastic suspension technology and long wheelbase design, the vehicle has fine smoothness.

/ The integrated driver's cab has large visual field and is made of irregular tubes. The driver's cab is flexibly connected to the vehicle body, has fine tightness, can isolate sound, vibration, heat and so on. Better comfort is offered for the driver. With the wide operating space and lower boarding/get-down pedal, the operator can board or get down conveniently.

/ The front and rear angles of inclination of the steering wheel are adjustable; the seat can be adjusted by 150mm to front or rear. The operator can select the best driving position.

## Environmental protection

/ With such advantages of mute, non-pollution and saving energy, the environmental protection requirements can be met.

/ The whole vehicle utilizes the asbestos-free material.

## Maintainability

/ Such electric elements as electric control, contactor, instrument, accelerator and so on are products of internationally well-known brands, and have high reliability.

/ AC power system is used for both running and steering. The motor is maintenance-free, and the maintenance cost for carbon brush replacement and so on is reduced.

/ With the rear cover design provided with air spring, large openness and barrier-free rear view, maintenance for such electric elements as battery, motor, controller and so on is very convenient.

## Standard specification

- / LED Head lamp (high beam head lamp and dipped head lamp)
- / Boarding handle
- / Large and integrated rubber pedal cushion
- / Steering signal lamp
- / Steering wheel adjustable device
- / High-power AC drive system
- / LED rear work lamp assembly
- / Standard seat
- / Fully hydraulic steering
- / Multi-functional combined instrument
- / Front windshield wipers
- / Vacuum servo hydraulic brake
- / Electric horn
- / Front windshield wiper water
- / Standard battery
- / Reversing buzzer
- / Reflecting mirror
- / Fully-enclosed driver's cab
- / Top light
- / Inching switch
- / Sun-shield
- / Standard traction pin
- / Front bumper
- / EPB(Electronic Parking Brake) (20-32t)

## Options

- / High-performance imported lead-acid battery
- / Speed limit
- / Warm air blower
- / Large-capacity domestically-made lead-acid battery
- / Speed limit alarm
- / Solid tyre
- / Domestically-made lithium iron phosphate battery
- / Traction pin height solution
- / Semi-enclosed driver's cab
- / Imported lithium iron phosphate battery
- / Alarm light
- / Rear windshield wipers
- / Battery charger
- / Rear work light
- / Rear windshield wiper water
- / Suspended seat
- / Extinguisher
- / Remote management system
- / EPB(Electronic Parking Brake) (10-15t)
- / Fan



*The integrated driver's cab has large visual field and is made of irregular tubes. The driver's cab is flexibly connected to the vehicle body, has fine tightness, can isolate sound, vibration, heat and so on. With the wide operating space, better comfort is offered for the driver.*



The large LED display screen has functions of electric quantity display, timing meter and failure self-diagnosis. Without the handheld unit, changing vehicle performance and overhaul can be completed via the instruments. The failure will be displayed both in code and text, which is more visual and easy for reading.



The battery can be replaced through being hoisted or laterally moved out, which provides convenience for use by the user(20-32t).



Equipped with electronic parking brake, more convenient and safer (20-32t).





# X Series Electric Tow Tractor



## X series 10-32t Electric Tow Tractor Specification

		HANGCHA GROUP CO.,LTD.											
Distinguishing mark	1.1	Manufacturer											
	1.2	Manufacturer's type designation	QSD100-XC2-ISY*	QSD150-XC2-ISY*	QSD200-XD3*	QSD200-XD3-I*	QSD250-XD3-L*	QSD250-XD3*	QSD250-XD3-IL*	QSD320-XD3-L*	QSD320-XD3*	QSD320-XD3-IL*	
Weight	1.5	Rated capacity/rated load	Q (kg)	10000	15000	20000	20000	25000	25000	32000	32000	32000	
	1.7	Rated drawbar pull	F (N)	3200	4000	6300	6300	6300	6300	7000	7000	7000	
Tyres, chassis	1.9	Wheelbase	y (mm)	1210	1410	1475	1475	1760	1475	1760	1475	1760	
	2.1	Service Weight	kg	2150	2550	3450	3250	4350	3650	3850	4550	4050	
Dimensions	2.2	Axle loading, front/rear	kg	950/1200	1000/1550	1410/2040	1150/2100	1800/2550	1350/2300	1500/2350	1820/2730	1635/2350	1440/2610
	3.2	Tyre size, front		6.00-9-10PR	6.00-9-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	
Performance data	3.3	Tyre size, rear		7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	7.00-12-12PR	28x9-15-12PR	28x9-15-12PR	28x9-15-12PR
	3.5	Wheels, number front / rear (x = driven wheels)		2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Electric engine	3.6	Tread, front	b <sub>50</sub> (mm)	1124.5	1124.5	1124.5	1124.5	1124.5	1124.5	1124.5	1124.5	1124.5	1124.5
	3.7	Tread, rear	b <sub>51</sub> (mm)	1130	1130	1150	1150	1150	1150	1150	1150	1150	1150
Performance data	4.7	Height of overhead guard (cabin)	h <sub>6</sub> (mm)	1875	1875	1895	1895	1895	1895	1895	1895	1895	1895
	4.12	Coupling height	h <sub>50</sub> (mm)	450/350	450/350	550/450/350	550/450/350	550/450/350	550/450/350	550/450/350	550/450/350	550/450/350	550/450/350
Performance data	4.16	Length of loading surface	l <sub>5</sub> (mm)	1450	1450	1685	1685	1970	1685	1970	1685	1970	
	4.18	Width of loading surface	b <sub>5</sub> (mm)	1080	1080	1160	1160	1160	1160	1160	1160	1160	
Performance data	4.19	Overall length	l <sub>5</sub> (mm)	2750	2950	3065	3065	3350	3065	3350	3065	3350	
	4.21	Overall width	b <sub>1</sub> (mm)	1350	1350	1380	1380	1380	1380	1380	1380	1380	
Performance data	4.32	Ground clearance, centre of wheelbase	m <sub>2</sub> (mm)	130	130	150	150	150	150	150	150	150	
	4.35	Turning radius	W <sub>9</sub> (mm)	2500	2750	2825	2825	3350	2825	3350	2825	3350	
Performance data	5.1	Travel speed, laden/unladen	km/h	11/20	11/20	11/25	11/25	11/25	11/25	11/25	11/25	11/25	
	5.5	Drawbar pull at 60 minute rating	N	3200	4000	6300	6300	6300	6300	7000	7000	7000	
Performance data	5.6	Max. Drawbar pull at 5 minute rating	N	10000	14000	20000	20000	20000	20000	26000	26000	26000	
	5.7	Gradeability, laden/unladen	%	/20	/20	/33	/33	/33	/33	/33	/33	/33	
Performance data	5.10	Service brake		Hydraulic/ Mechanical	Hydraulic/ Mechanical	Hydraulic/ Electromagnetic	Hydraulic/ Electromagnetic	Hydraulic/ Electromagnetic	Hydraulic/ Electromagnetic	Hydraulic/ Electromagnetic	Hydraulic/ Electromagnetic	Hydraulic/ Electromagnetic	
	6.1	Drive motor rating S2 60 min	kW	12	12	25	25	25	25	30	30	30	
Performance data	6.4	Battery voltage, nominal capacity K5	V/Ah	80.5/456(Lithium)	80.5/456(Lithium)	80/500	80.5/456(Lithium)	80/775	80/500	80.5/456(Lithium)	80/775	80/620	
	6.5	Battery weight	kg	500	500	1200	500	1920	1200	500	1920	1550	

Note: \* CE model

