G系列6-8吨内燃牵引车
G SERIES 6-8T INTERNAL-COMBUSTION TOW TRACTOR

标准配置 Standard configuration

全液压动力四轮制动 Hydraulic power brake acts on four wheels	液晶数字化仪表 LCD digital instrument	倒车蜂鸣器 Backward buzzer
全液压横置油缸式动力转向 Fully hydraulic transverse cylinder steering	2kg干粉灭火器 2kg fire extinguisher	防滑踏板 Antiskid footplate
机械换向 Mechanical direction changing	随机备件箱 Spare parts box with tractor	后工作灯 Rear working light
全封闭驾驶室（含顶灯） Fully enclosed cab(with overhead light)	半包围双座椅 Double Semi-closed seat	灭火消声器 Extinguishing muffler
橘红/蓝灰色涂装 Orange/steel gray painting	高进气 High air intake	天窗 Scuttle
电风扇 Electric fan	倒车镜 Rearview mirror	

选项配置 Optional configuration

前牵引座 Front traction seat	空调 Air conditioner	总电源开关 Power switch
用户自选涂装 Customized painting	暖风机 Warm air blower	实心胎 Solid tyre
电液换向 Electro-hydraulic direction changing	双空滤 Double air filter	警示灯 Warning light
双层/多层牵引机构 Dual-layer/ multi-layer operation stick & pin component	速度里程表 Speedometer	排气火花熄灭器 Exhaust spark arrester
后窗防护栏 Guard grid of cab rear window	隔热防晒棚 Thermal insulation awning	

- 合力产品不断更新和改进中，合力保留在没有事先告知用户的情况下，更改整体参数及设计的权利。
- 文中插图不一定是该机型的标准款，插图中产品配置和外观颜色与实际机型存在差异，以实物为准。

- Our products are keeping improving and HELI have the rights to update truck specifications and design without prior notice.
- The figure in the brochure may not be the standard model and its configuration and color may be different from actual machine. Please refer to the real machine.

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6-8吨

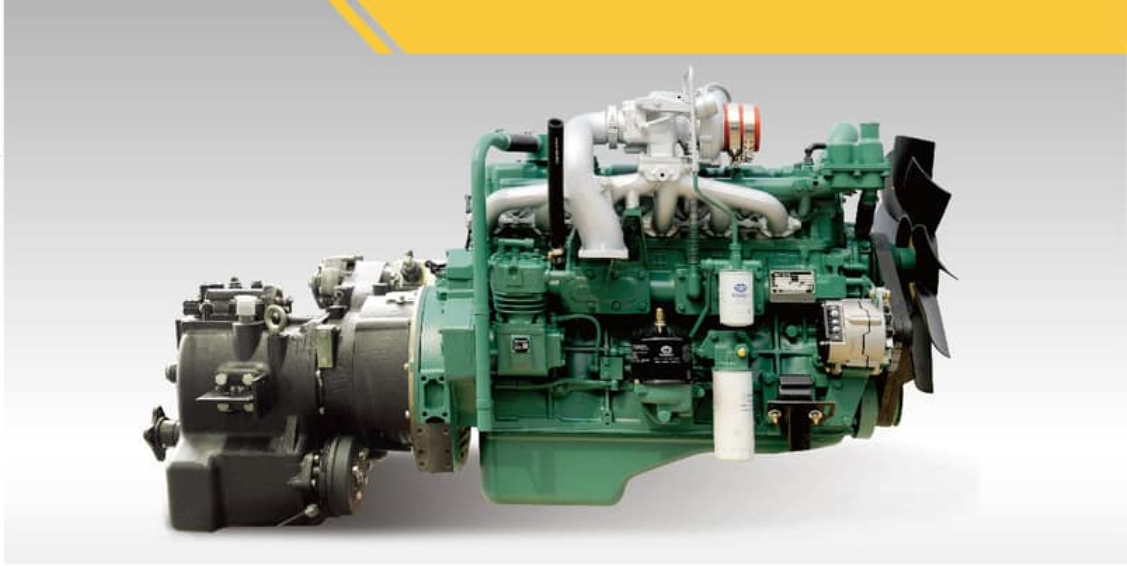
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HELI
中国合力 提升未来

G系列6-8吨内燃牵引车
G SERIES 6-8T INTERNAL-COMBUSTION TOW TRACTOR





动力传动系统 Power and transmission system

- 采用工程机械专用的国内知名品牌柴油机，其功率储备大，噪音低，环保性能好,可靠性高，整机排放标准符合国III最新环保标准。
- 液力变速箱传动比合理，前进和后退均为两档且换档平稳无冲击，具有良好的散热和密封性能。

- Domestic famous diesel engine specially for engineering machinery are adopted which has characteristics of large power margin, low noise, environment friendliness, high reliability,the tractor conforming to China III emission standard.
- The transmission ratio of hydraulic powered transmission box is reasonable, both forward and backward are two gears, and the gear shifting is smooth and no impact. The transmission box have excellent cooling and sealing performance.

制动系统 Brake system

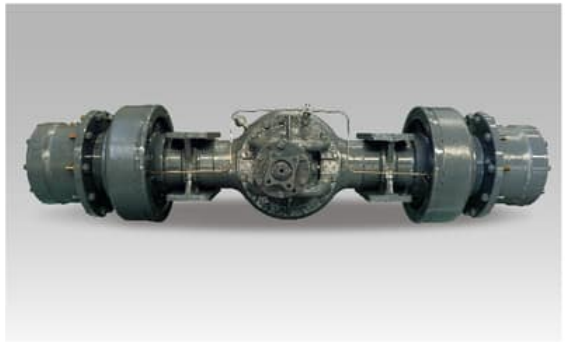
- 全液压动力行车制动系统使得制动简捷、轻便，安全、可靠，制动器性能符合GB10827-89的有关规定，保证在发动机坡道意外熄火的情况下，仍然可以实现8脚以上的制动。

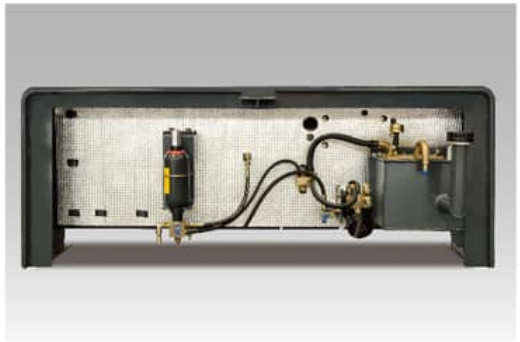
- The tractor adopts fully hydraulic powered service brake system, has easy, secure and reliable braking. The brake performance is according to the relevant regulations of standard GB10827-89, ensures effective brake for eight times after the engine is flame out on a slope.

》 整车简介
General Introduction

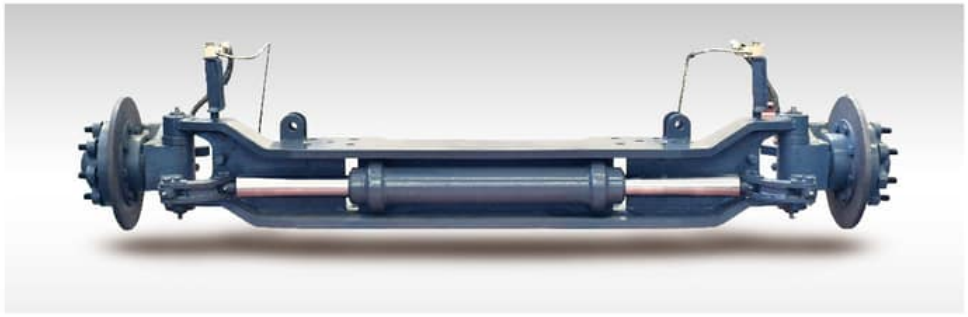
合力G系列6-8t内燃牵引车是安徽合力股份有限公司研制的新型柴油液力传动牵引车。整车充分利用了本公司成熟的设计、制造技术，整机由车身系统、动力系统、传动系统、变速操纵系统、行车制动系统、油门操纵系统、转向系统、电气系统、前、后悬挂、转向桥、驱动桥、牵引销机构、驾驶室等部分组成。该车广泛应用于港口、码头、工矿企业等作业场合。

G series 6-8t diesel powered internal-combustion tow tractor with tor-con is a series of new product designed by HELI. The whole tractor adequately adopts the mature design and manufacturing technology of our company. It's composed of bodywork system, power system, transmission system, transmission control system, service brake control system, accelerator control system, steering system, electric system, front suspension ass'y, rear suspension ass'y, steering axle, drive axle, operation stick & pin component，cab and so on.The tractor is widely used for following working sites: ports, docks, industrial and mining enterprises and so on.





G系列6-8吨内燃牵引车
G SERIES 6-8T INTERNAL-COMBUSTION TOW TRACTOR



转向系统 Steering system

- 合力自行研发的全液压横置油缸动力转向技术，刚性好，转向轻便、准确。该项技术解决了国内同类产品转向桥刚性不足，　轮胎过早磨损、前桥早期报废等问题。
- The tractor adopts HELI homemade fully hydraulic transverse cylinder powered steering technology, has good rigidity, has easy and accurate steering and operating feeling,thus effectively avoids the problems such as steering axle rigidity insufficient,tyre early worn out and front axle early discarding in domestic similar products

弹性悬挂装置 Suspension system

- 采用专业汽车配件生产厂家生产的前、后板弹簧悬挂装置。且前桥另装有筒式阻尼减震器，使得整机更加具有良好的平稳性。
- The tractor adopt leaf spring suspension at front and rear axle which are made by professional auto parts manufacturers. Further more, the shock absorber is assembled on the front axle, which makes the tractor has favorable stability.

驾驶室 Cab

- 全框架结构的驾驶室具有足够的强度，室内宽敞且视野良好，可以实现全方位的观察。
- 驾驶室的前、后、左、右挡风玻璃均采用安全玻璃，且前玻璃装有两档多速控制雨刮器。
- 采用在驾驶室顶部高端进气，提高了发动机进气质量,同时采用不经过驾驶室的独立管道技术，有效降低了噪音。

- The fully framed cab has enough strength. What is more,the cab is wide and has good view from where omnibearing observing can be achieved.
- The front, rear, left and right windscreen of the cab are all safety glass, and the front glass is equipped with two-stage multi-speed control wiper.
- High air inlet mechanism at the top of the cab is adopted to improve the quality of air entering the engine, moreover,the independent pipeline technology without passing through the cab can effectively reduce the noise.

液压系统 Hydraulic system

- 采用摆线转阀式全液压转向器、齿轮泵等专业化生产厂成熟的优质液压元件，工作密封可靠，无泄露。采用双联齿轮泵，制动和转向分开，保证制动和转向对液压油的不同需求，提高制动和转向的可靠性。大容量的液压油箱足够满足工作和散热要求。液压系统配备有齐全的安全保护阀。

- The tractor adopt cycloid rotary valve type wholly hydraulic steering unit,gear pump and other mature high quality hydraulic components produced by specialized manufacturers. The hydraulic system sealing reliable, no leakage. The tractor assembled with double gear pump,thus the separate control of braking and steering is achieved, ensures the different demands of hydraulic oil for braking and steering, and the reliability of braking and steering is improved. Enlarged hydraulic oil tank ensures working and cooling requirement. The hydraulic system is equipped with a complete range of safety protection valves.

操纵牵引销机构 Operation stick & pin component

- 设置在驾驶室内的操纵牵引销采用自动脱钩及自动导引机构，使得牵引作业方便、效率高。牵引机构的自锁功能有效避免因误操作或行车颠簸导致拖车脱销的隐患，提高行车安全性。
牵引机构可视性好，驾驶员坐在座椅上可以直接观察到牵引座。

- The tractor adopts traction pin mechanism with automatic unhook and automatic guide function, the traction pin is assembled in cab, the operation is easy and efficient. Self lock function of traction pin mechanism effectively avoids trailer hook suddenly off caused by vehicle jolt during travelling or mis-operation, improves travelling safety.
- Traction pin mechanism has good visuality,driver can observe the traction seat directly from seat.









整车选配——防晒棚

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技术参数 Parameter

	参数名称 Parameter		单位Unit	QYCD60-WXG	QYCD70-WXG	QYCD80-WXG
1	最大牵引力 Max.drawbar.pull		kN	60	70	80
2	空载最大行驶速度(前进) Max.Travel speed(without load, forward)		km/h	30		
3	爬坡度（空载） Grade ability (without load)		%	30		
4	最小转弯半径 Min.turning radius		mm	≤4710		
5	制动距离（20Km/h） Service braking distance（20Km/h）		m	≤5		
6	整车质量（含油水） Total Weight(including oil and coolant)		kg	9000	10980	11610
7	桥负荷 Axle load	前桥 Front	kg	1900	2390	2390
		后桥 Rear	kg	7100	8590	9220
8	发动机 Engine	型 号 Model		锡柴CA6DF3-16GAG3U		
		缸径×冲程 Bore×stroke	mm	6-110×125		
		额定功率/转速 Rated output	kW/rpm	118/2200		
		最大扭矩/转速 Max. output	N·m/rpm	640/1300—1700		
9	燃油箱容积 Fuel tank capacity		L	150		
10	外形尺寸 External dimensions	长 Overall length	mm	4165(不含前牵引座 without front coupler)，4340(包括前牵引座 with front coupler)		
		宽 Overall Width	mm	2180		
		高 Overall height	mm	2685	2695	2695
11	轴 距 Wheel base		mm	2100		
12	轮距 Tread	前 轮 Front	mm	1700		
		后 轮 Rear	mm	1600		
13	最小离地间隙 Min.underground clearance		mm	200		
14	牵引座中心线离地高度 Center height of drawbar		mm	450(可选 customized)		
15	电压/容量 Battery (voltage/capacity)		V/Ah	2-6-QW-80 12V×2 80Ah×2		
16	驱动桥型号 Drive axle			P82D3-00001		
17	变速箱 Transmission case	型号 Model		P82H3-80001		
		变速型式 Type		无级变速 Stepless change speed 变矩器直径340 Tor-con diameter:340		
18	制动器 Brake apparatus	行车制动 Service brake		全液压四轮动力制动 Hydraulic oil acts on four wheels		
		停车制动 Parking brake		机械式,作用于变速箱中间轴上 Mechanical type acts on the middle shaft of the transmission box		
19	轮胎 Tyre 前轮 Front	规格 Model		2-7.50-16-12PR		
		气压 Air pressure	kPa	790		
	后轮 Rear	规格 Model		4-9.00-20-14PR		
		气压 Air pressure	kPa	760		

防水型组合式仪表 Waterproof combined instrument

