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G2系列正面吊运机
G2 Series Reach Stacker



合力产品范围：1-46吨内燃叉车；0.6-35吨电动叉车；前移式叉车、托盘车、堆垛车等仓储类产品；AGV智能搬运车辆及系统解决方案；正面吊、堆高机、牵引车、防爆叉车、越野叉车等多样化产品。



安徽合力股份有限公司
ANHUI HELI CO., LTD.

地址 / 中国 合肥方兴大道668号
Add / No.668, FangXing Road, Hefei, China
邮编 (Post Code) / 230000

客服热线 (Customer Service Hotline) / 4001-600761
服务电话 (Service Tel) / +86-551-63689000, 63648005

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A 我们的实力



安徽合力股份有限公司系安徽叉车集团有限责任公司核心控股子公司，1996年在上海证券交易所上市，注册资本6.168亿元，是我国目前规模大、产业链条完整、综合实力强的工业车辆研发、制造与出口基地。

Anhui Heli Co. Ltd., a core holding subsidiary of the forklift group, was listed in Shanghai Stock Exchange in 1996 and it is registered capital is 616.8 million. It is presently an industrial vehicle research and development, manufacturing and export base in China with large scale, complete product line and industrial chain and strong overall strength.



行业地位 Position in industry

公司的工业车辆、智能运搬装备及其核心零部件的研发、制造与销售，具有产业规模大、业务链完整、综合实力与经济效益好的显著优势；各项主要经济指标已连续多年均保持全国行业佼佼者。

Our R&D, manufacturing and sales of industrial trucks, intelligent transport equipment and the relevant core parts, having the significant advantages of large scale, completed business chain, strong comprehensive strength and high economic benefits. The main economic indicators have maintained leading in the national industry.



科研实力 Scientific research ability

公司技术中心是1995年由国家发改委等四部委首批认定的100家国家“企业技术中心”之一。学科齐全，基础设施雄厚。

The technical center of the company was honored as one of the first batch of “enterprise technical center at national level” in 1995 by National Development and Reform Commission together with other three ministers and commissions. We have complete research sectors and rich infrastructure.

我们的实力 Our strength



重要奖项 Key awards

近5年，公司自主研发的新产品获得6项科技进步奖，安徽省科技进步一等奖2项，机械工业科技进步二等奖一项。

In recent 5 years, New products with our independent research and development win 6 awards for scientific and technological advancement, 2 first prize wards for scientific and technological advancement in Anhui Province and 1 second prize award for scientific and technological advancement in mechanical industry.

B 特点



B.1 高设计标准 High design standard

- 合力正面吊整机开发采用全数字化三维设计，车架、伸缩臂等关键零部件均经CAE有限元分析、模态分析、动力学仿真分析等优化设计手段，以精准的理论数据作为设计基础，确保整车性能。设计方案成熟可靠，与欧洲同类产品水平同步，设计标准不仅满足国家标准GB/T26474-2011，同时满足欧盟标准EN1459和ISO15018标准。
- Truck performance is ensured with accurate theoretic data as design basis through CAE analysis, finite element analysis, modal analysis and dynamics simulated analysis on key parts like frame, telescopic boom and so on and full digitalized 3D software during truck development. The design scheme of the completed truck is mature and reliable and achieves same performance level as the same product in European market. Not only China design standard GB/T26474-2011 is satisfied, EN1459 and ISO 15018 design standards are also satisfied.

B.2 齐全系列 Complete series

- 合力集装箱正面吊产品，是合力与欧洲知名港口机械设计公司联合开发，用于20'、40'满载集装箱的搬运及堆垛，广泛应用于港口、码头、铁路系统及集装箱中转站等场所。合力正面吊具有齐全系列，可靠地安全性能，优异的节能环保性和高效作业的特点。整机拥有电控超载保护系统，自动灭火系统，倒车集成监控系统等，产品各项性能指标世界先进，值得选择。
- HELI co-develops reach stacker with EURO famous port machinery design company for handling and stacking 20 foot and 40 foot fully loaded container. It is widely used in port, dock, railway system, container terminal and so on. HELI reach stacker has the characteristics of complete series, reliable safety performance, good energy saving and environmental protection performance and high working efficiency. The truck is assembled with electric controlled overload protection system, automatic fire extinguishing system, backward integrated monitoring system and so on. The truck has world advanced performances and it is worth to choice.



B.3 可靠的质量 Reliable quality

- **电控超载保护系统**

通过智能超载保护系统，自动识别桥体转向角度，调整吊具伸缩状态，确保整车在安全的起吊范围内起升，大大提高了作业的安全性和作业效率。

- **Electric controlled overload protection system**

Intelligent overload protection system can automatically detect axle steering angle and adjust spreader state to ensure lifting within safety range. And thus working safety and working efficiency is largely improved.

- **倒车集成监控系统**

倒车集成监控系统的应用，可以随时监控车体周围安全状况，保证车辆的安全操作行驶，大大的提高了整车的作业安全性。

- **Backward integrated monitoring system**

Backward integrated monitoring system can monitor the safety around the truck at any time to ensure truck safety driving.



- **整机防火控制系统(选配)**

车体内关键位置安装强力自动灭火系统，实现防火预报警，阻燃及灭火功能，防火控制安全可靠。

- **Truck fire extinguishing control system (Optional)**

Powerful automatic fire extinguishing system is installed in the key position of the truck achieving fire pre-alarm, antflaming and fire extinguishing functions. It is safe and reliable.

- **真空胎柔性减震技术**

选用缓冲功能较好的真空胎减震技术，降低车体与地面的冲击接触，作业更安全，操作更舒适，且维修保养成本低，大大提高了设备的结构件的使用寿命。

- **Vacuum pneumatic tyre**

Vacuum pneumatic tyre with good buffering function reduces shock contact between truck and ground. It is safer and more comfortable. What is more, maintenance cost is largely reduced and structural parts service life is largely increased.



- **可靠的动力系统**

选用原装进口VOLVO/CUMMINS等世界知名品牌发动机，动力强劲，质量可靠。结合先进的动力匹配技术及控制技术，使整车动力性能得到较大的释放。

- **Reliable power system**

Imported VOLVO/CUMMINS engine with original packing is assembled on the truck. It is powerful and reliable. Combined with advanced power matching technology and control technology, truck performance is brought into better play.

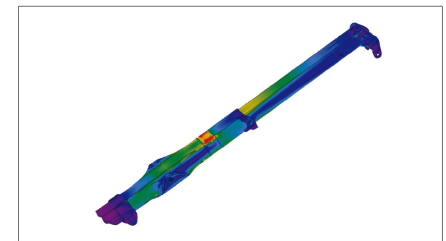
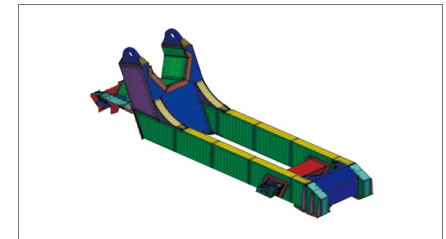


- **可靠的结构设计**

整机开发采用全数字化三维设计系统，经CAE有限元分析、模态分析、动力学仿真分析等优化设计手段，以精准的理论数据作为设计基础，确保整车性能。设计方案成熟可靠，与欧洲同类产品水平同步，设计标准不仅满足国家标准GB/T26474-2011，同时满足欧盟标准EN1459和ISO15018标准。

- **Reliable structure design**

Truck performance is ensured with accurate theoretic data as design basis through CAE analysis, finite element analysis, modal analysis and dynamics simulated analysis on key parts like frame, telescopic boom and so on and full digitalized 3D software during truck development. The design scheme of the completed truck is mature and reliable and achieves same performance level as the same product in European market. Not only China design standard GB/T26474-2011 is satisfied, EN1459 and ISO 15018 design standards are also satisfied.





B4 高效的作业 High efficient working

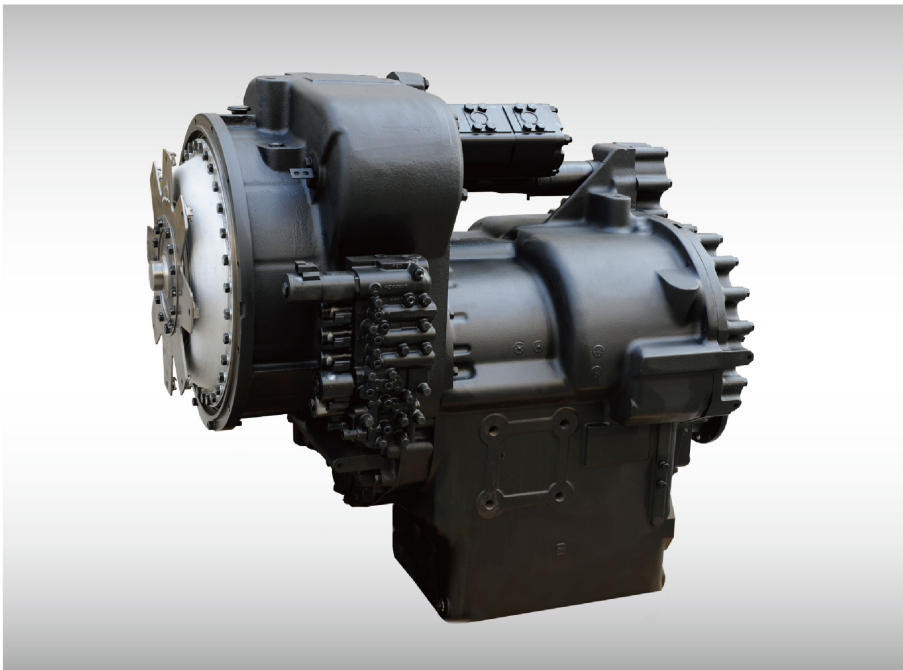
- 能量再生技术**
 全过程“能量再生”自动控制功能让大臂在起升过程中，变幅油缸上腔的回油直接利用于起升，起升速度更快、更高效。
- Energy regenerating technology**
 Big arm oil cylinder overall process “energy regenerating” automatic controlling function uses the return oil in the cylinder upper cavity for lifting and thus offers faster lifting speed and higher efficiency.
- 垂直升降功能**
 组合式“垂直升降”自动控制功能，可让大臂同时实现伸缩、升降功能，简化驾驶员操作，保障安全同时提升工作效率。
- Vertical lift function**
 Big arm stretching out and drawing back function and lifting and lowering function can be realized simultaneously with combined type “vertical lift” automatic control function. And thus working efficiency is improved.



- 舒适的操作环境**
 方便的人机交互式操作界面，操作者可以实时了解整车的运行状态；宽阔的操作视野，全悬浮式可调座椅等，大大提高了操作者的舒适性，降低操作疲劳，提高工作效率。
- Comfort operation environment**
 Through convenient man-machine interactive operation interface, operator can control truck real time working state. Wide view and fully suspension adjustable seat improve operator comfort, reduce operation fatigue and increase working efficiency largely.
- 集装箱吊运统计及打印系统（选配）**
 办公化配件提升日常作业管理效率。
- Container stacking statistics and print system (optional)**
 Official configuration improves daily working management efficiency.

B.5 低使用成本 Low cost

- 节能的动力系统**
 合适的动力系统匹配，可以根据负载变化自动识别动态功率，调节发动机转速，充分发挥整机作业效率高、低油耗的特性。
- Energy saving power system**
 Suitable power system matching can automatically identify dynamic power according to the change of load, adjust engine speed and bring truck high working efficiency and low oil consumption performance into full play.



- 液压负荷感应系统**
 根据实际负载，调节油泵输出流量，实现流量高精度控制，减少发动机负荷，节能降耗效果显著。
- Hydraulic load sensing system**
 Hydraulic load sensing system can adjust oil pump output flow according to actual load and achieve high precision control on flow. And thus engine load is reduced and truck oil consumption is reduced.
- 真空胎柔性减震技术**
 选用缓冲功能较好的真空胎减震技术，降低车体与地面的冲击接触，作业更安全，操作更舒适，且维修保养成本低。
- Vacuum pneumatic tyre**
 Vacuum pneumatic tyre with good buffering function reduces shock contact between truck and ground. It is safer and more comfortable. What is more, maintenance cost is largely reduced and structural parts service life is largely increased.
- LED照明系统**
 采用LED高亮度、低能耗照明系统，为夜间工作提供更好的照明环境和日间行车指示。
- LED lighting system**
 LED lighting system which is bright and has low energy consumption offers better lighting for working and indication.



B.6 便捷的维修 Easy maintenance



- 全包围防滑上下车安全通道**
 通过防滑上下车安全通道系统，可以安全快速地到相关操作区域，大大提高操作的便捷性。
- Fully surrounded anti-skidding getting on and off safety passway**
 You can reach to the area needs repair safely and quickly through fully surrounded anti-skidding getting on and off safety passway and thus repair is more convenient.
- 外置式维护保养检查机构**
 采用车体外置式燃油滤清器及液压油滤清和滤芯布置，大大的方便车辆的日常维护保养，缩短了维护保养操作时间，提高车辆维护效率。
- Outside installed maintenance and repair check mechanism**
 Outside installed fuel filter, hydraulic oil filter and filter core facilitate daily maintenance, shorten maintenance time and improve truck maintenance efficiency.

- 集中润滑系统**
 关键运动部件采用集中润滑系统，大大提升维护的方便性和部件的更换周期。
- Centralized lubricating system**
 Centralized lubricating system makes maintenance easy and extends parts service life.

- 备件库遍布世界各地**
 备件可快速提供无论你在何方。备件可由本地的合力销售网点或代理商快速提供，或直接由公司总部仓库发运。
- Worldwide spare parts store centers**
 No matter where you are, HELI local sales network or dealers can provide you with spare parts locally or directly from HELI headquarters quickly.



B.7 吊具选配 Spreader



- 采用世界著名专业吊具生产厂家—瑞典ELME（艾尔玛）公司的817型吊具，该吊具是为正面吊运机特殊的作业工况而设计的产品，整体采用优质钢制造，单筒式结构，强度高，视野好。
- 817 type spreader from world famous spreader manufacturer----Sweden ELME is assembled on the truck. The spreader is designed for reach stacker. The spreader is made by high-quality steel and it has single-cylinder type structure, high strength and good view.



B.7 升级驾驶室 Improved driver's cab

- 标准型正面吊采用全新设计的驾驶室，大弧面玻璃提供宽阔视野。
- Newly designed cab is standard configuration of the reach stacker. Oversized cambered glass on the cab offers wide view.



- 面板按键排布符合人体工学，保证了充分舒适的操作空间。
- The buttons' layout on panel satisfies ergonomics requirements and ensures comfort operation space.



- 方便美观的人机交互式操作界面，操作者可以实时了解整车的运行状态。
- Through convenient and beautiful man-machine interactive operation interface, operator can control truck real time working state.

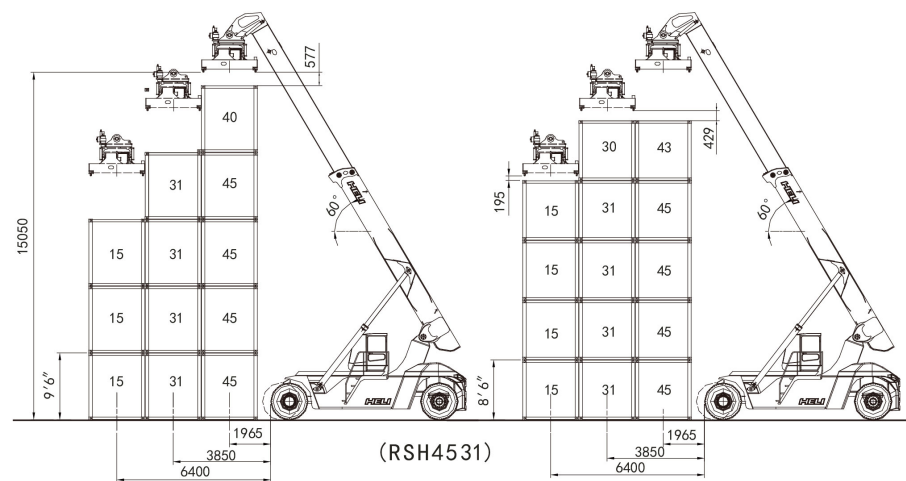
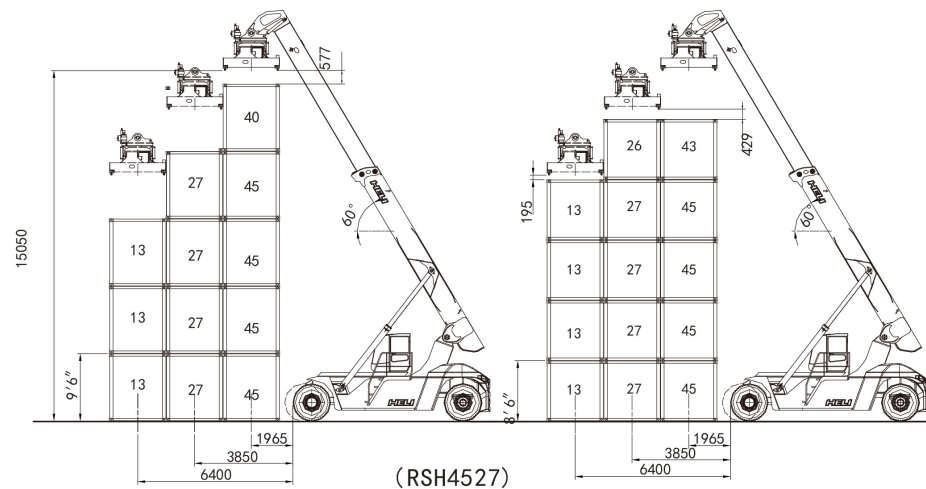


- 全悬浮式可调座椅等，大大提高了操作者的舒适性，降低操作疲劳，提高工作效率。
- 全封闭设计隔音防震，驾驶室内噪音可低至70dB。
- 驾驶室内配备灭火装置，保证安全无虞。
- Fully suspended adjustable seat largely improves operator comfort, reduces operation fatigue and improves working efficiency.
- Fully enclosed design improves sound insulation and vibration proof performance and noise inside of the cab is reduced to 70dB.
- Fire extinguisher is equipped in the cab to ensure safety.



技术参数

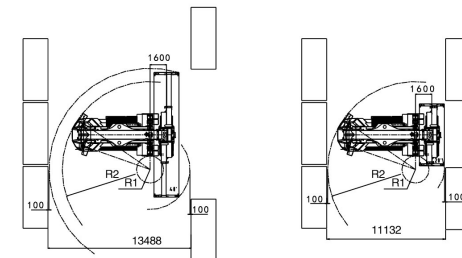
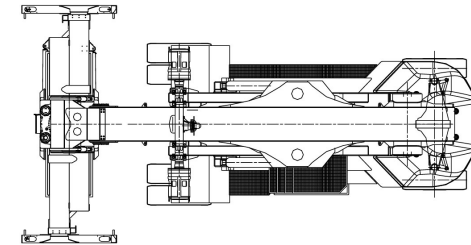
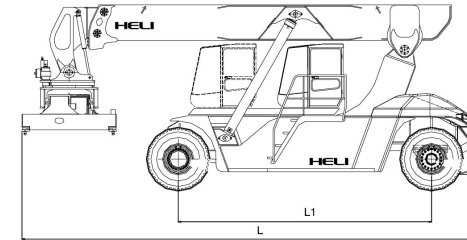
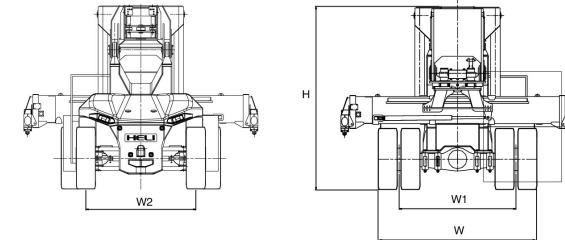
载荷图 Load diagram



性能参数 Performance specifications

型号 Model			RSH4527-V1D/ RSH4527-VDG2	RSH4531-V1D RSH4531-VDG2
起重量 Lifting capacity	第一排/第二排/第三排 First row/second row /third row	Kg	45000/27000/13000	45000/31000/15000
载荷中心 Load center	第一排/第二排/第三排 First row/second row /third row	mm	1965/3850/6400	1965/3850/6400
最大起升高度(第一排) Max. lifting height (first row)		mm	15050	15050
集装箱吊具 Container Spreader	侧移 Side shift	mm	±800	±800
	旋转 Rotation	deg	-105~+195	-105~+195
最小转弯半径R2 Min. turning radius		mm	7990	7990
吊臂最大倾角 Spreader max. tilting angle		deg	60	60
轴距L1 Wheel base		mm	6000	6000
轮距(前W1/后W2) Tread (front/rear)		mm	3030/2838	3030/2838
长度L Length		mm	11300	11300
宽度W Width		mm	4148	4148
高度H Height		mm	4754	4754
轮胎 Tyre	规格 Specification		18.00-25-40PR	18.00-25-40PR
	(前/后) (Front/rear)		4/2	4/2
发动机 Engine	型号 Model		Volvo TAD1181VE	Volvo TAD1181VE
	额定功率/转速 Rated output/Speed	kW/rpm	265/2100	265/2100
	额定扭矩/转速 Rated torque/Speed	Nm/rpm	1785/1316	1785/1316
	尾气排放标准 Emissions standards		欧 V /国IV EU Stage V /CHINA StageIV	欧 V /国IV EU Stage V /CHINA StageIV
变速箱(前/后) Transmission box (front/rear)			DANATE30	DANATE30
驱动桥 Drive axle			Kessler	Kessler

外形尺寸 Formal Size



直角通道宽度



附加选配表 Optional

序号 No.	功能 Item	备注 Note
1	集装箱吊运统计及打印系统 container stacking statistics and print system	微型打印机, 可打印集装箱重量, 箱号及吊箱数量等。 Miniprinter: it can print container weight, number and hoisting container quantity.
2	自动灭火系统 Automatic fire extinguishing system	配备热敏感应式干粉灭火器, 自动灭火, 安全高效。 Heat sensitive dry powder extinguisher can extinguish automatically and it is safe and efficient.
3	进口真空胎 Imported vacuum tyre	可根据客户的个性化需求, 整车选用进口品牌的真空轮胎。 Tyre choice can be customized and imported vacuum tyre is optional.
4	自动润滑系统 Automatic lubricating system	配备润滑泵, 定时、定量加注润滑油, 便捷高效, 关键部件润滑充分, 更换周期长。 Lubricating pump is assembled on the truck to add lubricating grease on time with proper quantity to ensure fully lubrication of key parts and extend replace period.
5	集装箱精确称重系统 Container weighting system	集装箱精确称重, 满足相关行业要求, 提供更好安全保护。 Accurate container weighting system meets relative industry's requirement and provide better safe protection.
6	吊具着箱自动上锁 Automatic lock when slings catching container	提升驾驶舒适性, 有效提高工作效率的智能化选项。 Sling will be locked automatically when catching container. Driving comfort and working efficiency are improved

合力智能车队管理系统 HELI smart fleet management system

- 车辆定位
- 远程诊断
- 远程监控
- 维保提示
- 统计报表
- 车辆管理
- 身份识别(选配)
- 称重管理(选配)
- Vehicle positioning
- Remote diagnosis
- Remote monitoring
- Maintenance reminder
- Statistical form
- Vehicle management
- Identification recognition (optional)
- Weight management (optional)





D 专业服务

- 合力本着“诚信合作、实现共赢”合作观，为用户提供车辆全程、周密的售前、售中、售后技术支持、培训与服务。我们的目标是要与客户达成长久的合作伙伴关系。
- 正确的保养和操作是保障车辆使用寿命，减少设备停工时间的重要前提。我们将提供完善的专业的技术支持确保车辆的高效益运转。
- Heli provides customers with close technical support, training and service before sales, during sales and after sales adhering to the cooperation value of “Good faith cooperation and altogether wins development”. Our object is to reach long term cooperation relationship with customers.
- Correct maintenance and operation is an important precondition to ensure truck service life and reduce truck downtime. We will provide perfect and professional technical support to ensure truck high efficient working.

- **备件库遍布世界各地**

备件可快速提供无论你身处何方。备件可由本地的合力销售网点或代理商快速提供，或直接由公司总部仓库发运。

- **全球服务机构**

作为中国先进的叉车生产品牌，我们国内和国际的销售网点或代理商服务体系将以至诚的服务满足客户的需要。

- **客户服务**

“用户至上”是合力追求的市场观，客户可以从合力网点或代理商得到优秀的服务。提供便捷，灵活专业的服务。

- **技术支持-解决您的需求**

当您有需求时，我们的技术支持可以提供专业的服务。通过联系我们国内和国际的销售网点或代理商或总部服务部门，您可以找到相应技术专家和具有丰富经验的技术人员为您提供技术支持，解决您的需求。

- **培训**

通过联系我们国内和国际的销售网点或代理商，根据不同型号的设备，为客户定制了所需的驾驶及维修培训服务。

- **Worldwide spare parts store centers**

No matter where you are, HELI local sales network or dealers can provide you with spare parts locally or directly from HELI headquarters quickly.

- **Worldwide service network**

As China advanced forklift truck manufacturer, HELI sales network and dealer all over the world meet customers' need with sincere service.

- **Customer service**

“Customer first” is our market value. Customers can receive sincere service from HELI network or dealers who will provide fast, flexible and professional service.

- **Technical support to satisfy your need**

We can provide professional service when you need. Through our worldwide network or dealers or headquarter, we can satisfy your need through our technical experts or technicians with rich experience.

- **Training**

Through our worldwide network or dealers, we will provide you with customized professional driving and repair trainings according to different truck models.