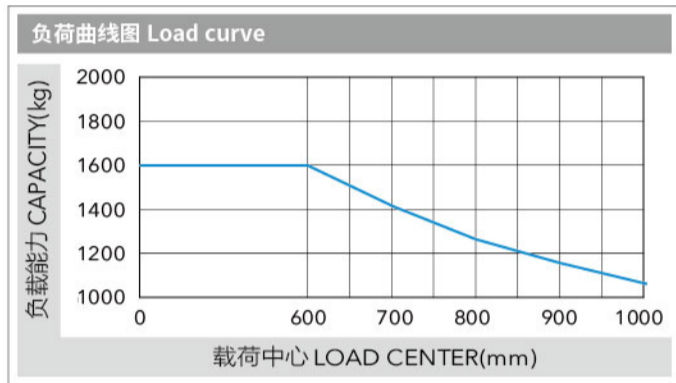
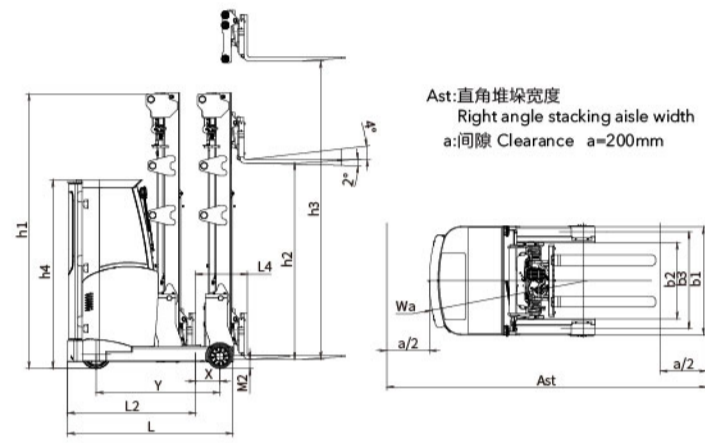


门架型号 Mast model	起升高度h3 lifting height (mm)	承载能力 (载荷中心为600mm) Load capacity (load center 600mm)(kg)	门架落地高度 h1(mm)	自由起升(带挡货架) Free lifting height (with backrest) (mm)	整车自重 Service weight(kg)	货叉倾角(前/后) Fork tilt angle (front/rear)α/β
ZSM460	4600	1600	2314	1280	3640	2°/4°
ZSM480	4800	1600	2381	1340	3659	2°/4°
ZSM540	5400	1600	2581	1540	3717	2°/4°
ZSM570	5700	1550	2681	1640	3745	2°/4°
ZSM630	6300	1500	2881	1840	3803	2°/4°
ZSM675	6750	1450	2982	1940	3836	2°/4°
ZSM700	7000	1400	3065	2030	3860	2°/4°
ZSM715	7150	1400	3115	2080	3874	2°/4°
ZSM750	7500	1300	3232	2190	3908	2°/4°
ZSM800	8000	1200	3398	2360	3956	2°/4°
ZSM850	8500	1100	3564	2530	4004	2°/4°
ZSM900	9000	900	3730	2690	4051	2°/4°
ZSM950	9500	800	3898	2860	4100	2°/4°

门架型号 Mast model	起升高度h3 lifting height (mm)	承载能力 (载荷中心为600mm) Load capacity (load center 600mm)(kg)	门架落地高度 h1(mm)	整车自重 Service weight(kg)	货叉倾角(前/后) Fork tilt angle (front/rear)α/β
M290	2900	1600	2200	3411	2°/4°
M320	3200	1600	2350	3430	2°/4°
M360	3600	1600	2550	3459	2°/4°
M380	3800	1600	2650	3473	2°/4°
M400	4000	1600	2750	3488	2°/4°
M420	4200	1600	2850	3501	2°/4°
M440	4400	1600	2950	3514	2°/4°
M460	4600	1600	3050	3570	2°/4°
M500	5000	1500	3250	3598	2°/4°



注: 竖轴表示承载量, 横轴表示载荷中心。载荷中心是从货叉正面计算起, 标准载荷的基点是指负侧边长为1000毫米的立方体中心位置。当门架前倾, 使用非标准货叉或装载超过正常宽度的货物时, 将使承载量减少。通过负荷曲线图, 能及时地了解标准门架在各种载荷中心时的承载能力。

Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load, the standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.

**能量再生技术**  
RENEWABLE ENERGY TECHNOLOGIES

应用负荷传感优先转向和交流控制能量再生技术, 叉车更节能, 蓄电池单作业循环时间最大延长15%。

With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.

15%

特性 Character		Manufacturer		HELI	
1.01	制造厂商				
1.02	型号	Model		CQD16	
1.03	配置号	Configuration number		GB2SL	
1.04	额定承载能力	Load capacity	Q kg	1600	
1.05	载荷中心距	load center distance	C mm	600	
1.06	动力形式	Power mode	蓄电池 Battery		
1.07	驾驶方式	Driving mode	座驾 Seated		
1.08	轴距	Wheel base	Y mm	1450	
轮胎 Tyre					
2.01	轮胎类型	Tyre type	聚氨酯 Polyurethane		
2.02	轮胎数量, 驱动轮/承重轮 (x=驱动轮)	Wheels, number front/rear (x=driven wheels)	1x/2		
2.03	轴距 (承重轮)	Track width, rear	b3 mm	1157	
2.04	承载轮尺寸	Wheel size, rear	mm	φ285x100	
2.05	驱动轮尺寸	Wheel size, front	mm	φ343x114	
尺寸 Size					
3.01	标准门架起升高度	Lift height	h3 mm	4600	
3.02	自由起升高度	Free lift	h2 mm	1280	
3.03	门架落地高度	Mast height, lowered	h1 mm	2314	
3.04	货叉尺寸, 厚度/宽度/长度	Fork size: thickness×width×length	s/e/l mm	40x122x1150	
3.05	货叉调节宽度	Fork adjusting width	mm	244-724	
3.06	货叉倾角 (前/后)	Fork tilt angle (front/rear)	α/β °	2°/4°	
3.07	货叉侧移量	Fork sideshifting	mm	±75	
3.08	车体长度 (不含货叉)	Truck body length (fork excluded)	L mm	1940	
3.09	长度 (货叉面至车后距离)	Length (the distance from the fork face to rear frame)	L2 mm	1472	
3.10	车体宽度	Truck body width	b1 mm	1270	
3.11	支腿内宽	Distance between support arms	b2 mm	900	
3.12	前移距离	Reach distance	L4 mm	555	
3.13	驾驶室高度	Height of cab	h4 mm	2215	
3.14	最小离地间隙 (门架处)	Ground clearance, below mast	m2 mm	75	
3.15	最小转弯半径	Turning radius	Wa mm	1788	
3.16	货叉前端面至承载轮中心距	Load distance, centre of support arm wheel to face of forks	X mm	313	
3.17	直角堆垛宽度 (托盘1200Lx1200W, 间隙200)	Asile width with pallet 1200Lx1200W across forks	Ast mm	3060	
3.18	直角堆垛宽度 (托盘1000Lx1200W, 间隙200)	Asile width with pallet 1000Lx1200W across forks	Ast mm	2900	
性能 Performance					
4.01	行驶速度, 满/空载	Travelling speed: with/without load	km/h	11/12	
4.02	起升速度, 满/空载	Lifting speed: with/without load	m/s	0.34/0.53	
4.03	下降速度, 满/空载	Lowering speed: with/without load	m/s	0.5/0.5	
4.04	前移速度, 满/空载	Reach speed, with/without load	m/s	0.11/0.11	
4.05	最大爬坡能力, 满/空载	Maximum climbing ability, with/without load	%	10/15	
重量 Weight					
5.01	整车自重 (含蓄电池)	Total weight (with battery)	kg	3640	
5.02	空载桥负荷, 驱动轮/承重轮 (货叉前移)	Axle load, fork outreached, without load, front/rear	kg	1740/1910	
5.03	空载桥负荷, 驱动轮/承重轮 (货叉后移)	Axle load, fork retracted, without load, front/rear	kg	2270/1280	
5.04	满载桥负荷, 驱动轮/承重轮 (货叉前移)	Axle load, fork outreached, with load, front/rear	kg	780/4460	
5.05	满载桥负荷, 驱动轮/承重轮 (货叉后移)	Axle load, fork retracted, with load, front/rear	kg	1930/3320	
蓄电池 Battery					
6.01	蓄电池电压/额定容量 (5小时放电)	Battery voltage/capacity Ks	V/Ah	48/500	
6.02	蓄电池重量	Battery weight	kg	860	
6.03	蓄电池箱体尺寸	Battery box dimension	mm	1220x353x784	
电机及控制 Motor and controller					
7.01	驱动电机功率	Drive motor power (60 min)	kW	6	
7.02	起升电机功率	Lifting motor power (15%)	kW	11	
7.03	转向电机功率	Steering motor power (50%)	kW	0.4	
7.04	驱动控制方式	Type of driving control	MOSFET/AC		
7.05	起升控制方式	Type of lifting control	MOSFET/AC		
7.06	转向控制方式	Type of steering control	MOSFET/AC		
7.07	变速箱	合力专用变速箱			
7.08	行车制动	Service brake	Mpa	电磁制动 Electromagnetic brake	
7.09	液压系统工作压力	Hydraulic system working pressure	17.5		

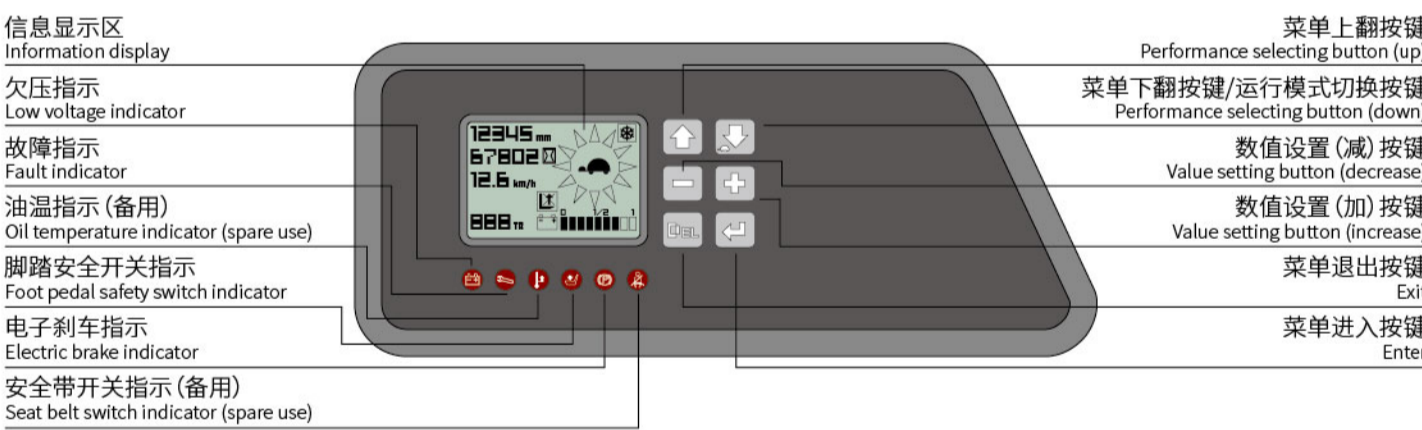
注: 蓄电池具体品牌及其容量大小, 请咨询销售或技术人员。 NOTE: \*Detailed information about battery, please contact our salesmen or engineer.

HELI合力

可靠的专用仪表 Reliable special designed instrument

可靠的专用仪表将整车运行状态, 故障检测等重要信息完整地显示出来, 使操作者更直观、方便地了解车辆状态。

The reliable special instrument gives a complete display of the vital information, like operation status, fault detection, etc. It ensures the operator predominate the vehicle status more intuitive and convenient.



标准配置 Standard configuration	选用装置 Optional
AC行走电机 AC travelling motor	其他高度三节全自由门架 Three-stage full free lift mast (other lifting height)
AC起升电机 AC lifting motor	基本型门架 Wide view mast
AC转向电机 AC steering motor	其他长度货叉 Fork with other length
ZAPI行走电机控制器 ZAPI travelling motor controller	货叉套 Fork extension
ZAPI起升电机控制器 ZAPI lifting motor controller	起升高度预选器 Lifting height pre-selector
ZAPI转向电机控制器 ZAPI steering motor controller	监控系统 Monitoring system
电磁制动 Electromagnetic brake	其他蓄电池 Other battery
DC/DC转换器 DC/DC converter	德国HOPPECKER蓄电池组 Germany hoppecker battery
低噪声齿轮泵 Low noisy gear pump	意大利FAAM蓄电池组 Italy FAAM battery
四片阀 Control valve (four throw)	蓄电池充电器 Battery charger
4600mm三节全自由门架 4600mm three stage full free lift mast	颜色用户需求 Customer made color
整体式侧移器 Integral sideshifter	蓄电池侧拉 Battery side pulling
标准货叉 Standard fork	和安普通座椅 HE' AN seat
挡货架 Backrest	格拉默普通座椅 Grammer seat
冷库专用驱动轮胎 Polyurethane tyre for cold store	合力智能车队管理系统 HELI smart fleet management system
LED液晶仪表 LED meter	
前工作灯 Front working light	
密封驾驶室 Sealed cab	
加热座椅 Heating seat	
暖风机 Heater	
USB接口 USB	
安全带 Safety belt	
球面后视镜 Sphere backview mirror	

HELI合力

1.6t

G2系列座式蓄电池 冷库前移式叉车

G2 SERIES SIT-ON TYPE ELECTRIC REACH TRUCK FOR COLD STORE



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\* 本公司保留更改产品设计和规格的权利, 恕不另行通知。  
\* Our products are subject to improvements and changes without notice.

# G2 系列 / 1.6 t

## 整车优势

### FEATURES OF THE COMPLETED TRUCK

#### 全新的液压设计 Newly designed hydraulic system

- 全新的液压设计,使液压系统的工作效率更高
- 大功率的起升电机
- MOSFET起升调速电控
- 新型叉分齿轮技术低噪音齿轮泵
- 最大空载起升速度提高15%
- 最大满载起升速度提高25%
- Newly designed hydraulic system with high working efficiency
- High power lifting motor
- MOSFET lifting speed governing electric controller
- New type low noisy gear pump
- Max. lifting speed without load 15% increased
- Max. lifting speed with load 25% increased

#### 三相交流电机技术 Three phase AC type motor technology

- 行驶,提升和转向均采用三相交流电机控制
- 强大的加速性
- 变换行驶方向灵敏迅速无迟滞
- 无碳刷的免维护电机寿命更长,维护费用更低,减速时进行能量回充,操作时间更长
- 最大空载行驶速度提高20%
- 最大满载行驶速度提高27%
- Three phase AC type motor control on travelling, lifting and steering
- Good acceleration
- Fast and sensitive respond on travel direction shifting Free from maintenance motor without carbon brush having long service life and low maintenance cost
- Energy regenerating during deceleration extending operation hours
- Max. travelling speed without load 20% increased
- Max. travelling speed with load 27% increased

#### 更加优化的智能型设计 Optimized intelligent design

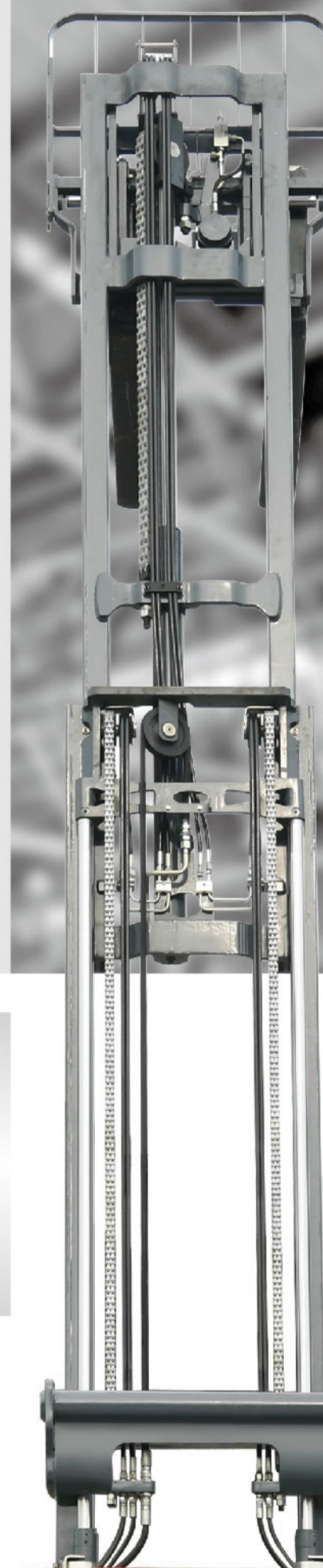
- ZAPI行走电机控制器
- ZAPI起升控制器
- ZAPI转向电机控制器
- CAN总线技术
- 主回路控制回路同时紧急断电
- ZAPI travelling motor controller
- ZAPI lifting motor controller
- ZAPI steering motor controller
- CAN bus technology
- Emergency power off of both main circuit and control circuit
- 坡度停车自制动
- 操作顺序保护
- 行驶速度控制
- 电自保护
- 提升高度预选(选配)
- Parking brake on slope
- Operation sequence protection
- Travelling speed control
- Electric controller self protection
- Lifting height pre-selector (optional)

#### 先进的EPS电子动力转向 Advanced EPS electric powered steering

- EPS电子动力转向,为整车提供了轻便灵活,高效静音的操作
- 转向电机控制器
- 自动对中功能
- 180度/360度两种转向模式,可实现实时切换
- 转向自动限制时速和加速度
- EPS electric powered steering offering easy, flexible, high efficient and mute operation
- Steering motor controller
- Automatic centering function
- Real-time shifting between 180°steering mode and 360° steering mode
- Automatic limit on speed and accelerated speed when steering

#### 操作轻便的拇指开关 Easy operated thumb switch

- 拇指开关可以控制所有液压功能
- 操作部件功能明确并且一目了然
- 比例电磁阀控制下降动作,平稳舒适
- To control hydraulic functions
- Clear operating units
- Proportional solenoid offering a stable and comfort lowering action



#### 密封驾驶室 Sealed cab

- 驾驶室钢化玻璃
- 驾驶室里全内饰包裹,防冻伤
- 暖风机,为驾驶员提供适宜的工作温度
- 电加热座椅,为驾驶员提供舒适的工作环境
- USB接口
- 顶部全玻璃,在保证安全前提下,拥有更好的视野
- 方向盘一侧开小视窗,更符合人眼睛视觉角度
- Tempered glass for cab
- The interior of the cab is packed by upholstery, prevent frostbite.
- Heater improves the temperature inside of cab.
- Electrical heating seat provides comfortable working environment for operator.
- USB
- Glass on top of the cab provides better visibility on the premise of ensuring safety
- Small window on one side of steering wheel meets ergonomics requirement.

#### 全新冷库专用部件 Special parts for cold store

- 冷库专用驱动轮胎
- 冷库专用电机
- Special drive tyres for cold store
- Special motors for cold store

#### 整机防腐防锈工艺 Corrosion and rust prevention

- 整车采用防腐防锈喷涂工艺
- 重要部件采用不锈钢螺栓紧固
- 前后起升油缸的活塞杆采用双层镀铬处理
- 链条表面采用达克罗工艺处理
- Corrosion and rust prevention painting is used on the completed truck.
- Stainless steel bolts are used on key parts.
- Chromate finish is adopted on pistons of front and rear lifting cylinders.
- Dacromet technology is adopted on the surfaces of chains.

#### 全新冷库专用油品 Special oils for cold store

- 滚轮采用专用低温型润滑油脂
- 传动系统采用低温传动油
- 液压系统采用低凝液压油
- Special low temperature lubrication grease is used for rollers.
- Low temperature transmission oil is used for transmission system.
- Hydraulic oil with low condensation point is used for hydraulic system.



#### 合力智能车队管理系统(选配)

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

#### HELI smart fleet management system (optional)

