

### 创新点 Innovations

- 1.自主研发基于变转速的正流量控制系统，全局功率匹配，按需供油、减少节流和溢流损失。
- 2.行走系统采用自主研发电机-泵马达-减速器，转速转矩复合控制，负载扭矩主动预测及扭矩直接控制，动力强劲，能耗低。
- 3.举升系统采用电动/发电-泵/马达，转速转矩复合控制，实现负载高效再生发电，增加续航时间。
- 4.多电机协调控制，电机负载合理匹配，优化能量管理，高效运行；分时工作，自动怠速停机，减少电机、泵空转能耗。
- 5.540V高压解决方案，降低电流；高效永磁同步电机，智能变转速控制，发热量极低，比异步电机节电20%。
- 6.对各种负值负载进行再生发电，基于动力锂电池能量回收，提高整机能源利用率。

- 1.Independently developed special load positive flow control system with variable speed, global power matching, on-demand oil supply, reducing throttling and overflow loss.
- 2.The travelling system adopts independently developed motor – pump/motor – reducer, compound control of speed and torque, active prediction of load torque and direct control of torque, with strong power and low energy consumption.
- 3.The lifting system adopts motor pump/hydraulic motor generator. The compound control of speed and torque. Realizing negative load regenerative power generation efficiently. Increasing the endurance time.
- 4.Multi-motor coordinated control, reasonable matching of motor load, optimized energy management, efficient operation; time-sharing, automatic idle stop, reducing energy consumption of the motor and pump at idle.
- 5.540V high voltage solution, reducing electric current; high efficiency permanent magnet synchronous motor, intelligent door drive variable speed control, low heat generation, 20% energy saved than asynchronous motor.
- 6.Renewable power generation for various negative loads, energy recovery based on power lithium batteries, improving energy efficiency of the whole machine.



### 产品特色 Features

● 零排放、零污染、低噪声。

● Zero emission, zero pollution, low noise.

● 电池安全性高，解决自燃/爆燃风险。

● High battery safety, no risk of spontaneous combustion / deflagration

● 使用成本低。纯电动工程机械用电成本大约为传统工程机械油耗费用的30%。

● Low use cost. The electricity consumption cost of pure electric construction machinery is about 30% of the fuel cost of traditional construction machinery.

● 电池达到8年以上使用寿命，所用磷酸铁锂电池1C循环寿命在4000次以上。

● The lifespan of the battery is more than 8-year. The recycle lifespan of lithium iron phosphate battery under 1C is more than 4000 times.

● 维护成本低。不需要对柴油机进行定期保养，如更换机油、三滤等。

● Low maintenance cost. No need for regular maintenance for the diesel engine, such as replacing the engine oil and three filters, etc.

● 优化能量管理，出色的能量利用效率和续航力，配合大容量锂电池，充满电连续作业7-9小时。

● Optimized energy management, excellent energy utilization efficiency and endurance, together with high-volume lithium iron phosphate battery, 7 to 9 working hours after full-charging can be guaranteed with large capacity lithium battery.

# 性能参数 Performance parameter

性能 Performance		参数 Parameter
基本参数 Basic parameter	型号 Model	HNF250-EL
	动力形式 Dynamic form	锂电池纯电动 Lithium battery pure electric
	座位方式 Seat mode	座驾式 Driver type
	额定起重量 Rated lifting capacity	25,000kg
	载荷中心距 Load center	1,250mm
	轴距 Wheelbase	4,400mm
重量 Weight	整机操作质量 Operating mass	35,000kg
车轮、底盘 Wheel、Chassis	轮胎形式 Tire	充气 Pneumatic
	前轮规格 Front tire	14.00-24-28PR
	后轮规格 Rear Tire	14.00-24-28PR
	车轮数量 前/后 (x=驱动轮) Number of wheels front/rear (x=drive wheel)	4x/2
	前轮距 Front track	2200mm
	后轮距 Rear track	2390mm
基本尺寸 Basic dimension	标准前/后门架倾角 Standard front/rear mast tilting angle	6° / 12°
	门架落地高度 Mast height when fork lowered	3,860mm
	标准起升高度 Standard lifting height	3,500mm
	作业时最大高度 Maximum height when fork raised	5,610mm
	驾驶室高度 Cab height	3,510mm
	整机长度 (含标准货叉) Overall Length (including standard forks)	9,190mm
	至货叉面长度 Length without forks	6,745mm
	整机宽度 Overall width	3,050mm
	货叉尺寸 Fork size	2,440 × 300 × 110mm
	货叉架宽度 Fork carriage width	3,050mm
	货叉开度 Fork opening Range	560-2,380mm
	门架离地间隙 Ground clearance in mast	300mm
	轴距中心离地间隙 Ground clearance in center of wheelbase	420mm
	转弯半径 (外侧) Turning radius (outside)	6,700mm
性能 Performance	行走速度 (负载/空载) Driving speed (load / no load)	28 km/h
	最大提升速度 (负载/空载) Maximum lifting speed (load / no load)	290/300mm/s
	最大下降速度 (负载/空载) Maximum lowering speed (load / no load)	315/260mm/s
	牵引力 Traction	170kN
	爬坡度 Gradeability	20%
	行车制动 Service brake	干式钳盘式/湿式多片式 (可选) Dry caliper / wet multi-piece (optional)
停车制动 Parking brake	钳盘式弹簧制动 Clamp disc spring brake	
电池参数 Battery parameter	电池类型 Type of battery	磷酸铁锂 Lithium iron phosphate
	电池额定存储能量 Battery rated storage energy	218kwh
	电池额定容量 Voltage	404AH
	标称电压 Full charge and discharge cycles	541V
	完全充放电循环次数 Full charge and discharge cycles	4000次以上 More than 4000 times
	理论使用寿命 Theoretical service life	>8年 >8 years
	充电时长 Charging time	1.5-2h (根据充电桩而定) 1.5-2h (depending on the charging pile)
	耗电量 Power consumption	25kWh/小时 25kWh/ hour
驱动系统 Drive System	电机类型 Motor type	永磁同步电机 Permanent magnet synchronous motor
	电机额定功率 Motor rated power	90kW
	传动方式 Transmission type	机械传动、自动换挡 Mechanical transmission, automatic shifting
液压系统 Hydraulic system	电机类型 Motor type	永磁同步电机 Permanent magnet synchronous motor
	电机额定功率 Motor rated power	分布式多电机 Distributed multi-motor 45 kW-45 kW-30 kW
	压力 Pressure	25 MPa
转向系统 Steering system	转向型式 Steering type	全液压转向 Full hydraulic steering
	压力 Pressure	14 MPa
	转向方式 Steering mode	横置式油缸转向 Horizontal cylinder steering

福建华南重工机械制造有限公司

地址: 福建省泉州台商投资区 邮编: 362122

国内销售: 0595-27393198 传真: 0595-27393200

邮箱: office@socmachinery.com

国际销售: 0592-5650685 传真: 0592-5650876

邮箱: jackson@socmachinery.com 网址: www.socma.net

FUJIAN SOUTHCHINA HEAVY MACHINERY MANUFACTURE CO.,LTD.

Address: Fujian Quanzhou Taiwanese Investment Area Post code:362122

International Sales Department

Add: rm. 1902,bldg.17,Donggangnan rd., Xiamen area, China(Fujian Pilot Free Trade Zone.Zip Code:361000

Email: jackson@socmachinery.com

Tel: 0592-5650685 Fax: 0592-5650876 Website: www.socmachinery.com