

## Product Overview

Zowell WSHM series electric multi-directional forklift is designed for handling of heavy-duty, bulky very long goods in a very narrow aisle. The load capacity is 5t and the lifting height is 3~10m, with 3 kinds of driving model: forward/backward, driving sideways and 360° steering in place. This forklift combines several patented technologies, especially hydraulic synchronous cross control technology + all-wheels driving 3 support framework design which ensure the forklift can be operated in several kinds of complicated environments.



Forward/backward Driving



360° steering in place



Driving Sideways

## Application Scenarios

Applications : industries such as pipe, slab , timber log, furniture, mattress, fabric rolls, glass, mold cabinet, box, elevator and goods with standard pallets.



Pipe



Furniture



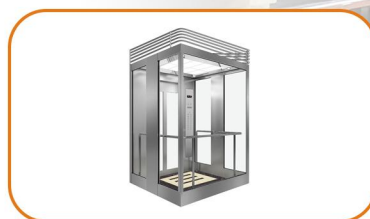
Mattress



Slab



Fabric roll



Elevator



# Product Features

## Advantages

- ▶ The forklift is designed for handling of very long (maximum 20m), heavy-duty goods in narrow aisle  $\leq 2750\text{mm}$ , with turning radius in place  $\leq 1750\text{mm}$ .
- ▶ Full 3 driving wheels + solid rubber tyres with outstanding gradeability and adaptability to tough terrains.
- ▶ Several kinds of driving modes (forward, sideways, turning in place) for freely switching.
- ▶ Patented hydraulic synchronous cross steering control technology.
- ▶ Finger joystick frequency band control technology, mast inching and slow lowering make hydraulic movement more secure and stable.
- ▶ HMI human-machine interaction interface, industrial touch screen + all-wheels display.
- ▶ Independently developed CAN bus full AC electrical topology control technology highly integrated system, reliable and stable communication, efficient and convenient electrical maintenance.
- ▶ All wheel braking system makes braking safer and smoother.
- ▶ Bypass valve + differential pressure transmission hydraulic control technology, improving the safety of forklift and the service life of hydraulic components.
- ▶ The oil circuit adopts a wide press filter design which filtering accuracy  $\leq 5\mu\text{m}$ , filtering efficiency  $\geq 99.5\%$ , reducing faults and extending the replacement cycle of hydraulic oil.
- ▶ Many optional configurations and available for customization.

## Features

- ▶ Multi-directional driving, suitable for operation in narrow aisles, easy to operate and switch working aisles, high efficiency and less faults.
- ▶ 80V full AC electric system, quick response and precise steering, highly integrated electric system with low power consumption
- ▶ High quality H type steel suitable for heavy-duty and high lifting operation environment
- ▶ All rubber tyres with big load capacity and suitable for different working environment. Outstanding obstacle surmounting ability and long service life.
- ▶ Imported spool for precise hydraulic movement and fewer faults.
- ▶ Modular electric control, CAN bus communication, easy to repair.
- ▶ Hydraulic synchronous cross steering control technology lowers the maintenance cost
- ▶ Real-time all wheels HD display makes micro adjustment in narrow aisle more convenient.
- ▶ All-wheels braking makes deceleration smoother and safer.
- ▶ Safe and reliable large capacity specialized traction battery featured with convenient charging, long cycle life, and low maintenance cost.



Big H type cross section channel steel built with high performance for mast resisting to bending and twisting.



All wheels are imported wear-resistant rubber tyres suitable for outdoors operation and uneven floors. All wheels are equipped with service parking device for emergency braking on slope outdoors.



Full-closed cabin isolates the operation from noise and dust, suitable for working in rainy and snowy environment. Full view front windshield provides clear view to external environment.



Full suspended seat provides a more comfortable driving experience



Optional accessories: 4 forks + fork carriage; fork positioner



Finger joystick + proportional valve technology for flexible and stable operation



# Product Specifications

Product			WSHM50	WSHM40	WSHM30
Basic specifications	Brand		Zowell	Zowell	Zowell
	Power type		Electric	Electric	Electric
	Operation type		Sit-on	Sit-on	Sit-on
	Load capacity	kg	5000	4000	3000
	Load center	mm	600	600	600
Weight	Total weight (including battery)	kg	7800	6500	5800
	Battery weight ( ±5% )	kg	1500	1300	1300
Tyres	Tyres type		Solid rubber tyres	Solid rubber tyres	Solid rubber tyres
	Front wheel (diameter*width)	mm	φ405×220	φ405×220	φ405×220
	Rear wheel (diameter*width)	mm	φ680×250	φ680×250	φ680×250
	Wheel quantity	pcs	1X/2	1X/2	1X/2
Dimensions	Lifting height	mm	3000-8000	3000-8000	3000-10000
	Mast tilting angle	α/β(°)	2/3	2/3	2/3
	Total length (including fork)	mm	2500	2300	2300
	Total width	mm	2280	2280	2280
	Fork dimensions	l/e/s(mm)	1200/150/50	1200/150/50	1200/125/45
	Minimum aisle width when driving sideways	mm	2750	2550	2550
Performance	Driving speed loaded/unloaded	km/h	8/9	9/10	10/11
	Lifting speed loaded/unloaded	mm/s	220/280	240/320	260/320
	Lowering speed loaded/unloaded	mm/s	320/260	330/260	360/290
	Maximum gradeability loaded/unloaded(S2-5min)	%(tanθ )	12%	13%	13%
	Service brake Electromagnetic		Electric	Electric	Electric
	Driving wheel position display All wheel display		All-wheels display	All-wheels display	All-wheels display
Motor & battery	Driving motor type		AC all-wheels drive	AC all-wheels drive	AC real time multi-wheels drive
	Driving motor quantity		3	3	3/2
	Driving motor rate (S2-60min)	kw	Σ10	Σ8	Σ7/8
	Lifting motor type		AC	AC	AC
	Lifting motor rate,(S3-15%)	kw	80V25kw	80V20kw	80V18kw
	Battery voltage/capacity	V/Ah	80V625Ah	80V600Ah	80V600Ah
Options	Visual assistance for blind spots		Standard	Standard	Standard
	Wide fork positioner		Options	Options	Options
	Four forks + fork carriage		Options	Options	Options
	Camera + Video display		Options	Options	Options
	Driving Recorder		Options	Options	Options

Notes : [1] Total safety distance is 100mm (50mm for each side) when forklift is equipped with front/rear guide wheels; The safety distance and aisle width should be wider if there is no guide wheel on the forklift .

[2] The equipment has one or more continuous or intermittent adaptive outputs and matched power sources from multiple drives in a specific operating environment.

[3] The cumulative effective power released by vehicle is calculated by combining the number of driving wheels.

[4] The tilting method of the vehicle is to tilt the fork carriage or fork backrest.

The parameters listed in the above table are for standard vehicle models, and may vary with customized configurations; Suzhou Pioneer Material Handling Equipment & Technology Co. Ltd reserves the right to modify the parameters listed in the above table ! ! !



Suzhou Pioneer Material Handling Equipment & Technology Co.Ltd  
No.588 Zixu Road Xujiang Industry Park,Wuzhong District  
Suzhou,P.R.China

Tel : +86-0512-67080057  
Email : info@zowell.com.cn  
www.zowellforklifts.com

Reminder : All photo here are for reference only and are subject to the physical product if there is any difference .Suzhou Pioneer Material Handling Equipment & Technology Co.Ltd reserves final right of explanation.