

# J Series

4.0/4.5/5.0 T  
Electric Forklift

## Standard Feature

- AC drive system
- Front wheel & Rear wheel pneumatic tyres
- High capacity storage battery
- Emergency disconnect switch
- Rubber floor mat
- 2 Spools control valve
- Locked spring gas
- Front combined lamp
- 3 meters 2-stage mast
- Adjustable steering column
- Rearview mirror
- Drive, lift, steering controlled
- Rear combined lamp
- Beeper
- Toolbox and file folder
- Hour meter, self-diagnose indicator

## Optional Feature

- 4.3-6 meters 3-stage mast
- 2.5-4.5 meters 2-stage mast
- With attachment
- Other dimension forks
- High capacity battery
- Special carriage and backrest
- Solid tyre
- No mark solid tyre
- Battery charger



CE CERTIFICATE



ISO14001: 2004



ISO9001: 2000



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ZHEJIANG HANGCHA ENGINEERING MACHINERY CO.,LTD.



durable, clean: **HYDRAULICS**  
simple, comprehensive: **PANEL**  
optimised, powerful: **BATTERIES**

### **CONTROLLER**

New Multi-Display employed full-dotted LCD is located on the steering column to improve visibility and manipulate-ability. Well fitted with convenient functions, such as battery level indicator, truck operation records, passwords entry and so on. While traveling, displays travel speed and BDI (Battery Discharge Indicator), while stopping, displays clock, Multi-display shows appropriate information under various situations.

DANAHER MOTION made high-frequency controller incorporates a powerful microprocessor together with MOSFET power electronics. It controls all truck movements precisely with high energy efficiency at low noise level- from smooth, sensitive inching to powerful acceleration and regenerative braking.

The new controller also offers sophisticated communication facilities and built-in diagnostics to reduce downtime. All electronics are housed inside the chassis body to protect them from external damage.

### **DRIVE TRAIN**

#### **AC Power System**

Multiple benefits of the AC Power System include: fast response to operating commands, precise power control, compact components. Moreover, since the AC motor does not use contactors and brushes, these maintenance items will no longer be required. It also allows for a revolutionary new forklift design and performance so enhanced the operator can actually feel the difference.



### **CHASSIS**

A fully enclosed chassis frame houses the drive motors. The hydraulic and drive components are protected against dirt and water. Due to their compact design, these trucks are exceptionally robust.

Main electric equipments are placed inside of operator compartment. You can access to main pump motor, oil tank by opening left and right cover hood.

No tools are required remove floor plate.

### **STEERING**

Rear axle with integrated steering cylinder suspended in the chassis with bearings for constant floor contact of all four wheels. It provides appropriate swinging limit of the steering axle and gives greater cornering stability.

Hydraulic power steering, combined with drive-motor system, gives superb maneuverability with low noise level and low energy consumption. The low steering force required, further enhances operator comfort.

### **Brakes**

The J series four-wheel truck has three independent braking systems:

- Regenerative braking system
- Front wheel brake drum system
- Toggle-type parking brake

#### **Three Types of Regenerative Systems (AC)**

- When accelerator is released

Regenerative braking operates when the accelerator pedal is released during travel to collect the electrical power created. It also acts much like "engine braking" to slow the speed of the forklift.

- During switch back

Regenerative braking operates during travel whenever the direction lever is switched from forward to reverse (or vice versa).

- During braking

Regenerative braking operates whenever the brake pedal is depressed during travel. The regenerative system also helps to reduce brake lining wear and helps extend operating time per charge.





simple. Easy: **SERVICE**  
AC: **MOTORS**  
state of the art: **ELECTRONICS**  
strong, wide, clear view: **MASTS**

### OPERATOR'S COMPARTMENT

A low step provides easy, comfortable access to the ergonomically designed compartment. The adjustable steering column and driver's seat ensure a comfortable working position.

Hydraulic levers can be mounted on either scuttle or beside the battery, allowing access from either side. Two strong grab handles are provided.

Lower step makes easy entry and exit. A clear foot well with well-placed pedals gives plenty of room for large feet and helps the driver work safely. This will be much appreciated by operators who have to get on and off of the forklift frequently.



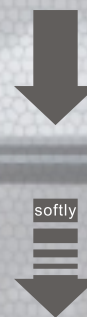
Comfortable seat can be upgraded to a luxury semi-suspension version.



Safe and easy access is assured by a large, non-slip step and grab handle.

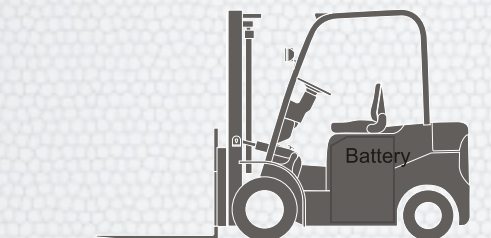
### SOFT LANDING LIFT CYLINDER

During lowering fork with no load, fork speed is reduced just before touching ground to avoid collision noise with ground. The operator and those working near the forklift will appreciate the reduced noise.



### BATTERY

Battery is dropped down to the lowest part of frame. This concept gives truck firm stability while it is traveling. By using relocating the battery under the cover hood, it reduces operator fatigue and makes the truck's overall dimensions smaller.



Because you open and close the battery cover for daily checkup, access of battery cover is improved by using gas-spring with lock function.



**F**or more than 30 years, **Zhejiang Hangcha Engineering Machinery CO., LTD.** Has played a leading role in the manufacture and production of Chinese forklift industry. We constantly strive to develop and incorporate the latest advances in forklift design and technology to ensure that our products provide an optimum level of performance, all the time. Our new generation J series of forklifts truly exemplifies this commitment to excellence.


### INTRODUCTION

The distinctive features of the new 4.0-5.0t J series electric Four-wheel counterbalanced forklift are the following:

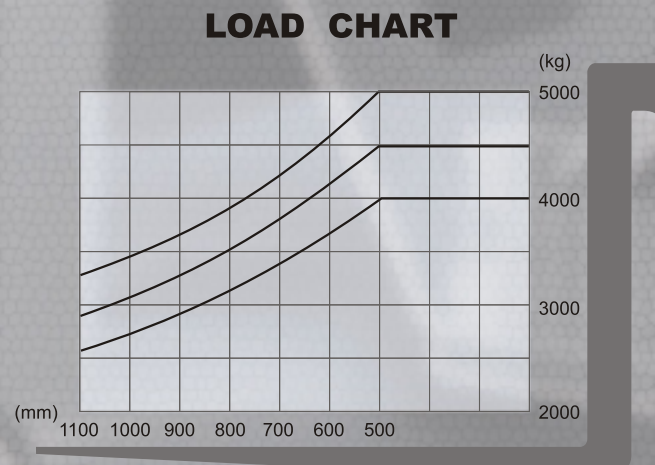
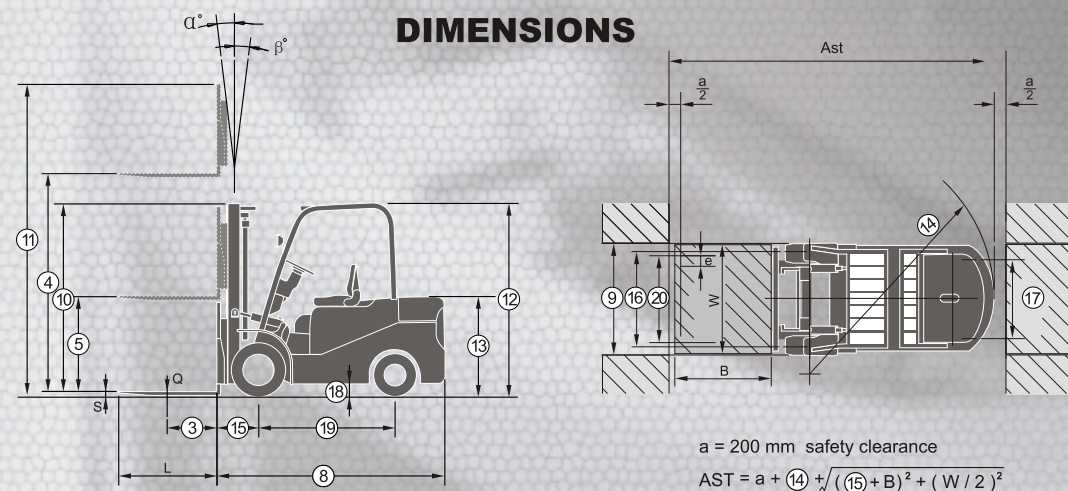
- Versatility of use due to compact design and minimal operating space requirements. Compact dimensions combined with superb maneuverability.
- High stability, both when stationary and cornering, due to long wheelbase, low centre of gravity and wide tyres.
- Economy of operation, resulting from minimized maintenance costs, e.g. fully enclosed 3 phase AC asynchronous motors with high degree of efficiency maintenance free for life.



#### 4.0-5.0t J Serial Electric Forklift Specification

Specification							
No.	Manufacturer		CPD40J D1	CPD45J D1	CPD50J D1		
1	Model		CPD40J D1	CPD45J D1	CPD50J D1		
2	Rated capacity	Kg	4000	4500	5000		
3	Load centre	mm	500	500	500		
4	Lifting height	mm	3000	3000	3000		
5	Free lifting height	mm	150	150	150		
6	Fork size	s×e×l	50×150×1070	55×150×1070	55×150×1070		
7	Tilting angle	F/B (α° / β°)	6 / 12	6 / 12	6 / 12		
Dimensions		8	Length (to fork face)	mm	3015	3015	
		9	Width	mm	1380	1380	1380
		10	Overall Dimension	Height when mast lowered	mm	2185	2185
		11		Height when mast lifting	mm	4117	4117
		12		Height to safeguard	mm	2280	2280
		13		Height seat	mm	1185	1185
		14		Turning radius	Min.	mm	2650
		15	Overhang	mm	550	550	550
		16/17	Thread(Front/Rear)	mm	1130 / 1100	1130 / 1100	1130 / 1100
		18	Ground clearance	Min.	mm	219	219
19	Wheelbase	mm	2000	2000	2000		
20	Fork spread	Min. / Max.	mm	310 / 1200	310 / 1200		
21	Working aisle width with pallet (Ast)	1000×1200 crossways	mm	4516	4516		
22		800×1200 lengthways	mm	4615	4615		
Performance		23	Travel (Laden)	km/h	14	13.5	
		24	Speed	Travel (Unladen)	km/h	14	13.5
		25		Lifting (Laden)	mm/s	270	260
		26		Lifting (Unladen)	mm/s	430	420
		27	Gradeability	Laden	%	14.5	14
		28		Unladen	%	15.5	15
		29	Max. Drawbar pull	Laden(S2 5min)	N	24000	26000
		30	Service weight	Include battery box	Kg	6600	6800
		31	Axle Loading (Front / Rear)	Laden	Kg	9440 / 1160	9950 / 1350
		32		Unladen	Kg	3960 / 2640	3950 / 2850
33	Tyre	Front×2		250 / 15	250 / 15		
34		Rear×2		7.00 - 12	7.00 - 12		
Driven		35	Motor	Driven motor / S 60min	kw	16.6	16.6
		36		Pump motor / S 15min	kw	25.4	25.4
		37	Battery	Standard	V/Ah	80 / 700	80 / 700
		38		Optional	V/Ah	/	/
		39		Type		MOSFET	MOSFET
		40	Controller	Drive system		AC	AC
		41		Manufacturer		Danaher	Danaher
42	Operating pressure for attachment	Mpa	17.5	17.5	17.5		
43	Noise level	dB(A)	74	75	76		

Ast\*: Include Safety Clearance = 200mm



#### 4.0 t J series mast

Type	Mast fork height	Lowered	Overall height		Free lift		Tilt range		Capacity	
			With backrest	Without backrest	With backrest	Without backrest	F	R	Load capacity at 500 mm	
			mm	mm	mm	mm	Deg	Deg	Single tire	Double tire
STD. Duplex	2500	1935	3670	3270	150	150	6	11	4000	4000
	2700	2035	3870	3470	150	150	6	11	4000	4000
	3000	2185	4170	3770	150	150	6	11	4000	4000
	3300	2335	4470	4070	150	150	6	11	4000	4000
	3500	2435	4670	4270	150	150	6	11	4000	4000
	3600	2485	4770	4370	150	150	6	11	4000	4000
	4000	2735	5170	4770	150	150	6	11	3800	4000
	4300	2900	5470	5070	150	150	6	6	3600	3800
	4500	3010	5670	5270	150	150	6	6	3400	3600
	4800	3175	5970	5570	150	150	6	6	3000	3200
Full Free Lift	2500	1916	3670	3305	750	1115	6	11	4000	4000
	2750	2040	3920	3555	873	1238	6	11	4000	4000
	3000	2166	4170	3805	1000	1365	6	11	4000	4000
	3300	2316	4470	4105	1150	1515	6	11	4000	4000
	4000	2020	5170	4805	850	1218	6	11	4000	4000
	4300	2120	5470	5105	950	1318	6	6	3400	3600
	4500	2185	5670	5305	1018	1380	6	6	3200	3400
	4800	2280	5970	5605	1110	1478	6	6	3000	3200
	5000	2350	6170	5805	1180	1548	6	6	2600	3000
	5500	2515	6670	6305	1348	1710	3	6	2250	2800
Triplex	6000	2730	7170	6805	1560	1928	3	6	1700	2600

#### 4.5 t J series mast

Type	Mast fork height	Lowered	Overall height		Free lift		Tilt range		Capacity	
			With backrest	Without backrest	With backrest	Without backrest	F	R	Load capacity at 500 mm	
			mm	mm	mm	mm	Deg	Deg	Single tire	Double tire
STD. Duplex	2500	1935	3670	3270	150	150	6	11	4500	4500
	2700	2035	3870	3470	150	150	6	11	4500	4500
	3000	2185	4170	3770	150	150	6	11	4500	4500
	3300	2335	4470	4070	150	150	6	11	4500	4500
	3500	2435	4670	4270	150	150	6	11	4500	4500
	3600	2485	4770	4370	150	150	6	11	4500	4500
	4000	2735	5170	4770	150	150	6	11	4250	4500
	4300	2900	5470	5070	150	150	6	6	4000	4250
	4500	3010	5670	5270	150	150	6	6	3800	4050
	4800	3175	5970	5570	150	150	6	6	3350	3600
Full Free Lift	2500	1916	3670	3305	750	1115	6	11	4500	4500
	2750	2040	3920	3555	873	1238	6	11	4500	4500
	3000	2166	4170	3805	1000	1365	6	11	4500	4500
	3300	2316	4470	4105	1150	1515	6	11	4500	4500
	4000	2020	5170	4805	850	1218	6	11	4500	4500
	4300	2120	5470	5105	950	1318	6	6	3800	4050
	4500	2185	5670	5305	1018	1380	6	6	3600	3850
	4800	2280	5970	5605	1110	1478	6	6	3350	3600
	5000	2350	6170	5805	1180	1548	6	6	3150	3400
	5500	2515	6670	6305	1348	1710	3	6	2550	3100
Triplex	6000	2730	7170	6805	1560	1928	3	6	1950	2800

#### 5.0 t J series mast

Type	Mast fork height	Lowered	Overall height		Free lift		Tilt range		Capacity	
			With backrest	Without backrest	With backrest	Without backrest	F	R	Load capacity at 500 mm	
			mm	mm	mm	mm	Deg	Deg	Single tire	Double tire
STD. Duplex	2500	1935	3670	3270	150	150	6	11	5000	5000
	2700	2035	3870	3470	150	150	6	11	5000	5000
	3000	2185	4170	3770	150	150	6	11	5000	5000
	3300	2335	4470	4070	150	150	6	11	5000	5000
	3500	2435	4670	4270	150	150	6	11	5000	5000
	3600	2485	4770	4370	150	150	6	11	5000	5000
	4000	2735	5170	4770	150	150	6	11	4750	5000
	4300	2900	5470	5070	150	150	6	6	4500	4750
	4500	3010	5670	5270	150	150	6	6	4250	4500
	4800	3175	5970	5570	150	150	6	6	3750	4000
Full Free Lift	2500	1916	3670	3305	750	1115	6	11	5000	5000
	2750	2040	3920	3555	873	1238	6	11	5000	5000
	3000	2166	4170	3805	1000	1365	6	11	5000	5000
	3300	2316	4470	4105	1150	1515	6	11	5000	5000
	4000	2020	5170	4805	850	1218	6	11	4750	5000
	4300	2120	5470	5105	950	1318	6	6	4200	4500
	4500	2185	5670	5305	1018	1380	6	6	4000	4250
	4800	2280	5970	5605	1110	1478	6	6	3750	4000
	5000	2350	6170	5805	1180	1548	6	6	3500	3750
	5500	2515	6670	6305	1348	1710	3	6	2850	3350
Triplex	6000	2730	7170	6805	1560	1928	3	6	2200	2950