

GLOBAL SALES NETWORK



J Series

1.3/1.5/1.6/1.8/2.0 t
Electric Three-wheel Forklift



CE CERTIFICATE



ISO14001: 2004



ISO9001: 2008

HANGCHA GROUP CO., LTD.
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2015 VERSION 1

HANGCHA GROUP CO., LTD.

DRIVE TRAIN

The Germany ZF dual transmission including finely engineered helical gears, assures low noise, high quality and a longer service life.

For heavy-duty application the AC system and brushless motors with minimum servicing is ideal for long cycles, ramps and high lifts.

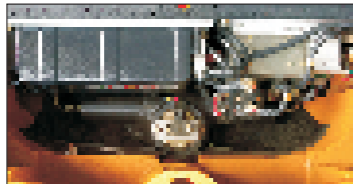
Twin AC motors are readily accessible from either the front or above, minimising service time.

The controller control the traveling, lifting, tilling and steering action.



Front-wheel drive through two drive motors incorporated in a compact axle. AC motors are used, depending on truck size and workloads.

Access to the state-of-the-art controllers is easy at waist height, helping to reduce servicing time.



STEERING

The "On - demand" 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.



simple. Easy: **SERVICE**

AC: **MOTORS**

state of the art: **ELECTRONICS**

strong, wide, clear view: **MASTS**



ELECTRONICS

AC technology is better suited to heavy-duty applications. The use of current is optimised and AC motors are brushless, which minimises servicing. Motors can be very well protected against the water and dust. Roll-back is almost eliminated and higher travel speeds are attainable.

Both systems are fully adjustable to suit the load, the working area and the operator. Inbuilt diagnostics record intermittent faults and service requirements reducing expensive service time.



More than thirty performance parameters can be adjusted to suit the type of load, congestion of the working area and skill of the driver.

F Or more than 30 years, HANGCHA GROUP 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 J series electric three-wheel 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. Low-wear brakes.

durable, clean: **HYDRAULICS**
 simple, comprehensive: **PANEL**
 wet disc, progressive: **BRAKES**
 optimised, powerful: **BATTERIES**

CHASSIS & HYDRAULICS

A fully enclosed chassis frame houses the drive motors. The hydraulic and drive components are protected against dirt and water.

The J series has high quality cylinders and hard chrome burnished and polished rods to reduce seal wear, for long life and minimum fluid contamination.

To keep the oil clean the J has a full-flow low pressure filter on the return line.

Cleanliness minimises seal and pump wear and keeps the control valve in good, trouble free, condition.

Brakes

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

- Regenerative braking system
- Hydraulic wet disc brake system
- Toggle-type parking brake



FRAME

Vertical sides help the driver work safely with less damage, even in an area with low-level obstructions.

Thick chassis plates resist distortion, reduce damage and minimise refurbishment costs.

The wide mast and low console give an excellent view of the forks and the way ahead.

Well positioned lights ensure optimum vision to both the front and back-essential in containers.

Much attention has been given to the carriage design, with an integral full-vision side-shift. The cleverly machined structure of tensile steel bars and a double-ended hydraulic cylinder gives the max view of the load and forks, coupled with variable speed side-shift.



The wide mast, low scuttle and high seating position gives the operator an excellent view of the forks and of the way ahead-reducing load damage and accidents.
An integral full-vision side-shift.



BATTERY CONTROL

Over 50% of all electric lift trucks bought today are three-wheelers and they have greatest range of applications, from running for just half an hour at one time to working three full shifts a day.

The J series uses only the best control systems. Smaller trucks with less demanding work patterns are fitted with market leading Inmotion controllers.

For heavy-duty trucks, it makes sense to select the Inmotion AC controllers which optimise battery power, particularly helpful on ramps and long runs as well as high lifts.



Full accessible 48 volt batteries with 400-600 Ah capacity are controlled by either CURTIS AC control systems.

DRIVER'S COMPARTMENT

The J series design pays great attention to the cabin: a strong grab handle is provided, with a large low step for easy access.

A clear footwell with well-placed pedals gives plenty leg room and helps the driver work comfortable.

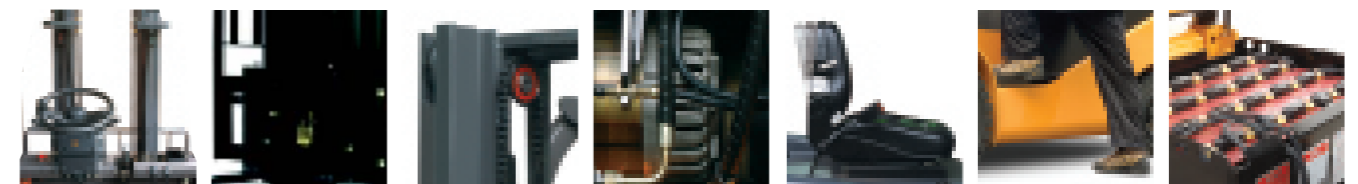
The simple, concise instrument panel is less distracting yet still offers a comprehensive warning system.

Hydraulic levers can be mounted on either the scuttle or beside the battery, allowing access from either side.

The standard Grammer GS12 semi-suspension seat is a clear benefit for longer shifts or mature operators and gives comfortable support.



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.
The adjustable steering Column ensure a comfortable working position.



Standard Feature

- Solid tyre
- Emergency disconnect switch
- Rubber floor mat
- Locked spring gas
- Front combined lamp
- Adjustable steering column

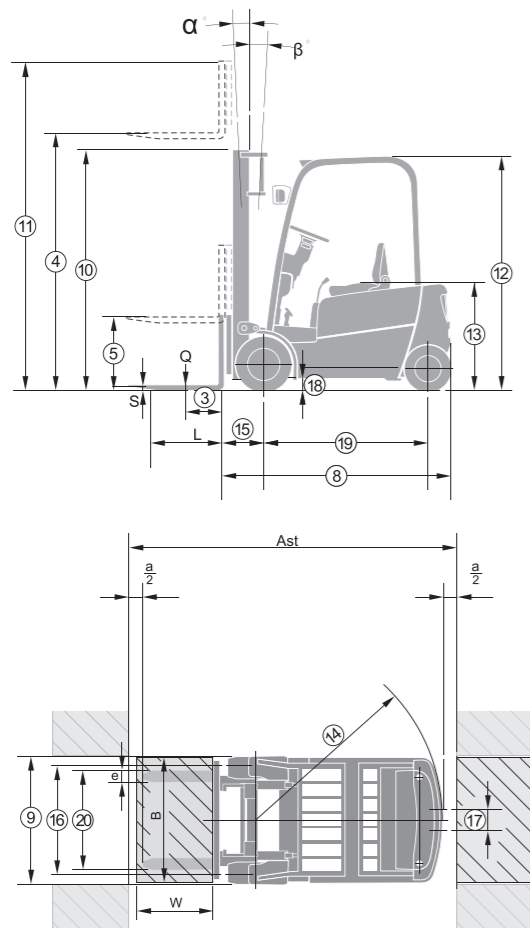
- Rearview mirror
- Drive, lift, steering controlled
- Rear combined lamp
- Beeper
- Toolbox and file folder
- Hour meter, self-diagnose indicator
- Germany Schabmuller dual AC traction motor
- Germany ZF dual transmission
- Japan Shimadzu hydraulic pump
- KDS AC pump motor (For C6)
- 4.5m triplex mast with intergrated side shift
- OPS system
- Gs12 Seat

Optional Feature

- 4 spools control valve
- 4.3-6.5 meters 3-stage mast
- 2.5-4.5 meters 2-stage mast
- With attachment
- Other dimension forks
- High capacity battery
- Special carriage and backrest
- Non-marking tyre
- Battery charger
- Side battery change

1.3-2.0 t Electric Three-wheel Forklift Specification

DIMENSIONS



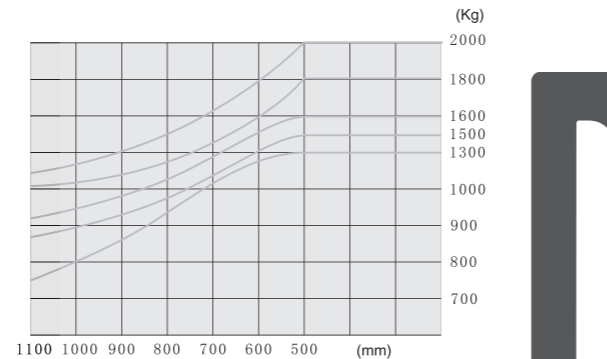
a = 200 mm safety clearance
 $AST = a + 14 + \sqrt{(15 + W)^2 + (B/2)^2}$

Distinguishing mark	HANGCHA GROUP CO.,LTD.											
	1.1	Manufacturer	CPDS13J-C5	CPDS15J-C5	CPDS16J-C5	CPDS18J-C5	CPDS20J-C5	CPDS13J-C6	CPDS15J-C6	CPDS16J-C6	CPDS18J-C6	CPDS20J-C6
1.2	Manufacturer's type designation											
1.5	Load capacity	Q (kg)	1300	1500	1600	1800	2000	1300	1500	1600	1800	2000
1.6	Load centre distance	c /mm	500	500	500	500	500	500	500	500	500	500
1.8	Load distance , center of drive axle to fork	x /mm	355	355	355	355	355	355	355	355	355	355
1.9	Wheelbase	y /mm	1250	1250	1358	1358	1465	1250	1250	1358	1358	1465
2.1	Service weight with battery	Kg	2760	2950	3020	3080	3370	2760	2950	3020	3080	3370
3.2	Tyre size , front x2		18x7-8	18x7-8	18x7-8	18x7-8	200/50-10	18x7-8	18x7-8	18x7-8	18x7-8	200/50-10
3.3	Tyre size , rear x2		15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8	15x4.5-8
3.6/3.7	Thread(Front/Rear)	b ₁₀ /b ₁₁ mm	902/175	902/175	902/175	902/175	915/175	902/175	902/175	902/175	902/175	915/175
4.1	Tilt of mast/fork carriage forward/backward	α/β(°)	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5	6.5/6.5
4.2	Height, mast lowered	h ₁ /mm	1995	1995	1995	1995	1995	1995	1995	1995	1995	1995
4.5	Height, mast extended(with load backrest)	h ₂ /mm	3945	3945	3945	3945	4005	3945	3945	3945	3945	4005
4.7	Height of overhead guard (cabin)	h ₃ /mm	1960	1960	1960	1960	1960	1960	1960	1960	1960	1960
4.8	Seat height/stand height	h ₄ /mm	930	930	930	930	930	930	930	930	930	930
4.20	length to fork face	l ₁ /mm	1792	1792	1900	1900	2012	1792	1792	1900	1900	2012
4.21	Overall width	b ₁ /mm	1060	1060	1060	1060	1060	1060	1060	1060	1060	1060
4.25	Distance between fork-arms	b ₂ (mm)	200/1000	200/1000	200/1000	200/1000	200/1000	200/1000	200/1000	200/1000	200/1000	200/1000
4.32	Ground clearance, centre of wheelbase	m ₂ /mm	90	90	90	90	90	90	90	90	90	90
4.34.1	Aisle width for pallets 1000 x 1200 cross forks	A ₂₁ /mm	3161	3161	3271	3271	3380	3161	3161	3271	3271	3380
4.34.2	Aisle width for pallets 800 x 1200 cross forks	A ₂₂ /mm	3260	3260	3370	3370	3480	3260	3260	3370	3370	3480
4.35	Turning radius	W ₂ /mm	1440	1440	1550	1550	1658	1440	1440	1550	1550	1658
5.1	Travel speed, laden/unladen	km/h	14/14	14/14	14/14	14/14	13/13	14/14	14/14	14/14	14/14	13/13
5.2	Lift speed, laden/unladen	m/s	0.290/0.440	0.290/0.440	0.290/0.440	0.290/0.440	0.250/0.400	0.290/0.440	0.290/0.440	0.290/0.440	0.290/0.440	0.250/0.400
5.7	Gradeability, Laden	%	16(20)	15(20)	15(20)	15(18)	12(15)	16(20)	15(20)	15(20)	15(18)	12(15)
5.7	Gradeability, Unladen	%	16(20)	20(20)	20(20)	15(20)	13(18)	16(20)	20(20)	20(20)	15(20)	13(18)
6.1	Drive motor rating S2 60min.	kw	4.5x2	4.5x2	4.5x2	4.5x2	4.5x2	4.5x2	4.5x2	4.5x2	4.5x2	4.5x2
6.2	Lift motor rating S3 15%	kw	8.6DC	8.6DC	8.6DC	8.6DC	8.6DC	8.6AC	8.6AC	8.6AC	8.6AC	8.6AC
6.4	Battery voltage, nominal capacity(5h). Standard	V/Ah	48/400	48/400	48/500	48/500	48/600	48/400	48/400	48/500	48/500	48/600
6.4	Battery voltage, nominal capacity(5h). Optional	V/Ah	48/440	48/440	48/550	48/550	48/660	48/440	48/440	48/550	48/550	48/660
9.1	Drive control		CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC	CURTIS AC
10.1	Operating pressure for attachment	bar	145	145	145	145	145	145	145	145	145	145

- 1.Special lifting height available
- 2.Attachment available.
- 3.The specification in the table are for standard models only. for further information
- 4.Specification are subject to change without notice



LOAD CHART



1.3 / 1.5 / 1.6 / 1.8 / 2.0 t J serie mast

Type	Model	max. fork height	Overall height				Free lift		Tilt range		Capacity				
			Lowered	Extended		Extended		FWD	BWD	load capacity at 500mm					
				With backrest	Without backrest	With backrest	Without backrest			1.3T	1.5T	1.6T	1.8T	2.0T	
Wide view Duplex mast	S16MX	2500	1745	3445	3065	145	145	5.5	6	1300	1500	1600	1800	2000	
		2700	1845	3645	3265	145	145	5.5	6	1300	1500	1600	1800	2000	
		3000	1995	3945	3565	145	145	5.5	6	1300	1500	1600	1800	2000	
		3300	2145	4245	3865	145	145	5.5	6	1300	1500	1600	1800	2000	
		3500	2245	4445	4065	145	145	5.5	6	1300	1500	1600	1800	2000	
		3600	2295	4545	4165	145	145	5.5	6	1300	1500	1600	1800	2000	
		4000	2545	4945	4565	145	145	3.5	5	1300	1500	1600	1800	2000	
		4300	2710	5245	4865	145	145	3.5	5	1200	1400	1500	1700	1900	
		4500	2820	5445	5065	145	145	3.5	5	1100	1300	1400	1600	1800	
Duplex free mast(with side shift)	S16UX	2500	1745	2955	3105	550	900	5.5	6	1300	1500	1600	1800	2000	
		2700	1845	3155	3305	750	1100	5.5	6	1300	1500	1600	1800	2000	
		3000	1995	3455	3605	1050	1400	5.5	6	1300	1500	1600	1800	2000	
		3300	2145	3755	3905	1350	1700	5.5	6	1300	1500	1600	1800	2000	
		3500	2245	3955	4105	1550	1900	5.5	6	1300	1500	1600	1800	2000	
		3600	2295	4055	4205	1650	2000	5.5	6	1300	1500	1600	1800	2000	
		4000	2545	4455	4605	2050	2400	3.5	5	1300	1500	1600	1800	2000	
		4300	2710	5245	4905	1100	1415	3.5	5	1200	1400	1500	1700	1900	
		4500	2820	5445	5105	1170	1480	3.5	5	1100	1300	1400	1600	1800	
Wide view full free Triplex mast	S16UX	4800	2175	5745	5405	1270	1580	3.5	5	1000	1200	1300	1500	1550	
		5000	2240	5945	5605	1340	1645	3.5	5	950	1150	1250	1450	1500	
		5500	2410	6445	6105	1500	1815	3.5	5	850	1050	1150	1200	1300	
		6000	2625	6945	6625	1670	2010	3.5	5	750	950	1050	1100	1200	
		6500	2810	7456	7135	1880	2180	3.5	5	550	750	850	900	1000	

Note: With side-shift, load capacity subtract 200kg