

Mast Specification

Type	Fork Lift Height h ₃		Mast Lowered h ₁		Mast Extended h ₄		Free Lift Height		Capacity	
									Load Capacity at 24in/600mm	
									WRS14Li	
	in	mm	in	mm	in	mm	in	mm	lb	kg
Limited Free Lift 2 Stage Mast	98.4	2500	76.4	1940	139.8	3552	3.7	95	3000	1361
	106.3	2700	80.3	2040	147.7	3752	3.7	95	3000	1361
	118.1	3000	86.2	2190	159.5	4052	3.7	95	3000	1361
	129.9	3300	92.1	2340	171.3	4352	3.7	95	3000	1361
	137.8	3500	96.1	2440	179.2	4552	3.7	95	3000	1361
	141.7	3600	98.0	2490	183.1	4652	3.7	95	2950	1338
	145.7	3700	100.0	2540	187.1	4752	3.7	95	2900	1315
	149.6	3800	102.0	2590	191.0	4852	3.7	95	2850	1293
	157.5	4000	109.8	2790	198.9	5052	3.7	95	2750	1247
	169.3	4300	115.7	2940	210.7	5352	3.7	95	2650	1202
Full Free Lift 3 Stage Mast	177.2	4500	119.7	3040	218.6	5552	3.7	95	2550	1157
	137.8	3500	77.8	1975	179.2	4552	36.3	923	3000	1361
	145.7	3700	80.3	2040	187.1	4752	38.9	988	2900	1315
	157.5	4000	84.3	2140	198.9	5052	42.8	1088	2750	1247
	169.3	4300	88.2	2240	210.7	5352	46.8	1188	2650	1202
	177.2	4500	90.2	2290	218.6	5552	48.7	1238	2550	1157
	185.0	4700	94.1	2390	226.5	5752	52.7	1338	2500	1134
	196.9	5000	98.0	2490	238.7	6062	56.6	1438	2400	1089
	204.7	5200	100.0	2540	246.1	6252	58.6	1488	2350	1066
	216.5	5500	103.9	2640	258.0	6552	62.5	1588	2200	998

Aisle Requirement-Right Angle Stack-WRS14Li

Aisle Requirement-Right Angle Stack ^①		Load Length				
Load Width		in(mm)	36(915)	40(1016)	42(1067)	48(1220)
	36(915)	in(mm)	92.0(2337)	95.1(2416)	96.8(2458)	101.9(2589)
	40(1016)	in(mm)	93.3(2370)	96.3(2447)	97.9(2487)	103.0(2615)
	42(1067)	in(mm)	94.0(2388)	97.0(2463)	98.5(2503)	103.5(2628)
	48(1220)	in(mm)	96.2(2444)	99.0(2514)	100.4(2551)	105.2(2671)

① Add a minimum of 12in (300mm) for maneuverability.



HC FORKLIFT AMERICA CORPORATION

Company address:
10405-A Granite Street
Charlotte, NC 28273

Toll Free: (888) 652-8395
Phone: (980) 888-8335
Fax: (980) 888-8336

america@hcforklift.com
www.hcforkliftamerica.com



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A Series Electric Lithium-ion Industrial Walkie Reach Stacker with capacities of 3000lbs



Making Material Handling Easier
SINCE 1956

Industrial Walkie Stacker Series

The Industrial Walkie Reach, Straddle, and Counterbalance Stacker make up a series of industrial walkie stackers that can handle dock-to-stock and everything in between. Hangcha's Industrial Walkie Stacker product line offer advantageous head-length and a multi-function control handle with Electric Power Steering (EPS). This system, combined with the standard creep speed feature, gives the operator incredible load handling control with excellent maneuverability. The Industrial Walkie Stacker Series excels in the most demanding operational environments to bring your materials handling capabilities to their full potential.



A Series Industrial Walkie Reach Stacker

The Industrial Walkie Reach Stacker from Hangcha is designed for versatility in the Industrial Walkie Stacker Series. It can act both as a counterbalanced stacker and a straddle stacker thanks to the scissor fork extension system. It acts as a counterbalanced stacker when its forks are extended. This allows it to handle non-standard pallets, enclosed pallets, and enclosed shelves easily. The reach stacker also acts as a straddle stacker when its forks are retracted allowing it to operate flexibly in narrow passages. This makes it perfect for warehouses, supermarkets, and workshops.

Easy
Efficient
Economical

High Performance

- / The Electric Power Steering (EPS) system makes maneuvering and load handling extremely easy.
- / The brushless AC travel motor features excellent acceleration, outstanding climbing ability, low heat emission, and is maintenance-free.
- / The latest CURTIS AC control system is highly efficient thanks to its accurate and stable control.
- / The CANBUS structure makes communication between all of the machine's functions faster and more reliable.
- / The truck's regenerative braking prevents it from sliding on a grade.
- / Tiller, switches, plug connectors, meters, and other components are all parts from industry known suppliers to ensure reliability, performance, and ease of service.
- / The forks and load backrest have a backward and forward tilt function as a part of the standard configuration. This creates a safer experience when loading and unloading goods.

Maintenance

- / The brushless AC motor reduces operation costs significantly because it is maintenance-free.
- / The integrated battery indicator meter, timer, and fault self-diagnosis are convenient for maintenance.
- / The back cover can be opened fully to reveal all key components and parts. This is extremely convenient for the maintenance of the entire machine.



FREI Multi-Function Tiller
1: Forks move forward / backward
2: Lifting / lowering of forks
3: Forward / backwards tilting of forks



Travel speed is reduced automatically when the forks are lifted past a specified height.



The structure of rotary load wheel offers better rolling ability and stability.



The forks' tilting function is easy for loading and unloading pallets.



Reliability

- / The three-support-point, low center of gravity, and the high-strength steel plate structure feature a large residual load-bearing capacity and a long service life.
- / All wires and cables are protected to increase the reliability of the electrical system significantly.
- / The non-contact proximity switch features a long service life and is reliable.
- / The power plug is fastened to the stacker’s body. This prevents the plug from being damaged due to impact when the lithium-ion battery is lifted for installation.

Safety

- / As the truck’s steering angle increases, the truck’s speed decreases. This is a standard safety feature.
- / The reach stacker features three types of braking functions, release braking, reverse braking, and emergency braking, for safe operation.
- / The anti-sliding function on a grade ensures a safe operational workspace.
- / The emergency reversing button at top of the tiller protects the operator from being injured in case of an emergency during the backward operation of the truck.
- / The soft landing function reduces the mast’s lowering speed automatically when the forks are lowered to a height less than 3.9” from the ground. This is designed to protect the goods from hitting the ground too hard.

CATL Lithium Iron Phosphate Battery Packs

- / Integrated Battery Management System (BMS) continually monitors energy management and ensures reliable operation.
- / HANGCHA provides these Lithium Iron Phosphate (LiFePO4) battery packs with up to a 5 year or 10,000 hour warranty.
- / See warranty certificate for specific warranty information on the Lithium Iron Phosphate battery packs.

Comfort

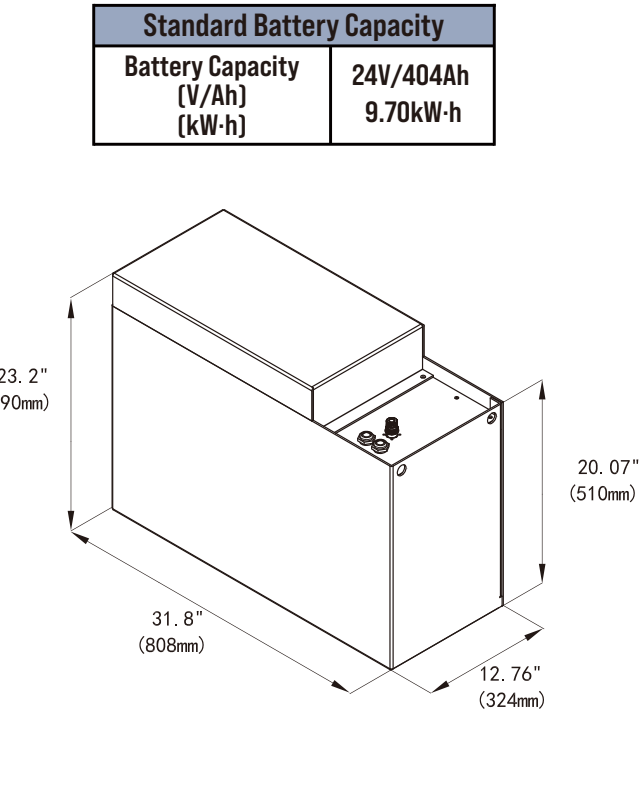
- / All movements of the fork can be regulated with step-less speed. This provides more accurate and stable handling of goods.
- / The imported tiller’s function buttons are designed to allow the operator to comfortably operate the stacker.
- / The standard configuration creep speed driving function allows the truck to move at slow speeds. This increases the stacker’s maneuverability and allows it to stack goods even in confined spaces.
- / The stacker’s compact body and large rounded corner design make the truck perfect for narrow aisle operation.
- / The optional battery side roll out makes swapping out the battery fast and easy.

Standard Specification

- / AC Drive Motor
- / CURTIS AC Drive Motor & Oil Pump Motor Controller
- / Electric Power Steering System
- / Automatic Deceleration at Turns
- / Proportional Speed Regulation for all Fork Operations
- / Multi-Function Battery Condition Meter
- / High-Performance Load Wheels
- / 42” Fork Length
- / 7.9-33.5” Range for the Adjustable Outer Distance of Forks
- / Forward and Backward Tilt of the Fork, by 3° and 5° Respectively
- / Load Backrest
- / 106.3” Limited Free Lift 2 Stage Mast with Double Lifting Cylinders
- / Soft Landing System
- / Multi-Function Tiller
- / Speed Limited when Fork is at Elevated Location
- / Horn
- / Key Switch
- / Creep Speed Function
- / Emergency Reversing Function
- / 23.2” Forward Extension Distance of Fork

Options

- / Other Mast Heights (see mast parameter list for details)
- / Various Fork Lengths
- / Sideshifter
- / Battery Side Extraction
- / Freezer
- / Wire Mesh Mast Screen



A Series Electric Lithium-ion Industrial Walkie Reach Stacker Specification

Distinguishing Marks	1.1	Manufacturer		HANGCHA GROUP CO.,LTD.
		HCFA Model		WRS14Li
	1.2	Manufacturer's Type Designation		CQDB14-AC1-JNAI
	1.3	Drive: electric(battery or mains),diesel,petrol,fuel gas		Electric
	1.4	Operator Type: hand,pedestrian,standing,seated,order-picker		Walkie
Weights	1.5	Rated Capacity/Rated Load	Q (lb/kg)	3000/1400
	1.6	Load Centre Distance	c (in/mm)	24/600
	1.8	Load Distance, centre of drive axle to fork	x (in/mm)	15/379
	1.9	Wheelbase	y (in/mm)	57/1451
Wheels/ Chassis	2.1	Service Weight without Battery	lb/kg	4850/2200
	3.1	Tires: solid rubber, superelastic, pneumatic, polyurethane		PU
	3.2	Tire Size, front	in/mm	Φ9.8×3.9 / Φ250×100
	3.3	Tire Size, rear	in/mm	Φ3.9×2.8 / Φ100×70
Basic Dimensions	3.5	Wheels, number front / rear (x = driven wheels)		1×/4
	3.7	Tread, rear	b11 (in/mm)	46.1/1170
	4.1	Tilt of Mast Forward/Backward	α/β(°)	3/5
	4.2	Height, mast lowered	h1 (in/mm)	80.3/2040
	4.4	Lift	h3 (in/mm)	106.3/2700
	4.5	Height, mast extended	h4 (in/mm)	147.7/3752
	4.9	Height of Tiller in Drive Position, min./max.	h14 (in/mm)	1475/755 (58.1/29.7)
	4.10	Height of Wheel Arms	h8 (in/mm)	5.1/130
	4.15	Height, lowered	h13 (in/mm)	1.4/35
	4.19	Overall Length	l1 (in/mm)	91.5 ¹⁾ /2323 ¹⁾
	4.20	Length to Face of Forks	l2 (in/mm)	49.3 ³⁾ /1253 ³⁾
	4.21	Overall Width	b1/b2 (in/mm)	1270/870 (50/34.3)
	4.22	Fork Dimensions	s/e/l (in/mm)	1.4/3.9/42.1(35/100/1070)
	4.24	Fork-Carriage Width	b3 (in/mm)	36.2/920
	4.25	Distance between Fork-Arms	b5 (in/mm)	8.3~33.5 (210~850)
	4.26	Distance between Wheel Arms	b4 (in/mm)	42~50 (1070~1270) ²⁾
	4.28	Reach Distance	l4 (in/mm)	23.2/590
	4.32	Ground Clearance, centre of wheelbase	m2 (in/mm)	2.8/70
	4.35	Turning Radius	Wa (in/mm)	64.3/1632
	4.37	Length Across Wheel Arms	l7 (in/mm)	69.96/1777
		Battery Compartment Width	l8 (in/mm)	13.4/340
		Battery Compartment Length	b6 (in/mm)	32.2/817
		Battery Floor Height w/ Optional Rollers	in/mm	9.4/240
		Load Backrest Height	h12 (in/mm)	41.3/1050
		Grade Clearance	D(%)	46.57
		Top Vertical Braking Arc	Q(°)	15
		Bottom Braking Arc	M(°)	10
		Handle Operating Arc	S(°)	65
Performance Data	5.1	Travel Speed, laden/unladen	mph (kph)	3.4/3.4 (5.5/5.5)
	5.2	Lift Speed, laden/unladen	ft/min (m/s)	18.66/26.58 (0.095/0.135)
	5.3	Lowering Speed, laden/unladen	ft/min (m/s)	37.38/29.52 (0.190/0.150)
	5.8	Max. Gradeability, laden/unladen	%	8/13
Electric Motor	5.10	Service Brake		Electromagnetic braking
	6.1	Drive Motor Rating S2 60 min.	hp/kW	4.0/3.0
	6.2	Lift Motor Rating at S3 15%	hp/kW	4.0/3.0
	6.4	Battery Voltage/Nominal Capacity K5	V/Ah	24/404
		Minimum Battery Weight	lb/kg	276/125
		Maximum Battery Weight	lb/kg	496/225
Others	8.1	Type of Drive Control		AC CURTIS
	10.5	Steering Design		Electric Power Steering
	10.7	Sound Pressure Level at the Driver's Seat	dB(A)	70

Note:1). Full Free Lift 3 Stage Mast +11mm(0.43in)

2). 50mm (2in) increments

Specifications are subject to change without notice.

