

A Series Walkie Counterbalanced Stacker

with capacities of 2,000 to 4,000lbs







A Series Walkie Counterbalanced Stacker

The walkie counterbalanced stacker, in addition to all spaces where general stackers may be used, can also play its role in spaces where general stackers cannot be used because enclosed pallets are used, there has little clearance between ground and pallet, and/or has no clearance for leg extension under shelves. Cutting-edge AC driving control technology and electric power steering technology are applied for the truck, which offer excellent performance, comfortable operation, safety and reliability, and low operation and maintenance cost. The stacker is an ideal tool for loading, unloading, and handling palletized goods in warehouse, supermarket, and workshop.

Environment/ Efficiency/ Economy

Appearance

- / The stacker is completed with specialized industrial design of appearance. The entire truck features smooth lines and affluent sense of movement, with full consideration to ergonomics, in accord with the latest appearance design trend.
- / It is manufactured with a number of steel plate stamping and injection molding technologies, solid and durable, in compliance with environmental requirements.



High Performance

- / Standard configuration of EPS (Electric Power Steering) offers easier and more flexible operation.
- / Stepless speed regulation for lifting, lowering, and tilting is a standard configuration.
- / The AC travel motor features excellent acceleration performance, outstanding climbing ability, low heat emission, and is brushless, and maintenance-free.
- / The cutting-edge CURTIS AC control system realizes accurate and stable control, and higher efficiency.
- / The CANBUS bus structure makes communication of the entire machine faster and more reliable.
- / Regenerative brake of the truck prevents it from sliding on a slope.
- / Standard configuration of forward and backward tilting function of gantry makes goods loading and unloading

Reliability

- / Three-support-point and low-gravity-center design and the high-strength steel plate framed structure feature large residual load bearing capacity, and long service life.
- / All wires and cables have reliable protection, which increases reliability of electrical system significantly.
- / Non-contact proximity switch features long service life and reliable operation.
- / The world-leading hydraulic power unit features low noise, small vibration, and stable and reliable rising and declining.
- / Power plug is fastened to truck body, which can avoid damage of plug due to impact when battery is lifted for installation.
- / The mast is made of H-shaped steel channels, which offer better rigidity and stability in comparison with C-shaped steel channels.

Comfort

- / Standard configuration of lifting and lowering stepless speed regulation realizes more accurate operation of the fork, and smoother and steadier lifting and lowering of the load.
- / The operating tiller is simple but beautiful, and function buttons are comfortable for operation.
- / The unique lighted creep speed driving function allows the truck to move at slow speed more conveniently, and can stack goods even in confined space.
- / Truck structure of optimized design guarantees terrific view for the operator, and easy entering and withdrawing from pallet.
- / Compact truck body and large rounded corner design make the truck suitable for operation in narrow space. Side roll out battery can realize easy and fast replacement of battery (optional).

Safety

- / As a standard configuration, speed is lowered automatically when fork is lifted to specified height.
- / The function of lowering speed automatically as steering angle increases is a standard configuration.
- / Three types of braking function release braking, reverse braking, and emergency braking can ensure safety of traveling.
- / Anti-sliding function on slope can ensure safety of operation.
- / The emergency reversing button at top of the tiller can avoid the driver from injury effectively in case of emergency during backward driving of the truck.
- / The function of intelligent lowering buffer reduces lowering speed automatically when the fork is lowered to a height less than 3.9" from ground, which provides effective protection for goods.

Maintenance

- / The brushless, maintenance-free AC motor reduces operation cost significantly.
- / The meter integrating battery indicator, timer, and fault self-diagnosis is convenient for maintenance.
- / Back cover can be opened fully, and all components and parts are clear at a glance, which is very convenient for maintenance of the entire machine.





Standard specification

- / AC drive motor
- / CURTIS AC drive motor controller + oil pump motor controller
- / EPS system
- / Automatic deceleration at turns
- / Speed of lifting, lowering, and tilting can all be regulated in proportion
- / Multi-function battery condition meter
- / High-performance load bearing wheels
- / Fork length 42"
- / Adjustable outer distance of forks within the range of 8.3-35.4"
- / Duplex 106.3" mast of double lifting cylinders
- / Mast intelligent declining buffer
- / Multi-function tiller
- / Speed limit when fork is at elevated location
- / Creep speed function
- / Emergency reverse
- / Horn
- / Forward and backward tilt of mast by 3° and 8° respectively
- / Load backrest
- / Mast shield of wire mesh

Options

- / Mast of various heights (see mast parameter list for details)
- / Various fork lengths
- / Mast shield of PC plate
- / Battery side extraction
- / Freezer
- / Side shift





REMA tiller is simple but beautiful, and function buttons are comfortable for operation



Mast can offer better rigidity and stability in comparison with C-shaped steel channels



Mast tilting function is easy for entry in/out the nallet



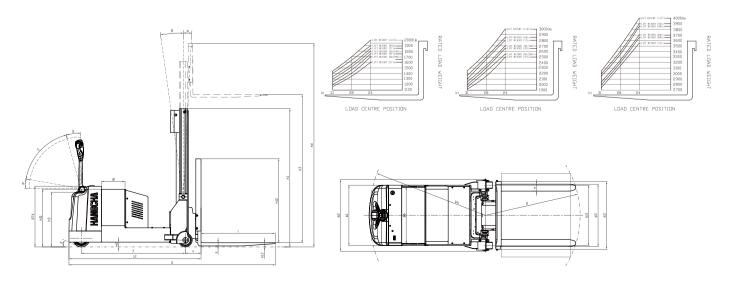
Lowering speed will automatically reduced when the fork is lowered to a height less than 3.9" from ground

A Series Walkie Counterbalanced Stacker Specification

Distinguishing marks	1.2	Manufacturer HCFA Model			HANGCHA GROUP CO.,LTD.	
nguishing marks	1.2			WCS09	WCS14	WCS18
guishing mar		Manufacturer's type designation		CPDB09-AC1-NA	CPDB14-AC1-NA	CPDB18-AC1-NA
guishing	1.3	Drive:electric(battery or mains),diesel,petrol,fuel gas		Battery	Battery	Battery
guishi	1.4	Operator type:hand,pedestrian,standing,seated,order-picker		Walkie	Walkie	Walkie
ng ⊦	1.5	Rated capacity/rated load	Q (kg/lb)	900/2000	1400/3000	1800/4000
	1.6	Load centre distance	c (mm/in)	600/24	600/24	600/24
뷺	1.8	Load distance, centre of drive axle to fork	x (mm/in)	216/8.5	216/8.5	226/8.9
<u> </u>	1.9	Wheelbase	y (mm/in)	1168 1330		1500
- 0	1.5	Wileelbase	y ()	1100	1330	1300
Weights	2.1	Service Weight without battery	kg/lb	1750/3858	2140/4718	2460/5423
	3.1	Tyres:solid rubber,superelastic,pneumatic,polyurethane		PU	PU	PU
s, s	3.2	Tyre size, front	mm/in	Φ250×80 / Φ9.5×3.1	Ф250×100 / Ф9.8×3.9	Ф250×100 / Ф9.8×3.9
Wheels, Chassis	3.3	Tyre size, rear	mm/in	Ф200×100 / Ф7.9×3.9	Φ200×100 / Φ7.9×3.9	Φ200×100 / Φ7.9×3.9
₹ `	3.5	Wheels, number front / rear (x = driven wheels)		1×/2	1×/2	1×/2
	3.7	Tread, rear	b11 (mm/in)	870/34.3	870/34.3	870/34.3
	4.1	Tilt of mast forward/backward	α/β (°)	3/8	3/8	3/8
	4.2	Height,mast lowered	h1 (mm/in)	1887/74.3	1887/74.3	1992/78.4
	4.4	Lift	h₃ (mm/in)	2700/106.3	2700/106.3	2700/106.3
	4.5	height, mast extended	h4 (mm/in)	3968/156.2	3968/156.2	3968/156.2
	4.9	Height of tiller in drive position min./max.	h14 (mm/in)	790/1480(31.1/58.3)	790/1480(31.1/58.3)	790/1480(31.1/58.3)
	4.15	Height, lowered	h13 (mm/in)	50/2.0	50/2.0	60/2.4
	4.19	Overall length	lı (mm/in)	2654 ¹⁾ /104.5 ¹⁾	2794 ¹⁾ /110 ¹⁾	2974 ¹⁾ /117.1 ¹⁾
	4.20	Length to face of forks	I2 (mm/in)	1584 ¹⁾ /62.4 ¹⁾	1724 ¹⁾ /67.9 ¹⁾	1904 ¹⁾ /75.0 ¹⁾
SI	4.21	Overall width	b1/b2 (mm/in)	870/1030(34.3/40.6)	870/1030(34.3/40.6)	870/1030(34.3/40.6)
Basic Dimensions	4.22	Fork dimensions	s/e/l (mm/in)	35/100/1070(1.4/3.9/42.1)	35/100/1070(1.4/3.9/42.1)	45/100/1070(1.8/3.9/42.1)
nen	4.24	Fork-carriage width	b₃ (mm/in)	974/38.3	974/38.3	974/38.3
ä	4.25	Distance between fork-arms	bs (mm/in)	210~900(8.3~35.4)	210~900(8.3~35.4)	210~900(8.3~35.4)
Sic	4.32	Ground clearance, centre of wheelbase	m2 (mm/in)	70/2.8	70/2.8	70/2.8
ä	4.35	Turning radius	Wa (mm/in)	1368/53.9	1508/59.4	1678/66.1
		Battery compartment width	ls (mm/in)	340/13.4	340/13.4	340/13.4
		Battery compartment length	bs (mm/in)	818/32.2	818/32.2	818/32.2
		Battery floor Height w/optional rollers	mm/in	240/9.4	240/9.4	240/9.4
		Load backrest height	h12 (mm/in)	1233/48.5	1233/48.5	1233/48.5
		Grade clearance	D (%)	39.75	46.57	46.57
		Top vertical braking Arc	Q (°)	15	15	15
		Bottom braking Arc	M (°)	10	10	10
		Handle Operating Arc	S (°)	65	65	65
a	5.1	Travel speed, laden/unladen	kph (mph)	5.5/5.5(3.4/3.4)	5.5/5.5(3.4/3.4)	5.5/5.5(3.4/3.4)
ance.	5.2	Lift speed, laden/unladen	m/s (ft/min)	0.150/0.240(29.53/47.24)	0.140/0.230(27.56/45.28)	0.125/0.216(24.61/42.52)
orma Data	5.3	Lowering speed, laden/unladen	m/s (ft/min)	0.220/0.250(43.31/49.21)	0.210/0.240(41.34/47.24)	0.210/0.240(41.34/47.24)
Performance Data	5.8	Max.gradeability, laden/unladen	%	7/10	7/10	6/10
ď	5.10	service brake		Electromagnetic braking	Electromagnetic braking	Electromagnetic braking
5	6.1	Drive motor rating S2 60 min.	kW/hp	1.5/2.0	3/4.0	3/4.0
to [6.2	Lift motor rating at S3 15%	kW/hp	2.2/2.95	3.2/4.29	3.2/4.29
Electric-motor	6.4	Battery voltage/nominal capacity K5	V/Ah	24/525	24/525	24/525
ect		Minimum battery weight	kg/lb	400/882	400/882	400/882
ū		Maximum battery weight	kg/lb	500/1102	640/1411	500/1102
S	8.1	Type of drive control		AC CURTIS	AC CURTIS	AC CURTIS
Others	10.5	Steering design		Electric power steering	Electric power steering	Electric power steering
0	10.7	sound pressure level at the driver's seat	dB(A)	70	70	70

Note:1).Triplex mast +21mm(0.83in)

Specifications are subject to change without notice.



Mast Specification

Туре	Fork lif	t height	Max. fork height (h3+h13)		Mast lowered		Mast extended		Free lift		Capacity Load capacity at 600mm/24in				
-36-	113		(113 - 1113)		'	***		114				CPDB09-AC1-NA		CPDB14-AC1-NA	
	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb	kg	lb	
	2000	78.7	2050	80.7	1537	60.5	3268	128.7	110	4.3	907	2000	1361	3000	
	2500	98.4	2550	100.4	1787	70.4	3768	148.3	110	4.3	907	2000	1361	3000	
	2700	106.3	2750	108.3	1887	74.3	3968	156.2	110	4.3	907	2000	1361	3000	
#	3000	118.1	3050	120.1	2037	80.2	4268	168.0	110	4.3	907	2000	1361	3000	
nas	3300	129.9	3350	131.9	2187	86.1	4568	179.8	110	4.3	907	2000	1361	3000	
ă.	3500	137.8	3550	139.8	2287	90.0	4768	187.7	110	4.3	907	2000	1361	3000	
Wide view mast	3600	141.7	3650	143.7	2337	92.0	4868	191.7	110	4.3	907	2000	1361	3000	
jd	3700	145.7	3750	147.6	2387	94.0	4968	195.6	110	4.3	907	2000	1361	3000	
\$	3800	149.6	3850	151.6	2437	95.9	5068	199.5	110	4.3	907	2000	1361	3000	
	4000	157.5	4050	159.4	2637	103.8	5268	207.4	110	4.3	907	2000	1361	3000	
	4300	169.3	4350	171.3	2787	109.7	5568	219.2	110	4.3	862	1900	1293	2850	
	4500	177.2	4550	179.1	2887	113.7	5768	227.1	110	4.3	839	1850	1270	2800	
	2000	78.7	2050	80.7	1595	62.8	3268	128.7	1035	40.7	907	2000	1361	3000	
+	2500	98.4	2550	100.4	1845	72.6	3768	148.3	1285	50.6	907	2000	1361	3000	
Wide view full free duplex mast	2700	106.3	2750	108.3	1945	76.6	3968	156.2	1385	54.5	907	2000	1361	3000	
ex F vi	3000	118.1	3050	120.1	2095	82.5	4268	168.0	1535	60.4	907	2000	1361	3000	
直	3300	129.9	3350	131.9	2245	88.4	4568	179.8	1685	66.3	907	2000	1361	3000	
	3500	137.8	3550	139.8	2345	92.3	4768	187.7	1785	70.3	907	2000	1361	3000	
	3600	141.7	3650	143.7	2395	94.3	4868	191.7	1835	72.2	907	2000	1361	3000	
	3500	137.8	3550	139.8	1844	72.6	4768	187.7	1165	45.9	907	2000	1361	3000	
	3700	145.7	3750	147.6	1909	75.2	4968	195.6	1235	48.6	907	2000	1361	3000	
, ts	4000	157.5	4050	159.4	2009	79.1	5268	207.4	1335	52.6	907	2000	1361	3000	
riew ma:	4300	169.3	4350	171.3	2109	83.0	5568	219.2	1435	56.5	862	1900	1293	2850	
Wide view full free triplex mast	4500	177.2	4550	179.1	2159	85.0	5768	227.1	1535	60.4	839	1850	1270	2800	
훷ᇂ흕	4700	185.0	4750	187.0	2259	88.9	5968	235.0	1590	62.6	816	1800	1225	2700	
·	5000	196.9	5050	198.8	2354	92.7	6268	246.8	1700	66.9	794	1750	1202	2650	
	5200	204.7	5250	206.7	2409	94.8	6468	254.6	1790	70.5	771	1700	1157	2550	
	5500	216.5	5550	218.5	2509	98.8	6768	266.5	1890	74.4	726	1600	1134	2500	

Mast Specification

Туре		Fork lift height		Max. fork height (h3+h13)		Mast lowered h1		Mast extended h4		e lift	Capacity Load capacity at 600mm/24in CPDB18-AC1-NA	
	mm	in	mm	in	mm	in	mm	in	mm	in	kg CPDB18	-ACI-NA
	mm 2000	78.7	2060	81.1	1642	64.6	3268	128.7	120	4.7	1814	4000
	2500	98.4	2560	100.8	1892	74.5	3768	148.3	120	4.7	1814	4000
	2700	106.3	2760	100.8	1992	78.4	3968	156.2	120	4.7	1814	4000
	3000	118.1	3060	120.5	2142	84.3	4268	168.0	120	4.7	1814	4000
ast	3300	129.9	3360	132.3	2292	90.2	4568	179.8	120	4.7	1814	4000
Ĕ	3500	137.8	3560	140.2	2392	94.2	4768	187.7	120	4.7	1814	4000
iew	3600	141.7	3660	144.1	2442	96.1	4868	191.7	120	4.7	1814	4000
Wide view mast	3700	145.7	3760	144.1	2492	98.1	4968	195.6	120	4.7	1814	4000
	3800	149.6	3860	152.0	2542	100.1	5068	199.5	120	4.7	1814	4000
	4000	157.5	4060	152.0	2742	108.0	5268	207.4	120	4.7	1814	4000
	4300	169.3	4360	171.7	2892	113.9	5568	219.2	120	4.7	1814	4000
	4500	177.2	4560	179.5	2992	117.8	5768	227.1	120	4.7	1814	4000
	2000	78.7	2060	81.1	1700	66.9	3268	128.7	1045	41.1	1814	4000
	2500	98.4	2560	100.8	1950	76.8	3768	148.3	1295	51.0	1814	4000
ast a	2700	106.3	2760	100.5	2050	80.7	3968	156.2	1395	54.9	1814	4000
Wide view full free duplex mast	3000	118.1	3060	120.5	2200	86.6	4268	168.0	1545	60.8	1814	4000
声름	3300	129.9	3360	132.3	2350	92.5	4568	179.8	1695	66.7	1814	4000
3 ⁻ ∃	3500	137.8	3560	140.2	2450	96.5	4768	187.7	1795	70.7	1814	4000
	3600	141.7	3660	144.1	2500	98.4	4868	191.7	1845	72.6	1814	4000
	3500	137.8	3560	140.2	1944	76.5	4768	187.7	1175	46.3	1814	4000
	3700	145.7	3760	148.0	2009	79.1	4968	195.6	1290	50.8	1814	4000
	4000	157.5	4060	159.8	2109	83.0	5268	207.4	1390	54.7	1814	4000
Wide view full free triplex mast	4300	169.3	4360	171.7	2209	87.0	5568	219.2	1490	58.7	1814	4000
i fr	4500	177.2	4560	179.5	2259	88.9	5768	227.1	1590	62.6	1814	4000
훩直텵	4700	185.0	4760	187.4	2359	92.9	5968	235.0	1600	63.0	1769	3900
→ ‡	5000	196.9	5060	199.2	2454	96.6	6268	246.8	1610	63.4	1724	3800
	5200	204.7	5260	207.1	2509	98.8	6468	254.6	1700	66.9	1678	3700
	5500	216.5	5560	218.9	2609	102.7	6768	266.5	1800	70.9	1610	3550

Model			CPDB09/14/18-AC1-NA					
Voltage		V	24					
D-tt	"X" Max.	mm (in)	810(31.9)					
Battery Compartment	"Y" Max.	mm (in)	327(12.9)					
Comparament	"Z" Max.	mm (in)	593(23.3)					
Batt.Wt.	Maximum	Kg (lb)	500(1102)					
Ddll.Wl.	Minimum	Kg (lb)	400(882)					

Aisle requirement-right angle stack-CPDB09-AC1-JNA

Aisle requirem	nent-right angle stack①	Load length							
		in(mm)	36(915)	40(1016)	42(1067)	48(1220)			
	36(915)	in(mm)	101.9(2588)	105.6(2682)	107.5(2730)	113.2(2875)			
Load width	40(1016)	in(mm)	102.7(2608)	106.3(2701)	108.2(2748)	113.8(2891)			
coad width	42(1067)	in(mm)	103.1(2619)	106.7(2711)	108.6(2758)	114.2(2900)			
	48(1220)	in(mm)	104.4(2653)	108.0(2743)	109.8(2789)	115.3(2928)			

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

Aisle requirement-right angle stack-CPDB14-AC1-JNA

Aisle requirem	ent-right angle stack①	Load length							
		in(mm)	36(915)	40(1016)	42(1067)	48(1220)			
	36(915)	in(mm)	107.4(2728)	111.1(2822)	113.0(2870)	118.7(3015)			
Load width	40(1016)	in(mm)	108.2(2748)	111.9(2841)	113.7(2888)	119.3(3031)			
LOAU WIUTII	42(1067)	in(mm)	108.6(2759)	112.2(2851)	114.1(2898)	119.7(3040)			
	48(1220)	in(mm)	110.0(2793)	113.5(2883)	115.3(2929)	120.8(3068)			

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

Aisle requirement-right angle stack-CPDB18-AC1-JNA

Aisle requirem	ent-right angle stack①	Load length							
		in(mm)	36(915)	40(1016)	42(1067)	48(1220)			
	36(915)	in(mm)	114.4(2907)	118.2(3002)	120.1(3050)	125.8(3195)			
Load width	40(1016)	in(mm)	115.2(2927)	118.9(3020)	120.7(3067)	126.4(3211)			
COAU WIUTII	42(1067)	in(mm)	115.7(2938)	119.3(3030)	121.1(3077)	126.7(3219)			
	48(1220)	in(mm)	117.0(2972)	120.6(3062)	122.4(3108)	127.8(3247)			

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



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