

# HELI

## 8000-10000 lbs [4-5t]

### H3C IC Cushion Tire Forklift CPYD40-50C



TOP 10 FORKLIFT MANUFACTURER  
IN THE WORLD

[www.heliforkliftamerica.com](http://www.heliforkliftamerica.com)

# H3C SERIES CPYD 40-50C



## ***Heli H3C Series Features*** ***Improved performance Superior quality***

### **Ergonomics**

- Vibration isolators separate the operator compartment from the main frame and the engine/transmission which absorb the truck's vibration for increased operator comfort.
- Engine performance and repositioned hydraulic pump offer quieter and smoother operation and less noise.
- Improved hydraulic control functions also reduce noise and increase performance.

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### **Operator Comfort - Visibility**

- Operator compartment has been enhanced by creating more foot and leg room with plenty of head room under the overhead guard.
- Visibility has been improved with narrower mast channels and more open overhead guard.
- Higher contrast LED display makes it easier to see in all lighting conditions.
- Comfortable suspension seat is standard with full adjustment for different operators.
- Low, wide step and grab handle make for easy entry to operator's compartment.
- Controls and park brake are within easy reach to reduce operator strain.
- Dual suspension structure of flexible connection between transmission box and drive axle and suspension connection between overhead guard and truck frame effectively reduce truck vibration.

# H3C SERIES CPYD 40-50C



## Increased Productivity

- Smaller turning radius and hydraulic power steering makes for tighter turns and easier steering operation.
- Reliable powershift transmission relieves operator from constantly shifting transmission.
- H3C series hydraulic performance has been enhanced for maximum productivity.
- Ergonomically designed operator's compartment enhances operator productivity, as well as providing safety and comfort.

## Improved Performance

- All aluminum radiator increases air flow and dissipates heat more efficiently.
- Smaller steering wheel with fewer turns lock-to-lock for quicker turns.
- 35% faster lifting speeds over previous generations Lifting cylinders are damped to reduce noise and provide smoother operation.
- Heavy duty powertrain offers exceptional performance in all applications.

## Serviceability

- Hood opens to an 80 degree angle and floor board is removable for easier access to all important chassis components.
- Electrical system, wiring, and hydraulic hoses are convenient and logically laid out with access from above and below.
- All grease points are accessible, including cast steel axle.
- Lubrication chart is located on front of operator compartment to highlight essential lubrication requirements.

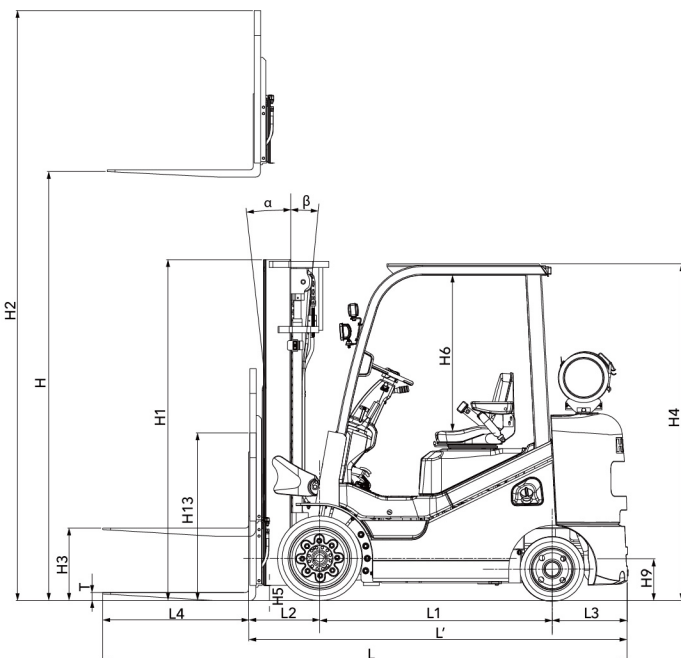
## Safety

- All Heli forklifts for North America meet ANSI B56.1 Safety Standard for Powered Industrial Trucks as well as meeting requirements for CE approval.
- All Heli forklifts come standard with Operator Presence System.
- Rear grab handle and horn button allows operator to safely drive in reverse.
- Strobes, Beacons or Blue Lights and Alarms are all available.

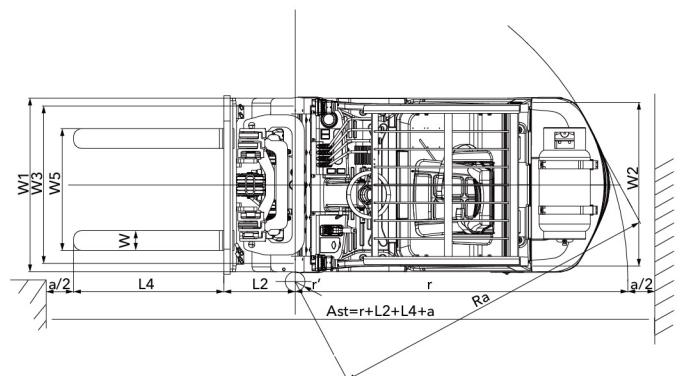
# H3C SERIES CPYD 40-50C

## Manufacturers Data and Design Characteristics

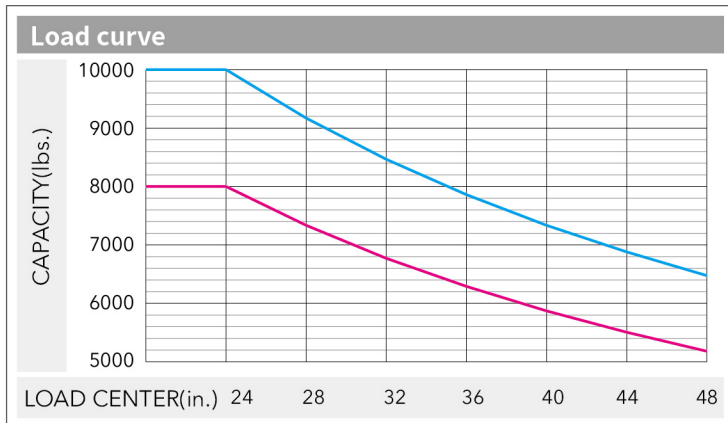
Character												
1.01	Manufacturer											
1.02	Model			CPYD40C		CPYD50C		CPYD40C BCS		CPYD50C BCS		
1.03	Rated capacity	lb	kg	8000	3500	10000	4500	8000	3500	10000	4500	
1.04	Load center	in	mm	24	610	24	610	24	610	24	610	
1.05	Operation mode	type	type	Seat-type								
Size												
2.01	Max.Lifting height	H	in	mm	130	3300	130	3300	130	3300	130	3300
2.02	Mast overall height (fork to the ground and mast be vertical)	H1	in	mm	93.3	2370	93.3	2370	93.3	2370	93.3	2370
2.03	Max.Fork lifting height(with backrest)	H2	in	mm	178.5	4533	178.5	4533	178.5	4533	178.5	4533
2.04	Free lift height	H3	in	mm	5.9	150	5.9	150	5.9	150	5.9	150
2.05	Overall height(overhead guard)	H4	in	mm	85.8	2180	85.8	2180	85.8	2180	85.8	2180
2.06	Min.Ground clearance(at the mast)	H5	in	mm	4.3	110	4.3	110	4.3	110	4.3	110
2.07	Distance from the surface of the seat to the overhead guard	H6	in	mm	40.9	1040	40.9	1040	40.9	1040	40.9	1040
2.08	Traction pin height	H9	in	mm	11.2	285	11.2	285	11.2	285	11.2	285
2.09	Backrest height (calculated from the surface of the fork)	H13	in	mm	47.6	1210	47.6	1210	47.6	1210	47.6	1210
2.10	Overall length(with fork/without fork)	(L/L')	in	mm	153/105	3885/2665	157/109	3985/2765	148/100	3751/2531	152/104	3855/2635
2.11	Wheel base	L1	in	mm	61.8	1570	61.8	1570	61.8	1570	61.8	1570
2.12	Front overhang	L2	in	mm	20	515	20	515	20	515	20	515
2.13	Rear overhang	L3	in	mm	22.4	570	26.8	680	16.9	430	21.6	549
2.14	Overall width	W1	in	mm	50	1270	55.9	1420	50	1270	55.9	1420
2.15	Tread (front tread/rear tread)	(W3/W2)	in	mm	41/41.1	1040/1043	43.9/41.1	1115/1043	41/41.1	1040/1043	43.9/41.1	1115/1043
2.16	Fork adjustable range (the external of the fork)(max./min.)	W5	in	mm	47/12	1195/300	47/12	1195/300	47/12	1195/300	47/12	1195/300
2.17	min.Turning radius(exterior)	r	in	mm	90.2	2290	94.5	2400	84.6	2150	88.2	2240
2.19	Min.right angle aisle width	Ra	in	mm	91.7	2330	96.3	2445	86.2	2190	90.2	2290
2.20	Mast tilting angle	$\alpha/\beta$			6°/5°							
2.21	Fork size	L4×W×T	in	mm	48×5.9×1.97	1220×150×50	48×5.9×1.97	1220×150×50	48×5.9×1.97	1220×150×50	48×5.9×1.97	1220×150×50
Performance												
3.01	Max.Traveling speed (loaded/unloaded)	mph	Km/h	10.5/11.2	19/19	10.5/11.2	19/19	10.5/11.2	19/19	10.5/11.2	19/19	
3.02	Lifting speed (loaded/unloaded)	fpm	mm/s	102/108	520/550	98.4/102	500/520	102/108	520/550	98.4/102	500/520	
3.03	Lowing speed (loaded/unloaded)	fpm	mm/s	104.3/94.4	530/480	104.3/94.4	530/480	104.3/94.4	530/480	104.3/94.4	530/480	
3.04	max.Drawbar pull (loaded/unloaded)	kN	kN	46/15	46/15	45/14	45/14	46/16	46/16	45/15	45/15	
3.05	Max.Gradeability (loaded/unloaded)	%	%	37/18	37/18	36/15	36/15	37/20	37/20	35/18	35/18	
Weight												
4.01	Total weight	lb	kg	13435	6095	15290	6935	13790	6255	15810	7170	
4.02	Weight distribution loaded (front/rear)	lb	kg	18300/2855	8300/1295	21560/3650	9780/1655	18760/2755	8510/1250	22145/3585	10045/1625	
4.03	Weight distribution unloaded (front/rear)	lb	kg	5025/8410	2280/3815	4510/10790	2045/4895	5490/8310	2490/3770	5090/10725	2310/4865	
Wheel and tyre												
5.01	Wheel number x = drive wheel (front/rear)			2X/2								
5.02	Tyre type(front/rear)	type	type	Cushion tyre								
5.03	Tyre size(front/rear)	in	in	22x9-16/18x8-12.125	22x12-16/18x8-12.125	22x9-16/18x8-12.125	22x12-16/18x8-12.125	22x9-16/18x8-12.125	22x12-16/18x8-12.125	22x12-16/18x8-12.125	22x12-16/18x8-12.125	
5.04	Service brake	type	type	Hydraulic-Foot Pedal								
5.05	Parking brake	type	type	Mechanical-Hand Lever								



Ast: Right angle stacking aisle width  
a: Clearance  
L4: Fork Length



# H3C SERIES CPYD 40-50C



CPYD40C

CPYD50C

**Note:** The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front of the fork. The base point of the standard load refers to the center position of the cube with 39.37in length of side. When mast is tilted forward, nonstandard fork usage or load with over wide goods, load capacity will be reduced. Different load capacity in different load center can be known in time through load chart.

## Engine Model and Specification

Model			CPYD40C	CPYD50C	CPYD40C BCS	CPYD50C BCS
Engine type			LPG		LPG	
Battery(Voltage/Capacity)	V/Ah	V/Ah	12/80		12/80	
Engine mode			WG3800		WG3800	
Engine rated power	HP/rpm	KW/rpm	84.8/2400	63.2/2400	84.8/2400	63.2/2400
Engine rated torque	(ft*lb)/rpm	Nm/rpm	208.3/1200	282.4/1200	208.3/1200	282.4/1200
Engine cylinder number-bore x stroke			4-100×120		4-100×120	
Piston displacement	cu in	L	230.1	3.77	230.1	3.77
Engine Emissions			Certified		Certified	
Transmission box shifting gears(front/rear type)	type	type	1-1Power Shift T/M		1-1Power Shift T/M	

# H3C SERIES CPYD 40-50C



## WIDE VIEW MAST

Mast Model	Max lifting height		Capacity (load center 610mm)								Overall Height		Freelift (With Backrest)		Tilt Range	Service Weight(unload)							
			CPYD40C		CPYD50C		CPYD40CBCS		CPYD50CBCS		CPYD40/50C CPYD40/50CBCS		CPYD40C			CPYD50C		CPYD40CBCS		CPYD50CBCS			
	in	mm	lb	kg	lb	kg	lb	Kg	lb	Kg	in	mm	in	mm	lb	kg	lb	kg	lb	kg	lb	kg	
M250	99	2500	8000	3650	10000	4550	8000	3650	10000	4550	74.4	1890	5.9	150	6/5	13536	6140	15432	7000	13911	6310	15939	7230
M300	118	3000	8000	3650	10000	4550	8000	3650	10000	4550	84.3	2140	5.9	150	6/5	13647	6190	15543	7050	14021	6360	16050	7280
M330	130	3300	8000	3650	10000	4550	8000	3650	10000	4550	90.2	2290	5.9	150	6/5	13757	6240	15653	7100	14132	6410	16160	7330
M350	138	3500	8000	3650	10000	4550	8000	3650	10000	4550	94.1	2390	5.9	150	6/5	13801	6260	15697	7120	14176	6430	16204	7350
M370	146	3700	8000	3650	10000	4550	8000	3650	10000	4550	98.0	2490	5.9	150	6/5	13867	6290	15763	7150	14242	6460	16270	7380
M400	157.5	4000	8000	3650	10000	4550	8000	3650	10000	4550	105.9	2690	5.9	150	6/5	14110	6400	16006	7260	14484	6570	16513	7490
M425	167	4250	8000	3650	9500	4330	8000	3650	9500	4330	110.8	2815	5.9	150	6/5	14176	6430	16072	7290	14551	6600	16579	7520
M450	177	4500	7800	3560	9200	4190	7250	3300	8700	3950	115.7	2940	5.9	150	6/5	14242	6460	16138	7320	14617	6630	16645	7550
M475	187	4750	7600	3450	8800	4000	7050	3200	8250	3750	120.7	3065	5.9	150	6/5	14308	6490	16204	7350	14683	6660	16711	7580
M500	195	5000	7400	3370	8000	3650	6700	3050	7250	3300	125.6	3190	5.9	150	3/5	14374	6520	16270	7380	14749	6690	16777	7610
M550	216.5	5500	7000	3190	7100	3240	6250	2850	6350	2900	137.4	3490	5.9	150	3/5	14694	6665	16590	7525	15069	6835	17097	7755
M600	236	6000	6400	2920	6600	3000	5600	2550	5800	2650	147.2	3740	5.9	150	3/5	14815	6720	16711	7580	15190	6890	17218	7810

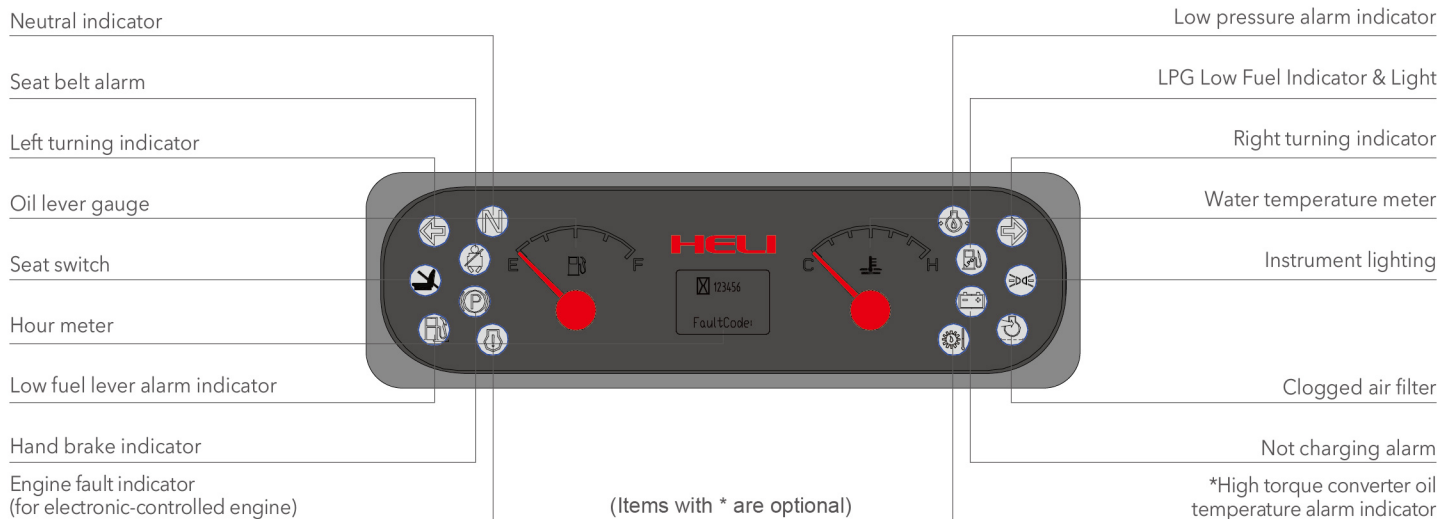
Note:Free lift height (without backrest)+275mm.

## WIDE VIEW FULL FREE 3-STAGE MAST

Mast Model	Max lifting height		Capacity (load center 610mm)								Overall Height		Freelift (With Backrest)		Tilt Range	Service Weight(unload)							
			CPYD40C		CPYD50C		CPYD40CBCS		CPYD50CBCS		CPYD40/50C CPYD40/50CBCS		CPYD40C			CPYD50C		CPYD40CBCS		CPYD50CBCS			
	in	mm	lb	kg	lb	kg	lb	Kg	lb	Kg	in	mm	in	mm	lb	kg	lb	kg	lb	kg	lb	kg	
ZSM360	141.5	3600	8000	3650	10000	4550	8000	3650	10000	4550	77.6	1970	29.9	760	6/5	13867	6290	15543	7050	14242	6460	16270	7380
ZSM400	157.5	4000	8000	3650	10000	4550	8000	3650	10000	4550	83.1	2110	35.4	900	6/5	13977	6340	15653	7100	14352	6510	16380	7430
ZSM435	171.5	4350	8000	3650	10000	4550	8000	3650	10000	4550	87.4	2220	39.8	1010	6/5	14043	6370	15719	7130	14418	6540	16446	7460
ZSM450	177	4500	8000	3650	10000	4550	7250	3300	9450	4300	89.4	2270	41.7	1060	6/5	14088	6390	15763	7150	14462	6560	16491	7480
ZSM470	185	4700	7600	3450	9300	4240	7150	3250	8800	4000	91.9	2335	44.3	1125	6/5	14132	6410	15807	7170	14506	6580	16535	7500
ZSM500	197	5000	7400	3370	8000	3650	6700	3050	7050	3200	97.2	2470	49.6	1260	3/5	14242	6460	15917	7220	14617	6630	16645	7550
ZSM540	212.5	5400	7300	3320	7600	3450	6600	3000	6900	3150	102.6	2605	54.9	1395	3/5	14528	6590	16204	7350	14903	6760	16932	7680
ZSM600	236	6000	6500	2950	6700	3040	5700	2600	5950	2700	111.8	2840	64.2	1630	3/5	14727	6680	16402	7440	15102	6850	17130	7770

Note:Free lift height (without backrest)+275mm.

## Instrument Panel



- Reliable dashboard shows the truck's working condition, faults and other important information for convenient operator control

### Standard configuration

Horn  
Two-spool control valve  
Basic type mast  
Power steering  
Full-suspension seat  
Load backrest  
Rear view mirror  
Rear grab handle with horn button  
Wet brake  
Front combo lights (LED)  
Transmission oil filter  
Rear combo lights (LED)  
Back-up alarm  
Overhead guard rain cover

Standard forks  
Integrated electric box  
Swing Out / Drop-Down LPG  
Bracket  
SAE hydraulic  
Speed-limiting valve  
Lifting and tilting operation lever  
Tow pin  
Overhead guard  
Combined display  
LPG Low Fuel Indicator  
Travling OPS control system  
LED headlights

### Optional

LED Rotating Light  
Dual Air Filter  
Hydraulic Fork Positioner  
Rear work light  
Lifting OPS control system  
Torque converter oil temperature meter  
Optional attachments  
Four-spool control valve  
No hand brake alarm  
Rotating seat for LPG  
Three-spool control valve



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\* Details of specifications and equipment are based on information available at time of printing and may change without notice.