

1-3.5t
H3 Series Internal Combustion
Counterbalanced Forklift Truck (Euro Stage V)

STAGE V



ANHUI HELI CO., LTD.

ADD: NO.668 Fangxing Street, Economical Development Zone, Hefei, PR China
TEL: (86 551) 63639068(America); 63639258(Europe); 63639358(Asia);
63662105(Africa & Middle East); 63639530(Key Accounts Division);

63662105(Wheel loader)

FAX: (86 551) 63639966

WEBSITE: <http://www.heliforklift.net>

Email: hell@helichina.net

www.heliforklift.net



* Our products are subject to improvements and changes without notice.



HIGH QUALITY PRODUCT

H3 series is proudly launched adhering to the principle of repaying the society with high quality product and vision of being century-old enterprise. To HELI, the H3 series is the culmination and milestone in pursuit of mastery in the development and manufacture of forklift over the years.

Elaborately built H3 series will provide you high level driving experience with environment friendliness, outstanding comfort, safety and reliability, easy maintenance and excellent working efficiency.



Engine Model:

KUBOTA V2403(Diesel)

KUBOTA WG2503(GAS/LPG)



The whole machine adopts the engine conforming to the Euro stage V and the American environmental protection standard;

- The diesel engine adopts KUBOTA V2403 Euro 5 electronic high pressure common rail engine and DOC + DPF tail gas treatment technology.
- Single/Dual fuel using KUBOTA WG2503 electronic high pressure common rail engine, using three catalytic tail gas treatment technology.

Note: DOC — Diesel Oxidation Catalyst DPF — Diesel Particulate Filters



Safety and reliability

HELI keeps improving truck safety and reliability to ensure the safety of people, machine and goods.



■ ratchet parking brake ■ automobile type oil adding cap structure ■ double-lip elastic sealing gasket

Enhanced Operator Presence System with comprehensive security upgrade

Walking on site induction safety system

When the machine is running, the operator will suddenly leave the correct operating position without releasing the accelerator pedal, and the power will be cut off to protect the safety of running.

LHS (Load Handling System) on site induction safety system and reset control system

When the operator leaves or returns to the correct operating position without loosening the LHS control device, the operation brought by the LHS operation will be suspended and will not occur automatically, so as to protect the LHS operation safety.

LHS (Load Handling System) static control system

When the LHS control device is operated and the engine is started, the operation brought by LHS control will not happen automatically after the engine is started. Only when the LHS control device is reset and then operated can the operation continue.

Non-parking security alarm system

When the forklift is not powered off and the driver is not using the parking brake, an audible warning is used to alert the driver.

Improved cooling performance

- The hot air reflow isolating device, aluminum plate-fin type radiator, 60mm backward muffler and optimized thermal dissipation duct improve cooling ability and ensure engine work reliability to meet the requirements of working under harsh and high temperature environment better.
- The hydraulic system adopts high efficiency and low loss technology, comprehensively optimizes the hydraulic piping system and sealing form, and further reduces the pressure loss, hydraulic oil temperature and sealing reliability in the hydraulic system.

Driver restraint warning system

- The vehicle is equipped with driver's safety belt restraint warning system, which makes driving safer.

Key parts

- The optimal design of key parts like frame, mast and overhead guard improve the whole truck's safety and reliability.

Fully-closed panel-mounted cab

- Fully-closed panel-mounted cab with high strength ensures the safety of people and machine fully.

Casting axle

- The key rotation parts are protected from water and dust to extend their maintenance period. With the using of casting axle, the bearing load carrying ability is improved and the truck structure is simple and reliable. The service life is prolonged.



Easy maintenance

Easy maintenance which is good for maintaining the optimal condition of key parts and completed truck and ensures safety and work efficiency is the necessary character of a good product.

Large engine hood opening angle

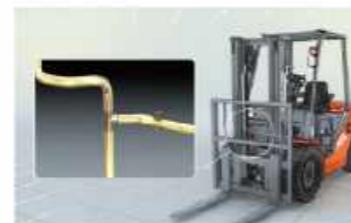
- Engine hood lock integrated on the hood is convenient for opening and close during maintenance.
- The gas spring has optimized arrangement, improved load carrying ability, opening angle, prolonged gas spring service life and improved opening comfort. 80° engine hood opening angle offers wide operation space for check and maintenance.



▪ compositional radiator heat flow baffle



▪ brake liquid reservoir



▪ mast pipeline



Low after-sales maintenance cost

- Equipped with Euro V diesel, liquefied gas, dual fuel power configuration to meet the needs of different users.
- Based on the same platform of a variety of fuel (diesel / liquefied gas) configuration scheme, the main parts of the general, low after-sales maintenance cost is low.

Excellent working efficiency

With high efficiency, the truck perfectly guarantees the material handling work at port, dock, and railway station. It can meet the requirements for various kinds of complicated work conditions.

Quick responding steering wheel

- With 100% pivot steering and returning, the truck has good maneuverability in narrow space.
- The truck has small turning radius, easy steering, good gradeability and flexible maneuverability.



Needs of low-temperature areas

- The prototype was tested at -25°C in the cold storage laboratory to meet the demand for use at this temperature.

Diesel products with large capacity batteries

- Euro V diesel-powered models use large capacity batteries, vehicle start, electricity is more secure.

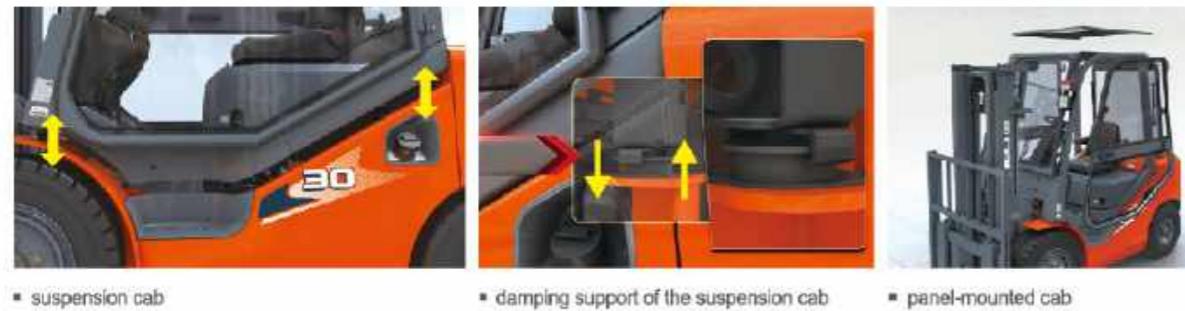


Environment-friendliness

Clean and environment-friendly power meeting international emission standard is assembled on the H3 series to reduce harmful emissions and be environment-friendly. Meanwhile, H3 series effectively reduce truck vibration and noise.

Suspension cab

- Cushion connection between the frame and cab and wholly suspension cab absorb whole truck's vibration effectively. Fully-closed panel-mounted cab isolates the noise.



Mast lowering buffering device

- It reduces shock and vibration to the mast and avoids crash noise caused by goods falling to the ground.



Outstanding comfort

Ergonomic designs, optimized operating device structure and layout improve driving experience and ensure long hours of efficient operation.

Enlarged operating space

- Tilting cylinder located below the floor board, 30mm widened low anti-skidded step and 45% enlarged operation space at foot provide comfort entry, exit and operation.
- 80mm heightened overhead guard and large arc shape of the overhead guard's front leg enlarge operating space and reduce operating fatigue.



Outstanding visibility

- With three-stage free lift mast, front view width is increased by 30mm; with 15mm lowered instrument panel, the visibility of fork and goods is increased by 20mm. CAE optimized counter weight structure improve rear view.



LED combined instrument

- With the clear displaying and right installment of the instrument, the operator can know the truck information in time.

Rear assist handle (optional)

- The assist grip with a horn enhances comfort by offering easy horn operation while travelling in reverse.

Manufacturer and technical parameters											
Character											
1.01	Manufacturer		HELI								
1.02	Model		CPCD10/CP(Q)YD10	CPCD15/CP(Q)YD15	CPCD18/CP(Q)YD18						
1.03	Rated capacity	kg	1000	1500	1750						
1.04	Load center	mm		500							
1.05	Operation mode			Seat-type							
Size											
2.01	Max. lifting height	H	mm	3000							
2.02	Mast overall height(Fork to the ground and mast be vertical)	H1	mm	1995	1995	1995					
2.03	Max. fork lifting height(With backrest)	H2	mm	4014							
2.04	Free lift height	H3	mm	152	155	155					
2.05	Overall height(Overhead guard)	H4	mm	2140							
2.06	Min. ground clearance(At the mast)	H5	mm	110							
2.07	Distance from the surface of the seat to the overhead guard	H6	mm	1018							
2.08	Overall length(With fork/Without fork)	(L/L')	mm	3197/2277	3201/2281	3219/2299					
2.09	Wheel base	L1	mm	1450							
2.10	Overall width	W1	mm	1070							
2.11	Tread (Front tread/Rear tread)	(W3/W2)	mm	902/928	902/928	932/928					
2.12	Fork adjustable range(The external of the fork)(Max./Min.)	W5	mm	950/200							
2.13	Min. turning radius(Exterior)	r	mm	1875	1910	1930					
2.14	Min. right angle aisle width	Ra	mm	2011	2016	2035					
2.15	Min. right angle stacking aisle width	Ast	mm	3576	3584	3603					
2.16	Mast tilting angle	α / β	deg	6/10							
2.17	Fork size	L4xWxT	mm	770×100×32	920×100×35	920×100×35					
Weight											
3.01	Total weight		kg	2540	2720	2850					
Wheel and tyre											
4.01	Tyre type(Front/Rear)			Pneumatic tyre							
4.02	Tyre size(Front/Rear)			6.50-10-10PR/5.00-8-10PR	6.50-10-10PR/5.00-8-10PR	6.50-10-10PR/5.00-8-10PR					
Performance											
Model				CP(Q)YD10	CP(Q)YD15	CP(Q)YD18	CPCD10	CPCD15	CPCD18	α / β	
Configuration number				KU1H	KU1H	KU1H	KU18H	KU18H	KU18H		
Max. drawbar pull (Loaded/Unloaded)		kN		17/7	19/7	19/7	17/7	18/7	18/7		
Max. gradeability (Loaded/Unloaded)		%		40/24	40/20	40/18	40/24	40/20	40/18		
Max. traveling speed (Loaded/Unloaded)		km/h		17/18							
Lifting speed (Loaded/Unloaded)		mm/s		610/650		550/605					
Lowing speed (Loaded/Unloaded)		mm/s		450/600							
Drive and transmission control device											
Engine model		KUBOTA WG2503			KUBOTA V2403						
Engine rated power		kW/rpm	GAS: 42.8/2600, LPG: 43.5/2600			33.6/2400					
Engine rated torque		Nm/rpm	GAS: 163/1800, LPG: 173.7/1400			157.4/1500					
Engine cylinder number-borexstroke			4-88×102.4			4-87×102.4					
Engine displacement		L		2.491		2.434					
Engine type				GAS/LPG		Diesel					
Emission				Euro Stage V		Euro Stage V					
Battery(Voltage/Capacity)		V/Ah		12/60		12/95					

WIDE VIEW MAST						
Mast model	Max. lifting height mm	Load capacity (load center 500mm)(Kg)			Mast overall height (fork to the ground) (mm)	Service weight (kg)
		CPCD10 CP(Q)YD10	CPCD15 CP(Q)YD15	CPCD18 CP(Q)YD18		
M200	2000	1000	1500	1750	1495	2470
M250	2500	1000	1500	1750	1745	2510
M300	3000	1000	1500	1750	1995	2540
M330	3300	1000	1500	1750	2145	2560
M350	3500	1000	1500	1750	2245	2580
M370	3700	1000	1500	1750	2345	2590
M400	4000	1000	1500	1750	2545	2650
M425	4250	950	1400	1650	2670	2660
M450	4500	950	1400	1650	2795	2680
M500	5000	930	1400	1600	3045	2720
M550	5500	900	1350	1600	3345	2790
M600	6000	850	1150	1400	3595	2820

Note: (1) Rated capacity with [*]; shows capacity with front dual tires. (2) Max. lifting height without lift-bracket: -395mm.

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. lifting height mm	Load capacity (load center 500mm)(Kg)			Mast overall height (fork to the ground) (mm)	Free lift height (with backrest) (mm)	Service weight (kg)	Mast tilting angle (α / β)
		CPCD10 CP(Q)YD10	CPCD15 CP(Q)YD15	CPCD18 CP(Q)YD18				
ZM200	2000	1000	1500	1750	1495	480	2500	2680
ZM250	2500	1000	1500	1750	1745	730	2530	2710
ZM300	3000	1000	1500	1750	1995	980	2570	2750
ZM330	3300	1000	1500	1750	2145	1130	2590	2770
ZM350	3500	1000	1500	1750	2245	1230	2600	2780
ZM370	3700	1000	1500	1750	2345	1330	2620	2800
ZM400	4000	1000	1500	1750	2545	1530	2670	2850
ZM425	4250	950	1400	1650	2670	1655	2690	2870
ZM450	4500	950	1400	1650	2795	1780	2710	2890
ZM500	5000	930	1400	1600	3045	2030	2740	2920
ZM550	5500	900	1350	1500	3345	2330	2820	2990
ZM60								



STAGE V

Manufacturer and technical parameters

Character							
1.01	Manufacturer	HEU					
1.02	Model	CPCD20 / CP(Q)Y20 / CP(Q)YD20	CPCD25 / CP(Q)Y25 / CP(Q)YD25	CPCD30 / CP(Q)Y30 / CP(Q)YD30	CPCD35 / CP(Q)Y35 / CP(Q)YD35		
1.03	Rated capacity	kg	2000	2500	3000	3500	
1.04	Load center	mm		500			
1.05	Operation mode	Seat-type					
	Size						
2.01	Max. lifting height	H	mm	3000	3000	3000	
2.02	Mast overall height (Fork to the ground and mast be vertical)	H1	mm	2000	2065	2180	
2.03	Max. fork lifting height (With backrest)	H2	mm	4030	4030	4245	
2.04	Free lift height	H3	mm	165	165	160	
2.05	Overall height (Overhead guard)	H4	mm	2150	2150	2170	
2.06	Min. ground clearance (At the mast)	H5	mm	115	115	135	
2.07	Distance from the surface of the seat to the overhead guard	H6	mm	1030	1030	1030	
2.08	Overall length (With fork/Without fork)	(L/L')	mm	3500/2580	3708/2638	3818/2748	
2.09	Wheel base	L1	mm	1650	1650	1700	
2.10	Overall width	W1	mm	1150	1150	1225	
2.11	Tread (Front tread/Rear tread)	(W3/W2)	mm	970/970	970/970	1000/970	
2.12	Fork adjustable range (The external of the fork)(Max./Min.)	W5	mm	1030/244	1030/244	1060/250	
2.13	Min. turning radius (Exterior)	r	mm	2170	2240	2400	
2.14	Min. right angle stacking aisle width	Ra	mm	2200	2280	2380	
2.15	Mast tilting angle	α / β	deg	6/12	6/12	6/12	
2.16	Fork size	L4xWxT	mm	920x122x40	1070x122x40	1070x125x45	

Weight

3.01	Total weight	kg	3370	3740	4340	4700		
Wheel and tyre								
4.01	Tyre type (Front/Rear)	Pneumatic tyre						
4.02	Tyre size (Front/Rear)	7.00-12-12PR/ 6.00-9-10PR	7.00-12-12PR/ 6.00-9-10PR	28x9-15-14PR/ 6.50-10-10PR	28x9-15-14PR/ 6.50-10-10PR			
Performance								
Model	CP(Q)YD20	CP(Q)YD25	CP(Q)YD30	CP(Q)YD35	CPCD20	CPCD25	CPCD30	CPCD35
Configuration number	KU1H	KU1H	KU1H	KU1H	KU20H	KU20H	KU20H	
Max. drawbar pull (Loaded/Unloaded)	kN	24/13	24/14	23/15	22/16	18/13	19/13	20/14
Max. gradeability (Loaded/Unloaded)	%	30/26	29/22	28/22	18/21	32/25	29/23	27/21
Max. traveling speed (Loaded/Unloaded)	km/h	17/18	17/18	18/19	18/19	17/17	17/17	18/19
Lifting speed (Loaded/Unloaded)	mm/s	535/600	535/600	455/540	360/400	570/585	570/585	480/500
Lowing speed (Loaded/Unloaded)	mm/s	450/500	450/500	450/500	350/400	450/500	450/550	450/550

Drive and transmission control device

Engine model	Kubota WG2503				Kubota V2403-CR-TE5B				
Engine rated power	kW/rpm	GAS:42.8/2600, LPG:43.5/2600				42.6/2400			
Engine rated torque	Nm/rpm	GAS:163/1800, LPG:173.7/1400				195.6/1500			
Engine cylinder number · bore/stroke		4-88×102.4				4-87×102.4			
Engine displacement	L	2.491				2.434			
Engine type		GAS/LPG				Diesel			
Emission		Euro StageV				Euro StageV			
Battery (Voltage/Capacity)	V/Ah	12/60				12/95			

WIDE VIEW MAST

Mast model	Max. lifting height mm	Load capacity (load center 500mm)(Kg)				Mast overall height (fork to the ground) (mm)			Service weight (kg)				Mast tilting angle (α / β)	
		CP(Q)Y120/ CP(Q)YD20/ CPCD20	CP(Q)Y125/ CP(Q)YD25/ CPCD25	CP(Q)Y130/ CP(Q)YD30/ CPCD30	CP(Q)Y135/ CP(Q)YD35/ CPCD35	2-2.5t	3t	3.5t	CP(Q)Y120/ CP(Q)YD20/ CPCD20	CP(Q)Y125/ CP(Q)YD25/ CPCD25	CP(Q)Y130/ CP(Q)YD30/ CPCD30	CP(Q)Y135/ CP(Q)YD35/ CPCD35		
M200	2000	2000	2500	3000	3500	1459	1570	1680	3280	3650	4250	4610	6/12	
M250	2500	2000	2500	3000	3500	1745	1820	1930	3330	3700	4300	4650	6/12	
M300	3000	2000	2500	3000	3500	1995	2080	2180	3370	3740	4340	4700	6/12	
M330	3300	2000	2500	3000	3500	2145	2220	2330	3400	3770	4360	4730	6/12	
M350	3500	2000	2500	3000	3500	2245	2320	2430	3420	3790	4380	4750	6/12	
M370	3700	2000	2500	3000	3500	2345	2420	2530	3430	3800	4400	4760	6/12	
M400	4000	2000	2500	3000	3400	2455	2620	2730	3510	3880	4490	4840	6/12	
M425	4250	2000	2500	3000	3450	2670	2745	2855	3530	3900	4510	4870	6/12	
M450	4500	1950	2450	3000	3350	2795	2870	2980	3560	3930	4540	4900	6/12	
M500	5000	1700	2650	3100	3100	3045	3120	3230	3600	3970	4580	4950	6/12	
M550	5500	1750	2100	2300	2900	3345	3420	3530	3700	4070	4690	4990	*3/6	
M600	6000	1700	1800	2200	2300	3595	3670	3780	2595	2440	2560	3930	4740	5040

Note: (1) * Stands for the rated capacity when the front tire is double-tire. (2) When the front tire of the 2-3.5t truck is double tire, the service weight of the truck is the weight in the table plus 110kg.

(3) The free lifting height (without backrest) of the 2-2.5t truck is the height (with backrest) in the table plus 432mm. The free lifting height (without backrest) of the 3t truck is the height (with backrest) in the table plus 568mm. The free lifting height (without backrest) of the 3.5t truck is the height (with backrest) in the table plus 505mm.

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. lifting height mm	Load capacity (load center 500mm)(Kg)				Mast overall height(fork to the ground) (mm)			Free lift height (with backrest) (mm)				Service weight (kg)				Mast tilting angle (α / β)
CP(Q)Y120/ CP(Q																	