



MANTRAC

HELI



1-10T FORKLIFT TRUCKS

*Welcome to the next
level of forklifts.*

ABOUT HELI

HELI is one of the fastest growing manufacturers of industrial forklifts worldwide, ranking among the top seven brands in the world since 2016. The company was established in 1998 in China and leads the industry with a selection of innovative forklift trucks that possess advanced capabilities. Affordable pricing, simple and emission friendly machines continue to make HELI a number one choice for its customers worldwide. Headquartered in Hefei City in Anhui Province, HELI's main business centres around R&D, manufacturing, sales of industrial trucks, intelligent transport equipment and the relevant core parts. HELI focuses on industrial business and is devoted to manufacturing upmarket equipment.

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WHO IS MANTRAC?

Mantrac is a leading provider of HELI forklifts and industry-leading power solutions for all applications across East and West Africa.

Our goal is to deliver systems that meet your requirements and are proven to be reliable, bringing you maximised uptime and bottom-line power savings – whatever your budget.

MANTRAC'S ROLE IN THE PARTNERSHIP?

We are not just a supplier. We also provide our customers with solutions supported by over 52 years of expertise, technical ability, experience and in-depth knowledge of local markets. Through hard work and maintaining long lasting partnerships and relationships with our customers, we have become known for our world-class support. Our customers benefit from this in various ways:

- Parts Support and Availability
- Consultation Services
- Operator Training
- Breakdown and Turnaround Services
- Local Support
- Quick turnaround during the ordering, inspection, shipment and transport & delivery process
- Easy access to local Mantrac dealer

*HELI and Mantrac,
where affordability and
simplicity meet world-
class support and
availability in a winning
combination.*



HELI PRODUCT RANGE OVERVIEW



Internal Combustion Counterbalance forklift trucks

FROM 1 TO 10 TONNES

- Reliable drive system produced by HELI
- Design focus on operator and cargo safety
- Hydraulic system cylinder reliability ensured by R&D investment in cylinder base development
- The latest technology has been applied to ensure smooth, accurate and safe steering.
- Designed for operator comfort

Heavy Trucks

FROM 12 TO 46 TONNES

- Engine system designed for low oil consumption, low noise and consistent power output
- Electric hydraulic gear shifting technology ensures highly-efficient, safe and reliable power matching in the gearbox and torque converter
- Heavy drive axle designed to suit demanding working conditions
- Smooth, and stable brake operation under all conditions

Port Equipment Trucks

- A Hydraulic oil pump system increases efficiency and energy saving while reducing oil temperature
- A modular electronics system with central CAN-BUS connection
- The ELME spreader has a single type main frame which enhances visibility when high stacking



Electric Trucks

FROM 1 TO 10 TONNES

- Newly designed wide-view mast
- Excellent steering system
- AC drive motor
- High-efficiency loading/uploading performance

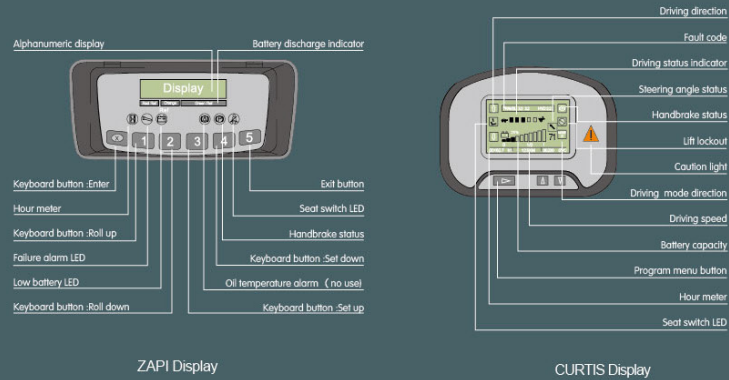
Warehouse Trucks

- Designed with a new ergonomic cabin design providing a broader top view for the truck operator
- High Working Efficiency with great reduction in truck energy consumption and noise
- High Stability with the forklift mast fixed to the truck body; the forks tilt instead of the mast, reduced mast shake in high lifting positions.
- High Safety: The truck is equipped with rampway automatic braking, automatic turning deceleration, and emergency power cut-out protection

Special Trucks (Explosion Proof)

- Security, reliability, low noise and high efficiency
- High-grade explosion-proof safety forklifts.
- HELI can also provide explosion-proof forklift used in both gas and dust environments including IIA IIB Zone 1 Zone2 & DIP A21 A22 TA and T1-T4

The reliable special instrument gives a complete display of the vital information, like operation status, fault detection, etc. It ensures the operator predominate the vehicle status more intuitive and convenient.



Standard configuration

wide view basic mast
standard fork
II (III) stage fork arm carrier
backrest
control valve
battery
standard seat
overhead guard
overhead guard rain cover
liquid crystal combined instrument
pneumatic tyre
traction pin
driver's tool
LED Lamp
Horn alert function on rear handle

Optional device

string rod
driver's cab
lifting hock
cargo boom
tip-over fork
back view mirror
side shifting
paper roll clamp
warning light (Flashing, totating, buzzing)
solid tyre
rear working light
steel protection net
multipurpose drum clamp
load stabilizer
widen fork arm carrier
lengthening fork
load pusher
lengthening fork extension
rotating flat clamp
widen tyre protection device
auxiliary hydraulic valve component
tilting/steering cylinder jacket
coloring tyre
wide view two/three stage full free mast
customer made color
Turn automatic deceleration function
Battery lifting sling

1-2.5 t H3 series AC Electric Forklift Truck



H3 series / HIGH EFFICIENCY
ENERGY SAVING



H3 1-2.5t

H3 series
AC Electric Forklift Truck



Improved driver's view

- Standard configuration of wide view mast, compact structure of mast and tube pulley block.
- Large arc of overhead guard and angle optimized grid tray enlarge driver's upper view.

Improved operating comfort

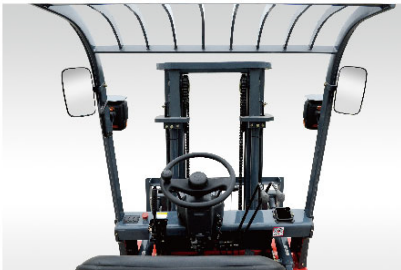
- 25mm lowered pedal height, 100% enlarged accelerator panel and 40% enlarged brake pedal improve driver's foot operating comfort.
- Super low torque steering unit makes steering light and easy.
- Rear handle with horn button ensures safe and comfortable operation while reverse driving.
- Mast and rear axle buffering improve driving comfort largely.
- Ratchet hand brake has different brake force on slope and ground, reducing driver's fatigue.

Optimized maintainability and safety

- Special side plate and top cover structure is easy for assembly and disassembly.
- Highly-mounted rear axle increasing transversal stability by 2.1%.
- Two driving modes offer optional choices to different working condition.
- Automatic deceleration when steering is optional so as to ensure the operation safety.

High efficiency and energy-saving

- The use of electric truck dedicated tire with pattern saves more than 10% of the energy during travelling.
- LED lamps save 80% of the energy.
- The professional matching design of the components prolongs the battery working time about 10%.





H3 1-2.5t

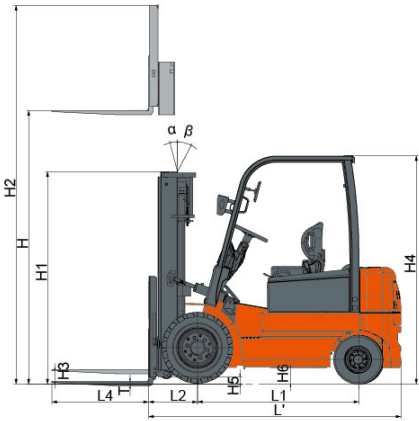
H3 series
AC Electric Forklift Truck



Manufacturer's Data and Design Characteristics

Character			HELI					
1.01	Manufacturer							
1.02	Model		CPD10	CPD15	CPD15	CPD18	CPD20	CPD25
1.03	Configuration number		HA1/HA2	HA1/HA2	HC1/HC2	HC1/HC2	HA1/HA2	HA1/HA2
1.04	Rated capacity	Q kg	1000	1500	1500	1750	2000	2500
1.05	Load center distance	c mm	500	500	500	500	500	500
1.06	Power mode		Battery	Battery	Battery	Battery	Battery	Battery
1.07	Driving mode		Seated	Seated	Seated	Seated	Seated	Seated
1.08	Wheel base	L1 mm	1280	1280	1390	1390	1535	1535
Tyre								
2.01	Tyre type		Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic	Pneumatic
2.02	Wheel number(front/rear)		2/2	2/2	2/2	2/2	2/2	2/2
2.03	Front wheel base	W3 mm	890	890	890	920	960	960
2.04	Rear wheel base	W2 mm	920	920	920	920	950	950
2.05	Tyre (front)		6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	6.50-10-10PR	7.00-12-12PR	7.00-12-12PR
2.06	Tyre(rear)		16×6-8-10PR	16×6-8-10PR	16×6-8-10PR	16×6-8-10PR	18×7-8-14PR	18×7-8-14PR
Size								
3.01	Front overhang	L2 mm	410	410	410	410	465	465
3.02	Mast tilt angle , front/rear	α/β °	6/12	6/12	6/12	6/12	6/12	6/12
3.03	Height with mast retraction	H1 mm	1995	1995	1995	1995	2000	2000
3.04	Free lifting height	H3 mm	150	150	150	150	170	170
3.05	Max. Lifting height	H mm	3000	3000	3000	3000	3000	3000
3.06	Max. Height under working condition	H2 mm	4040	4040	4040	4040	4042	4042
3.07	Overhead guard height	H4 mm	2130	2130	2130	2130	2155	2155
3.08	Fork size:thickness×width×length	T×W×L4 mm	32×100×770	35×100×920	35×100×920	35×100×920	40×122×920	40×122×1070
3.09	Fork arm carrier, din standard		2A	2A	2A	2A	2A	2A
3.10	Truck body length (fork excluded)	L' mm	2065	2065	2175	2175	2400	2400
3.11	Truck body width	W1 mm	1070	1070	1070	1070	1150	1150
3.12	Turning radius	r mm	1770	1770	1880	1880	2065	2065
3.13	Clearance between mast and ground	H5 mm	110	110	110	110	115	115
3.14	Clearance between wheel base center and ground(loaded)	H6 mm	120	120	120	120	135	135
3.15	Right angle stacking aisle width (pallet1000x1000mm, clearance 200mm)	Ast mm	3380	3380	3490	3490	3730	3730
3.16	Right angle stacking aisle width (pallet1200x1200mm, clearance 200mm)	Ast mm	3580	3580	3690	3690	3930	3930
3.17	Lateral fork adjustment(outside of forks)max./min.		960/200	960/200	960/200	960/200	1030/244	1030/244
Performance								
4.01	Travelling speed: loaded/unloaded	km/h	14/15	14/15	14/15	14/15	14/15	14/15
4.02	Lifting speed: loaded/unloaded	m/s	0.29/0.45	0.27/0.45	0.27/0.45	0.28/0.53	0.28/0.49	0.26/0.49
4.03	Lowering speed	m/s	0.45	0.45	0.45	0.45	0.45	0.45
4.04	Gradeability (loaded)	%	18	17	17	15	16	15
4.05	Max. Traction force (loaded)	N	7800	8600	8800	9500	12300	12800
4.06	Acceleration time (10m) loaded/unloaded	s	5.2/5.0	5.4/5.2	5.4/5.2	5.6/5.4	5.6/5.4	6.2/6.0
Weight								
5.01	Total weight (with /without battery)	kg	2680/2030	2950/2300	2980/2220	3150/2390	4080/3080	4230/3230
5.02	Axle load: unloaded, front/rear	kg	1215/1465	1330/1620	1445/1535	1450/1700	1960/2120	1950/2280
5.03	Axle load: loaded, front/rear	kg	3080/600	3900/550	3930/550	4400/500	5220/860	6020/710
Battery								
6.01	Battery voltage/capacity k5	V/Ah	48/400	48/400	48/480	48/480	48/600	48/600
6.02	Battery weight	kg	650(600-1000)	650(600-1000)	760(700-1000)	760(700-1000)	1000(950-1300)	1000(950-1300)
6.03	Battery, din standard		43531A	43531A	43531A	43531A	43531A	43531A
Motor and controller								
7.01	Drive motor power-60 minutes	kW	8.0	8.0	8.0	8.0	11.1	11.1
7.02	Lifting motor power-15 minutes	kW	7.5	7.5	7.5	8.6	10.5	10.5
7.03	Drive motor controlling mode		MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC	MOSFET/AC
7.04	Lifting motor controlling mode		MOSFET/DC	MOSFET/DC	MOSFET/DC	MOSFET/DC	MOSFET/DC	MOSFET/DC
7.05	Service brake/parking brake		Hydraulic/Mechanical	Hydraulic/Mechanical	Hydraulic/Mechanical	Hydraulic/Mechanical	Hydraulic/Mechanical	Hydraulic/Mechanical
7.06	Hydraulic system working pressure	Mpa	14.5	14.5	14.5	17.5	17.5	17.5

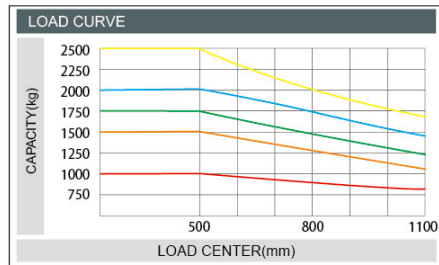
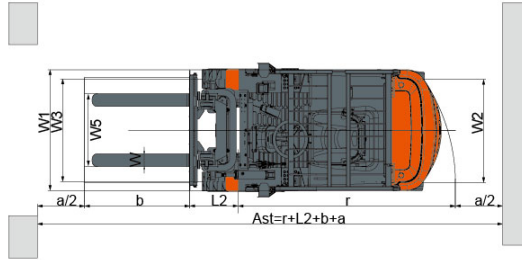
NOTE: *Detailed information about battery, please contact our salesmen or engineer.



Ast: Right angle stacking aisle width

a: Clearance

b: Load Length



CPD10 CPD15 CPD18 CPD20 CPD25

Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. the standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.

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 tilt angle (°)α/β
		1t	1.5t	1.8t	2t	2.5t	1-1.8t	2-2.5t	1t	1.5t(A)	1.5t(C)	1.8t	2t	2.5t	
M200	2000	1000	1500	1750	2000	2500	1495	1500	2615	2885	2915	3085	3990	4140	6/12
M250	2500	1000	1500	1750	2000	2500	1745	1750	2645	2915	2945	3115	4035	4185	6/12
M300	3000	1000	1500	1750	2000	2500	1995	2000	2680	2950	2980	3250	4080	4230	6/12
M330	3300	1000	1500	1750	2000	2500	2145	2150	2700	2970	3000	3170	4105	4255	6/12
M350	3500	1000	1500	1750	2000	2500	2245	2250	2710	2980	3010	3180	4125	4275	6/12
M370	3700	1000	1500	1750	2000	2500	2345	2350	2725	2995	3025	3195	4140	4290	6/6
M400	4000	1000	1500	1700	2000	2450	2545	2550	2775	3045	3075	3245	4200	4350	6/6
M425	4250	1000	1400	1650 1750	1850	2250	2670	2675	2790	3060	3090	3260	4225	4375	6/6 6/12
M450	4500	950	1350	1550 1700	1800	2150	2795	2800	2805	3075	3105	3275	4250	4400	6/6 6/12
M500	5000	930	1000 1250	1000 1600	1600 1700	1600 2000	3045	3050	2840	3110	3140	3310	4295	4445	6/6 6/6
M550	5500	900	900 1150	950 1500	950 1600	1500 1900	3345	3350	2900	3170	3200	3370	4370	4520	3/6 3/6
M600	6000	600	600 850	600 1050	600 1400	600 1800	3595	3600	2930	3200	3230	3400	4420	4570	3/6

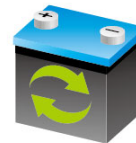
NOTE: (1) * refers to rated capacity with double tires.

WIDE VIEW FULL FREE 2-STAGE MAST																	
Mast model	Max lifting height (mm)	Load capacity (load center 500mm)(kg)					Mast overall height (mm)		Free lifting height (with backrest)(mm)		Service weight(kg)						Mast tilt angle (°)α/β
		1t	1.5t	1.8t	2t	2.5t	1-1.8t	2-2.5t	1-1.8t	2-2.5t	1t	1.5t(A)	1.5t(C)	1.8t	2t	2.5t	
ZM200	2000	1000	1500	1750	2000	2500	1495	1500	485	495	2660	2930	2960	3130	4000	4150	6/12
ZM250	2500	1000	1500	1750	2000	2500	1745	1750	735	745	2690	2960	2990	3160	4045	4195	6/12
ZM300	3000	1000	1500	1750	2000	2500	1995	2000	985	840	2725	2995	3025	3295	4095	4245	6/12
ZM330	3300	1000	1500	1750	2000	2500	2145	2150	1135	990	2750	3020	3050	3220	4115	4265	6/12
ZM350	3500	1000	1500	1750	2000	2500	2245	2250	1235	1090	2760	3030	3060	3230	4145	4295	6/12
ZM370	3700	1000	1500	1750	2000	2450	2345	2350	1335	1205	2775	3045	3075	3245	4160	4310	6/6
ZM400	4000	1000	1500	1750	2000	2400	2545	2550	1535	1390	2825	3095	3125	3295	4225	4375	6/6
ZM425	4250	1000	1400	1650 +1750	1850	2250	2670	2675	1660	1515	2840	3110	3140	3310	4250	4400	6/6 +6/12
ZM450	4500	950	1350	1550 +1700	1800	2150	2795	2800	1785	1640	2860	3130	3160	3330	4275	4425	6/6 +6/12
ZM500	5000	930	1000	1600 +1600	1600	1600	3045	3050	2035	1910	2895	3165	3195	3365	4320	4470	6/6 +6/6
ZM550	5500	900	950	950 +150	1500 +1500	1500	3345	3350	2335	2190	2955	3225	3255	3425	4405	4555	6/6 +3/6
ZM600	6000	600	600	600 +850	600 +1400	950 +1500	3595	3600	2585	2440	2990	3260	3290	3460	4455	4605	6/6 +3/6

NOTE: (1) * refers to rated capacity with double tires.
(2) 1-1.8T: free lifted height 365mm increased without backrest.
(3) 2-2.5T: free lifted height 290mm increased without backrest.

WIDE VIEW FULL FREE 3-STAGE MAST																	
Mast model	Max lifting height (mm)	Load capacity (load center 500mm)(kg)					Mast overall height(mm)		Free lifting height (with backrest)(mm)		Service weight(kg)						Mast tilt angle (°)α/β
		1t	1.5t	1.8t	2t	2.5t	1-1.8t	2-2.5t	1-1.8t	2-2.5t	1t	1.5t(A)	1.5t(C)	1.8t	2t	2.5t	
ZSM360	3600	1000	1450	1750	2000	2400	1790	1795	695	795	2775	3045	3075	3245	4205	4355	6/6
ZSM400	4000	1000	1400	1600	1900	2300	1925	1920	910	920	2800	3070	3100	3270	4240	4390	6/6
ZSM435	4350	950	1300	1500 ⁺¹⁷⁰⁰	1850	2200	2040	2045	1025	1045	2820	3090	3120	3390	4275	4425	6/6
ZSM450	4500	950	1300	1500 ⁺¹⁶⁵⁰	1750	2100	2090	2095	1075	1095	2830	3100	3130	3300	4285	4435	6/6
ZSM470	4700	930	1280	1450 ⁺¹⁶⁰⁰	1720	2000	2160	2160	1075	1160	2850	3120	3150	3320	4305	4455	6/6
ZSM480	4800	920	1250	1400 ⁺¹⁵⁸⁰	1700	1950	2190	2195	1145	1195	2860	3130	3160	3330	4315	4465	6/6
ZSM500	5000	900	1000 ⁺¹²⁰⁰	1500 ⁺¹⁵⁵⁰	1600	1600 ⁺¹⁶⁰⁰	2290	2295	1275	1295	2880	3150	3180	3350	4345	4495	6/6
ZSM540	5400	750 ⁺⁹⁰⁰	800 ⁺¹¹⁵⁰	800 ⁺¹⁴⁸⁰	1500	1500 ⁺¹⁸⁰⁰	2415	2420	1400	1420	2900	3170	3200	3370	4385	4535	3/6 ^{+3/6}
ZSM600	6000	550 ⁺⁸⁵⁰	550 ⁺¹⁰⁵⁰	550 ⁺¹³⁸⁰	950 ⁺¹⁴⁵⁰	950 ⁺¹⁷⁰⁰	2640	2645	1625	1645	2975	3245	3275	3445	4450	4600	3/6 ^{+3/6}
ZSM650	6500	800 ⁺⁸⁰⁰	1000 ⁺¹⁰⁰⁰	1250 ⁺¹²⁵⁰	1300 ⁺¹³⁰⁰	1500 ⁺¹⁵⁰⁰	2840	2835	1815	1835	3010	3280	3310	3480	4505	4655	3/3 ^{+3/3}
ZSM700	7000	650	750	900	1000	1100	3025	3105	2010	2105	3050	3320	3350	3520	4570	4720	3/3

NOTE: (1) * refers to rated capacity with double tires.
(2) 1-1.8T: free lifted height 480mm increased without backrest.
(3) 1-1.8T: free lifted height 440mm increased without backrest when assembled with pulley block.
(4) 2-2.5T: free lifted height 320mm increased without backrest.
(5) 2-2.5T: free lifted height 90mm increased without backrest when assembled with pulley block



Renewable energy technologies

With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.

↑15%
THE PERFORMANCE OF
BATTERY INCREASES



G series

3-3.5 ton
AC ELECTRIC
FORKLIFT

STANDARD EQUIPMENT

Wide view mast
Standard fork
II (III) fork carriage
Backrest
Two-spool control valve
Battery group
Standard seat
Overhead guard
Overhead guard raincoat
LCD combined display
Pneumatic tyres
Traction bar
Attached tools
Flashing light

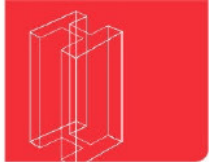
OPTIONS

Boom
Cab
Load hook
String bar
Hinged fork
Back view mirror
Side shifter
Paper roll clamp
warning light (rotating or buzzing)
Solid tyre
Rear work lights
Protective fences
Multi function barrel clamp
Load stabilizer
Widened fork carriage
Lengthened fork
Load pusher
Fork sleeve
Rotating flat clamp
Dual-tyres protector
Accessory hydraulic component
Tilt/Steering cylinder protection sleeve
Colored tyre(white/green)
Wide view double/triplex full free mast
User-specified color



3-3.5 ton
AC ELECTRIC
FORKLIFT

G series / INTELLIGENT
ENVIRONMENT-FRIENDLY



AC ELECTRIC FORKLIFT 3-3.5 ton

HELI

Newly designed wide-view mast



The newly designed wide-view mast enlarges operators' view effectively and lessens the blind area to provide a clearer vision.

↑ 7%
THE MAST VIEW INCREASES

Excellent steering system



The Steering system with new technologies not only provides a smoother swerve and faster positioning & steering, but also effectively lowers down the noise.

- ✓ New integrated load-sensing steering
- ✓ Power Steering
- ✓ New low-noise gear pump with differential tooth technology

AC drive motor



- ✓ Large ratio gearbox
- ✓ Motor maintenance
- ✓ Maintain more efficient
- ✓ Renewable energy technologies

The wonderful combination of high-power AC motor and the new style gearbox by independent R&D fully enhance the performance of acceleration, driving and grade ability.

↑ 50 %
GRADIENT PERFORMANCE INCREASES

↑ 25 %
THE MAXIMUM TRAVEL SPEED INCREASES

High efficiency loading/unloading performance

The innovative design and configuration of hydraulic system improve the working efficiency largely and provide a very efficient loading/unloading.

↑ 20 %
THE MAXIMUM UNLOADED
LIFTING SPEED INCREASES

↑ 12 %
THE MAXIMUM LOADED
LIFTING SPEED INCREASES



- ✓ New low-speed & high-torque lifting motor
- ✓ MOSFET lifting controller
- ✓ New dynamic load sensing technology in hydraulic system
- ✓ Optional AC lifting system greatly enhances the loading/unloading performance.

Enough operation space

The new optimization layout widens the operator space for ensuring more comfortable and convenient operation.

↑ 12 %
THE OPERATING SPACE INCREASES



More intelligent performance

The truck equipped with more intelligence functions not only ensures the safety performance, but also improves the efficiency and reduces energy consumption.

- ✓ Standard CAN BUS
- ✓ Self-braking on ramp
- ✓ Preventing abnormality operating
- ✓ AC traction controller
- ✓ Emergency power shut-down
- ✓ Electric controller self-protecting
- ✓ Presence of driver sensing system
- ✓ Speed selection function (normal/cutback)



ZAPI CONTROLLER



CURTIS CONTROLLER



AC ELECTRIC
FORKLIFT

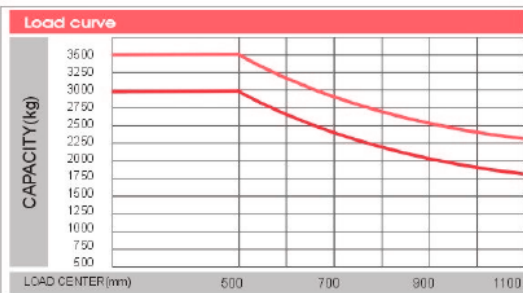
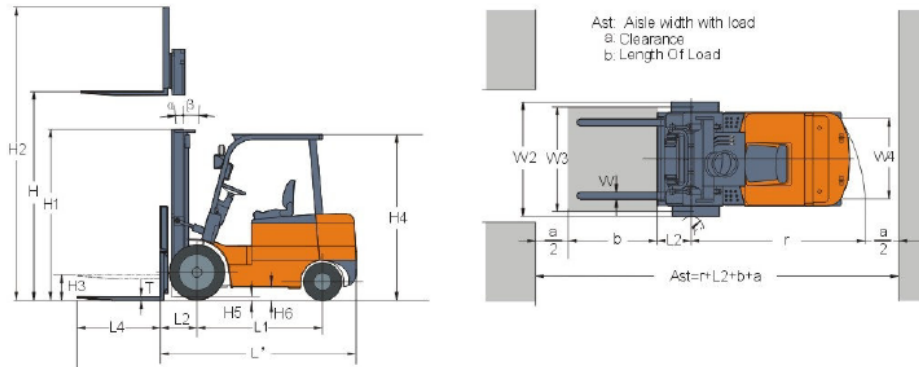
3-3.5 ton



Manufacturers Data and Design Characteristics

Characteristics				HEU	
1.01	Manufacture's Name				
1.02	Model Designation			CPD30	CPD35
1.03	Configuration Number			G1/G2	G1/G2
1.04	Load Capacity	Q	kg	3000	3500
1.05	Load Center	c	mm	500	500
1.06	Power Type			Battery	Battery
1.07	Operator Type			Seated	Seated
1.08	Wheelbase	L1	mm	1680	1680
Wheels & Tyres					
2.01	Tyre Type			Pneumatic	Superelastic
2.02	Tyres Number (Front/Rear)			2/2	2/2
2.03	Tread (centre of tyre) front	W3	mm	1000	1000
2.04	Tread (centre of tyre) rear	W4	mm	980	980
2.05	Tyre Size, Front			28 x 9-15-12PR	28 x 9-15
2.06	Tyre Size, Rear			18 x 7-8-14PR	18 x 7-8
Dimensions					
3.01	Load Distance	L2	mm	485	490
3.02	Mast Tilt Angle F/R	α / β	°	6/10	6/10
3.03	Height with Mast Lowered	H1	mm	2075	2180
3.04	Free Lift	H3	mm	145	150
3.05	Standard Lift Height	H	mm	3000	3000
3.06	Height with Mast Extended	H2	mm	4182	4177
3.07	Overhead Guard Height	H4	mm	2215	2215
3.08	Fork Size T x W x L	T x W x L4	mm	45 x 125 x 1070	50 x 125 x 1070
3.09	Fork Carriage to DIN 15173 A/B			3A	3A
3.10	Length to fork face	L*	mm	2485	2560
3.11	Overall Width	W2	mm	1225	1225
3.12	Outside Turning Radius	r	mm	2210	2270
3.13	Ground Clearance at mast ,Loaded	H5	mm	135	135
3.14	Ground Clearance at centre of wheelbase ,Loaded	H6	mm	150	150
3.15	Right Stack Aisle width (Pallet size 1000x1000mm, clearance:200mm)	As1	mm	3965	4030
3.16	Right Stack Aisle width (Pallet size 1200x1200mm, clearance:200mm)	As2	mm	4095	4160
Performances					
4.01	Travel Speed,with/without load		km/h	15.0/15.5	14.5/15.0
4.02	Lifting Speed,with/without load		mm/s	280/450	250/440
★4.02	Lifting Speed,with/without load		mm/s	340/460	325/450
4.03	Lowering Speed		mm/s	500	500
4.04	Gradient performance with load		%	15	12
4.05	Max. draw bar pull with load		N	15800	17500
4.06	Acceleration time (10 metres) W/D load		s	5.0/4.7	5.2/4.9
Weight					
5.01	Total Approximate Weight(W/D battery)		kg	4810/3230	5500/3920
5.02	Axle Loading*: Unloaded,Front/Rear		kg	2320/2490	2640/2860
5.03	Axle Loading*: Loaded,Front/Rear		kg	7055/755	8145/855
Battery					
6.01	Battery Voltage/rated capacity(5h)		V/Ah	80/480	80/480
6.02	battery weight		kg	1580	1580
6.03	Battery to DIN 43531/35/36/A/B/C			43536A	43536A
Motor & Controller					
7.01	Drive Motor - 60 Min. Rating		kW	16.6(AC)	16.8(AC)
7.02	Pump Motor - 15 Min. Rating		kW	13(DC)	13(DC)
★7.02	Pump Motor - 15 Min. Rating		kW	13.5(AC)	13.5(AC)
7.03	Drive Motor Control Method			MOSFET/AC	MOSFET/AC
★7.04	Pump Motor Control Method			MOSFET/DC	MOSFET/DC
7.04	Pump Motor Control Method			MOSFET/AC	MOSFET/AC
7.05	Service Brake/Parking Brake			Hydraulic/Mechanical	Hydraulic/Mechanical
7.06	Relief Pressure		Mpa	21	21

* stands for the parameters and configurations when choosing the AC type lifting system.



3.0t 3.5t

Note:

The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. The standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.

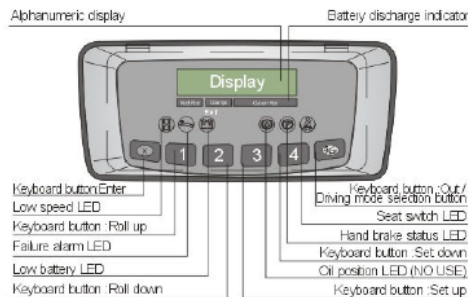


Renewable energy technologies

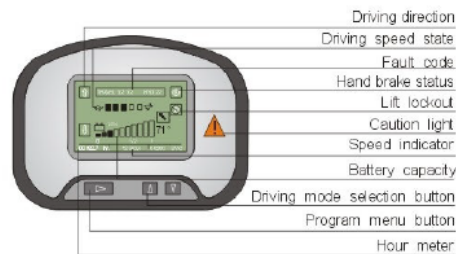
With the use of the excellent load-sensing steering system and AC controlling renewable energy technologies, the forklift is more energy-saving and the working hour of the battery is extended by 15%.

↑ 15%
THE PERFORMANCE OF BATTERY INCREASES

The reliable special instrument gives a complete display of the vital information, like operation status, fault detection, etc. It ensures the operator predominate the vehicle status more intuitive and convenient.



ZAPI Display



CURTIS Display

WIDE VIEW MAST

Mast model	Max. Fork height (mm)	Load Capacity (Load center 500mm) (kg)		Overall Height (mm)		Tilt Angle (α/β)
		CPD30	CPD35	CPD30	CPD35	
M200	2000	3000	3500	1665	1680	6/10
M250	2500	3000	3500	1815	1930	6/10
M300	3000	3000	3500	2075	2180	6/10
M330	3300	3000	3500	2215	2330	6/10
M350	3500	3000	3500	2315	2430	6/10
M370	3700	3000	3400	2415	2530	6/10
M400	4000	2950	3350	2615	2730	6/10
M425	4250	2850	3250	2740	2855	6/10
M450	4500	2750	3100	2885	2980	6/10
M500	5000	2400	2850	3115	3230	6/6
M550	5500	2250	2600	3415	3530	3/6
M600	6000	1500	2400	3665	3780	3/6

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. fork height (mm)	Load Capacity (Load center 500mm) (kg)		Overall Height (mm)		Free lift (With STD backrest) (mm)		Tilt Angle (α/β)
		CPD30	CPD35	CPD30	CPD35	CPD30	CPD35	
ZM200	2000	3000	3500	1570	1680	344	500	6/10
ZM250	2500	3000	3500	1820	1930	594	750	6/10
ZM300	3000	3000	3500	2070	2180	844	1000	6/10
ZM330	3300	3000	3500	2220	2330	994	1150	6/10
ZM350	3500	3000	3500	2320	2430	1094	1250	6/10
ZM370	3700	3000	3400	2420	2530	1194	1350	6/10
ZM400	4000	2950	3350	2620	2730	1394	1550	6/6
ZM425	4250	2850	3250	2745	2855	1519	1675	6/6
ZM450	4500	2750	3100	2870	2980	1644	1800	6/6
ZM500	5000	2400	2850	3120	3230	1894	2050	6/6
ZM550	5500	2250	2600	3420	3530	2194	2350	3/6
ZM600	6000	1500	2400	3670	3780	2444	2600	3/6

WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max. Fork height (mm)	Load Capacity (Load center 500mm) (kg)		Overall Height (mm)		Free lift (With STD backrest) (mm)		Tilt Angle (α/β)
		CPD30	CPD35	CPD30	CPD35	CPD30	CPD35	
ZSM350	3500	3000	3400	1946	1946	670	670	6/6
ZSM400	4000	2900	3250	2065	2065	795	795	6/6
ZSM435	4350	2750	3150	2190	2190	920	920	6/6
ZSM450	4500	2700	3000	2240	2240	970	970	6/6
ZSM470	4700	2650	2850	2240	2240	970	970	6/6
ZSM480	4800	2600	2800	2340	2340	1070	1070	6/6
ZSM500	5000	2400	2650	2440	2440	1170	1170	6/6
ZSM540	5400	2250	2500	2565	2565	1295	1295	3/6
ZSM600	6000	1550	2300	2790	2790	1520	1520	3/6

NOTE: (1)* Rated capacity with front dual tires;

(2)CPD30: The free height of full free 2-stage mast without backrest increase 490mm;

(3)CPD35: The free height of full free 2-stage mast without backrest increase 412mm;

(4)The free lift height of full free 3-stage mast without backrest increase 520mm.



h2000
SERIES

Reliable forklift

1-3.5 ton
ENGINE POWERED
FORKLIFT

STANDARD EQUIPMENT

Hour meter	Overhead guard
Horn	Standard forks
Oil pressure alarm	Central Control Box
Three-spool control valve	Hydraulic circuit oil filter
Power steering	Radiator tank
Rubber pedal pad	Speed-limiting valve
Backrest	Oil meter
Back view mirror	Battery-charge indicator
Front combined lights	Wide-view mast
Transmission oil filter	Intake device
Engine flameout device	Durable tire
Parking brake cable	Operating handles
Water temperature meter	Traction pin
Attached tools	Standard seat
Rear combined lights	Hydraulic oil gauge
Reversing buzzer	Overhead guard raincoat
Self-locking tilt valve	Torque converter oil gauge
Tilt adjustable steering column	Combined display

OPTIONS

Cab	Tilt cylinder sleeve
Rotating warning light	Steering cylinder sleeve
Vertical exhaust	User-specified color
Double air filter	Optional attachments
Suspension seat	Steel protective fences
Extended fork sleeve	Dual tires and protective devices
Heater	LPG with the flip seat
Solid tire	LPG single and dual-fuel system
Widening fork carriage	Power brake
Windglass	Side shifter
Purifying muffler	
Fire muffler	
Fire extinguisher	
Rear lights	
Air conditioning (some models)	
Electro-hydraulic switch	
OPS driving control	
Torque converter oil temperature meter	



1-3.5 ton
ENGINE POWERED
FORKLIFT

h2000
SERIES

Reliable forklift

HELI



ENGINE POWERED
FORKLIFT

1-3.5 ton

h2000
SERIES

Reliable forklift

A reliable Drive system



As the most reliable transmission system produced by HELI, it has been validated by over twenty years' experience in World market. Meanwhile, various ancillary devices of the power system ensure the reliability effectively.

- ✓ Durable transmission
- ✓ Equipped with the intake system & intake silencer
- ✓ Optional air filter pressure alarm device
- ✓ Automatic engine preheating system
- ✓ Cyclone Air Filter
- ✓ Lost foam casting
- ✓ Various high-power engines are available for customers' optional choices, and the emission meets the latest European & American environmental regulation.

A reliable mast



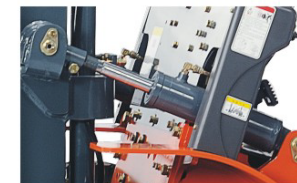
The high internal-qualified mast confirmedly ensures the safety of the operator, truck and cargo. Standard configuration of the wide-view mast enlarges operators' view effectively, and ensures loading /unloading operations more reliable.

- ✓ Using the best German steel material for triplex mast (option only for triplex mast)
- ✓ The frame of mast has more strength basing on the enlarged channel interface.
- ✓ Clear visibility for standard wide-view mast
- ✓ The channel with own patented technology has the first-rate quality.

A reliable hydraulic system

HELI has the most professional R&D base of cylinders, where we take advantage of the advanced manufacturing technologies and detecting means to ensure the reliability of all cylinders of the hydraulic system.

- ✓ Standard tilt cylinder by HELI
- ✓ Standard lift cylinder by HELI
- ✓ Standard steering cylinder by HELI
- ✓ Self-locking tilt cylinder
- ✓ Standard hydraulic circuit filter
- ✓ Speed buffer device on lifting system



A reliable steering system

The steering system with new technologies not only provides a smoother swerve and faster positioning & steering, but also effectively ensures operators' safety.



- ✓ Wearable tire
- ✓ Smaller turning radius
- ✓ Full hydraulic power steering

Comfortable operation space

Large operation space with ergonomic-design and configuration ensure the operation more comfortable & convenient, and effectively enhance the efficiency & safety of operation.

- ✓ Filled with noise-reducing and buffer rubber material between bonnet and frameworks
- ✓ Newly patented insulation materials of Bonnet
- ✓ Well-designed non-slip mat
- ✓ Special display with easily reading
- ✓ Standard files packet
- ✓ Exhaust system is flexibly connected with the frame.





ENGINE POWERED
FORKLIFT

1-3.5 ton



Manufacturers Data and Design Characteristics

Characteristics		HELI																																																												
1	Manufacturer																																																													
2	Model		CPC10	CPD10	CPC15	CPD15	CPC18	CPD18	CPC20	CPD20	CPC25	CPD25	CPC30	CPD30	CPC35	CPD35	CPQ10	CPGD10	CPQ15	CPGD15	CPQ18	CPGD18	CPQ20	CPGD20	CPQ25	CPGD25	CPQ30	CPGD30	CPQ35	CPGD35																																
3	Power unit		Diesel														Gasoline																																													
4	Rated Capacity	kg	1000		1500		1750		2000		2500		3000		3500		1000		1500		1750		2000		2500		3000		3500																																	
5	Load Center	mm	500														500																																													
6	Operation		Driver seated														Driver seated																																													
Dimensions																																																														
7	Overall max lifting height (with backrest)	h4	mm	4030		4030		4030		4030		4030		4262		4262		4030		4030		4030		4030		4030		4262		4262																																
8	Max Lifting height	h3	mm			3000								3000												3000																																				
9	Height mast retracted (upright)	h1	mm	1995		1995		1995		2000		2000		2070		2180		1995		1995		1995		2000		2000		2070		2180																																
10	Free lift height	h2	mm	152		155		155		170		170		160		170		152		155		155		170		170		160		170																																
11	Backrest height (from upper face of forks)	h8	mm	1008		1005		1005		995		995		1227		1222		1008		1005		1005		995		995		1227		1222																																
12	Overhead Guard clearance (from face of seat)	h7	mm			1025								1035													1035																																			
13	Overall height (overhead guard)	h6	mm	2070		2070		2070		2070		2070		2090		2090		2070		2070		2070		2070		2070		2090		2090																																
14	Overall length (with forks)	L1	mm	2941		3165		3213		3442		3667		3772		3783		2941		3165		3213		3442		3667		3772		3783																																
15	Overall length (without forks)	L2	mm	2171		2245		2293		2522		2597		2702		2713		2171		2245		2293		2522		2597		2702		2713																																
16	Front overhang	X	mm	418		421		421		482		482		487		498		418		421		421		482		482		487		498																																
17	Rear overhang	L4	mm	350		420		465		440		515		515		515		350		420		465		440		515		515		515																																
18	Wheel base	L5	mm	1400		1400		1400		1600		1600		1700		1700		1400		1400		1400		1600		1600		1700		1700																																
19	Coupler height	h5	mm	250		250		250		290		290		310		310		250		250		250		290		290		310		310																																
20	Min. ground clearance under mast	m1	mm	110		110		110		110		110		135		135		110		110		110		110		110		135		135																																
21	Overall width	B	mm	1070		1070		1070		1150		1150		1225		1225		1070		1070		1070		1150		1150		1225		1225																																
22	Lateral fork adjustment outside of fork (Max./Min.)	S	mm	950/200				1000/222				1000/222				1055/250				1055/250				950/200				1000/222				1000/222				1055/250				1055/250																						
23	Tread (front)	R	mm	890		890		920		970		970		1000		1000		890		890		920		970		970		1000		1000																																
24	Tread (rear)	P	mm	920		920		920		970		970		970		970		920		920		920		970		970		970		970																																
25	Outside turning radius	Va	mm	1880		1955		1985		2170		2240		2400		2420		1880		1955		1985		2170		2240		2400		2420																																
26	Inside turning radius	V	mm	110		110		95		160		160		200		200		110		110		95		160		160		200		200																																
27	Min. intersecting aisle	Ra	mm	1977		2052		2093		2200		2280		2380		2400		1977		2052		2093		2200		2280		2380		2400																																
28	Tilting angles (forward/backward)	qB		6° /12°								6° /12°								6° /12°								6° /12°																																		
29	Fork dimensions (a×b×c)	mm	770×100×32	920×100×35	920×100×35	920×100×45	1070×100×45	1070×125×45	1070×125×50	770×100×32	920×100×35	920×100×35	920×100×45	1070×100×45	1070×125×45	1070×125×50	770×100×32	920×100×35	920×100×35	920×100×45	1070×100×45	1070×125×45	1070×125×50	770×100×32	920×100×35	920×100×35	920×100×45	1070×100×45	1070×125×45	1070×125×50																																
Performance																																																														
30	Max. Traveling speeds (With/Without load)	km/h	13.5/14.5								17/19								18/19								19/19								13.5/14.5								17/19								18/19								19/19			
31	Lifting Speeds (With/Without load)	mm/s	590/650								530/550								440/480								330/370								590/650								530/550								450/480								310/340			
32	Lowering Speeds (With/Without load)	mm/s	450/550								450/550								450/500								350/400								450/550								450/550								450/500								350/400			
33	Max. Draw-bar pull (With/Without load)	kN	12.3/7	18/7	12.3/7	18/7	12.3/7	18/7	14.2/9	16.4/9	13.7/8.6	16.2/8.6	13.5/9.8	16/9.8	16.7/11.8	20.6/11.8	9.3/6.9	14.2/6.9	9.3/6.9	14.2/6.9	9.3/6.9	14.2/6.9	11/9	12.3/9	9.8/8.6	12.3/8.6	9.1/8.8	10.8/9.8	14/9.8	18.5/9.8																																
34	Max. Negotiable Gradient (With/Without load)	%	≥20								23/20	25/20	20/17	21.5/17	15/17	16/17	20/15	22/15	30/22	37/22	23/18	27/18	20/17	24/17	18/20	18/20	15/17	15/17	12/14	14/14	15/15	15/15																														
Weights																																																														
35	Service Mass	kg	2220		2660		2890		3320		3680		4270		4700		2220		2660		2890		3320		3680		4270		4700																																	
36	Load Wheel with load (Front/Rear)	kg	2830/390	3640/520	4040/600	4788/532	5562/618	6543/727	7380/820	2830/390	3640/520	4040/600	4788/532	5562/618	6543/727	7380/820	2830/390	3640/520	4040/600	4788/532	5562/618	6543/727	7380/820	2830/390	3640/520	4040/600	4788/532	5562/618	6543/727	7380/820																																
37	Load Wheel without load (Front/Rear)	kg	1220/1000	1170/1490	1140/1750	1328/1992	1472/2208	1708/2562	1880/2820	1220/1000	1170/1490	1140/1750	1328/1992	1472/2208	1708/2562	1880/2820	1220/1000	1170/1490	1140/1750	1328/1992	1472/2208	1708/2562	1880/2820	1220/1000	1170/1490	1140/1750	1328/1992	1472/2208	1708/2562	1880/2820																																
Tyres																																																														
38	Wheels number front/rear (x=driven)		2X/2								2X/2								2X/2								2X/2								2X/2																											
39	Tyre Type		Pneumatic								Pneumatic								Pneumatic								Pneumatic								Pneumatic																											
40	Tyre size (front)		6.50-10-10PR								7.00-12-12PR								28×9-15-12PR								28×9-15-14PR								6.50-10-10PR								7.00-12-12PR								28×9-15-12PR								28×9-15-14PR			
41	Tyre size (rear)		5.00-8-8PR								6.00-9-10PR								6.50-10-10PR								6.50-10-10PR								5.00-8-8PR								6.00-9-10PR								6.50-10-10PR								6.50-10-10PR			
42	Service Brake		Hydraulic-Foot Pedal																				Hydraulic-Foot Pedal																																							
43	Parking Brake		Mechanical-Hand Lever																				Mechanical-Hand Lever																																							
Drive																																																														
44	Battery (Voltage/Capacity)	V/Ah	12/80										12/60																																																	
45	Internal Combustion Engine Model		ISUZU C240PKJ								ISUZU C240PKJ								ISUZU 4JG2								NISSAN K15								NISSAN K21								NISSAN K25																			
46	Internal Combustion Engine Rated Output	kW/rpm	35.4/2500								35.4/2500								44.9/2450								23.6/2400								31.2/2250								37.6/2400																			
47	Internal Combustion Engine Rated Torque	Nm/rpm	139.9/1800								139.9/1800								184.7/1600~1800								103/1600								143.7/1600								176.5/1600																			
48	Internal Combustion Engine Number of Cylinder		4-86×102								4-86×102								4-95.4×107								4-75.5×83								4-89×83								4-89×100																			
49	Internal Combustion Engine Displacement	L	2.369								2.369								3.05								1.468								2.065								2.488																			
50	Internal Combustion Engine Fuel Tank Capacity	L	38								60								38								60								60								60																			
51	Transmission Number of Speed Fwd/Bwd. type		1-1Power Shift T/M. 2-2 Manual Shift T/M								1-1Power Shift T/M. 2-2 Manual Shift T/M								1-1Power Shift T/M. 2-2 Manual Shift T/M								1-1Power Shift T/M. 2-2 Manual Shift T/M								1-1Power Shift T/M. 2-2 Manual Shift T/M								1-1Power Shift T/M. 2-2 Manual Shift T/M																			

Engin Model and Main Specification for Option

Engine Model	Rated Power/Rotating Speed (kW/rpm)	Rated Torque/Rotating Speed (Nm/rpm)	Engine Capacity (L)	Number of cylinders	Remark
Kubota V2403	35.4/2400	161.3/1600	2.434	4	For 1-2.5t
Kubota V2600	36.5/2600	164/1500	2.434	4	For 3-3.5t
Kubota V3600	46.9/2400	210/1600	3.62	4	For 2-3.5t
QUANCHAI QC490GP	39/2650	162/1950	2.67	4	For 2-3.5t
XINCHANG A490BPG	36.8/2650	148/1900	2.54	4	For 2-3.5t
XINCHANG A498BPG	45/2500	193/1800	3.168	4	For 2-3.5t
DACHAI CA498-97	45/2500	170~180/1600~1800	3.168	4	For 2-3.5t
JIANGUNG HJ493	33/2300	153/1800	2.771	4	For 1-1.8t
JIANGUNG HJ493	39/2500	165/1800	2.771	4	For 2-3.5t
XINCHANG NC485BPG	30/2600	131/1700~1900	2.27	4	For 1-1.8t

Reliable special designed instrument

Not-charging alarm

Low oil pressure alarm

Water temperature

Seat alarm indicator

Fuel gauge

Left turn indicating

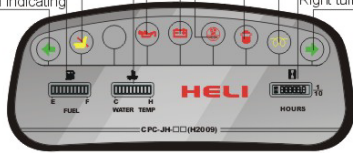
Air filter blocking alarm

Oil-water separator alarm

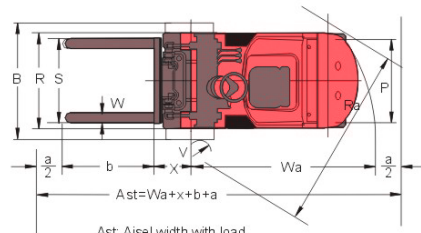
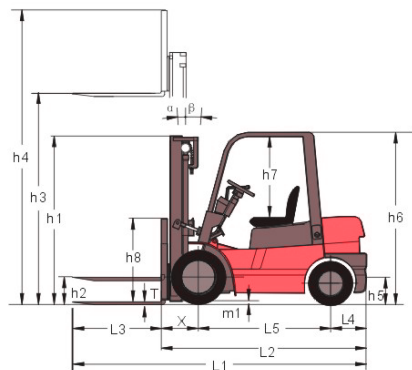
Preheat indicator

Time

Right turn indicating



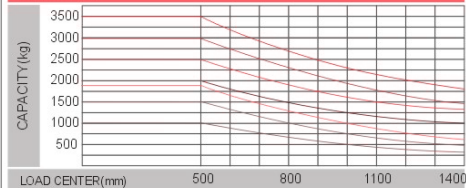
Standard



Ast: Aisel width with load
a : Clearance
b : Load Length

GROUND CLEARANCE	2t/2.5t	3t
Drive Axle	135	140
Steer Axle	150	150
Counter Weight	140	155
Frame	120	130

Load curve



Note:

Capacities shown are computed with upright in vertical position, based on a 1000 mm cube load configuration with the center of gravity at the true center of the cube, and standard forks. Truck capacities with upright in forward tilt position will be less. Long forks, and unusually wide or loads may also reduce capacity.

1-3.5t WIDE VIEW MAST

Mat model	Max. fork height (mm)	Capacity at 5000 L Load center (kg)								Overall Mast Height (mm)				Tilting Angle	Service Weight (kg)							
		CP010/CP010/CP010/CP010/CP010	CP018/CP018/CP018/CP018/CP018	CP020/CP020/CP020/CP020/CP020	CP025/CP025/CP025/CP025/CP025	CP030/CP030/CP030/CP030/CP030	CP035/CP035/CP035/CP035/CP035	1.18	2.2.2	3	3.5	CP010/CP010/CP010/CP010/CP010	CP015/CP015/CP015/CP015/CP015		CP018/CP018/CP018/CP018/CP018	CP020/CP020/CP020/CP020/CP020	CP025/CP025/CP025/CP025/CP025	CP030/CP030/CP030/CP030/CP030	CP035/CP035/CP035/CP035/CP035			
M300	3000	1000	1500	1750	2000	2500	3000	3500	1465	1500	1555	1590	6-12	2120	2530	2760	3240	3500	4255	4800		
M350	2500	1000	1500	1750	2000	2500	3000	3500	1745	1750	1815	1930	6-12	2145	2555	2785	3280	3640	4110	4650		
M300	3000	1000	1500	1750	2000	2500	3000	3500	1965	2000	2055	2180	6-12	2220	2660	2890	3340	3680	4270	4700		
M330	3000	1000	1500	1750	2000	2500	3000	3500	2145	2150	2215	2340	6-12	2195	2605	2835	3345	3705	4375	4635		
M350	3500	1000	1500	1750	2000	2500	3000	3500	2245	2250	2315	2430	6-12	2210	2620	2850	3360	3720	4390	4635		
M370	3700	1000	1500	1750	2000	2500	3000	3500	2345	2350	2415	2530	6-12	2230	2640	2870	3375	3735	4410	4670		
M400	4000	1000	1500	1750	2000	2500	3000	3500	2545	2550	2615	2730	6-12	2270	2680	2910	3420	3780	4470	5055		
M425	4250	950	1400	1650	1900	2250	2650	3100	2670	2675	2740	2855	6-12	2285	2695	2925	3440	3800	4490	5085		
M450	4500	950	1400	1650	1900	2250	2650	3100	2765	2770	2835	2950	6-12	2300	2710	2940	3460	3820	4510	5100		
M500	5000	930	1300	1550	1800	2150	2550	3000	3045	3050	3115	3230	6-12	2335	2745	2975	3500	3860	4560	5170		
M550	5500	930	1300	1550	1800	2150	2550	3000	3345	3350	3415	3530	6-12	2500	2910	3140	3655	4055	4780	5270		
M600	6000	950	1400	1650	1900	2250	2650	3100	3595	3600	3665	3780	13-6	2530	2940	3170	3735	4095	4820	5320		

NOTE: (1) For gas, diesel model: +90kg, dual wheels weight: +110kg
(2) * (Front wheel) is dual wheels load capacity.
(3) Rated capacity with (*): shows capacity with front dual tires
(4) Max lifting without lift-bracket: - 470mm.

1-3.5t WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. fork height (mm)	Capacity at 500mm; Load center (kg)												Overall Mast Height (mm) At Loaded				Free Lift (with Basket)				Tie Angle (°)	Service Weight (kg)											
		CP010/CP015/CP020				CP015/CP020/CP030				CP020/CP030/CP035				CP030/CP035/CP040				CP010/CP015/CP020					CP015/CP020/CP030				CP020/CP030/CP035				CP030/CP035/CP040			
		CP010	CP015	CP020	CP030	CP015	CP020	CP030	CP035	CP020	CP030	CP035	CP040	CP030	CP035	CP040	CP010	CP015	CP020	CP030	CP015		CP020	CP030	CP035	CP020	CP030	CP035	CP040	CP030	CP035	CP040		
ZM2005	2000	1000	1500	1750	2000	2500	3000	3500	1535	1445	1570	1680	520	465	340	460	6-12	2135	2555	2765	3050	3615	4500	4830										
ZM2500	2500	1000	1500	1750	2000	2500	3000	3500	1745	1745	1745	1745	550	485	340	460	6-12	2165	2625	2835	3120	3685	4620	4950										
ZM3000	3000	1000	1500	1750	2000	2500	3000	3500	1995	1995	1995	2180	985	865	840	960	6-12	2220	2650	2890	3385	3725	4390	4940										
ZM3300	3300	1000	1500	1750	2000	2500	3000	3500	2145	2145	2220	2330	1135	1145	960	1100	6-12	2250	2700	2910	3405	3750	4415	4695										
ZM3600	3600	1000	1500	1750	2000	2500	3000	3500	2245	2245	2320	2480	1235	1245	1090	1210	6-12	2250	2685	2925	3420	3765	4460	5000										
ZM3700	3700	1000	1500	1750	2000	2500	3000	3500	2370	2345	2420	2530	1360	1345	1205	1335	6-12	2280	2700	2940	3420	3775	3765	4410	5000									
ZM4000	4000	1000	1500	1750	2000	2500	3000	3500	2545	2545	2620	2730	1535	1545	1360	1510	6-6	2330	2750	2990	3500	3840	4645	5085										
ZM425	4250	950	1400	1650	1900	2200	2650	3100	2670	2670	2745	2855	1660	1670	1515	1635	6-6	2350	2770	3010	3525	3865	4665	5115										
ZM4600	4600	950	1300	1550	1800	2100	2750	3000	2705	2705	2870	2880	1785	1795	1640	1760	6-6	2365	2785	3025	3545	3880	4695	5130										
ZM5000	5000	950	1100	1350	1600	1900	2550	3000	3045	3045	3120	3230	2005	2040	1910	2010	6-6	2400	3020	3090	3590	3925	4615	5200										
ZM5500	5500	950	1050	1300	1550	1850	2500	3000	3345	3345	3420	3530	2135	2145	2010	2130	6-6	2575	3095	3235	3730	4120	4675	5300										
ZM6000	6000	950	1050	1300	1550	1850	2500	3000	3595	3595	3670	3780	2265	2265	2040	2250	6-6	2610	3130	3270	3735	4120	4675	5300										

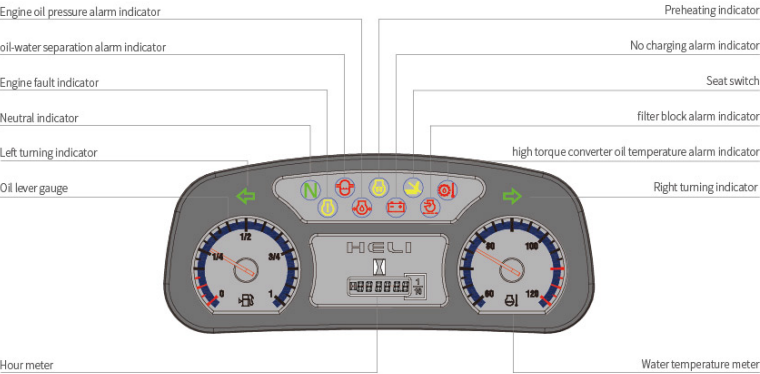
NOTE: (1)-2.5t free lift height (without bracket):+435mm,3t free lift height (without bracket):+580mm
(2)Dual wheels weight +110kg.
(3)* (front wheel) is dual wheels load capacity.
(4)Max lifting height without bracket: 470mm.
(5)Free lifting height without bracket: +470mm.
(6) Rated capacity with (*): shows capacity with front dual tires.

1-3.5t WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max. fork height (mm)	Capacity at 500mm Load center (kg)								Overall Mast Height (mm) At Loaded				Free Lift (with Balkeet)				Tilting Angle	Service Weight (kg)							
		CPQ10/CP10D	CPQ15/CP15D	CPQ18/CP18D	CPQ20/CP20D	CPQ25/CP25D	CPQ30/CP30D	CPQ35/CP35D	CPQ40/CP40D	CPQ10/CP10D	CPQ15/CP15D	CPQ18/CP18D	CPQ20/CP20D	CPQ25/CP25D	CPQ30/CP30D	CPQ35/CP35D	CPQ40/CP40D		CPQ45/CP45D							
Z3A690	3600	1000	1400	1750	2000	2400	2600	3300	1181	2.2:1	3t	35t	1181	2.2:1	3t	35t	6-6 6-6 6-6	2275	2695	2635	3470	3810	4680	-	-	
Z3A490	4000	1000	1400	1900	2100	2400	2600	3300	1915	16:20	20:25	21:05	910	920	835	885	6-6 6-6 6-6	2300	2720	2900	3505	3845	4615	-	-	
Z3A485	4390	900 *950	1350 *1400	1550 *1700	1850 *1900	2200 *2400	2600 *3000	3000 *3000	2040	20:45	21:05	22:30	1030	1045	950	1010	6-6 6-6 6-6	2325	2745	2985	3535	3885	4650	5075	-	
Z3A480	4500	900 *950	1300 *1400	1550 *1700	1750 *1900	2150 *2400	2700 *3000	2900 *3000	2090	20:45	22:30	23:30	1080	1090	1010	1110	6-6 6-6 6-6	2355	2750	2965	3565	3910	4660	5080	-	
Z3A470	4700	900 *950	1300 *1400	1400 *1720	2000 *2000	2600 *2600	3000 *3000	-	2160	21:00	22:30	-	1150	1160	1010	-	6-6 6-6 6-6	2385	2780	3005	3585	3910	4660	-	-	
Z3A480	4800	900 *950	1100 *1350	1400 *1600	1700 *1900	2000 *2400	2600 *3000	-	2190	21:05	23:30	24:30	1180	1195	1110	1210	6-6 6-6 6-6	2375	2775	3010	3575	3910	4680	5095	-	
Z3A480	5000	900 *950	1300 *1550	1150 *1600	1550 *1800	2200 *2400	2600 *3000	-	2290	22:05	24:30	25:55	1280	1295	1210	1335	6-6 6-6 6-6	2400	2780	3035	3715	4055	4725	5085	-	
Z3A480	5400	800 *850	1100 *1250	1550 *1600	1850 *1900	2400 *2400	2600 *2600	-	2415	24:40	25:55	26:55	1440	1440	1335	1435	3-6 3-6 3-6	2420	2815	3055	3895	4235	4760	-	-	
Z3A480	6000	550 *550	850 *1100	1550 *1600	550 *1800	950 *1900	1550 *2200	-	2505	25:45	27:05	28:15	1640	1645	1560	1655	3-6 3-6 3-6	2480	2875	3115	3945	4285	4850	-	-	
Z3A650	6500	6500	*800	*1000	*1200	-	-	-	2855	-	-	-	1945	-	-	-	3-6	2530	2925	3165	-	-	-	-	-	
Z3A600	7000	-	-	*860	*1000	*1200	*1500	-	3025	30:10	31:60	-	2015	20:30	19:40	-	3-6	2580	2975	3215	4845	4485	5250	-	-	

NOTE: (1)2-2.5t free lift height (without bracket):+435mm,3t free lift height (without bracket):+580mm
(2)Dual wheels weight +110kg.
(3)*(front wheel) is dual wheels load capacity.
(4)Max lifting height without bracket:470mm.
(5)Free lifting height without bracket:+470mm.
(6)Rated capacity with(*): shows capacity with front dual tires.

Reliable special designed instrument



The reliable special instrument gives a complete display of the vital information, like operation status, fault detection, etc. It ensures the operator predominate the vehicle status more intuitive and convenient.

- ✓ Stepping motor core
- ✓ Electrical safety standard meets CE requirements

Standard configuration Optional

- | | |
|--|---|
| <ul style="list-style-type: none">Hour meterHornOil pressure alarmThree-spool control valvePower steeringAluminum pedal padBackrestBack view mirrorLED front combined lightsTransmission oil filterEngine flameout deviceParking brake cableWater temperature meterAttached toolsLED Rear combined lightsReversing buzzerSelf-locking tilt valveTilt adjustable steering columnEndurance board awingStandard forksCentral Control BoxHydraulic circuit oil filterSpeed limiting valveOil meterCharging indicatorWide view mastAir intake deviceDurable tyreOperation handleTraction pinFront lampHydraulic oil gaugeOverhead guardTorque converter oil dipstickCombined meterEngine fault indicator | <ul style="list-style-type: none">CabRotating warning lightVertical exhaustDouble air filterSuspension seatExtended fork sleeveHeaterSolid tyreWidening fork carriageWindglassPurifying mufflerFire mufflerFire extinguisherRear lightsAir conditioning (some models)Electro-hydraulic switchOPS driving controlTorque converter oil temperature meterTilt cylinder sleeveSteering cylinder sleeveUser-specified colorOptional attachmentsSteel protective fencesDual tires and protective devicesLPG with the flip seatLPG single and dual-fuel systemPower brakeSmart fleet management system (optional) |
|--|---|

2-3.5 t

H2000 series Internal Combustion Counterbalanced Forklift Truck



H2000 SERIES 2-3.5 t

A reliable Drive system



The transmission box designed and manufactured by HELI specially for the model is equipped on the truck. As the most reliable transmission system produced by HELI, it has been validated by over twenty years' experience in World market. Meanwhile, various ancillary devices of the power system ensure the reliability effectively.

- Durable transmission
- Equipped with the intake system & intake silencer
- Optional air filter pressure alarm device
- Automatic engine preheating system
- Cyclone Air Filter
- Lost foam casting
- Meeting China III (GB20891-2014)
- Environment friendly engine
- lower vibration and noise

A reliable mast

The superior mast confirmedly ensures the safety of the operator, truck and cargo. Standard configuration of the wide-view mast enlarges operators' view effectively, and ensures loading /unloading operations more reliable.

- The frame of mast has more strength basing on the enlarged channel interface.
- Clear visibility for standard wide-view mast.
- The channel with own patented technology has the first-rate quality.

HELI smart fleet management system (optional)

- Vehicle positioning
- Remote diagnosis
- Remote monitoring
- Maintenance reminder
- Battery management
- Statistical form
- Vehicle management
- Identification recognition (optional)
- Weight management (optional)
- Collision management (optional)



A reliable hydraulic system

HELI has the most professional R&D base of cylinders, where we take advantage of the advanced manufacturing technologies and detecting means to ensure the reliability of all cylinders of the hydraulic system.

- Standard tilt cylinder by HELI
- Standard lift cylinder by HELI
- Standard steering cylinder by HELI
- Self-locking tilt cylinder
- Standard hydraulic circuit filter
- Speed buffer device on lifting system



A reliable steering system

The steering system with new technologies not only provides a smoother swerve and faster positioning & steering, but also effectively ensures operators' safety.

- Wearable tyre
- Smaller turning radius
- Full hydraulic power steering



Comfortable operation space

Large operation space with ergonomic-design and configuration make the operation more comfortable & convenient, and effectively enhance the efficiency & safety of operation.

- Noise isolating and buffering materials are filled between engine hood and frame;
- Patented engine hood with new noise isolating and buffering materials
- Well-designed anti-slip mat
- Easy reading meter
- Storage box
- Flexible connection between exhausting system and frame

H2000 SERIES 2-3.5 t



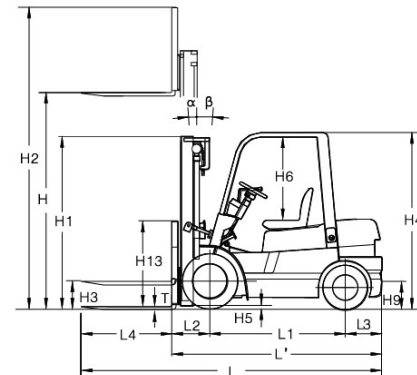
Manufacturer and technical parameters

Characteristics		HELI									
1.01	Manufacturer			CPC20	CPCD20	CPC25	CPCD25	CPC30	CPCD30	CPC35	CPCD35
1.02	Model										
1.03	Power unit			Diesel							
1.04	Rated Capacity	kg		2000		2500		3000		3500	
1.05	Load Center	mm		500							
1.06	Operation			Driver seated							
Dimensions											
2.01	Max.Lifting height	H	mm	3000							
2.02	Height mast retracted(upright)	H1	mm	1995		1995		2070		2180	
2.03	Overall max.lifting height (with backrest)	H2	mm	4030		4030		4225		4225	
2.04	Free lift height	H3	mm	70		70		65		65	
2.05	Overall height(overhead guard)	H4	mm	2070		2070		2090		2090	
2.06	Min.ground clearance under mast	H5	mm	110		110		135		135	
2.07	Overhead Guard clearance(from face of seat)	H6	mm	1035							
2.08	Coupler height	H9	mm	290		290		310		310	
2.09	Backrest height(from upper face of forks)	H13	mm	1000		1000		1227		1177	
2.10	Overall length(with forks)	L	mm	3432		3657		3762		3783	
2.11	Overall length(without forks)	L'	mm	2512		2587		2707		2728	
2.12	Wheel base	L1	mm	1600		1600		1700		1700	
2.13	Front overhang	L2	mm	472		472		477		495	
2.14	Rear overhang	L3	mm	440		515		515		515	
2.15	Overall width	W1	mm	1150		1150		1225		1225	
2.16	Tread(front)	W3	mm	970		970		1000		1000	
2.17	Tread(rear)	W2	mm	970		970		970		970	
2.18	Lateral fork adjustment outside of fork(Max./Min.)	W5	mm	1030/244		1030/244		1060/250		1060/250	
2.19	Outside turning radius	r	mm	2170		2240		2400		2420	
2.20	Inside turning radius	r'	mm	160		160		200		200	
2.21	Min.intersecting aisle	Ra	mm	2200		2280		2380		2400	
2.22	Tilting angles(forward/backward)	α/β	deg	6/12							
2.23	Fork dimensions(L4xWxT)	L4xWxT	mm	920×122×40		1070×122×40		1070×125×45		1070×125×50	
Performance											
3.01	Max. Traveling speeds(With/Without load)	km/h		17/19				18/19		19/19	
3.02	Lifting Speeds(With/Without load)	mm/s		570/600				455/480		360/380	
3.03	Lowering Speeds(With/Without load)	mm/s		450/550				450/500		350/400	
3.04	Max. Draw-bar pull,(With/Without load)	kN		17/12.5	19/12.5	16.5/11.8	18.5/11.8	18.6/13.4	19.5/13.4	17.8/14.3	19.6/14.3
3.05	Max. Negotiable Gradient(With/Without load)	%		21/20	24/22	18/20	24/22	15/21	21/20	15/20	16/21
Weights											
4.01	Service Mass	kg		3380		3700		4300		4700	
4.02	Load Wheel with load(Front/Rear)	kg		4770/610		5460/740		6420/880		7390/810	
4.03	Load Wheel without load(Front/Rear)	kg		1600/1780		1510/2190		1710/2590		1830/2870	
Tyres											
5.01	Wheels number front/rear(x=driven)			2X/2							
5.02	Tyre Type			Pneumatic							
5.03	Tyre size(front)			7.00-12-12PR				28×9-15-14PR			
5.04	Tyre size(rear)			6.00-9-10PR				6.50-10-10PR			
5.05	Service Brake			Hydraulic-Foot Pedal							
5.06	Paking Brake			Mechanical-Hand Lever							

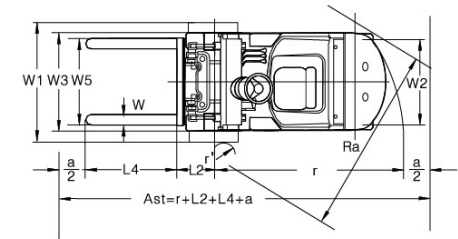
Engine Model and Main Specification for Option

Engine Model	Rated power/ Rotating speed (Kw/rpm)	Rated power/ Rotating speed (Nm/rpm)	Engine Capacity(L)	Number of cylinders	Emission	Power unit
DACHAI CA498-06T3R-A122	45/2500	196/1800	3.168	4-98x105	China Stage III	Diesel
QUANCHAI 4C2-50V31	36.8-2500	157/1800	2.79	4-92x105	China Stage III	Diesel
XINGCHANG 4D27G31	36.8-2500	156/1700-1900	2.67	4-90x105	China Stage III	Diesel
ISUZU 4JG2PE-01	36/2450	175/1700	3.059	4-95.4x107	Euro Stage IIIA / China Stage III	Diesel
ISUZU C240PKJ-30	35.4/2500	139.9/1800	2.369	4-86x102	Euro Stage IIIA / China Stage III	Diesel
Kubota V3600	46.9/2400	209.8/1600	3.62	4-98x120	Euro Stage IIIA / Epa Interim Tier 4	Diesel
Kubota V2403	34.1/2400	155.9/1600	2.434	4-87x102.4	Euro Stage IIIA / China Stage III / Epa Interim Tier 4	Diesel
XIN CHANG C490BPG-25	36.8/2650	156/1800~2000	2.67	4-90x105	Euro Stage IIIA	Diesel
JMC HJ493G	36.5/2500	165/1800	2.771	4-93x102	Euro Stage IIIA	Diesel
DACHAI CA498-97	45/2500	196/1800	3.168	4-98x105	China Stage II	Diesel
JMC HJ493	36.5/2500	156/1800	2.771	4-93x102	China Stage II	Diesel
XINGCHANG C490BPG-200	40/2650	160/1800~2000	2.67	4-90x105	China Stage II	Diesel
QUANCHAI QC490GP	39/2650	160/1800	2.67	4-90x105	China Stage II	Diesel

Ast:Right angle stacking aisle width
a:Clearance
L4:Length of fork



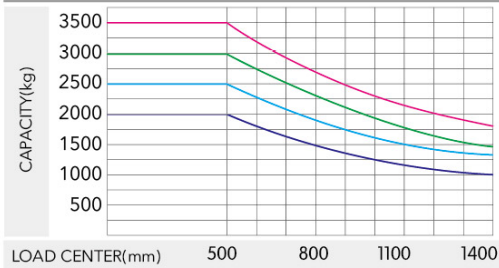
GROUND CLEARANCE	2t/2.5t	3t
Drive Axle	135	140
Steer Axle	150	150
Counter Weight	140	155
Frame	120	130



Engine Model and Main Specification for Option

Engine Model	Rated power/ Rotating speed (Kw/rpm)	Rated power/ Rotating speed (Nm/rpm)	Engine Capacity(L)	Number of cylinders	Emission	Power unit
NISSAN K21	31.2/2200	143.7/1600	2.065	4-89×83	-	Gasoline/LPG
NISSAN K25	37.4/2400	176.5/1600	2.488	4-89×100	-	Gasoline/LPG

Load curve



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 1000mm 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.

2-3.5t WIDE VIEW MAST

Mast model	Max.fork height (mm)	Capacity at 500mm(Load center)(kg)				mast overall height(fork to the ground)			mast tilting angle α / β (°)	Service Weight (kg)			
		CPC20/ CPCD20	CPC25/ CPCD25	CPC30/ CPCD30	CPC35/ CPCD35	2-2.5t	3t	3.5t		CPC20/ CPCD20	CPC25/ CPCD25	CPC30/ CPCD30	CPC35/ CPCD35
M200	2000	2000	2500	3000	3500	1495	1570	1680	6/12	3285	3605	4205	4590
M250	2500	2000	2500	3000	3500	1745	1820	1930	6/12	3335	3655	4250	4645
M300	3000	2000	2500	3000	3500	1995	2070	2180	6/12	3380	3700	4300	4700
M330	3300	2000	2500	3000	3500	2145	2220	2330	6/12	3405	3725	4330	4730
M350	3500	2000	2500	3000	3500	2245	2320	2430	6/12	3430	3750	4350	4750
M370	3700	2000	2500	3000	3500	2345	2420	2530	6/12	3445	3765	4370	4775
M400	4000	2000	2500	3000	3500	2545	2620	2730	6/12	3510	3830	4450	4860
M425	4250	1900	2250	2850	3100	2670	2745	2855	6/6	3535	3855	4480	4885
M450	4500	1800	2150	2750	3000	2795	2870	2980	6/6	3555	3875	4500	4915
M500	5000	1600	1650	2400	2500	3045	3120	3230	6/6	3605	3925	4555	4970
M550	5500	1600	1650	2400	2500	3045	3120	3230	6/6	3605	3925	4555	4970
M500	5000	1600	1650	2400	2500	3045	3120	3230	6/6	3605	3925	4555	4970
M550	5500	1600	1650	2400	2500	3045	3120	3230	6/6	3605	3925	4555	4970
M600	6000	1500	1550	2300	2400	3345	3420	3530	3/6	3685	4005	4655	5075
M600	6000	1500	1550	2300	2400	3345	3420	3530	3/6	3685	4005	4655	5075

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

2-3.5t WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max.fork height (mm)	Capacity at 500mm(Load center)(kg)				mast overall height (fork to the ground)(mm)			free lifting height (with backrest)(mm)			mast tilting angle α / β (°)	Service Weight (kg)			
		CPC20/ CPCD20	CPC25/ CPCD25	CPC30/ CPCD30	CPC35/ CPCD35	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t		CPC20/ CPCD20	CPC25/ CPCD25	CPC30/ CPCD30	CPC35/ CPCD35
ZM200	2000	2000	2500	3000	3500	1495	1570	1680	495	340	340	6/12	3330	3640	4240	4640
ZM250	2500	2000	2500	3000	3500	1745	1820	1930	745	590	590	6/12	3370	3690	4300	4700
ZM300	3000	2000	2500	3000	3500	1995	2070	2180	955	840	840	6/12	3430	3750	4360	4760
ZM330	3300	2000	2500	3000	3500	2145	2220	2330	1145	990	990	6/12	3460	3780	4380	4780
ZM350	3500	2000	2500	3000	3500	2245	2320	2430	1245	1090	1090	6/6	3480	3810	4400	4800
ZM370	3700	2000	2500	3000	3500	2345	2420	2530	1370	1190	1190	6/6	3510	3830	4420	4820
ZM400	4000	2000	2500	3000	3500	2545	2620	2730	1545	1390	1390	6/6	3590	3910	4500	4900
ZM425	4250	1900	2250	2850	3100	2670	2745	2855	1670	1515	1515	6/6	3620	3940	4530	4930
ZM450	4500	1800	2150	2750	3000	2795	2870	2980	1795	1640	1640	6/6	3640	3960	4550	4950
ZM500	5000	1600	1650	2400	2500	3045	3120	3230	2045	1890	1890	6/6	3700	4020	4605	5005
ZM550	5500	1600	1650	2400	2500	3045	3120	3230	2045	1890	1890	6/6	3700	4020	4605	5005
ZM500	5000	1600	1650	2400	2500	3045	3120	3230	2045	1890	1890	6/6	3700	4020	4605	5005
ZM550	5500	1600	1650	2400	2500	3045	3120	3230	2045	1890	1890	6/6	3700	4020	4605	5005
ZM600	6000	1500	1550	2300	2400	3345	3420	3530	2345	2190	2190	3/6	3800	4120	4730	5130
ZM600	6000	1500	1550	2300	2400	3345	3420	3530	2345	2190	2190	3/6	3800	4120	4730	5130

Note: (1) *stands for the rated capacity when the front tyre is double-tyre.

(2) When the front tyre of the 2-3.5t truck is double tyre, 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 430mm. The free lifting height (without backrest) of the 3t truck is the height (with backrest) in the table plus 567mm. The free lifting height (without backrest) of the 3.5t truck is the height (with backrest) in the table plus 509mm.

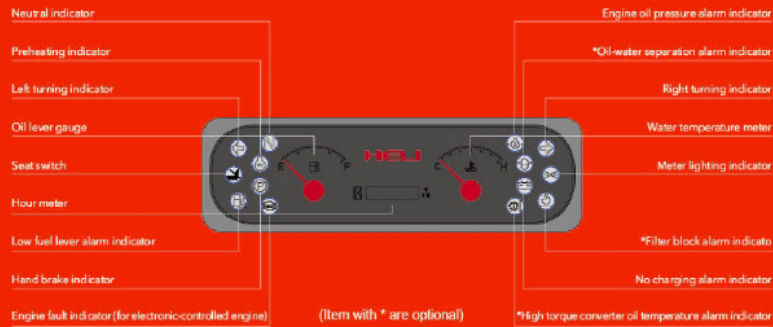
2-3.5t WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max.fork height (mm)	Capacity at 500mm(Load center)(kg)				mast overall height (fork to the ground)(mm)			free lifting height (with backrest)(mm)			mast tilting angle α / β (°)	Service Weight (kg)			
		2t	2.5t	3t	3.5t	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t		CPC20/ CPCD20	CPC25/ CPCD25	CPC30/ CPCD30	CPC35/ CPCD35
ZSM360	3600	2000	2400	2900	3250	1800	1870	1870	800	640	640	6-6	3495	3835	4510	4770
ZSM400	4000	1900	2400	2900	3250	1950	2020	2020	950	790	790	6-6	3540	3875	4540	4800
ZSM435	4350	1850	2200	2850	2900	2050	2120	2120	1050	890	890	6-6	3570	3920	4560	4820
ZSM450	4500	1750	2150	2750	2800	2100	2170	2170	1100	940	940	6-6	3580	3965	4580	4840
ZSM470	4700	1720	2000	2650	2700	2165	2230	2230	1165	1000	1000	6-6	3600	4005	4600	4860
ZSM480	4800	1700	1950	2550	2650	2210	2270	2270	1210	1040	1040	6-6	3615	4050	4620	4880
ZSM500	5000	1600	1650	2450	2500	2300	2370	2370	1300	1140	1140	6-6	3640	4095	4645	4905
ZSM540	5400	1450	1500	2300	2350	2400	2470	2470	1400	1240	1240	3/6	3670	4135	4675	4935
ZSM600	6000	1400	1450	2250	2300	2600	2670	2670	1600	1440	1440	3/6	3775	4180	4765	5025
ZSM650	6500	1450	1500	2300	2350	2800	2870	2870	1800	1640	1640	3/6	3830	4225	4800	5060
ZSM700	7000	1450	1500	2300	2350	2975	3045	3045	1975	1815	1815	3/3	3885	4265	4850	5110
ZSM750	7500	950	1050	1200	1300	3150	3370	3370	2150	2140	2140	3/3	3990	4310	4960	5170

Note: (1) *stands for the rated capacity when the front tyre is double-tyre.

(2) When the front tyre of the 2-3.5t truck is double tyre, the service weight of the truck is the weight in the table plus 110kg.

Reliable special designed instrument



Reliable special meter display the whole truck's working condition, fault detect and other important information completely which make the operator master the whole truck condition directly and conveniently.

Standard configuration

Horn	Standard fork
Control valve	Integrated electric box
Wholly hydraulic-powered steering	Hydraulic oil circuit filter
Semi-suspension seat	Flow regulator
Backrest	Wide view mast
Back view mirror	Air intaking device
Front combined lamp	Durable tread tyre
Transmission oil filter	Lifting and tilting operation lever
Engine flame out device	Traction pin
Cable type parking brake	Head lamp
Driver's tool	Hydraulic oil dipstick
Rear combined lamp	Overhead guard
Backward buzzer	Torque converter oil dipstick
Tilt oil circuit self lock valve	Combined instrument
Tilt adjustable steering column	Electro-hydraulic direction changing
Overhead guard rain cover	

Optional

Driver's cab	Torque converter oil temperature meter
Warning light	Tilting cylinder bush
High air exhausting device	Customer made color
Double air cleaner	Optional attachments
Suspension seat	Steel protection net
Lengthening fork extension	Double-tyre and protection device
Warm air blower	Rotating seat for LPG
Solid tyre	Single/dual fuel system
Widen fork arm carrier	Power braking
Wind shield	Low speed alarm
Cleansing muffler	
Fire extinguisher muffler	
Fire extinguisher	
Rear working light	
Air conditioner (certain type)	
Travelling control system	

2-3.5ton

H3 SERIES INTERNAL COMBUSTION COUNTERBALANCED FORKLIFT TRUCK



H3-series | HIGH EFFICIENCY ENERGY SAVING **New**



H3 SERIES INTERNAL COMBUSTION COUNTERBALANCED FORKLIIFT TRUCK

2-3.5ton



Improved performance, superior quality



↓ Vibration 20% reduced

↓ Noise 3dB reduced

- Cushion connection and wholly suspension driver's cab absorb whole truck's vibration effectively.
- Noise around ear is reduced through down the tilting cylinder under the floor board and using fully closed patch type driver's cab.
- Lower damping device inside the lifting system reduces mast shock and vibration, avoiding crash noise caused by goods falling to the ground.

↑ Workspace 45% increased

- Space around foot is effectively increased through up steering unit and using suspension type inching.
- The operation space is enlarged by heightened overhead guard and using large arc shape of the overhead guard's front leg.
- Semi-suspension seat, steering wheel with small diameter, electro-hydraulic direction changing and automobile type double joystick combined switch effectively improve driving comfort.

↑ Operator's view 20% improved

- Operator's front view is improved through the assembling of stand wide view mast and lowering the dashboard.
- Operator's rear view improved through the CAE optimal designed counterweight.



↑ Working efficiency 20% improved

- Small turning radius makes steering flexible and easy.
- The truck has fast lifting speed, good gradeability and high efficiency.
- High working efficiency guarantees the truck could meet the requirements for various kinds of complicated work condition perfectly wherever at port, dock and railway station.

↑ Loading capacity increased over 5%

↑ Stability 5% improved

↑ Reliability 40% improved

- The hot air reflow isolating device, optimal thermal dissipation duct and aluminum plate-fin type radiator improve cooling ability and ensure engine work reliability.
- Automobile type oil filling cap and optimal oil filling channel structure and process ensure whole truck's safety.
- The constant displacement pump load sensing steering system increases the lifting speed and reduces the hydraulic oil temperature.
- The optimal design of key parts like frame, mast, overhead guard and steering axle improve the whole truck's safety and reliability.
- The retroposition of whole truck's gravity center improve loading capacity, stability and safety.

↑ Engine hood open angle increased to 80°

- Enlarged internal space is convenient for engine and transmission box maintenance.
- Increased hood open angle contributes to quick and convenient maintenance.





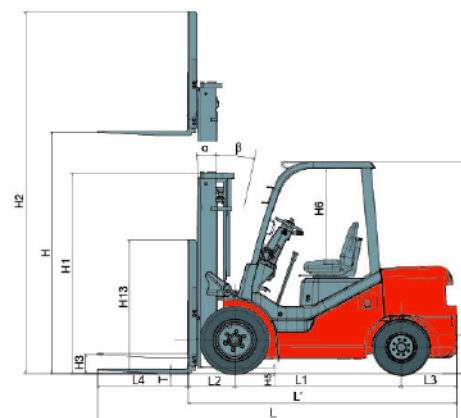
H3 SERIES INTERNAL COMBUSTION COUNTERBALANCED FORKLIFT TRUCK

2-3.5ton

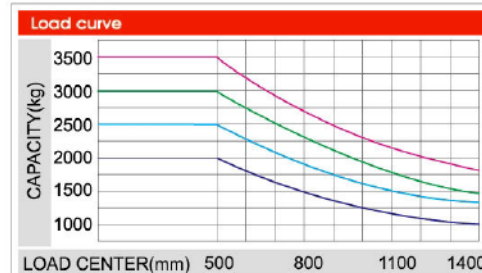
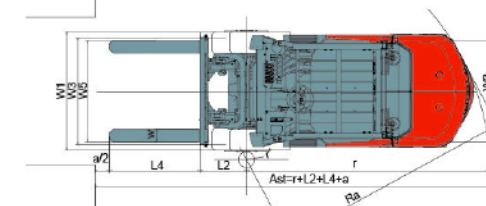


Manufacturer and technical parameters

Character		HELI					
1.01	Manufacturer						
1.02	Model	CPC20 / CPCD20 / CPCQ(Y)D20 CPC25 / CPCD25 / CPCQ(Y)D25 CPC30 / CPCD30 / CPCQ(Y)D30 CPC35 / CPCD35 / CPCQ(Y)D35					
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	3000
2.02	Mast overall height(Fork to the ground and mast be vertical)	H1	mm	2000	2000	2065	2180
2.03	Max.fork lifting height(With backrest)	H2	mm	4030	4030	4245	4235
2.04	Free lift height	H3	mm	165	165	160	170
2.05	Overall height(Overhead guard)	H4	mm	2150	2150	2170	2170
2.06	Min.ground clearance(At the mast)	H5	mm	115	115	135	135
2.07	Distance from the surface of the seat to the overhead guard	H6	mm	1030	1030	1030	1030
2.08	Traction pin height	H9	mm	275	275	280	280
2.09	Backrest height(Calculated from the surface of the fork)	H13	mm	1000	1000	1227	1222
2.10	Overall length(With fork/Without fork)	(L/L')	mm	3500/2580	3708/2638	3818/2748	3836/2766
2.11	Wheel base	L1	mm	1650	1650	1700	1700
2.12	Front overhang	L2	mm	473	473	478	496
2.13	Rear overhang	L3	mm	457	515	570	570
2.14	Overall width	W1	mm	1150	1150	1225	1225
2.15	Tread (Front tread/Rear tread)	(W3/W2)	mm	970/970	970/970	1000/970	1000/970
2.16	Fork adjustable range(the external of the fork)(Max./Min.)	W5	mm	1030/244	1030/244	1060/250	1060/250
2.17	Min.turning radius(Exterior)	r	mm	2255	2310	2400	2440
2.18	Min.turning radius(Interior)	r'	mm	180	180	200	200
2.19	Min.right angle stacking aisle width	Ra	mm	2274	2330	2380	2415
2.20	Mast tilting angle	α / β	%	6°/12°	6°/12°	6°/12°	6°/12°
2.21	Fork size	L4×W4×T	mm	920×122×40	1070×122×40	1070×125×45	1070×125×50
Weight							
3.01	Total weight	kg	3420	3800	4370	4800	
3.02	Weight distribution loaded (Front/Rear)	kg	4794/654	5520/820	6460/910	7470/830	
3.03	Weight distribution unloaded (Front/Rear)	kg	1643/1805	1584/2256	1710/2660	1880/2920	
Wheel and tyre							
4.01	Wheel number x = drive wheel (Front/Rear)	2X/2					
4.02	Tyre type(Front/Rear)	Pneumatic tyre					
4.03	Tyre size(Front/Rear)	7.00-12-12PR/6.00-9-10PR 7.00-12-12PR/6.00-9-10PR 28×9-15-12PR/6.50-10-10PR 28×9-15-14PR/6.50-10-10PR					
4.04	Service brake	Hydraulic-Foot Pedal					
4.05	Parking brake	Mechanical-Hand Lever					



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



CPCQ(Y)D20 CPCQ(Y)D25 CPCQ(Y)D30 CPCQ(Y)D35
CPC20 CPC25 CPC30 CPC35
CPCD20 CPCD25 CPCD30 CPCD35

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 1000mm 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.

WIDE VIEW MAST													
Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)					Mast overall height (fork to the ground)			Service weight			
		CPCQ(Y)D20 / CPC20 / CPCD20	CPCQ(Y)D25 / CPC25 / CPCD25	CPCQ(Y)D30 / CPC30 / CPCD30	CPCQ(Y)D35 / CPC35 / CPCD35		2-2.5t	3t	3.5t	CPCQ(Y)D20 / CPC20 / CPCD20	CPCQ(Y)D25 / CPC25 / CPCD25	CPCQ(Y)D30 / CPC30 / CPCD30	CPCQ(Y)D35 / CPC35 / CPCD35
M200	2000	2000	2500	3000	3500		1500	1570	1680	3340	3720	4280	4700
M250	2500	2000	2500	3000	3500		1750	1820	1930	3385	3765	4335	4750
M300	3000	2000	2500	3000	3500		2000	2070	2180	3420	3800	4370	4800
M330	3300	2000	2500	3000	3500		2150	2220	2330	3460	3840	4395	4830
M350	3500	2000	2500	3000	3500		2250	2320	2430	3480	3860	4420	4850
M370	3700	2000	2500	3000	3500		2350	2420	2530	3500	3880	4430	4870
M400	4000	2000	2500	3000	3500		2500	2570	2680	3565	3945	4490	4940
M425	4250	2000	2500	3000	3500		2675	2745	2855	3590	3970	4510	4970
M450	4500	2000	2500	3000	3500		2800	2870	2980	3615	3995	4535	4990
M500	5000	2000	2500	3000	3500		3050	3120	3230	3655	4035	4575	5040
M550	5500	2000	2500	3000	3500		3350	3420	3530	3740	4120	4745	5245
M600	6000	2000	2500	3000	3500		3600	3670	3780	3785	4165	4795	5285

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

Performance																
Model		CPC20	CPCD20	CPC25	CPCD25	CPC30	CPCD30	CPC35	CPCD35	CP(Q)(Y)20	CP(Q)(Y)20	CP(Q)(Y)25	CP(Q)(Y)25	CP(Q)(Y)30	CP(Q)(Y)30	CP(Q)(Y)35
Max.drawbar pull (Loaded/Unloaded)	kN	12.5/8.5	16/11.5	15/8.5	16.5/11.5	17/14.5	19/14.5	18/14.5	21/14.5	15/10.5	16/10.5	15/10.5	16.5/10.5	17/13.5	18/13.5	20/13.5
Max.Gradeability (Loaded/Unloaded)	%	15/20	20/20	15/20	20/20	17/20	23/20	15/20	21/20	15/20	20/20	15/20	20/20	17/20	23/20	21/20
Max.traveling speed (Loaded/Unloaded)	km/h	17/19		17/19		19/20		19/19		17/19		17/19		19/20		19/20
Lifting Speed (Loaded/Unloaded)	mm/s	560/600		560/600		500/550		400/420		520/570		520/570		420/480		370/410
Lowling Speed (Loaded/Unloaded)	mm/s	450/500		450/500		450/550		350/400		450/500		450/500		450/550		350/400
Drive and transmission control device																
Engine mode				ISUZU C240PKJ				ISUZU 4JG2					GCT k25			
Engine rated power	kW/rpm			35.4/2500				44.9/2450					37.4/2400			
Engine rated torque	Nm/rpm			139/1800				184.7/1600-1800					176.5/1600			
Engine cylinder number-borexstroke				4-86x102				4-95.4x107					4-89x100			
Engine displacement	L			2.369				3.05					2.488			
Engine type					Diesel								Gasoline or LPG			
Emission				Euro IIIA				CHINA STAGE II								
Battery(Voltage/Capacity)	V/Ah					12/80							12/60			
Engine fuel tank capacity	L									60						
Transmission box shifting gears (Front/Rear type)										1-1Power Shift T/M / 2-2 Manual Shift T/M						

Engine Model and Main Specification for Option							
Engine model	Rated power/ rotating speed (Kw/rpm)	Rated power/ rotating speed (Nm/rpm)	Engine displacement (L)	Engine cylinder number	Cylinder number - BorexStroke	Engine type	Emission
JMC HJ493	39/2500	165/1800	2.771	4	4-93x102	Diesel	CHINA STAGE II
DACHAI CA498	45/2500	170~180/1600~1800	3.168	4	4-98x105	Diesel	CHINA STAGE II
GCT K21	31.5/2200	140/1600	2.065	4	4-89x83	Gasoline or LPG	
Cummins QSF2.8	36/2500	180/800~1800	2.8	4	4-94x100	Diesel	Euro IIIA
Deutz F4M2011	45/2500	190/1700	3.108	4	4-94x112	Diesel	CHINA STAGE II
JMC HJ 493G43	36.8/2500	156/1800	2.771	4	4-93x102	Diesel	Euro IIIA

WIDE VIEW FULL FREE 2-STAGE MAST																
Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)				Mast overall height (fork to the ground)			Free lifting height (with backrest)			Service weight				Mast tilting angle (°) α/β
		CPQ120/CPQ120/CPQ120	CPQ125/CPQ125/CPQ125	CPQ130/CPQ130/CPQ130	CPQ135/CPQ135/CPQ135	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CPQ120/CPQ120/CPQ120	CPQ125/CPQ125/CPQ125	CPQ130/CPQ130/CPQ130	CPQ135/CPQ135/CPQ135	
ZM200	2000	2000	2500	3000	3500	1495	1570	1680	495	340	460	3470	3850	4330	4770	6-12
ZM250	2500	2000	2500	3000	3500	1745	1820	1930	745	590	710	3515	3895	4370	4820	6-12
ZM300	3000	2000	2500	3000	3500	1995	2070	2180	995	840	960	3565	3945	4420	4870	6-12
ZM330	3300	2000	2500	3000	3500	2145	2220	2330	1145	990	1100	3595	3975	4445	4895	6-12
ZM350	3500	2000	2500	3000	3500	2245	2320	2430	1245	1090	1210	3615	3995	4465	4915	6-12
ZM370	3700	2000	2500	3000	3500	2345	2420	2530	1370	1205	1310	3635	4015	4480	4935	6-12
ZM400	4000	2000	2500	3000	3500	2545	2620	2730	1545	1390	1510	3705	4085	4550	5000	6-12
ZM425	4250	1500	2000	2500	3000	2670	2745	2855	1670	1515	1635	3730	4110	4575	5025	6-12
ZM450	4500	1800	2100	2750	3000	2795	2870	2980	1795	1640	1760	3755	4135	4595	5050	6-12
ZM500	5000	1600	2200	2850	3050	3045	3120	3230	2045	1910	2010	3805	4185	4640	5100	*3-6
ZM550	5500	1600	2200	2850	3050	3345	3420	3530	2345	2190	2310	3890	4270	4830	5295	*3-6
ZM600	6000	1500	2100	2750	3000	3595	3670	3780	2595	2440	2560	3935	4315	4875	5350	*3-6

Note: (1) *stands for the rated capacity when the front tyre is double-tyre.
(2) When the front tyre of the 2-3.5t truck is double-tyre, the service weight of the truck is the weight in the table plus 110kg.
(3) The free lifting height (without backrest) of the 1-1.8t truck is the height (with backrest) in the table plus 431mm. The free lifting height (without backrest) of the 2-2.5t truck is the height (with backrest) in the table plus 459mm. The free lifting height (without backrest) of the 3t truck is the height (with backrest) in the table plus 588mm. The free lifting height (without backrest) of the 3.5t truck is the height (with backrest) in the table plus 625mm.

三級全自由門架 WIDE VIEW FULL FREE 3-STAGE MAST																
Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)				Mast overall height (fork to the ground)			Free lifting height (with backrest)			Service weight				Mast tilting angle (°) α/β
		CPQ120/CPQ120/CPQ120	CPQ125/CPQ125/CPQ125	CPQ130/CPQ130/CPQ130	CPQ135/CPQ135/CPQ135	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CPQ120/CPQ120/CPQ120	CPQ125/CPQ125/CPQ125	CPQ130/CPQ130/CPQ130	CPQ135/CPQ135/CPQ135	
ZSM360	3600	2000	2400	2900	3300	1795	1946	1946	795	705	710	3715	4095	4610	4925	6-6
ZSM400	4000	1900	2400	2900	3300	1920	2065	2065	920	830	835	3745	4125	4640	4955	6-6
ZSM435	4350	1850	2200	2800	3100	2045	2190	2190	1045	955	960	3775	4155	4665	4980	6-6
ZSM450	4500	1750	2100	2600	3000	2095	2240	2240	1095	1005	1010	3785	4165	4680	4995	6-6
ZSM470	4700	1800	2100	2600	3000	2160	2240	2240	1160	1005	1010	3800	4180	4700	5015	6-6
ZSM480	4800	1700	2050	2500	2900	2195	2340	2340	1195	1105	1110	3805	4185	4720	5025	6-6
ZSM500	5000	1600	2000	2400	2800	2295	2440	2440	1295	1205	1210	3830	4210	4745	5060	6-6
ZSM540	5400	1450	1900	2250	2700	2420	2565	2565	1420	1330	1335	3860	4240	4775	5090	6-6
ZSM600	6000	1600	2000	2400	2800	2645	2790	2790	1645	1555	1560	3940	4320	4865	5180	6-6

Note: (1) *stands for the rated capacity when the front tyre is double-tyre.
(2) When the front tyre of the 2-3.5t truck is double-tyre, the service weight of the truck is the weight in the table plus 110kg.
(3) The free lifting height (without backrest) of the 1-1.8t truck is the height (with backrest) in the table plus 495mm. The free lifting height (without backrest) of the 2-2.5t truck is the height (with backrest) in the table plus 453mm. The free lifting height (without backrest) of the 3t truck is the height (with backrest) in the table plus 582mm. The free lifting height (without backrest) of the 3.5t truck is the height (with backrest) in the table plus 487mm.

INTERNAL COMBUSTION COUNTERBALANCED
FORKLIFT TRUCK

4-5 ton

WIDE VIEW MAST

Mast model	Max.Lifting height	Load capacity(Load center 500mm)(kg)			Height mast retracted (C)(mm)	Tilting angles Forward /backward	Service Weight (kg)					
		CPC(D)40	CPC(D)45	CPC(D)50			CPCD40	CPCD45	CPCD50	CPC40	CPC45	CPC50
M260	2600	4000	4500	5000	2075	6° / 12°	6450	6750	7050	6150	6450	6750
M270	2700	4000	4500	5000	2125	6° / 12°	6475	6775	7075	6175	6475	6775
M300	3000	4000	4500	5000	2275	6° / 12°	6500	6800	7100	6200	6500	6800
M330	3300	4000	4500	5000	2425	6° / 12°	6515	6815	7115	6215	6515	6815
M350	3500	4000	4500	5000	2525	6° / 12°	6525	6825	7125	6225	6525	6825
M370	3700	4000	4500	5000	2625	6° / 12°	6535	6835	7135	6235	6535	6835
M375	3750	4000	4500	5000	2650	6° / 12°	6540	6840	7140	6240	6540	6840
M400	4000	4000	4500	5000	2825	6° / 6°	6550	6850	7150	6250	6550	6850
M425	4250	3800 *4000	4300 *4500	4700 *5000	2950	6° / 6°	6560	6860	7160	6260	6560	6860
M450	4500	3700 *4000	4200 *4500	4500 *5000	3075	6° / 6°	6575	6875	7175	6275	6575	6875
M475	4750	3500 *3700	4000 *4200	4250 *4600	3200	6° / 6°	6590	6890	7190	6290	6590	6890
M500	5000	3200 *3400	3600 *4000	4000 *4200	3325	6° / 6°	6600	6900	7200	6300	6600	6900
M550	5500	2900 *3100	3200 *3600	3600 *3800	3575	3° / 6°	6630	6930	7230	6330	6630	6930
M600	6000	2600 *2900	3000 *3200	3300 *3600	3825	3° / 6°	6650	6950	7250	6350	6650	6950

Note: * Refers to the rated capacity with front dual tyre.

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max.Lifting height	Load capacity(Load center 500mm)(kg)			Height mast retracted (C)(mm)	Free lift (with backrest) (mm)	Full free lift (mm)	Tilting angles Forward /backward	Service Weight (kg)					
		CPC(D)40	CPC(D)45	CPC(D)50					CPCD40	CPCD45	CPCD50	CPC40	CPC45	CPC50
ZM261	2610	4000	4500	5000	2180	960	1380	6° / 12°	6475	6775	7075	6175	6475	6775
ZM271	2710	4000	4500	5000	2230	1010	1430	6° / 12°	6500	6800	7100	6200	6500	6800
ZM300	3000	4000	4500	5000	2375	1155	1575	6° / 12°	6550	6850	7150	6250	6550	6850
ZM330	3300	4000	4500	5000	2525	1305	1725	6° / 12°	6565	6865	7165	6265	6565	6865
ZM350	3500	4000	4500	5000	2625	1405	1825	6° / 12°	6575	6875	7175	6275	6575	6875
ZM375	3750	4000	4500	5000	2750	1530	1950	6° / 12°	6590	6890	7190	6290	6590	6890
ZM400	4000	4000	4500	5000	2875	1655	2075	6° / 6°	6605	6905	7205	6305	6605	6905
ZM450	4500	3700 *4000	4200 *4500	4500 *5000	3125	1905	2326	6° / 6°	6630	6930	7230	6330	6630	6930
ZM500	5000	3200 *3400	3600 *4000	4000 *4200	3375	2155	2576	6° / 6°	6665	6965	7265	6365	6665	6965
ZM550	5500	2900 *3100	3200 *3600	3600 *3800	3625	2405	2826	3° / 6°	6690	6990	7290	6390	6690	6990
ZM600	6000	2600 *2900	3000 *3200	3300 *3600	3875	2655	3076	3° / 6°	6715	7015	7315	6415	6715	7015

Note: (1)Free lift (without backrest) : +380mm;
(2)* Refers to the rated capacity with front dual tyre.

WIDE VIEW FULL FREE 3-STAGE MAST

Mast model	Max.Lifting height	Load capacity(Load center 500mm)(kg)			Height mast retracted (C)(mm)	Free lift (with backrest) (mm)	Full free lift (mm)	Tilting angles Forward /backward	Service Weight (kg)					
		CPC(D)40	CPC(D)45	CPC(D)50					CPCD40	CPCD45	CPCD50	CPC40	CPC45	CPC50
ZSM392	3920	3340 *4000	4250 *4500	4800 *5000	2235	1012	1430	6° / 6°	6700	7000	7300	6400	6700	7000
ZSM435	4350	3500 *3800	4100 *4300	4400 *4800	2380	1157	1575	6° / 6°	6740	7040	7340	6440	6740	7040
ZSM450	4500	3350 *3500	4000 *4200	4200 *4700	2430	1208	1625	6° / 6°	6755	7055	7355	6455	6755	7055
ZSM470	4700	3250 *3400	3800 *4000	4050 *4200	2495	1274	1692	6° / 6°	6775	7075	7375	6475	6775	7075
ZSM480	4800	3150 *3300	3700 *3900	3950 *4100	2530	1307	1725	6° / 6°	6785	7085	7385	6485	6785	7085
ZSM500	5000	3050 *3200	3400 *3800	3800 *4000	2630	1407	1825	6° / 6°	6805	7105	7405	6505	6805	7105
ZSM540	5400	2750 *3000	3100 *3400	3400 *3600	2755	1532	1950	3° / 6°	6845	7145	7445	6545	6845	7145
ZSM600	6000	2400 *2500	2800 *3000	3100 *3400	2995	1772	2190	3° / 6°	6865	7165	7465	6565	6865	7165

Note: (1)Free lift (without backrest) : +355mm;
(2)* Refers to the rated capacity with front dual tyre.

HELI



H series / HIGH EFFICIENT
ENERGY EFFICIENT

4-5 ton H series

INTERNAL COMBUSTION COUNTERBALANCED
FORKLIFT TRUCK

Standard equipments

Standard fork
Standard carriage
M300 standard mast
Standard overhead guard
Single air cleaner
Standard muffler
Control valve (two throw)
Standard pneumatic tyre
Normal seat
Driver's tool

Optional equipments

Cab
Warning light
Dual air cleaner
Heater
Fan
Fire extinguisher
Protecting net
Dual tyre
Solid tyre
Long fork
Suspension seat
Windshield glass
Rear working light
Wide carriage
Control valve (multi throw)
High vertical exhaust
Spark arrested muffler
Catalyst muffler
Tilting cylinder boot
Steering cylinder boot
Two stage free lift mast
Three stage free lift mast

Optional attachments

Side shifter
Fork positioner
Double side shifter
Single double pallet handler
Hinged forks
Rotator
Push/Pulls
Carpet boom
Load stabilizer
Turnalloads
Crane jib
Glass handler
Fork extension
Paper roll clamp
Bale clamp
Drum clamp
Fork clamp
Block clamp
Multi-purpose clamp



ANHUI HELI CO., LTD.

ADD: NO.668 Fangxing Street, Economical Development Zone, Hefei, P.R.China

TEL : (86 551) 63639068, 63639258, 63639358, 63662105

FAX : (86 551) 63639966

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

Email : heli@helichina.net

AUTHORIZED DEALER

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Catalog No.2015-04-A HELI Print

4-5 ton H series
INTERNAL COMBUSTION COUNTERBALANCED
FORKLIFT TRUCK



H series / HIGH EFFICIENT
ENERGY EFFICIENT

HELI
LIFTING THE FUTURE

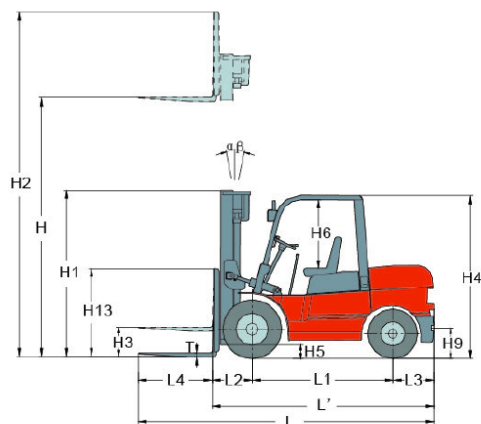
24 YEARS TOP1 FORKLIFT MANUFACTURER AND SALLER
IN CHINA FOR CONSECUTIVE 24 YEARS

Date and design Characteristics

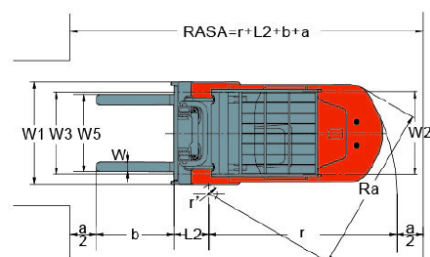
Character											
1.01	Manufacturer						HELI				
1.02	Model		CPCD40-M2	CPCD45-M2	CPCD50-M2	CPQYD40-TY5	CPQYD45-TY5	CPQYD50-TY5	CPC40-XC3	CPC45-XC3	CPC50-WX5
1.03	Power type			Diesel			Gasoline/LPG			Diesel	
1.04	Rated capacity	kg	4000	4500	5000	4000	4500	5000	4000	4500	5000
1.05	Load center	mm					500				
1.06	Driving mode						Seated				
Size											
2.01	Mast height, extended (with backrest, unloaded)	H2	mm				4217				
2.02	max. Fork height	H	mm				3000				
2.03	Mast height, lowered	H1	mm				2275				
2.04	Free lift	H3	mm				150				
2.05	Backrest height (from the fork surface)	H13	mm				1217				
2.06	distance from the seat surface to the overhead guard	H6	mm				980				
2.07	Overall height (overall height)	H4	mm				2270				
2.08	Overall length (fork/without fork)	L/L'	mm	4145/3075	4165/3095	4209/3139	4145/3075	4165/3095	4209/3139	4145/3075	4165/3095
2.09	Front overhang	L2	mm				555				
2.10	Rear overhang	L3	mm	520	540	584	520	540	584	520	540
2.11	Wheel base	L1	mm				2000				
2.12	Traction pin height	H9	mm				385				
2.13	Min. Under clearance (at mast)	H5	mm				175				
2.14	overall width	W1	mm				1480				
2.15	Fork distance (external)(max. /min.)	W5	mm				1340/300				
2.16	Tread (front tread/rear tread)	W3/W2	mm				1180/1190				
2.17	Min. Turning radius (inside)	r'	mm				220				
2.18	min. Turning radius (outside)	r	mm	2720	2740	2800	2720	2740	2800	2720	2740
2.19	min. Right angle aisle width	Ra	mm	2480	2500	2550	2480	2500	2550	2480	2500
2.20	Mast tilting angle (front/rear)	α/β					6°/12°				
2.21	Fork size	L4xVxT	mm				1070x150x50				
Performance											
3.01	Max Travelling speed (loaded/unloaded)	Km/h		25/26			25/26		18/19		18/19
3.02	lifting speed (loaded/unloaded)	mm/s		460/520			460/520		360/390		360/390
3.03	Lowering speed (loaded/ unloaded)	mm/s					<600/> 300				
3.04	Traction force (loaded/unloaded)	KN		22/16			25/16		21/14		31/14
3.05	max. Gradeability(loaded/unloaded)	%		18/20	17/20	16/20	18/20	17/20	16/20	17/20	16/20
											20/25
Weight											
4.01	Service weight	Kg	6500	6800	7100	6500	6800	7100	6200	6500	6800
4.02	Weight distribution loaded (front/rear)	Kg	8925/1575	9750/1550	10500/1600	8925/1575	9750/1550	10500/1600	8568/1632	9320/1680	10030/1770
4.03	weight distribution unloaded (front/rear)	Kg	2700/3800	2710/4090	2680/4420	2700/3800	2710/4090	2680/4420	2635/3565	2730/3770	2890/3910
Wheel and tyre											
5.01	Tyre number x=drive wheel (front/rear)						2X/2				
5.02	tyre type (front/rear)						Pneumatic tyre				
5.03	tyre model (front)		8.25-15-14PR	300-15-20PR		8.25-15-14PR	300-15-20PR		8.25-15-14PR	8.25-15-14PR	300-15-20PR
5.04	Tyre model (rear)						7.00-12-12PR				
5.05	Service brake						powered brake-pedal tyre			vacuum assist -pedal type	
5.06	Parking brake									Mechanical-hand brake lever type	
Drive and control device											
6.01	Battery (voltage /capacity)	V/Ah		24/80			12/100			24/80	
6.02	Engine manufacturer /model			Mitsubishi S6S-230			GM 4.3L Gasoline/LPG		Xinchang 4D35G		Wuxi CA4110
6.03	Engine rated power	KW/rpm		52/2300			Gasoline: 70/2300、LPG: 76.6/2300		48/2300		61/2200
6.04	Engine rated torque	Nm/rpm		248/1700			Gasoline: 287/1700、LPG: 323.5/1700		230/1600~1800		305/1400~1600
6.05	Engine cylinder (number-bore xstroke)			6-94x120			6-101.6x88.39		4-98x115		4-110x125
6.06	engine displacement	L		4.966			4.29418		3.5		4.752
6.07	Engine fuel tank capacity	L					90				
6.08	Gear number (front/rear)						2-1 powered shift			2-2 manual shift	

Engine Model and Main Specification for Option

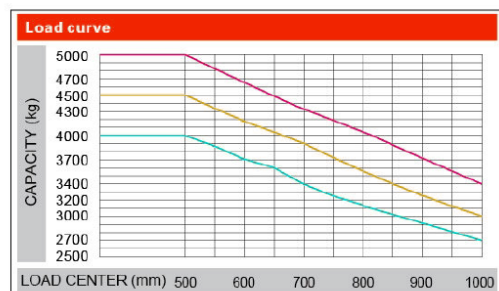
Engine model and manufacturer	Engine rated power / rated speed kW/rpm	Max. torque/speed Nm/rpm	Engine displacement L	Engine cylinder (Number-bore×stroke)	Applied model
Weifang 4RMG25-1	55/2200	270/1680	4.329	4.105x125	CPD40-50-WF6
Wuxi CA4110	61/2200	305/1400-1600	4.75	4.110x125	CPD40-50-Wx5
GM4 3L Tier IV Certified engine	Gasoline 70/2300 LPG 78.6/2300	Gasoline 297/1700 LPG 323.5/1700	4.29418	6.101.6x88.39	CPD40-50-TY6
Quanchai 4C6-M	48/2300	230/1600-1800	3.47	4.98x115	CPC40-45-QC1



RASA:Aisle width with load
a:Clearance
b:Load Length



Under Clearance	4t/4.5t/5t
Drive Axle	190
Steering Axle	240
Counter Weight	220
Frame	190



CPC(D)50
/CPQ(Y)D50

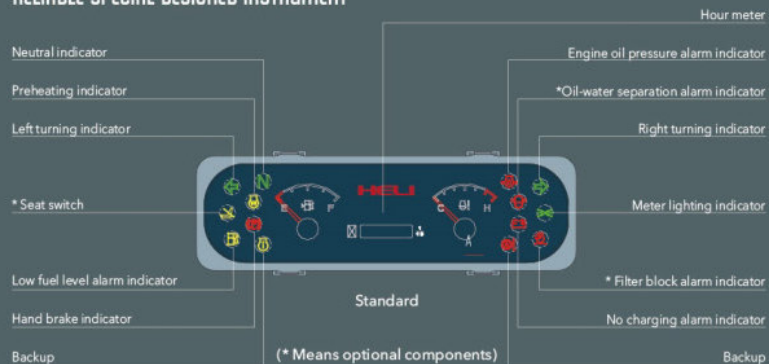
Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. The standard load means a cubic with 1000mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.

Mast lifting height and fork length table

wide view normal mast lifting height (mm)	2600	2700	3000 ★	3300	3500	3700	3750	4000	4250	4500	4750	5000	5500	6000
two stage full free mast lifting height (mm)	2610	2710	3000	3300	3500	3750	4000	4500	5000	5500	6000			
three stage full free mast lifting height (mm)	3920	4350	4500	4700	4800	5000	5400	6000						
fork length (mm)	1070 ★	1220	1370	1520	1670	1820	1970	2120						

Note: Equipments with ★ is standard.

RELIABLE SPECIAL DESIGNED INSTRUMENT



Reliable special meter displays the whole truck's working condition, fault detect and other important information completely which makes the operator master the whole truck condition directly and conveniently.

Standard configuration

Hour meter	Overhead guard
Horn	Standard fork
Oil pressure alarm	Neutral gear switch
Control valve	Hydraulic circuit oil filter
Wholly hydraulic-powered steering	Electro-hydraulic changing-over
Rubber pad	Intelligent shift
Backrest	Speed-limiting valve
Rear view mirror	Oil level gauge
Front combined lamp (LED light)	Charging indicator
Transmission oil filter	Wide view mast
Engine flame out device	Air intaking device
Ratchet type parking brake	Durable tire with decorative pattern
Water temperature meter	Lifting and tilting operating handles
Driver's tools	Traction pin
Rear combined lamp(LED)	Semi-suspension seat
Reversing buzzer	Hydraulic oil dipstick
Tilt-lock valve	Overhead guard rain cover
Tilt adjustable steering column	Torque converter oil dipstick
Back view mirror	Combined instrument

Optional

Driver's cab	User-specified color
Warning light	Optional attachments
High air exhausting device	Sling
Double air cleaner	Full LED light ass'y
Suspension seat	Power switch
Fork extension	Reversing voice speaker
Heater	Universal key
Solid tyre	Overspeed 10km/h alarm
Widen fork carriage	Electric fan
Wind shield	OPS(Travelling function and loading function)
Purifying muffler	Drive axle with wet disc type brak
Fire extinguisher muffler	
Fire extinguisher	
Rear working light	
Air conditioner (certain type)	
OPS (travelling function)	
Torque converter oil temperature meter	
Tilting cylinder sleeve	
Steering cylinder sleeve	

5-10 t G series Internal Combustion Counterbalanced Forklift Truck



5-10 t G series internal combustion counterbalanced forklift truck

G series / INTELLIGENT ENVIRONMENT-FRIENDLY

Technical features remarkably improved

Damping

- With suspension damping structure on overhead guard(cab) and optimized design for the transmission, the whole trucks's vibration reduced a lot and relieve driver's fatigue greatly.

Noise reduction

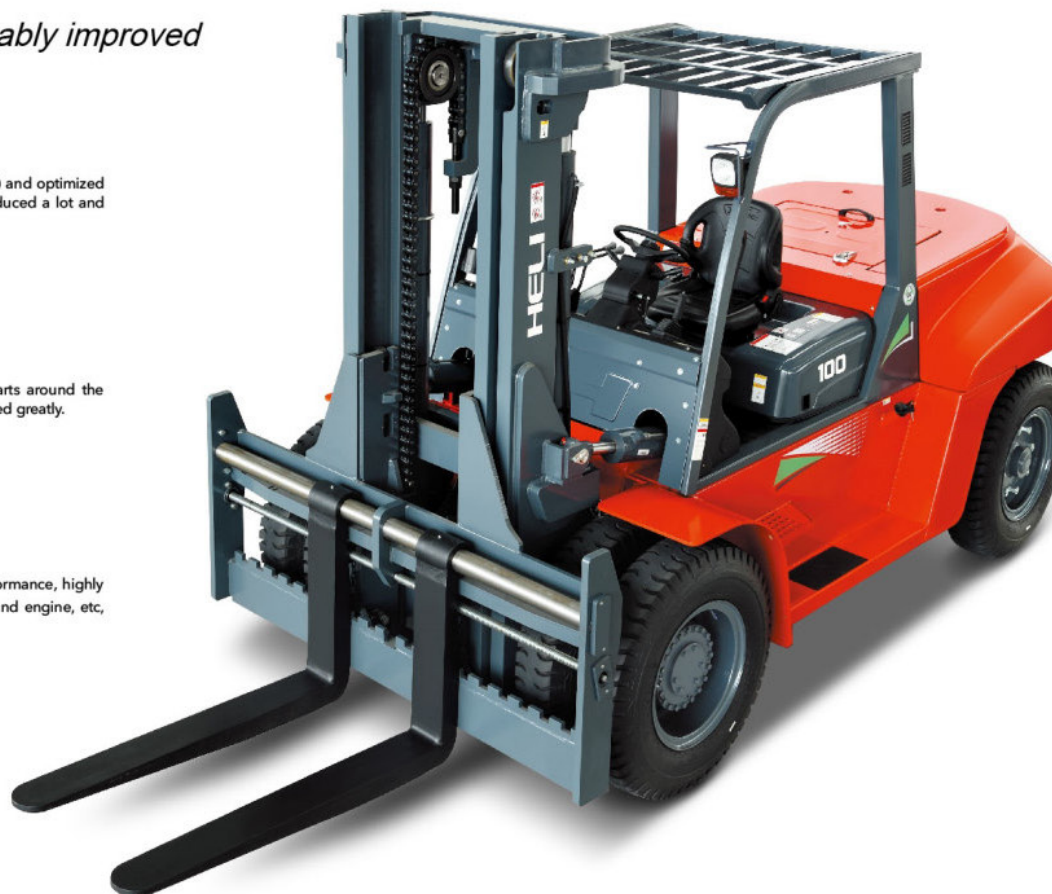
- Equipped with fully sealed cab and optimize designed parts around the engine, noise nearby ear and the truck sound level are reduced greatly.

Heat dissipation

- With the optimized cooling system and great cooling performance, highly improved the reliability and durability of the transmission and engine, etc, many key parts.

Energy efficiency

- With optimized hydraulic system, the truck is more energy-efficient and lower fuel consumption.



Comfort

- Man-machine engineering design improves operation comfort; wide view lifting system improves vision.

Intelligent gear shifting

- With electronic-hydraulic reversing system as standard configuration, make operation more liaght and easy; The updated new intelligent gear shifting system could avoid starting with second gear, improves the transmission box's reliability.

Maintainability

- Wider internal space, more reasonable parts layout and 80°hood opening angle make maintenance easy.

Reliability

- Key parts like frame and mast apply CAE top-down design to improve their strength and make the truck tough.



Independent integrated electric cabinet



LED signal (standard configuration)



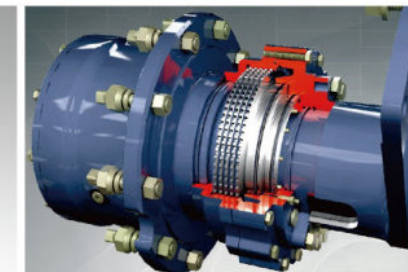
Ratchet type parking brake



Locked fuel tank cover



Folder



Wet-disc brake driving axle (optional choice):
Advantages: the convenient operation,
stable braking and free from maintenance.

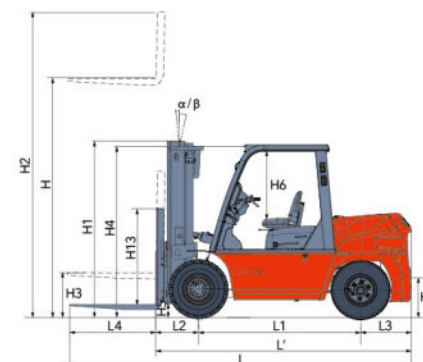
5-10t G series internal combustion counterbalanced forklift truck

Manufacturer and technical parameters

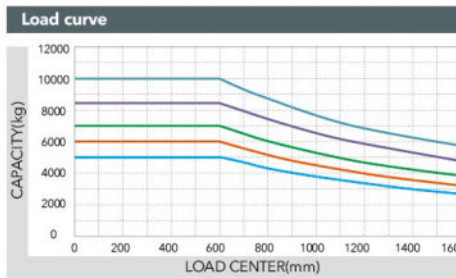
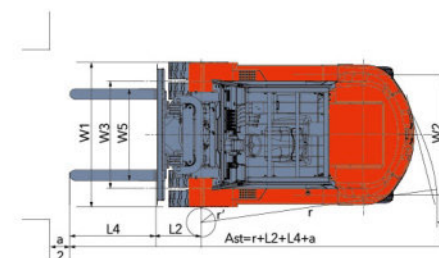
Characteristics								
1.01	Manufacturer				HELI			
1.02	Model			CPCD50	CPCD60	CPCD70	CPCD85	CPCD100
1.03	Power type					Diesel		
1.04	Rated capacity	Q	kg	5000	6000	7000	8500	10000
1.05	Load center	c	mm			600		
1.06	Driving mode			Sit-on type				
Dimensions								
2.01	Mast height, extended (with backrest)	H2	mm	4400	4400	4400	4420	4415
2.02	Max. fork height	H	mm	3000	3000	3000	3000	3000
2.03	Mast height, lowered	H1	mm	2500	2500	2500	2700	2850
2.04	Free lift	H3	mm	200	200	200	200	200
2.05	Backrest height (calculated from the fork surface)	H13	mm	1360	1350	1345	1360	1345
2.06	Overhead guard clearance (from face of seat)	H6	mm	1060	1060	1060	1060	1060
2.07	Overhead guard height	H4	mm	2450	2450	2450	2560	2560
2.08	Overall length (with forks)	L	mm	4710	4790	4840	5180	5430
2.09	Overall length (without forks)	L'	mm	3490	3570	3620	3960	4210
2.10	Front overhang	L2	mm	590	595	600	705	720
2.11	Rear overhang	L3	mm	600	675	720	755	715
2.12	Wheel base	L1	mm	2300	2300	2300	2500	2775
2.13	Traction pin center height	H9	mm	410	410	410	520	520
2.14	Min. Ground clearance (from bottom of mast)	H5	mm	200	200	200	250	250
2.15	Truck body width	W1	mm	2045	2045	2045	2165	2165
2.16	Lateral fork adjustment (outside of fork)(max./min.)	W6	mm	300-1835	300-1835	300-1835	348-1944	420-2060
2.17	Front tread	W3	mm	1520	1520	1520	1600	1600
2.18	Rear tread	W2	mm	1700	1700	1700	1700	1700
2.19	Min. Turning radius (external)	r	mm	3240	3300	3370	3650	3900
2.20	Min. Turning radius (internal)	r'	mm	200	200	200	200	200
2.21	In right angle stacking aisle width (standard load size 1200X1200)	Ast	mm	5250	5315	5390	5775	6040
2.23	Mast tilting angle (forward /rear)	α/β	°	6/12	6/12	6/12	6/12	6/12
2.24	Fork size	L4	mm	55X1220X150	60X1220X150	65X1220X150	70X1220X170	80X1220X175
Tyre								
3.01	Wheel number (front/rear)			4X/2				
3.02	Tyre type (front/rear)			Pneumatic tyre				
3.03	Tyre size (front)			8.25-15-14PR			9.00-20-14PR	
3.04	Tyre size (rear)			8.25-15-14PR			9.00-20-14PR	
Specifications of the brake and transmission devices								
4.01	Battery (voltage/capacity)	V/Ah		2X12/80				
4.02	Service brake			Powered brake-pedal type				
4.03	Parking brake			Mechanical-hand brake lever type				
4.04	Oil tank capacity	L		160				
4.05	Transmission type			Intelligent gear shifting				
4.06	Transmission number of speed (fwd/bwd)			2/2				
Truck specifications								
5.01	Max. Travelling speed (loaded/unloaded)	km/h		25/29	25/29	25/29	25/29	25/29
5.02	Lifting speed (loaded/unloaded)	mm/s		510/550	510/550	500/550	400/430	330/350
5.03	Lowering speed (loaded/unloaded)	mm/s		WITHOUT LOAD≥300 WITH FULL LOAD≤600				
5.04	Max. Draw bar (loaded)	KN		60	60	60	60	58
5.05	Max. Gradeability (loaded/unloaded)	%		34/19	31/19	29/19	23/20	21/20
5.06	Weight (oil included)	kg		8300	9050	9650	11550	12660
5.07	Axle load (loaded) front/rear	kg		11940/1360	13400/1650	14500/2150	17845/2205	20167/2493
5.08	Axle load (unloaded) front/rear	kg		4130/4170	4060/4990	3870/5780	5082/6468	5570/7090
Engine specifications								
6.01	Engine manufacturer /mode			ISUZU 6BG1				
6.02	Engine rated power/rotational speed	Kw/rpm		82/2000				
6.03	Engine rated torque/rotational speed	Nm/rpm		415/1400--1600				
6.04	Cylinder number			6				
6.05	Engine displacement	L		6.494				

Optional engine model and truck main specifications

Truck specifications		CPCD50	CPCD60	CPCD70	CPCD85	CPCD100	CPCD50
Manufacturer							
Max. Travelling speed (loaded/unloaded)	km/h	26/30	26/30	26/30	26/30	26/30	26/30
Lifting speed (loaded/unloaded)	mm/s	500/520	500/520	485/520	390/420	330/350	530/550
Lowering speed (loaded/unloaded)	mm/s						
Max. Draw bar (loaded)	KN	62	62	62	60	60	60
Max. Gradeability (loaded/unloaded)	%	39/20	34/20	30/20	22/20	20/20	34/19
Weight (oil included)	kg	8150	8900	9500	11400	12510	8150
Axle load (loaded) front/rear	kg	11830/1320	13330/1570	14450/2050	17750/2150	20030/2480	11830/1320
Axle load (unloaded) front/rear	kg	4050/4100	4005/4895	3900/5600	6040/5360	5510/7000	4050/4100
Engine specifications		Cummins QSF3.8(Euro IIIA, CHINA STAGE III)					
Engine manufacturer /mode							
Engine rated power/rotational speed	Kw/rpm	86/2200					
Engine rated torque/rotational speed	Nm/rpm	470/1100~1700					
Cylinder number		4					
Engine displacement	L	3.8					



Ast: Right angle stacking aisle width
a: Safety clearance 200mm



Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front surface of the forks to the gravity of the standard load. the standard load means a cubic with 1200mm edge length. When mast is tilted forward, using non-standard forks or loading large goods, the load capacity will be reduced. The load capacity of standard mast at different load center can be known from this load chart.



CPCD60	CPCD70	CPCD85	CPCD100	CPCD50	CPCD60	CPCD70	CPCD85	CPCD100	CPCD50	CPCD60	CPCD70	CPQJYD50	CPQJYD60	CPQJYD70	CPCD50	CPCD60	CPCD70	CPCD85	CPCD100
26/30	26/30	26/30	26/30	24/29	24/29	24/29	24/28	24/28	26/30	26/30	26/30	28/30	28/30	28/30	26/30	26/30	26/30	26/30	26/30
530/550	510/540	390/420	330/350	510/530	510/530	500/530	390/420	330/350	450/470	440/470	420/460	420/440	420/440	420/440	550/570	550/570	550/570	430/450	350/370
WITHOUT LOAD≥300 WITH FULL LOAD≤600																			
60	60	60	58	63	63	62	60	58	42	40	40	60	60	60	62	62	62	56	56
31/19	29/19	23/20	21/20	38/19	35/19	32/19	23/20	21/20	23/19	20/19	20/19	38/19	35/19	31/19	42/22	36/20	32/20	24/20	21/20
8900	9500	11400	12510	8300	9050	9650	11550	12660	8300	9050	9650	7980	8730	9330	8150	8900	9500	11400	12510
13330/1570	14450/2050	17750/2150	20030/2480	11940/1360	13400/1650	14500/2150	17845/2205	20167/2493	11940/1360	13400/1650	14550/2150	11620/1360	13080/1650	14180/2150	11830/1320	13330/1570	14450/2050	17750/2150	20030/2480
4005/4895	3900/5600	5360/6040	5510/7000	4130/4170	4060/4990	3870/5780	5082/6468	5570/7090	4130/4170	4060/4990	3870/5780	3810/4170	3740/4990	3550/5780	4050/4100	4005/4895	3900/5600	5360/6040	5510/7000
Perkins 1104D-44TA				XICHAI CA6110				Mitsubishi S6S-T				PSI 4.3				Cummins QSB4.5(EU Stage IIIB、US EPA Tier 4(i)、CHINA STAGE III)			
83/2200				83/2000				63.9/2300				77/2300				82/2200			
418/1400				450/1400-1500				285/1700				332/1400				489/1500			
4				6				6				6				4			
4.4				7.127				4.29				4.3				4.5			

MANTRAC GROUP LOCATIONS

Mantrac Kenya Ltd.

Witu Road off Lusaka Road
Industrial Area, Mansour Complex
Nairobi
P.O. Box 30067-00100
Tel: +254 20 4995300
www.mantrackkenya.com

Mantrac Uganda Ltd.

Plot 17/41, 7th St.
Industrial Area
P.O. Box 7126
Kampala
Tel: +256 312330600
www.mantracuganda.com

Mantrac Sierra Leone Ltd.

6-8 Blackhall Road
P.O. Box 127
Freetown
Tel: +232 30 223317
www.mantrac-sl.com

Mantrac Ghana Ltd.

Ring Road West
North Industrial Area
P.O. Box 5207
Accra-North
Tel: +233 302 213777
www.mantracghana.com

Mantrac Liberia Ltd.

Somalia Drive
Bushrod Island
Monrovia
Tel: +231 777137646
www.mantraliberia.com

Unatrac Limited

Mansour House
188 Bath Road
Slough
Berkshire SL1 3GA
Tel: +44 (0)1753 695555
www.unatrac.com

Mantrac Nigeria Ltd.

2 Billingsway
(off Secretariat Road)
Oregun Industrial Estate
P.M.B 21480, Ikeja
Lagos
Tel: 234 12716300 ext 226
www.mantracnigeria.com

Mantrac Tanzania Ltd.

Plot no 4A, Nyerere Road
P.O. Box 9262
Dar es Salaam
Tel: +255 22 551 520
www.mantractanzania.com

