

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
Half enclosed 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	Low speed alarm
Wind shield	
Cleansing muffler	
Fire extinguisher muffler	
Fire extinguisher	
Rear working light	
Air conditioner (certain type)	
Travelling control system	



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2-3.5t

H3 series Internal Combustion Counterbalanced Forklift Truck



H3 series | HIGH EFFICIENCY
ENERGY SAVING

HELI
LIFTING THE FUTURE

25 YEARS TOP1 FORKLIFT MANUFACTURER AND SELLER
IN CHINA FOR CONSECUTIVE 25 YEARS



2-3.5t

H3 series Internal Combustion Counterbalanced Forklift Truck



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.

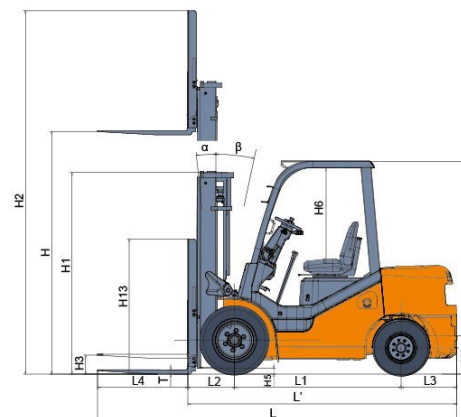


2-3.5t H3 series Internal Combustion Counterbalanced Forklift Truck



Manufacturer and technical parameters

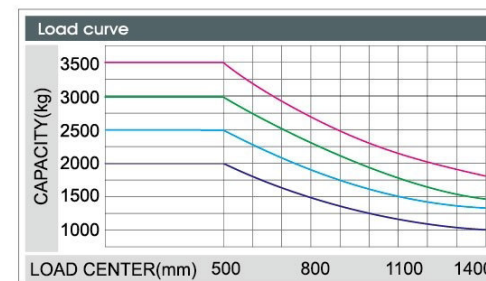
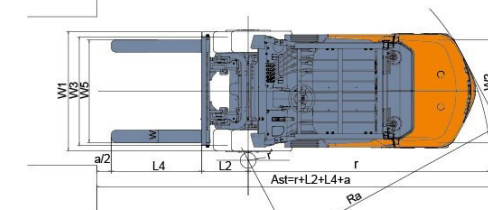
Character							
1.01	Manufacturer			HELI			
1.02	Model			CPC20 / CPCD20 / CP(Q)YD20 / CP(Q)YD20	CPC25 / CPCD25 / CP(Q)YD25 / CP(Q)YD25	CPC30 / CPCD30 / CP(Q)YD30 / CP(Q)YD30	CPC35 / CPCD35 / CP(Q)YD35 / CP(Q)YD35
1.03	Rated capacity	kg		2000	2500	3000	3500
1.04	Load center	mm		500			
1.05	Operation mode			Seat-type			
Size							
2.01	Max.lifting height	H	mm	3000	3000	3000	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	2170	2240	2400	2420
2.18	Min.turning radius(Interior)	r'	mm	180	180	200	200
2.19	Min.right angle stacking aisle width	Ra	mm	2200	2280	2380	2400
2.20	Mast tilting angle	α / β	%	6°/12°	6°/12°	6°/12°	6°/12°
2.21	Fork size	L4×W×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		4770/650	5480/820	6460/910	7470/830
3.03	Weight distribution unloaded (Front/Rear)	kg		1600/1820	1560/2240	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



CP(QXY)20
CP(QXY)D20
CPC20
CPCD20

CP(Q)(Y)25
CP(Q)(Y)D25
CPC25
CPCD25

CP(Q)(Y)30
CP(Q)(Y)D3
CPC30
CPCD30

CP(Q)(Y)3
CP(Q)(Y)D
CPC35
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					Mast tilting angle (°)	± a
		CRQ1M25/CRQ1M25/CP20/CP20	CRQ1M25/CRQ1M25/CP25/CP25	CRQ1Y30/CRQ1Y30/CP30/CP30	CRQ1M35/CRQ1M35/CP35/CP35	2-2.5t	3t	3.5t	CRQ1Y20/CRQ1Y20/CP20/CP20	CRQ1M25/CRQ1M25/CP25/CP25	CRQ1Y30/CRQ1Y30/CP30/CP30	CRQ1M35/CRQ1M35/CP35/CP35			
M200	2000	2000	2500	3000	3500	1500	1570	1680	3340	3720	4280	4700	6-12		
M250	2500	2000	2500	3000	3500	1750	1820	1930	3385	3765	4335	4750	6-12		
M300	3000	2000	2500	3000	3500	2000	2070	2180	3420	3800	4370	4800	6-12		
M330	3300	2000	2500	3000	3500	2150	2220	2330	3460	3840	4395	4830	6-12		
M350	3500	2000	2500	3000	3500	2250	2320	2430	3480	3860	4420	4850	6-12		
M370	3700	2000	2500	3000	3500	2350	2420	2530	3500	3880	4430	4870	6-12		
M400	4000	2000	2500	3000	3500	2550	2620	2730	3565	3945	4490	4940	6-12		
M425	4250	*1500	*2500	*3000	*3500	2675	2745	2855	3590	3970	4510	4970	6-12		
M450	4500	*1800	*2100	*3000	*3000	2800	2870	2980	3615	3995	4535	4990	6-12		
M500	5000	*1600	*1650	*2100	*2100	3050	3120	3230	3655	4035	4575	5040	6-12		
M550	5500	*1600	*1950	*2400	*2400	3350	3420	3530	3740	4120	4745	5245	3-6		
M600	6000	*1500	*1800	*2000	*2000	3600	3670	3780	3785	4165	4795	5285	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

Performance																			
Model		CPC20	CPCD20	CPC25	CPCD25	CPC30	CPCD30	CPC35	CPCD35	CP(Q)Y20	CP(Q)(Y)D20	CP(Q)Y25	CP(Q)(Y)D25	CP(Q)Y30	CP(Q)YD30	CP(Q)(Y)35	CP(Q)(Y)D35		
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	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	15/20	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			
Lowing 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	139.9/1800						184.7/1600-1800						176.5/1600					
Engine cylinder number-borexstroke		4-86×102						4-95.4×107						4-89×100					
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 - Bore×Stroke	Engine type	Emission
JMC HJ493	39/2500	165/1800	2.771	4	4-93×102	Diesel	CHINA STAGE II
DACHAI CA498	45/2500	170~180/1600~1800	3.168	4	4-98×105	Diesel	CHINA STAGE II
GCT K21	31.5/2200	140/1600	2.065	4	4-89×83	Gasoline or LPG	
Cummins Q5F2.8	36.5/2500	180/800~1800	2.8	4	4-94×100	Diesel	Euro IIIA
ISUZU 4JG2	35/2450	170/1700	3.059	4	4-95.4×107	Diesel	Euro IIIA
JMC HJ 493G43	36.8/2500	156/1800	2.771	4	4-93×102	Diesel	Euro IIIA
KUBOTA V2403	34.1/2400	155.9/1600	2.434	4	4-87 ×102.4	Diesel	Euro IIIA/ EPA T4I

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
		CPQW120/CPQW120/CPCD20	CPQW125/CPQW125/CPCD25	CPQW130/CPQW130/CPCD30	CPQW135/CPQW135/CPCD35		2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CPQW120/CPQW120/CPCD20	CPQW125/CPQW125/CPCD25	CPQW130/CPQW130/CPCD30	CPQW135/CPQW135/CPCD35		
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	1900	2250	2850	3200		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	1650	2400	2500		3045	3120	3230		2045	1910	2010	3805	4185	4640	5100	*3-6
ZM550	5500	1600	1950	2450	2500		3345	3420	3530		2345	2190	2310	3890	4270	4830	5295	*3-6
ZM600	6000	1500	1800	2200	2300		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 523mm.

三级全自由门架 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
		CPQW120/CPQW120/CPCD20	CPQW125/CPQW125/CPCD25	CPQW130/CPQW130/CPCD30	CPQW135/CPQW135/CPCD35		2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CPQW120/CPQW120/CPCD20	CPQW125/CPQW125/CPCD25	CPQW130/CPQW130/CPCD30	CPQW135/CPQW135/CPCD35	
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	+2900	2045	2190	2190	1045	955	960	3775	4155	4665	4980	6-6	
ZSM450	4500	+1750	+2150	+2700	+2800	2095	2240	2240	1095	1005	1010	3785	4165	4680	4995	6-6	
ZSM470	4700	+1800	+2300	+2900	+3000	2160	2240	2240	1160	1005	1010	3800	4180	4700	5015	6-6	
ZSM480	4800	+1200	+1250	+2500	+2600	2195	2340	2340	1195	1105	1110	3805	4185	4720	5025	6-6	
ZSM500	5000	+1600	+1650	+2400	+2450	2295	2440	2440	1295	1205	1210	3830	4210	4745	5060	6-6	
ZSM540	5400	+1450	+1500	+2250	+2300	2420	2565	2565	1420	1330	1335	3860	4240	4775	5090	6-6	
ZSM600	6000	+1600	+1800	+2100	+2200	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 496mm. 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.