



2-3.5ton

H SERIES INTERNAL COMBUSTION COUNTERBALANCED FORKLIFT TRUCK



H series / HIGH EFFICIENCY
ENERGY SAVING **New**



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COUNTERBALANCED FORKLIFT TRUCK

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ENERGY SAVING **New**

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 reposition 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.



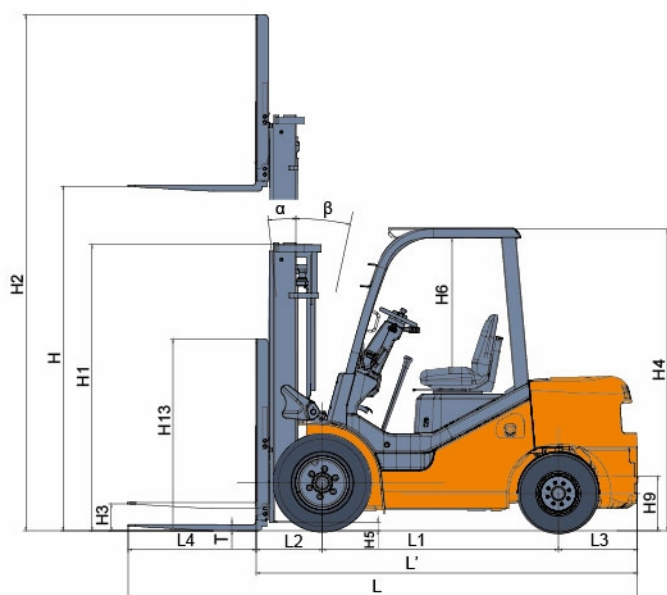


H SERIES INTERNAL COMBUSTION COUNTERBALANCED FORKLIFT TRUCK

2-3.5t

Manufacturer and technical parameters

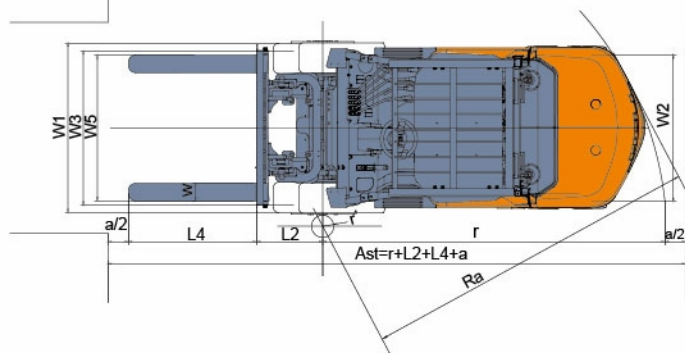
	Character						
1.01	Manufacturer			HELI			
1.02	Model			CPC20 / CPCD20 / CP(Q)(Y)20 / CP(Q)(Y)D20	CPC25 / CPCD25 / CP(Q)(Y)25 / CP(Q)(Y)D25	CPC30 / CPCD30 / CP(Q)(Y)30 / CP(Q)(Y)D30	CPC35 / CPCD35 / CP(Q)(Y)35 / CP(Q)(Y)D35
1.03	Rated capacity		kg	2000	2500	3000	3500
1.04	Load center		mm	500			
1.05	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 overahead 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×W×T	mm	920×122×40	1070×122×40	1070×125×45	1070×125×50
	Weight						
3.01	Total weight		kg	3448	3840	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			



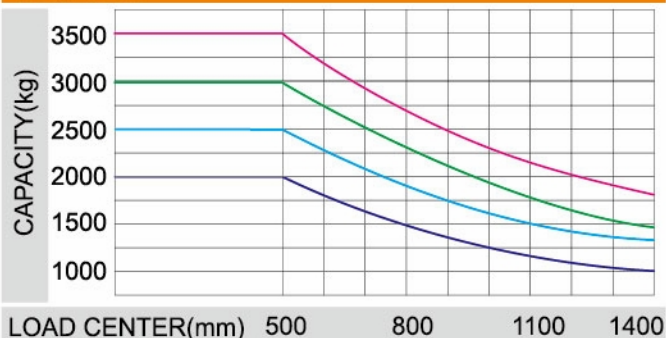
Ast: right angle stacking aisle width

a: Clearance

L4: Fork Length



Load curve



CP(Q)(Y)20
CP(Q)(Y)D20
CPC20
CPCD20

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

CP(Q)(Y)30
CP(Q)(Y)D30
CPC30
CPCD30

CP(Q)(Y)35
CP(Q)(Y)D35
CPC35
CPCD35

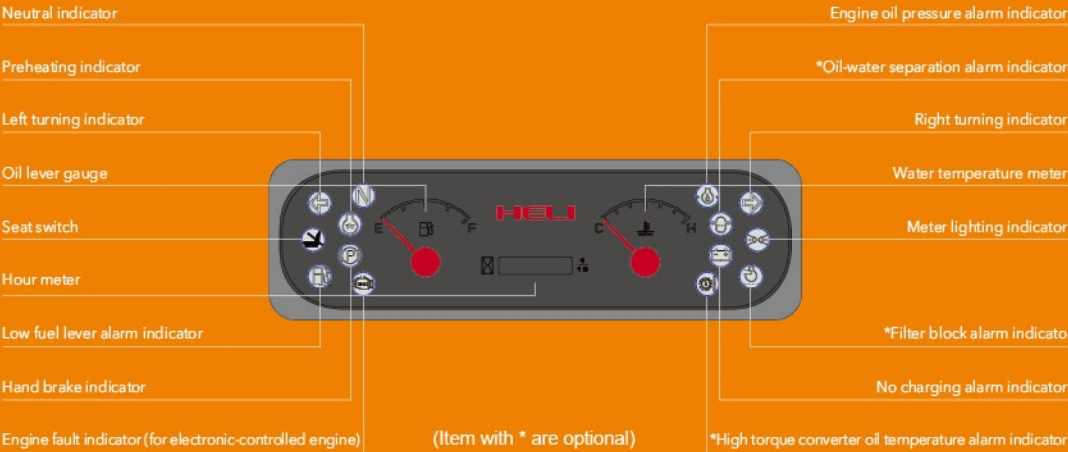
Note: The vertical axis stands for load capacity and the horizontal axis stands for load center which is calculated from the front of the fork. The base point of the standard load refers to the center position of the cube with 1000mm length of side. When mast is tilted forward, nonstandard fork usage 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 (°) α/β
		CP(Q)(Y)20/ CP(Q)(Y)D20/ CPC20/CPCD20	CP(Q)(Y)25/ CP(Q)(Y)D25/ CPC25/CPCD25	CP(Q)(Y)30/ CP(Q)(Y)D30/ CPC30/CPCD30	CP(Q)(Y)35/ CP(Q)(Y)D35/ CPC35/CPCD35	2-2.5t	3t	3.5t	CP(Q)(Y)20/ CP(Q)(Y)D20/ CPC20/CPCD20	CP(Q)(Y)25/ CP(Q)(Y)D25/ CPC25/CPCD25	CP(Q)(Y)30/ CP(Q)(Y)D30/ CPC30/CPCD30	CP(Q)(Y)35/ CP(Q)(Y)D35/ CPC35/CPCD35	
M200	2000	2000	2500	3000	3500	1500	1570	1680	3265	3640	4280	4700	6-12
M250	2500	2000	2500	3000	3500	1750	1820	1930	3310	3685	4335	4750	6-12
M300	3000	2000	2500	3000	3500	2000	2070	2180	3345	3750	4370	4800	6-12
M330	3300	2000	2500	3000	3500	2150	2220	2330	3370	3745	4395	4830	6-12
M350	3500	2000	2500	3000	3500	2250	2320	2430	3385	3760	4420	4850	6-12
M370	3700	2000	2500	3000	3500	2350	2420	2530	3400	3775	4430	4870	*6-12
M400	4000	2000	2500	3000	*3200	2550	2620	2730	3465	3840	4490	4940	*6-12
M425	4250	*1900	*2250	*2850	*3100	2675	2745	2855	3485	3860	4510	4970	*6-12
M450	4500	*1800	*2100	*2700	*3000	2800	2870	2980	3500	3875	4535	4990	*6-12
M500	5000	*1400	*1650	*2100	*2400	3050	3120	3230	3545	3920	4575	5040	*6-12
M550	5500	*1600	*1950	*2400	*2400	3350	3420	3530	3590	3965	4745	5245	*3-6
M600	6000	*1500	*1800	*2000	*2000	3600	3670	3780	3630	4005	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.

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
Overhead guard rain cover	changing

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	

Performance																	
Model		CPC20	CPCD20	CPC25	CPCD25	CPC30	CPCD30	CPC35	CPCD35	CP(Q)(Y)20	CP(Q)(Y)D20	CP(Q)(Y)25	CP(Q)(Y)D25	CP(Q)(Y)30	CP(Q)(Y)D30	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	139/1800						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			
Battery(Voltage/Capacity)	V/Ah	12/80												12/60			
Engine fuel tank capacity	L							60									
Tranmission 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
HJ493	39/2500	165/1800	2.771	4	4-93x102	柴油 Diesel
DACHAI CA498	45/2500	170~180/1600~1800	3.168	4	4-98x105	柴油 Diesel
GCT K21	31.5/2200	140/1600	2.065	4	4-89x83	汽油或液化气 Gasoline or LPG

WIDE VIEW FULL FREE 2-STAGE MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)				Mast overall height(forkto the ground)			Free lifting height (with backrest)			Service weight				Mast tilting angle (°) α/β
		CP(Q)(Y)20/ CPC20/ CPCD20	CP(Q)(Y)25/ CPC25/ CPCD25	CP(Q)(Y)30/ CPC30/ CPCD30	CP(Q)(Y)35/ CPC35/ CPCD35	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CP(Q)(Y)20/ CPC20/ CPCD20	CP(Q)(Y)25/ CPC25/ CPCD25	CP(Q)(Y)30/ CPC30/ CPCD30	CP(Q)(Y)35/ CPC35/ CPCD35	
ZM200	2000	2000	2500	3000	3500	1495	1570	1680	495	340	460	3640	3645	4330	4770	6-12
ZM250	2500	2000	2500	3000	3500	1745	1820	1930	745	590	710	3685	3690	4370	4820	6-12
ZM300	3000	2000	2500	3000	3500	1995	2070	2180	995	840	960	3750	3730	4420	4870	6-12
ZM330	3300	2000	2500	3000	3500	2145	2220	2330	1145	990	1100	3745	3760	4445	4895	6-12
ZM350	3500	2000	2500	3000	3500	2245	2320	2430	1245	1090	1210	3760	3775	4465	4915	6-12
ZM370	3700	2000	2500	3000	3500	2345	2420	2530	1370	1205	1310	3775	3790	4480	4935	6-12
ZM400	4000	2000	2500	3000	3500	2545	2620	2730	1545	1390	1510	3840	3855	4550	5000	6-12
ZM425	4250	1900	2250	2850	3100	2670	2745	2855	1670	1515	1635	3860	3875	4575	5025	6-6
ZM450	4500	1800	2100	2750	3000	2795	2870	2980	1795	1640	1760	3875	3900	4595	5050	6-6
ZM500	5000	1600	1650	2400	2500	3045	3120	3230	2045	1910	2010	3920	3940	4640	5100	3-6
ZM550	5500	1600	1950	2450	2500	3345	3420	3530	2345	2190	2310	3965	4130	4830	5295	3-6
ZM600	6000	1500	1800	2200	2300	3595	3670	3780	2595	2440	2560	4005	4175	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.

WIDE VIEW FULL FREE 3--STAGE MAST

Mast model	Max. lifting height (mm)	Load capacity (load center 500mm)				Mast overall height(forkto the ground)			Free lifting height (with backrest)			Service weight				Mast tilting angle (°) α/β
		CP(Q)(Y)20/ CPC20/ CPCD20	CP(Q)(Y)25/ CPC25/ CPCD25	CP(Q)(Y)30/ CPC30/ CPCD30	CP(Q)(Y)35/ CPC35/ CPCD35	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CP(Q)(Y)20/ CPC20/ CPCD20	CP(Q)(Y)25/ CPC25/ CPCD25	CP(Q)(Y)30/ CPC30/ CPCD30	CP(Q)(Y)35/ CPC35/ CPCD35	
ZSM360	3600	1900	2400	2900	3200	1795	1946	1946	755	670	675	3540	3900	4610	4925	6-6
ZSM400	4000	1900	2400	2900	3200	1920	2065	2065	880	795	800	3570	3930	4640	4955	6-6
ZSM435	4350	1850	2200	2800	2900	2045	2190	2190	1005	920	925	3600	3960	4665	4980	6-6
ZSM450	4500	1750	2150	2700	2800	2095	2240	2240	1055	970	975	3610	3970	4680	4995	6-6
ZSM470	4700	1800	2300	2900	3000	2160	2240	2240	1120	970	975	3625	3985	4700	5015	6-6
ZSM480	4800	1700	1950	2500	2600	2195	2340	2340	1155	1070	1075	3630	3990	4720	5025	6-6
ZSM500	5000	1600	1650	2400	2450	2295	2440	2440	1255	1170	1175	3655	4015	4745	5060	6-6
ZSM540	5400	1450	1500	2250	2300	2420	2565	2565	1380	1295	1300	3685	4045	4775	5090	3-6
ZSM600	6000	950	1000	1500	1550	2645	2790	2790	1605	1520	1525	3765	4125	4865	5180	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 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.