

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

- | | |
|-----------------------------------|--------------------------------------|
| Hom | Standard fork |
| Control valve | Integrated electric box |
| Wholly hydraulic-powered steering | Hydraulic oil circuit filter |
| Ser nisuspension seat | Flow regulator |
| Backrest | Wide view mast |
| Back view mirror | Air inleaking 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 | |
| Cleansing muffler | |
| Fire extinguisher muffler | |
| Fire extinguisher | |
| Rear working light | |
| Air conditioner (certain type) | |
| Travelling control system | |

2-3.5 ton
H SERIES INTERNAL COMBUSTION
COUNTERBALANCED FORKLIFT TRUCK



H series / HIGH EFFICIENT ENERGY EFFICIENT **New**



H SERIES INTERNAL COMBUSTION
COUNTERBALANCED FORKLIFT TRUCK

2-3.5ton

New H series

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.



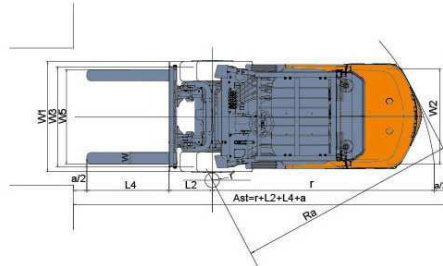
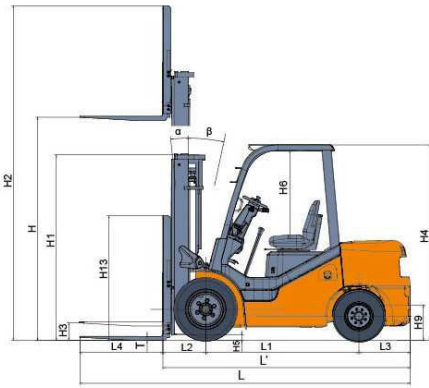


H SERIES INTERNAL COMBUSTION COUNTERBALANCED FORKLIFT TRUCK 2-3.5ton



Manufacturers Data and Design Characteristics

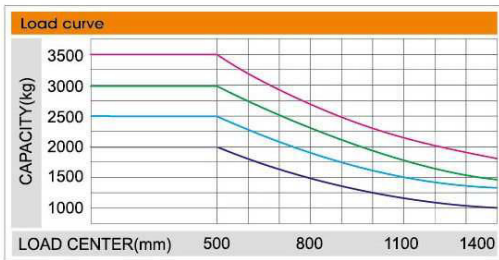
Character		HELI																															
		CPC20	CPCD20	CPC25	CPCD25	CPC30	CPCD30	CPC35	CPCD35	CP(Q)(Y)20	CP(Q)(Y)D20	CP(Q)(Y)25	CP(Q)(Y)D25	CP(Q)(Y)30	CP(Q)(Y)D30	CP(Q)(Y)35	CP(Q)(Y)D35																
		Diesel						Gasoline or LPG																									
1.1	Manufacturer	HELI																															
1.2	Model																																
1.3	Engine type																																
1.4	Rated capacity	kg	2000	2500	3000	3500	2000	2500	3000	3500	2000	2500	3000	3500	2000	2500	3000	3500															
1.5	Load center	mm	500																														
1.6	Operation mode	Seat-type																															
Size																																	
2.1	Max. Lifting height	H	mm 3000																														
2.1	Mast overall height (fork to the ground and mast be vertical)	H1	mm	2000	2000	2065	2180	2000	2000	2065	2180	2000	2000	2065	2180	2000	2000	2065	2180														
2.3	Max. Fork lifting height (with backrest)	H2	mm	4030	4030	4245	4235	4030	4030	4245	4235	4030	4030	4245	4235	4030	4030	4245	4235														
2.4	Free lift height	H3	mm	165	165	160	170	165	165	160	170	165	165	160	170	165	165	160	170														
2.5	Overall height (overhead guard)	H4	mm	2150				2170				2150				2170																	
2.6	Min. Ground clearance(at the mast)	H5	mm	115	115	135	135	115	115	135	135	115	115	135	135	115	115	135	135														
2.7	Distance from the surface of the seat to the overhead guard	H6	mm	1030						1030																							
2.8	Traction pin height	H9	mm	275	275	280	280	275	275	280	280	275	275	280	280	275	275	280	280														
2.9	Backrest height (calculated from the surface of the fork)	H13	mm	1000	1000	1227	1222	1000	1000	1227	1222	1000	1000	1227	1222	1000	1000	1227	1222														
2.10	Overall length (with fork/without fork)	(L/L')	mm	3500/2580	3708/2638	3818/2748	3836/2766	3500/2580	3708/2638	3818/2748	3836/2766	3500/2580	3708/2638	3818/2748	3836/2766	3500/2580	3708/2638	3818/2748	3836/2766														
2.11	Wheel base	L1	mm	1650	1650	1700	1700	1650	1650	1700	1700	1650	1650	1700	1700	1650	1650	1700	1700														
2.12	Front overhang	L2	mm	473	473	478	496	473	473	478	496	473	473	478	496	473	473	478	496														
2.13	Rear overhang	L3	mm	457	515	570	570	457	515	570	570	457	515	570	570	457	515	570	570														
2.14	Overall width	W1	mm	1150	1150	1225	1225	1150	1150	1225	1225	1150	1150	1225	1225	1150	1150	1225	1225														
2.15	Tread (front tread/rear tread)	(W3/W2)	mm	970/970	970/970	1000/970	1000/970	970/970	970/970	1000/970	1000/970	970/970	970/970	1000/970	1000/970	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	1030/244	1030/244	1060/250	1060/250	1030/244	1030/244	1060/250	1060/250	1030/244	1030/244	1060/250	1060/250														
2.17	Min. Turning radius (exterior)	r	mm	2255	2310	2400	2440	2255	2310	2400	2440	2255	2310	2400	2440	2255	2310	2400	2440														
2.18	Min. Turning radius(interior)	r'	mm	180	180	200	200	180	180	200	200	180	180	200	200	180	180	200	200														
2.19	Min.Right angle stacking aisle width	Ra	mm	2274	2330	2380	2415	2274	2330	2380	2415	2274	2330	2380	2415	2274	2330	2380	2415														
2.20	Mast tilting angle	α/β	%	6° /12°																													
2.21	Fork size	L4xWxT	mm	920×122×40	1070 × 122 × 40	1070 × 125 × 45	1070 × 125 × 50	920 × 122 × 40	1070 × 122 × 40	1070 × 125 × 45	1070 × 125 × 50	920 × 122 × 40	1070 × 122 × 40	1070 × 125 × 45	1070 × 125 × 50	920 × 122 × 40	1070 × 122 × 40	1070 × 125 × 45	1070 × 125 × 50														
Performance																																	
3.1	Max. Travelling speed (loaded/unloaded)	km/h	17/19	17/19	19/20	19/19	17/19	17/19	19/20	19/20	17/19	17/19	19/20	19/20	17/19	17/19	19/20	19/20	17/19														
3.2	Lifting speed (loaded/unloaded)	mm/s	560/600	560/600	500/550	400/420	520/570	520/570	420/480	370/410	560/600	560/600	500/550	400/420	520/570	520/570	420/480	370/410	560/600														
3.3	Lowering speed (loaded/unloaded)	mm/s	450/500	450/500	450/550	350/400	450/500	450/500	450/550	350/400	450/500	450/500	450/550	350/400	450/500	450/500	450/550	350/400	450/500														
3.4	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	15/10.5														
3.5	Max. Gradability (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	15/20														
weight																																	
4.1	Total weight	kg	3448	3840	4370	4800	3448	3840	4370	4800	3448	3840	4370	4800	3448	3840	4370	4800															
4.2	Weight distribution loaded(front/rear)	kg	4794/654	5520/820	6460/910	7470/830	4794/654	5520/820	6460/910	7470/830	4794/654	5520/820	6460/910	7470/830	4794/654	5520/820	6460/910	7470/830															
4.3	Weight distribution unloaded(front/rear)	kg	1643/1805	1584/2256	1710/2660	1880/2920	1643/1805	1584/2256	1710/2660	1880/2920	1643/1805	1584/2256	1710/2660	1880/2920	1643/1805	1584/2256	1710/2660	1880/2920															
wheel and tyre																																	
5.1	Wheel number x=drive wheel (front/rear)	2X/2																															
5.2	Tyre type (front/rear)	Pneumatic tyre																															
5.3	Tyre size (front/rear)	7.00-12-12PR/6.00-9-10PR				7.00-12-12PR/6.00-9-10PR				28 x 9-15-12PR/6.50-10-10PR				28 x 9-15-14PR/6.50-10-10PR				7.00-12-12PR/6.00-9-10PR				7.00-12-12PR/6.00-9-10PR				28 x 9-15-12PR/6.50-10-10PR				28 x 9-15-14PR/6.50-10-10PR			
5.4	Service brake	Hydraulic-Foot Pedal																															
5.5	Parking brake	Mechanical-Hand Lever																															
Drive and transmission control device																																	
6.1	Battery (voltage/capacity)	V/Ah	12/80																														
6.2	Engine mode	ISUZU C240PKJ				ISUZU 4JG2				GCT K25																							
6.3	Engine rated power	kW/rpm	35.4/2500				44.9/2450				37.4/2400																						
6.4	Engine rated torque	Nm/rpm	139/1800				184.7/1600-1800				176.5/1600																						
6.5	Engine cylinder number-borexstroke	4-86×102																															
6.6	Engine displacement	L	2.369																														
6.7	Engine fuel tank capacity	L	3.05																														
6.8	Transmission box shifting gears (front/ rear type)	60																															
		1-1Power Shift T/M / T/M 2-2 Manual Shift T/M																															



Ast: Right angle stacking aisle width

a: Clearance

L4: Fork Length



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.

CP(Q)(Y)20	CP(Q)(Y)25	CP(Q)(Y)30	CP(Q)(Y)35
CP(Q)(Y)D20	CP(Q)(Y)D25	CP(Q)(Y)D30	CP(Q)(Y)D35
CPC20	CPC25	CPC30	CPC35
CPCD20	CPCD25	CPCD30	CPCD35

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
		CP(Q)(Y)20/ CPC20/CPD20	CP(Q)(Y)25/ CPC25/CPD25	CP(Q)(Y)30/ CPC30/CPD30	CP(Q)(Y)35/ CPC35/CPD35	2-2.5t	3t	3.5t	CP(Q)(Y)20/ CPC20/CPD20	CP(Q)(Y)25/ CPC25/CPD25	CP(Q)(Y)30/ CPC30/CPD30	CP(Q)(Y)35/ CPC35/CPD35	
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	6-6 *6-12
M400	4000	2000	2500	3000	3500	2550	2620	2730	3465	3840	4490	4940	6-6 *6-12
M425	4250	1900 *2000	2250 *2500	2850 *3000	3100 *3200	2675	2745	2855	3485	3860	4510	4970	6-6 *6-12
M450	4500	1800 *1900	2100 *2400	2600 *3000	3000 *3050	2800	2870	2980	3500	3875	4535	4990	6-6 *6-12
M500	5000	1600 *1700	1650 *2200	2100 *2850	2100 *2850	3050	3120	3230	3545	3920	4575	5040	6-6 *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.

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 tilt angle (°) α/β
		CP(Q)(Y)20/ CPC20/CPD20	CP(Q)(Y)25/ CPC25/CPD25	CP(Q)(Y)30/ CPC30/CPD30	CP(Q)(Y)35/ CPC35/CPD35	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CP(Q)(Y)20/ CPC20/CPD20	CP(Q)(Y)25/ CPC25/CPD25	CP(Q)(Y)30/ CPC30/CPD30	CP(Q)(Y)35/ CPC35/CPD35	
ZM200	2000	2000	2500	3000	3500	1495	1570	1680	495	370	500	3640	3645	4330	4770	6-12
ZM250	2500	2000	2500	3000	3500	1745	1820	1930	745	620	750	3695	3690	4370	4820	6-12
ZM300	3000	2000	2500	3000	3500	1995	2070	2180	995	870	1000	3750	3730	4420	4870	6-12
ZM330	3300	2000	2500	3000	3500	2145	2220	2330	1145	1020	1150	3745	3760	4445	4895	6-12
ZM350	3500	2000	2500	3000	3500	2245	2320	2430	1245	1120	1250	3760	3775	4465	4915	6-6 *6-12
ZM370	3700	2000	2500	3000	3500	2345	2420	2530	1370	1230	1350	3775	3790	4480	4935	6-6 *6-12
ZM400	4000	2000	2500	3000	3500	2545	2620	2730	1545	1420	1550	3840	3855	4550	5000	6-6 *6-12
ZM425	4250	1900 *2000	2250 *2500	2850 *3000	3100 *3200	2670	2745	2855	1670	1545	1675	3860	3875	4575	5025	6-6 *6-12
ZM450	4500	1800 *1900	2100 *2400	2600 *3000	3000 *3050	2795	2870	2980	1795	1670	1800	3875	3900	4595	5050	6-6 *6-12
ZM500	5000	1600 *1700	1650 *2200	2100 *2850	2100 *2850	3045	3120	3230	2045	1920	2050	3920	3940	4640	5100	*3-6
ZM550	5500	*1600	*1950	*2450	*2500	3345	3420	3530	2345	2220	2350	3965	4130	4830	5295	*3-6
ZM600	6000	*1500	*1800	*2200	*2300	3595	3670	3780	2595	2470	2600	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 1-1.1t 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 450mm. 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 (fork to the ground)			Free lifting height (with backrest)			Service weight				Mast tilt angle (°) α/β
		CP(Q)(Y)20/ CPC20/CPD20	CP(Q)(Y)25/ CPC25/CPD25	CP(Q)(Y)30/ CPC30/CPD30	CP(Q)(Y)35/ CPC35/CPD35	2-2.5t	3t	3.5t	2-2.5t	3t	3.5t	CP(Q)(Y)20/ CPC20/CPD20	CP(Q)(Y)25/ CPC25/CPD25	CP(Q)(Y)30/ CPC30/CPD30	CP(Q)(Y)35/ CPC35/CPD35	
ZSM360	3600	1900	2400	2900	3300	1795	1946	1946	755	740	740	3540	3900	4610	4925	6-6 *6-6
ZSM400	4000	1900	2400	2900	3300	1920	2065	2065	880	865	865	3570	3930	4640	4955	6-6 *6-6
ZSM435	4350	1850 *1900	2200 *2400	2800 *2900	2900 *3000	2045	2190	2190	1005	990	990	3600	3960	4665	4980	6-6 *6-6
ZSM450	4500	1750 *1800	2150 *2300	2700 *2800	2800 *2900	2095	2240	2240	1055	1040	1040	3610	3970	4680	4995	6-6 *6-6
ZSM470	4700	1700 *1800	2000 *2300	2600 *2800	2600 *2900	2160	2240	2240	1120	1040	1040	3625	3985	4700	5015	6-6 *6-6
ZSM480	4800	1700 *1800	1950 *2300	2500 *2800	2600 *2900	2195	2340	2340	1155	1140	1140	3630	3990	4720	5025	6-6 *6-6
ZSM500	5000	1600 *1750	1650 *2250	2100 *2750	2400 *2850	2295	2440	2440	1255	1240	1240	3655	4015	4745	5060	6-6 *6-6
ZSM540	5400	1450 *1700	1500 *2150	2000 *2650	2300 *2700	2420	2565	2565	1380	1365	1365	3685	4045	4775	5090	3-6 *3-6
ZSM600	6000	950 *1600	1000 *1800	1500 *2100	1550 *2200	2645	2790	2790	1605	1590	1590	3765	4125	4865	5180	3-6 *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 1-1.1t 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.

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
ISUZU 4JG2	44.9/2450	184.7/1600-1800	3.05	4
HJ493	39/2500	165/1800	2.771	4
Dachai CA498	45/2500	170~180/1600~1800	3.168	4
GCT K21	31.5/2200	140/1600	2.065	4