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XF Series Box Car Special Forklift

with capacities of 8,000 to 12,000lbs

Making Material Handling Easier
SINCE 1956



CONCEPT

As a part of the XF series from Hangcha Group, the Box Car Special forklift adds a large capacity cushion tire truck to our full line of forklifts. This forklift was designed with a vertical counterweight to meet tight spaced, railroad car applications. The Box Car Special is also versatile enough to meet the demands of typical large capacity cushion forklifts or become a paper roll special by changing the mast to a paper roll clamp. This forklift also includes the latest advancements from Hangcha. These advancements include LED efficient lighting, a load-sensing hydraulic system, reliable lpg engine, noise/vibration control, and a new control system. This is the Box Car Special forklift from Hangcha Group.



LED Light System and Environmentally-Friendly Materials



LED lights are used throughout the entire truck. The lights are energy efficient, have a longer service life, and offer a significant increase in performance.

Environmentally-friendly materials are also used throughout the truck to minimize environmental damage and impact.

Large LCD Instrument Panel



The newly developed LCD instrument display has additional functions and offers more stable performance. Important information including the running status of the entire truck and a check engine light can be displayed. This allows the operator to easily understand the status of the truck for easy maintenance.



Suspension Seat

61.8 INCHES
Short Wheelbase



The Wide View Mast Offers Better Visibility

New type of steel channels and mast system of brand-new design are applied to increase visibility in front of the driver.



Low LPG Fuel Warning Indicator

Maintenance Hatch with a Safety Latch

The maintenance hatch opens wide enough to provide easy serviceability of key components. The safety latch prevents the hatch from compromising operator safety when using the truck.

Reliable Hydraulic System

The hydraulic system has a longer service life and an increase in efficiency thanks to the optimized hydraulic breather structure with a built-in return oil filter and the load-sensing hydraulic steering system.

Optimized Cooling System

The cooling system has been designed to maximize cooling and increase the reliability of the engine when working under heavy loads. This system uses an aluminum radiator, independent oil cooler, optimized heat transfer channel and a dual-hole counterweight to increase cooling efficiency.

The New Integrated Fuse Box

The next generation of integrated fuse box has been added to the truck. It offers a better layout, ease of service and maintenance, and is waterproof. The entire truck is also equipped with waterproof connectors to increase the electronics' reliability.



Panoramic Rear View Mirror

The panoramic rear view mirror allows the operator to have wider rear visibility when operating the forklift.





TOUGH TRUCKS



PSI 4.3L LPG Engine

The PSI 4.3L LPG engine has the power and torque to get the job done. This engine is also electronically controlled to increase the fuel economy and the reliability of the trucks.



OKAMURA Transmission

The world-renown OKAMURA transmission, with the Power Take-Off (PTO) feature, is used in our Box Car Special forklift. This transmission was chosen as apart of our forklift's design for its reliability. The gear pump is also extremely efficient.

Ergonomic Design

The small diameter, adjustable steering wheel, electro-hydraulic steering, and the combination switch increase the ease of operation and operator comfort substantially.



Large Hand Grip

The large hand grip on the overhead guard is designed to allow the operator to get in and out of the truck safer and easier.



High-Strength Overhead Guard

The overhead guard is fabricated with specially shaped steel tubes to increase its structural rigidity and strength. It is also designed to be easily disassembled and reassembled for repairs. The guard features a flexible connection between it and the chassis to decrease vibrations. All of these features are responsible for increasing operator safety and comfort.

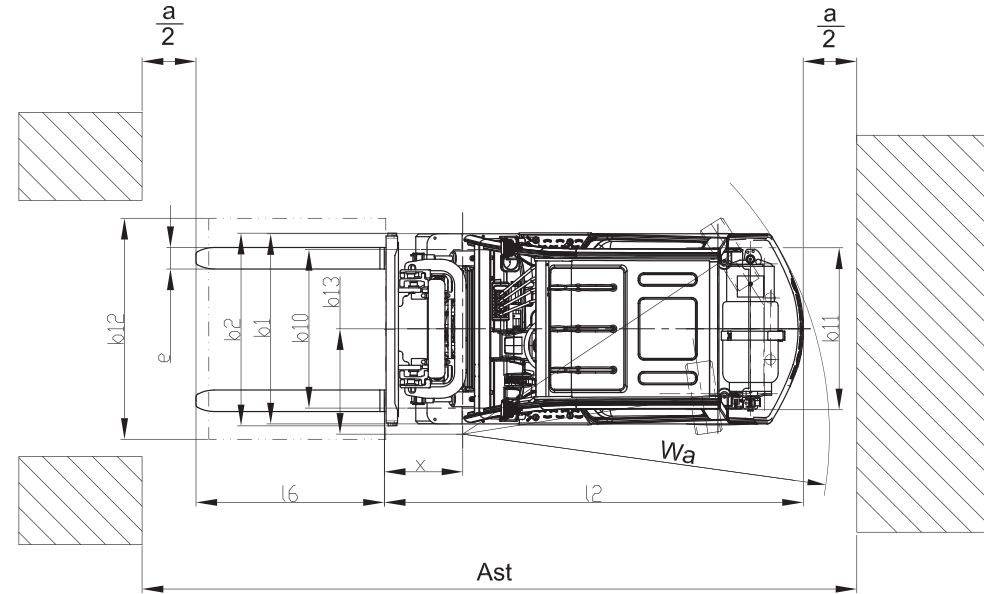
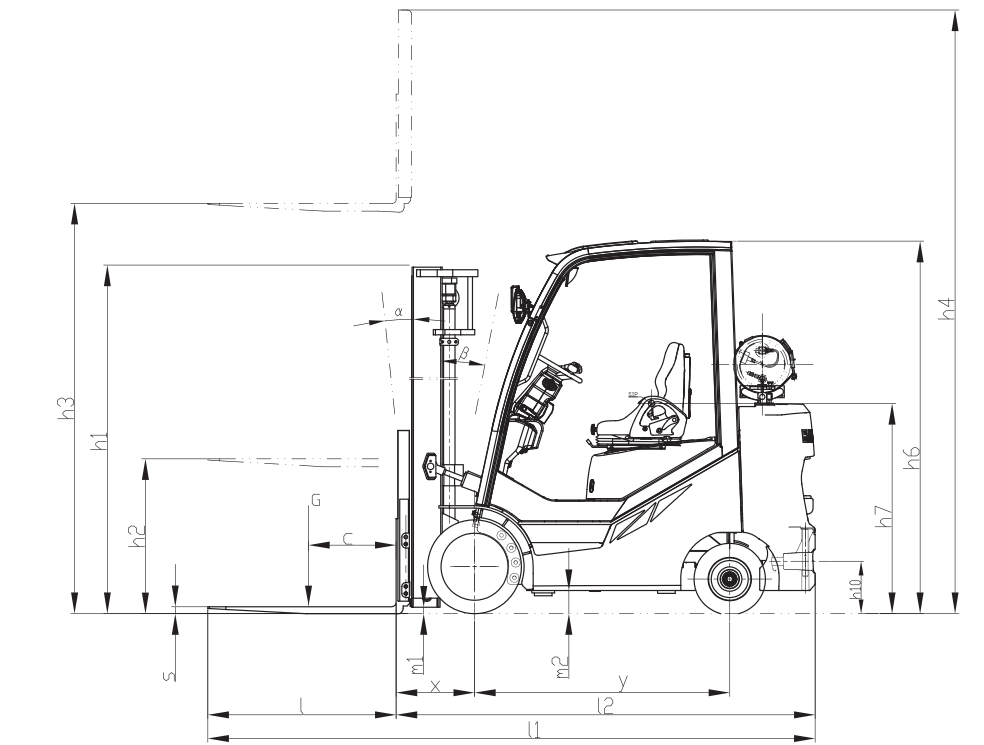


Steering Axle

The steering axle uses large conical bearings on the master pin, buffer blocks, and a large-diameter steering cylinder to substantially increase the reliability and service life of the steering system.

XF Series Box Car Special Forklift Specification

Distinguishing Marks	1.1 Manufacturer		HANGCHA GROUP CO.,LTD.				
		HCFA Model		FP35C	FP45C	FP55C	FP55PRS
	1.2 Manufacturer's Type Designation		CPYD35-XW688-CB	CPYD45-XW688-CB	CPYD55-XW688-CB	CPYD55-XW688-CBP	
	1.3 Drive: electric (battery or mains), diesel, petrol, fuel gas		LPG	LPG	LPG	LPG	
	1.4 Operator Type: hand, pedestrian, standing, seated, order-picker		Seated	Seated	Seated	Seated	
	1.5 Rated Capacity/Rated Load	Q lb (kg)	8000(3500)	10000(4500)	12000(5500)	12000(5500)	
	1.6 Load Centre Distance	c in(mm)	24(600)	24(600)	24(600)	24(600)	
	1.7 Load Distance, centre of drive axle to fork	x in(mm)	17.7(450)	18.1(460)	18.5(470)	18.5(470)	
	1.8 Wheelbase	y in (mm)	61.8(1570)	61.8(1570)	70.5(1790)	70.5(1790)	
Weight	2.1 Service Weight		lb(kg)	13230(6000)	15080(6840)	16755(7600)	16755(7600)
	2.2 Axle Loading, laden front/rear		lb(kg)	18560/2670(8290/1210)	22060/3020(9970/1370)	25625/3130(11680/1420)	25625/3130(11680/1420)
	2.3 Axle Loading, unladen front/rear		lb(kg)	5405/7825(2450/3550)	5290/9790(2400/4440)	6375/10380(2890/4710)	6375/10380(2890/4710)
Tires, Chassis	3.1 Tires: solid rubber, superelastic, pneumatic, polyurethane			Cushion	Cushion	Cushion	Cushion
	3.2 Tire Size, front			22×9-16	22×12-16	22×12-16	22×12-16
	3.3 Tire Size, rear			18×8-12.125	18×8-12.125	18×8-12.125	18×8-12.125
	3.4 Wheels, number front / rear (x = driven wheels)			2×/2	2×/2	2×/2	2×/2
	3.5 Tread, front		b10 in (mm)	41(1041)	43.9(1115.2)	43.9(1115.2)	43.9(1115.2)
	3.6 Tread, rear		b11 in(mm)	42.3(1074)	44.3(1125)	44.3(1125)	44.3(1125)
Dimensions	4.1 Tilt of Mast/Fork Carriage Forward/Backward		α/β (°)	5/6	5/6	5/6	5/6
	4.2 Height, mast lowered		h1 in (mm)	86.2(2190)	86.2(2190)	86.2(2190)	86.2(2190)
	4.3 Free Lift		h2 in(mm)	4.3(110)	4.3(110)	4.7(120)	4.7(120)
	4.4 Lift		h3 in (mm)	118.1(3000)	118.1(3000)	118.1(3000)	118.1(3000)
	4.5 Height, mast extended		h4 in (mm)	166.3(4225)	166.3(4225)	166.3(4225)	166.3(4225)
	4.6 Height of Overhead Guard		h5 in (mm)	86.5 (2198)	86.5 (2198)	86.5 (2198)	86.5 (2198)
	4.7 Seat Height Relating to SIP		h7 in (mm)	51.1(1299)	51.1(1299)	51.1(1299)	51.1(1299)
	4.8 Coupling Height		h10 in (mm)	14.6(370)	14.6(370)	14.6(370)	14.6(370)
	4.9 Overall Length		l1 in (mm)	138.6(3520)	142.3(3615)	154.3(3920)	154.3(3920)
	4.10 Length to Face of Forks		l2 in (mm)	96.5(2450)	100.2(2545)	106.3(2700)	106.3(2700)
	4.11 Overall Width (without backrest)		b1 in(mm)	50(1270)	55.9(1420)	55.9(1420)	55.9(1420)
	4.12 Fork Dimensions		s/e/l in (mm)	2×4.8×42(50×122×1070)	2×6×42(50×150×1070)	2.4×6×48(60×150×1220)	2.4×6×48(60×150×1220)
	4.13 Fork Carriage DIN 15 173 --- ISO 2328, class/type A,B			Class 3A	Class 3A	Class 4A	Class 4A
	4.14 Backrest Width		b2 in (mm)	45.8(1164)	51.7(1314)	51.7(1314)	51.7(1314)
	4.15 Fork-Carriage Width		b3 in(mm)	43.3(1100)	49.2(1250)	49.2(1250)	49.2(1250)
	4.16 Distance between Fork-Arms		b5 in (mm)	10-41.3(255-1050)	12.2-47.2(310-1200)	12.2-46.9(310-1190)	12.2-46.9(310-1190)
	4.17 Ground Clearance, laden, below mast		m1 in (mm)	3.1(80)	3.1(80)	3.1(80)	3.1(80)
	4.18 Ground Clearance, centre of wheelbase		m2 in (mm)	5.9(149)	5.9(149)	5.9(149)	5.9(149)
	4.19.1 Aisle Width for Pallets 39" x 47" Crossways		Ast in (mm)	141.3(3590)	145.3(3690)	151.6(3850)	151.6(3850)
	4.19.2 Aisle Width for Pallets 31.5" x 47" Lengthways		Ast in (mm)	149.2(3790)	153.1(3890)	159.4(4050)	159.4(4050)
	4.20 Turning Radius		Wa in(mm)	84.3(2140)	87.8(2230)	93.5(2380)	93.5(2380)
4.21 Minimum Plotting Distance		b13 in(mm)	24.3(617)	24.3(617)	25.3(642)	25.3(642)	
Performance Data	5.1 Travel Speed, laden/unladen		mph(km/h)	12.2/12.9(19.7/20.8)	12.1/12.8(19.5/20.6)	11.4/12.1(18.3/19.4)	11.4/12.1(18.3/19.4)
	5.2 Lift Speed, laden/unladen		ft/min(m/s)	104.3/114.2(0.53/0.58)	92.5/102.4(0.47/0.52)	78.7/88.6(0.40/0.45)	78.7/88.6(0.40/0.45)
	5.3 Lowering Speed, laden/unladen		ft/min(m/s)	98.4/88.6(0.50/0.45)	98.4/88.6(0.50/0.45)	98.4/88.6(0.50/0.45)	98.4/88.6(0.50/0.45)
	5.4 Drawbar Pull, laden/unladen		N	42000/16500	44000/16500	48000/18400	48000/18400
	5.5 Gradeability, laden/unladen		%	39/16	36/16	34/16	34/16
	5.6 Service Brake			Hydraulic	Hydraulic	Hydraulic	Hydraulic
	5.7 Parking Brake			Mechanical	Mechanical	Mechanical	Mechanical
Combustion Engine	6.1 Engine Manufacturer/Type			PSI 4.3L	PSI 4.3	PSI 4.3L	PSI 4.3L
	6.2 Engine Power		hp (kw)	105(77)	105(77)	105(77)	105(77)
	6.3 Rated Speed		r/min	2300	2300	2300	2300
	6.4 Number of Cylinders/Displacement		(-)/(cm ³)	6/4294	6/4294	6/4294	6/4294
	6.5 Generator		A	70	70	70	70
	6.6 Vehicle Electrical System Voltage		V	12	12	12	12
	6.7 Battery Voltage/Nominal Capacity		V/Ah	12/60	12/60	12/60	12/60
	6.8 Rated Torque		N·m/r/min	332.85/1400	332.85/1400	332.85/1400	332.85/1400
	6.9 Transmissions Manufacturer			OKAMURA	OKAMURA	OKAMURA	OKAMURA
	6.10 Transmissions Type			Powershift	Powershift	Powershift	Powershift
	6.11 Stage FWD/RVS			1/1	1/1	1/1	1/1
Additional Data	7.1 Operating Pressure for Attachments		psi(MPa)	2683(18.5)	2683(18.5)	2683(18.5)	2683(18.5)
	7.2 Hydraulic Tank - Capacity (drain & refill)		gal(liter)	18.5(70)	21.1(80)	26.4(100)	26.4(100)
	7.3 Fuel tank Capacity		gal(liter)	NA	NA	NA	NA



$Ast = L6 + X + Wa + a$ $a = 200$

