

# C 50s

Diesel or LPG engine

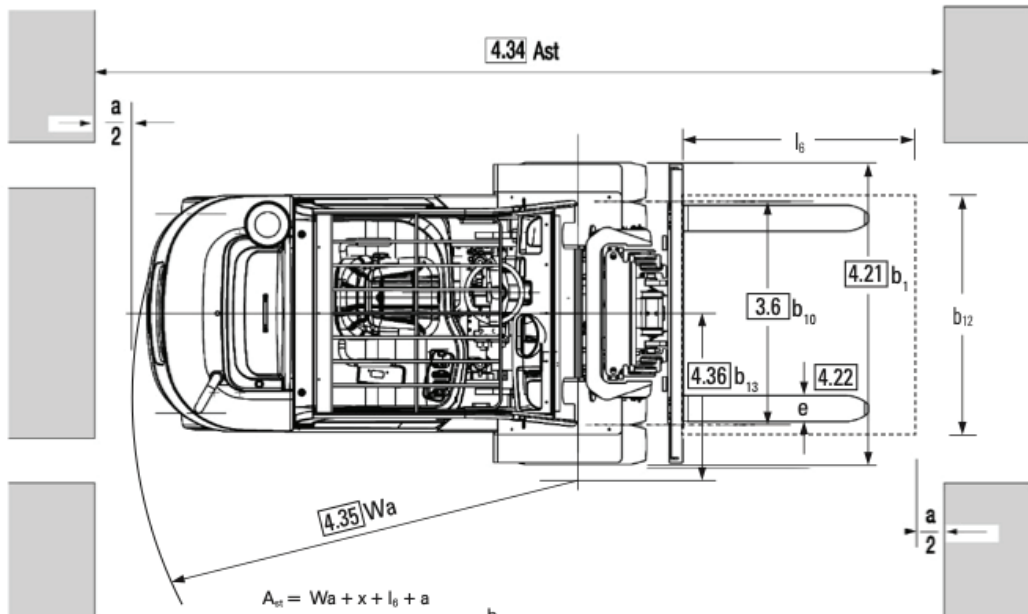
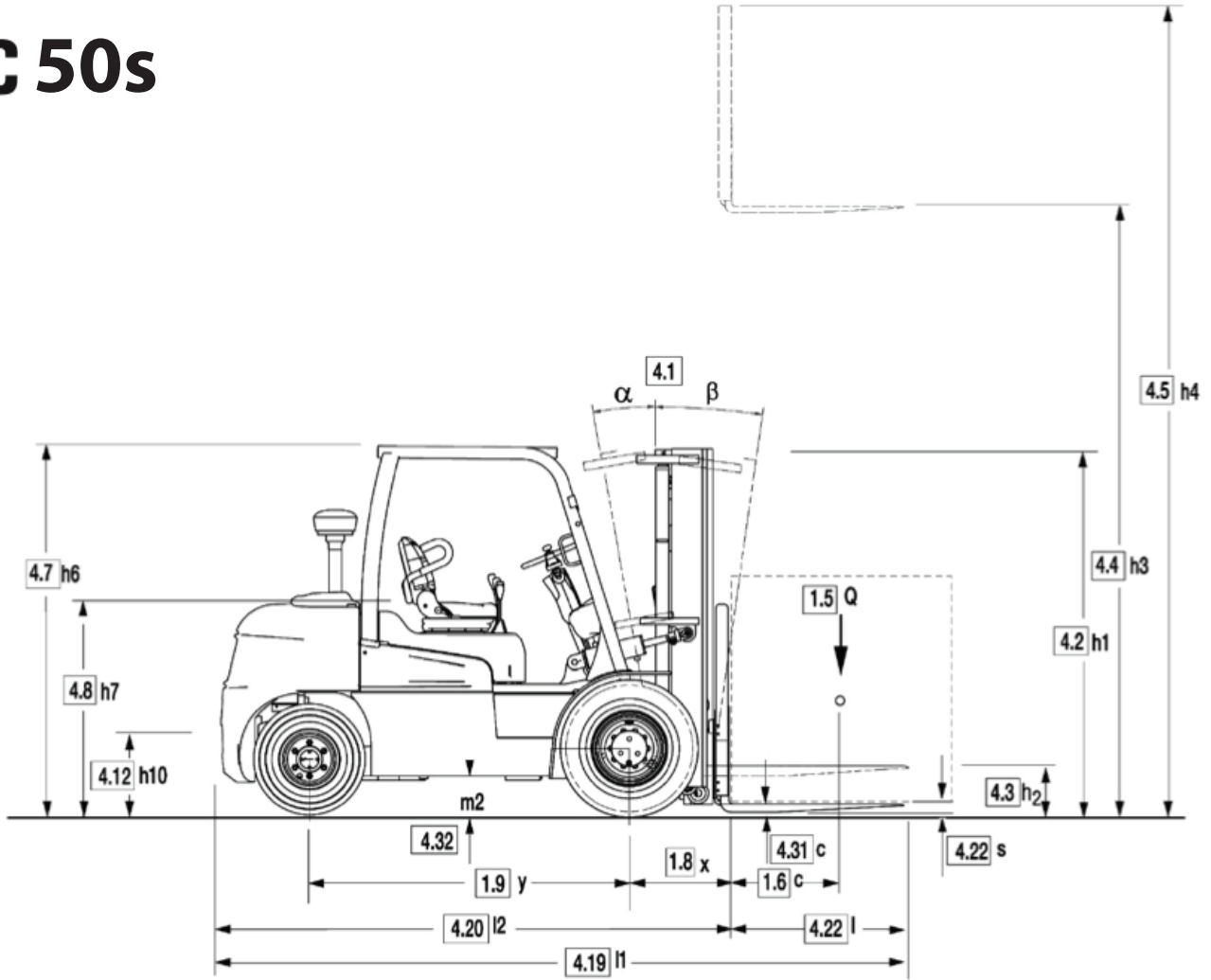
Pneumatic Tires

4000 kg 4500 kg 5000 kg 5500 kg



# DIMENSIONS

## C 50s



$$A_{st} = Wa + x + l_6 + a$$

gilt nur bei / applies only if  $\frac{b_{12}}{2} < b_{13}$

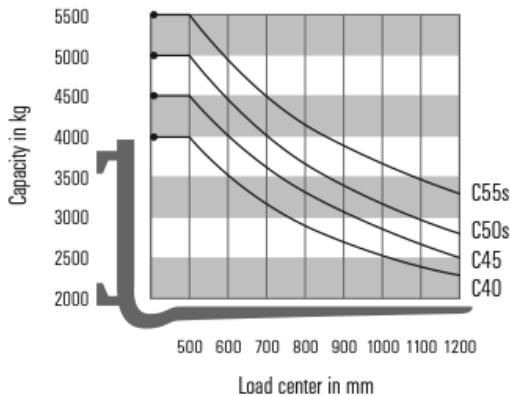
$$A_{st} = Wa + \sqrt{(l_6 + x)^2 + \left(\frac{b_{12}}{2} - b_{13}\right)^2} + a$$

gilt nur bei / applies only if  $\frac{b_{12}}{2} \geq b_{13}$

$$a = 200$$

# GENERAL DATA

## Truck Capacities Capacity at different load centres



Note:

The listed capacities are valid only for the standard upright in vertical position with standard fork carriage and standard forks, up to max. lifting height of 3300 mm. The centre of gravity of the load may be displaced by max. 100 mm against the longitudinal centre plane of the truck. Load centre is determined from top and front face of the forks. The values are based on a 1000 mm cube load configuration with the centre of gravity at the true centre of the cube. With upright tilted forward lower capacity values are valid. Attachments, longer forks, exceptional load dimensions and higher lifting heights can reduce the capacity. Please talk to your CLARK dealer if you require further information.

## Upright table C50s

Mast type	Maximum Fork Height (h3)	Mast Lowered (h1)*	Mast Extended (h4)		Free Lift (h2)	
			with load backrest	without load backrest	with load backrest*	without load backrest*
	mm	mm	mm	mm	mm	mm
Standard	2500	1992/1957	3752	3269	156	156
	2700	2092/2057	3952	3469		
	3000	2242/2207	4252	3769		
	3300	2392/2357	4552	4069		
	3500	2492/2457	4752	4269		
	3700	2592/2557	4952	4469		
	4000	2742/2707	5252	4769		
	4500	2992/2957	5752	5269		
Triple	2450	1607/1572	3702	3219	387/352	870/835
	3700	2024/1989	4952	4469	804/769	1287/1252
	4000	2124/2089	5252	4769	904/869	1387/1352
	4300	2224/2189	5552	5069	1004/969	1487/1452
	4500	2291/2256	5752	5269	1071/1036	1554/1519
	4800	2391/2356	6052	5569	1171/1136	1654/1619
	5000	2458/2423	6252	5769	1238/1203	1721/1686
	5500	2625/2590	6752	6269	1405/1370	1888/1853
	6000	2792/2757	7252	6769	1572/1537	2055/2020
	6500	2959/2924	7752	7269	1739/1704	2222/2187
HI-LO	2700	2141/2106	3951	3468	921/886	1404/1369
	3000	2291/2256	4251	3768	1071/1036	1554/1519
	3300	2441/2406	4551	4068	1221/1186	1704/1669

# SPECIFICATIONS

## Product Specifications acc. to VDI 2198

1.1 Manufacturer (Abbreviation)		CLARK	
Specifications	1.2 Manufacturer's designation	C50sD	
	1.3 Drive unit Diesel, L.P. Gas	Diesel	
	1.4 Operator type stand on / driver seated	Driver seated	
	1.5 Load capacity / rated load	Q (Kg) 5000	
	1.6 Load centre distance	c (mm) 500	
	1.8 Load centre distance, centre of drive axle to fork face	x (mm) 573	
	1.9 Wheelbase	y (mm) 2100	
	Weight	2.1 Service weight *5	kg 7033(7164)
		2.2 Axle loading, laden front / rear *5	kg 10937/10961(11076/1088)
2.3 Axle loading, unladen front / rear *5		kg 3085/3948(3224/3940)	
Tires, Chassis	3.1 Tyre type, P = pneumatic, SE = superelastic, C = cushion *1	P	
	3.2 Tyre size, front *5	300X15-18PR (7.50X15-12PR)	
	3.3 Tyre size, rear	7.00X12-14PR	
	3.5 Wheels, number front/rear (x = drive wheels) *5	2(4)/2	
	3.6 Tread, front *5	b10 (mm) 1112(1288)	
	3.7 Tread, rear	b11 (mm) 1134	
	Dimensions	4.1 Tilt of upright/fork carriage, α / β	Grad 10/8
4.2 Height, upright lowered *5		h1(mm) 2384(2357)	
4.3 Freelift		h2(mm) 156	
4.4 Lift height *2		h3(mm) 3300	
4.5 Height, upright extended (with LBR)		h4(mm) 4552	
4.7 Height overheadguard Std /cabin *5		h6(mm) 2324/2371 (2310/2357)	
4.8 Seat height		h7(mm) 1265	
4.12 Coupling height		h10(mm) 460	
4.19 Overall length		l1(mm) 4453	
4.20 Length to face of forks		l2(mm) 3233	
4.21 Width *5		b1, b2 (mm) 1400(1742)	
4.22 Fork dimensions		s • e • l (mm) 50x150x1219	
4.23 Fork carriage DIN 15173, A, B		Class III A	
4.24 Fork carriage width *5		b3 (mm) 1348(1678)	
Performance	4.31 Ground clearance minimum *5	m1 (mm) 177(141)	
	4.32 Ground clearance centre of wheelbase *5	m2 (mm) 221(185)	
	4.33 Aisle width for pallets (l6-b12) 1000 x 1200 crossways	Ast(mm) 4805	
	4.34 Aisle width for pallets (l6-b12) 800 x 1200 lengthways	Ast(mm) 5005	
	4.35 Outside turning radius	Wa(mm) 3032	
	4.36 Smallest pivot point distance *5	b13 (mm) 1020(1021)	
	5.1 Travel speed laden/unladen *5	km/h 24.9/26.9(24.0/25.5)	
	5.2 Lift speed laden/unladen	m/s 0.50/0.56	
	5.3 Lowering speed laden/unladen	m/s 0.50/0.47	
	5.6 Max. drawbar pull laden/unladen *3 *5	N 43120/14779 (44699/15485)	
5.8 Max. gradeability laden/unladen *3 *5	% 41.1/21.3 (42.3/21.8)		
5.9 Acceleration time laden/unladen (0 - 15 m)	s -		
5.10 Service brake	Wet disc brake		
Drive line	7.1 Manufacturer / Type *6	Kubota V3800T	
	7.2 Rated output acc. To ISO 1585	kW 68.6	
	7.3 Rated speed	min-1 2400	
	7.4 No. of cylinders / displacement	/cm <sup>3</sup> 4/3769	
	7.5 Fuel consumption acc. VDI-Cyclus Diesel = l/h. Gas = kg/h	-	
Miscellaneous	8.2 Operating pressure for attachments	bar 140	
	8.3 Oil volume for attachments	l/min -	
	8.4 Sound level, driver's ear *4	dB (A) 83	
8.5 Towing coupling, class/type DIN	-		

1) Optional with super-elastic tyres \*2 Further lift heights see upright table \*3 with 1.6 km/h Without load at friction coefficient  $\mu=0.8$  \*4 Equivalent permanent sound-pressure level L<sub>pAeq, T</sub> in accordance with DIN EN 12053 (previously DIN 45635-36) \*5 Values for Dual Tyre \*6 Diesel = Tier3 / LPG = Tier0

All values shown are for standard lift truck with standard equipment. If the truck is supplied with options, values may change. All values given may vary +5% and -10% due to the motor and system tolerances and represent nominal values obtained under typical operating conditions. Specifications for Non-emission limited truck.

# PRODUCT DESCRIPTION

The C40-55s series from CLARK marks a further development in the reliable, durable and powerful forklifts of the premium Gen2 series. Lower operating and maintenance costs combined with a well-designed and ergonomic operators compartment are what makes this forklift truly unique. The sturdy „Built to last“ upright and a robust construction with no thin metal or plastic components means these forklifts are suitable for use under even the toughest conditions.

## Driver's cab

The driver accesses his ergonomically designed compartment via a large, low positioned perforated non-slip metal step. A grab handle on the drivers side of entry makes it easy to climb up and down. A full width rubber floor covering in the footwell prevents slippage.

The adjustable steering column (30°) with two spoke steering wheel and an easy-to-adjust, yet comfortable seat together with impressive leg room allow perfect adaptation to any driver.

Automotive style foot pedals and fully directional hood mounted control levers with international symbols avoid confusion for any operator

The operating data is displayed in real-time on the clear TFT LCD colour display.

A low front cowl and ingenious narrow profile arrangement of the chains and hoses on the upright ensure a wide field of vision for the driver.

Easily accessible storage compartments and an ideally positioned automotive style hand brake, set this driver's cab apart.

## Engine, Transmission

The CLARK C40-55s forklifts with LPG or diesel power enable excellent acceleration and high driving performance. These extremely robust modern engines are at the top end of the performance class. A Kubota V3800T diesel engine with 92 HP at 2400 revolutions per minute is just as impressive as the LPG propelled GM V6 with 4.3 litres. Both engine versions are connected to a proven manual two-gear transmission.

To protect your investment, the temperature of the engine and transmission is constantly monitored and in the event of design limits being exceeded the engine is automatically switched off. Heavy Duty flexible coupling of the engine/transmission and drive axle reduces vibrations and noises to a minimum.

All engines comply with EU directives ensuring low noise and exhaust emissions.

## Brake system

Wet disc service brakes and an independent drum parking brake ensure a reliable high level of safety. Power assisted service brakes ensure that the work is undertaken in a relaxed and stress free manner with full focus on the task in hand. A stress free comfortable operator, works always at his peak ensuring optimum productivity over the complete shift.

## Steering system

The hydrostatic power steering eliminates steering Kick-Back, makes steering easy and reaches full lock with just a few turns of the steering wheel. The steering axle has pivotal bearings mounted in rubber steel elements. The spherical bearing mounted short tie rods are adjustment free and guarantee precise and continuous driving in a straight line. The double acting steer cylinder ensures precise and direct steering. The axle kingpins are mounted in lubricated tapered roller bearings for long service life.

## Hydraulic system

A full-flow reverse filter, filters the oil to the tank at each reverse flow. Rough particles are filtered directly via a suction filter, thereby preventing them from entering the oil circuit, ensuring a long service life for all hydraulic components. With 88 litres in the C40/C45 and 100 litres in the C50/55, there is always enough hydraulic oil available for the highest upright and all attachments.

A high-capacity pump provides adequate oil supply for the upright and the hydrostatic steering. A priority distributor ensures steering priority in all conditions. Load handling is controlled via a load sensitive-response and precise control valve. A safety valve provides extra safety and prevents an uncontrolled lowering of the load at all times.

## Upright

The clear-view uprights are available in Standard, Hilo and Triplex versions. The heavy duty interlocked narrow profiles provide high strength even under the heaviest load. Adjustable sealed canted (Angled) rollers minimize deflection particularly when handling off-set loads.

The tilt cylinders are mounted in spherical bearings. This consequently extends the service life of the complete cylinder by preventing premature leaks due to cylinder rod deflection. An integral tilt-lock valve prevents unintentional tilting of the upright when the power is off.

The heavy duty tapered forged forks with hook or shaft mounting are adjustable and locked by individual pins.

An hydraulic dampening system reduces impacts and vibrations during the transition between the individual lifting sections in raising and lowering, thus protecting the products and extending service life. The sturdy 6-roller fork carriage with adjustable side thrust rollers enhances the durability of this design, preventing carriage "Jamming" when handling off-set loads.

## Additional standard equipment

Front headlights, direction indicator lights, combination rear lights with brake lights and white reversing light, pneumatic tyres, acoustic reversing alarm, paintwork in the bright safety colour "CLARK Green", driver's compartment and upright in black, rims in white.

## Additional equipment

SE tyres, air-conditioned (only for diesel engine) or heated cabs, integrated or hook on sideshifts, various other attachments, fuel cap lock, quick-release couplings, various seats, reduced driver's overhead guard height and much more.

## Security

The C40-55s series is CE certified and corresponds to all European safety standards for forklift trucks.

Talk to your CLARK dealer to find the optimum equipment for you.

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