

# C60/70/80D C60/70/75L C80D900

Diesel or LPG engine Pneumatic Tyres 6.000 kg 7.000 kg 7.500 kg 8.000 kg

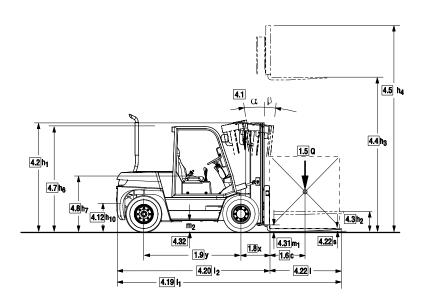


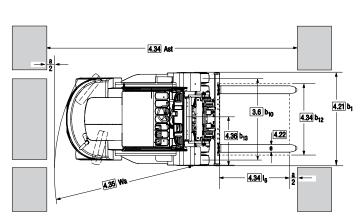
EU-Stage 5 -Diesel EU-Stage 5 -LPG

www.clarkmheu.com

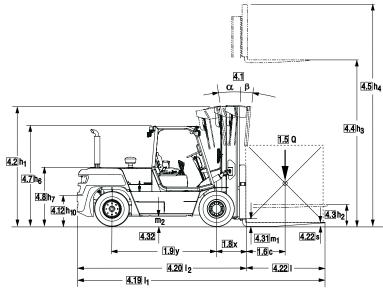
# DIMENSIONS

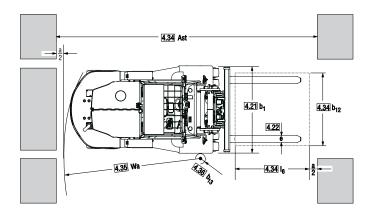
**C**60/80





# **C**80**D**900





$$A_{st} = Wa + \sqrt{(I_6 + x)^2 + \left(\frac{b_{12}}{2} - b_{13}\right)^2} + a$$
  
gilt nur bei / applies only if  $\frac{b_{12}}{2} \ge b_{13}$   
 $a = 200$ 

For corresponding data see Specification Chart.

# **SPECIFICATIONS**

### Product Specifications acc. to VDI 2198

	1.1 Manufacturer (Abbreviation)		CLARK	CLARK	CLARK	CLARK
	1.2 Manufacturer's designation		C60D	C70D	C80D	C80D900
Specifications	1.3 Drive unit Diesel, L.P. Gas		Diesel	Diesel	Diesel	Diesel
	1.4 Operator type stand on / driver seated		Driver Seated	Driver Seated	Driver Seated	Driver Seated
	1.5 Load capacity/rated load	Q (kg)	6.000	7.000	8.000	8.000
	1.6 Load centre distance	c (mm)	600	600	600	900
	1.8 Load centre distance, centre of drive axle to fork	(facex (mm)	630	630	660	660
	1.9 Wheelbase	y (mm)	2.250	2.250	2.500	2.500
	2.1 Service weight	kg	10.210	10.570	11.490	12.950
¥	2.2 Axle loading, laden front/rear	kg	14.130 / 2.080	15.880 / 1.710	17.280 / 2.190	19.040 / 1.910
_	2.3 Axle loading, unladen front/rear	kg	4.460 / 5.750	4.750 / 5.820	5.040 / 6.450	5.608 / 7.270
(0)	3.1 Tyre type, P = pneumatic, SE = superelastic, C = cusł	nion *1	Р	Р	Р	Р
Chassis	3.2 Tyre size, front		8.25 x 15 - 14 PR	8.25 x 15 - 14 PR	8.25 x 15 - 18 PR	8.25 x 15 - 18 PR
Che	3.3 Tyre size, rear		8.25 x 15 - 14 PR	8.25 x 15 - 14 PR	8.25 x 15 - 18 PR	8.25 x 15 - 18 PR
Tyres,	3.5 Wheels, number front/rear (x = drive wheels)		4 x / 2	4 x / 2	4 x / 2	4 x / 2
L <sub>Z</sub>	3.6 Tread, front	b10 (mm)	1.575	1.575	1575	1685
	3.7 Tread, rear	b11 (mm)	1.610	1.610	1610	1610
	4.1 Tilt of upright $\alpha$ = back / $\beta$ = front	Grad	10 / 15	10 / 15	10 / 15	10 / 15
	4.2 Height, upright lowered	h1(mm)	2.500	2.500	2.476	2.796
	4.3 Freelift	h2(mm)	110	110	233	233
	4.4 Lift height *2	h3(mm)	3.300	3.300	3.300	3.100
	4.5 Height, upright extended	h4(mm)	4.464	4.464	4.464	4.214
	4.7 Height overheadguard (cab); Std / Container	h6(mm)	2.370	2.370	2.370	2.370
	4.8 Seat height	h7(mm)	1.320	1.320	1.320	1.320
	4.12 Coupling height	h10(mm)	470	470	470	470
suo	4.19 Overall length	l1(mm)	4.723	4.783	5.095	5.746
ensi	4.20 Length to face of forks	l2(mm)	3.523	3.583	3.895	3.946
Dimensions		b1, b2 (mm)	2.125	2.125	2.125	2.235
		● e ● I (mm)	60 x 150 x 1.220	60 x 150 x 1.220	70 x 180 x 1.200	70 x 180 x 1.800
	4.23 Fork carriage DIN 15173, A, B		Shaft type	Shaft type	Shaft type	Shaft type
	4.24 Fork carriage width	b3 (mm)	2.040	2.040	2.040	2.040
	4.31 Ground clearance minimum	m1 (mm)	216	216	216	216
	4.32 Ground clearance centre of wheelbase	m2 (mm)	230	230	230	230
	4.33 Aisle width for pallets 1.000 x 1.200 crossways	Ast(mm)	5.250	5.280	5.616	6.138
	4.34 Aisle width for pallets 800 x 1.200 lengthways	Ast(mm)	5.450	5.480	5.816	6.338
	4.35 Turning radius	(mm)	3.420	3.450	3.775	3.838
	4.36 Internal turning radius	b13 (mm)	1.416	1.497	1.497	1.497
S	5.1 Travel speed laden/unladen	km/h	30.4 / 32.9 0.40 / 0.42	30.1 / 32.9 0.39 / 0.42	29.7 / 32.7 0.37 / 0.42	26.2 / 29.4
ance	5.2 Lift speed laden/unladen	m/s	0.40 / 0.42	0.39 / 0.42	0.37 / 0.42	0.36 / 0.42 0.45 / 0.43
	5.3 Lowering speed laden/unladen	m/s	61.789 / 19.306	61.132 / 18.620	62.024 / 19.286	74.852 / 23.471
Performances	5.6 Max. drawbar pull laden/unladen *3 5.8 Max. gradeability laden/unladen *3	N 0/	44.5 / 20.7	40.4 / 19.8	36 / 18.8	40.9 / 19.9
	5.8 Max. gradeability laden/unladen *3 5.10 Service brake	%	Wet disc brake	Wet disc brake	Wet disc brake	Wet disc brake
	7.1 Manufacturer/Type *4		Kubota / V3800-CR-TE5B	Kubota / V3800-CR-TE5B	Kubota / V3800-CR-TE5B	Kubota / V3800-CR-TE5B
Engine	7.2 Rated output acc. DIN 70 020	kW	55.4	55.4	55.4	55.4
	7.3 Rated speed acc. DIN 70 020	min-1	2.000	2.000	2.000	2.000
	7.4 No. of cylinders / displacement	/cm3	4 / 3.8	4 / 3.8	4 / 3.8	4 / 3.8
I.C.	7.5 Fuel consumption acc. VDI-Cyclus Diesel = I/h, L.F	-	-	-	-	-
	8.1 Type of drive control		hydrodynamic	hydrodynamic	hydrodynamic	- hydrodynamic
Miscellaneous	8.2 Operating pressure for attachments *5	bar	Adjustable	Adjustable	Adjustable	Adjustable
lane	8.3 Oil volume for attachments	I/min	max. 35	max. 35	max. 35	max. 35
scel	8.4 Sound level, driver's ear acc. EN 12053	dB (A)	80.5	80.5	80.5	80.5
Mis	8.5 Towing coupling, class/type DIN		PIN	PIN	PIN	PIN
	0 · · · · 0 · · · · · · · · · · · · · ·					

\*1 Optional with superelastic tyres \*2 Futher lift heights see upright table \*3 At friction coefficient  $\mu$  = 0.6 \*4 Diesel = Stage 5 LPG = Stage 5 \*5 Max. 140 bar

Performance may vary + 5 % and - 10 % due to motor and system efficiency tolerance. The performance shown represents nominal values which may be obtained under typical operating conditions of a machine. CLARK products and specifications are subject to change without notice.

### Product Specifications acc. to VDI 2198

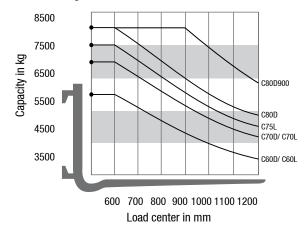
	1.1 Manufacturer (Abbreviation)		CLARK	CLARK	CLARK
Specifications	1.2 Manufacturer's designation		C60L	C70L	C75L
	1.3 Drive unit Diesel, L.P. Gas		LPG	LPG	LPG
	1.4 Operator type stand on / driver seated	0 // )	Driver Seated	Driver Seated	Driver Seated
cific	1.5 Load capacity/rated load	Q (kg)	6.000	7.000	7.500
Spe	1.6 Load centre distance	c (mm)	600	600	600
	1.8 Load centre distance, centre of drive axle to fork		630	630	630
	1.9 Wheelbase	y (mm)	2.250	2.250	2.250
L	2.1 Service weight	kg	9.077	9.447	9.590
M	2.2 Axle loading, laden front/rear	kg	13.263 / 1.814	14.685 / 1.762	15.514 / 1.576
	2.3 Axle loading, unladen front/rear	kg	3.998/5.079	3.877 / 5.570	3.934 / 5.656
<u>.s</u>	3.1 Tyre type, P = pneumatic, SE = superelastic, C = cust	nion *1	P	P	P
<b>Fyres</b> , Chassis	3.2 Tyre size, front		8.25 x 15 - 14 PR	8.25 x 15 - 14 PR	8.25 x 15 - 14 PR
୍ ଧ	3.3 Tyre size, rear		8.25 x 15 - 14 PR	8.25 x 15 - 14 PR	8.25 x 15 - 14 PR
/res	3.5 Wheels, number front/rear (x = drive wheels)	h10 (mm)	4 x / 2	4 x / 2	4 x / 2
Г	3.6 Tread, front	b10 (mm)	1.575	1.575	1.575
	3.7 Tread, rear 4.1 Tilt of upright $\alpha$ = back / $\beta$ = front	b11 (mm) Grad	1.610 10 / 15	1.610 10 / 15	1.610 10 / 15
	4.1 The of upright $\alpha = back / \beta = from 4.2$ 4.2 Height, upright lowered	h1(mm)	2.650	2.650	2.650
	4.2 Height, upright lowered 4.3 Freelift	h2(mm)	110	110	110
	4.5 Freehrt 4.4 Lift height *2	h3(mm)	3.300	3.300	3.300
	4.4 Lift height 2 4.5 Height, upright extended	h4(mm)	4.464	4.464	4.464
	4.5 Height overheadguard (cab); Std / Container	h6(mm)	2.370	2.370	2.370
	4.7 Reight overheadguard (Cab), Std 7 Container 4.8 Seat height	h7(mm)	1.320	1.320	1.320
	4.12 Coupling height	h10(mm)	470	470	470
S	4.12 Coupling height 4.19 Overall length	11(mm)	4.723	4.783	4.783
sion	4.19 Overall length 4.20 Length to face of forks	I2(mm)	3.523	3.583	3.583
Dimensions		b1, b2 (mm)	2.125	2.125	2.125
Din		• e • I (mm)	60 x 150 x 1.200	60 x 150 x 1.200	60 x 180 x 1.200
	4.23 Fork carriage DIN 15173, A, B	• 6 • 1 (11111)	Shaft type	Shaft type	Shaft type
	4.24 Fork carriage width	b3 (mm)	2.040	2.040	2.040
	4.31 Ground clearance minimum	m1 (mm)	216	216	216
	4.32 Ground clearance centre of wheelbase	m2 (mm)	230	230	230
	4.33 Aisle width for pallets 1.000 x 1.200 crossways	Ast(mm)	5.250	5.280	5.280
	4.34 Aisle width for pallets 800 x 1.200 lengthways	Ast(mm)	5.450	5.480	5.480
	4.35 Turning radius	(mm)	3.420	3.450	3.450
	4.36 Internal turning radius	b13 (mm)	1.063	1.063	1.063
	5.1 Travel speed laden / unladen	km/h	29.3 / 31.4	29.0 / 30.2	28.3 / 29.6
es	5.2 Lift speed laden / unladen	m/s	0.44 / 0.49	0.42 / 0.49	0.39 / 0.49
anc	5.3 Lowering speed laden / unladen	m/s	0.45 / 0.43	0.45 / 0.43	0.45 / 0.43
orm	5.6 Max. drawbar pull laden / unladen *3	N	58.345 / 23.347	62.784 / 22.661	59.448 / 22.955
Performances	5.8 Max. gradeability laden / unladen *3	%	41.0 / 21.4	42.2 / 20.0	38.4 / 20.0
	5.10 Service brake		Wet disc brake	Wet disc brake	Wet disc brake
	7.1 Manufacturer / Type *4		PSI 4X	PSI 4X	PSI 4X
I.C Engine	7.2 Rated output acc. DIN 70 020	kW	82	82	82
	7.3 Rated speed acc. DIN 70 020	min-1	2.400	2.400	2.400
	7.4 No. of cylinders / displacement	/cm3	6 / 4.300	6 / 4.300	6 / 4.300
	7.5 Fuel consumption acc. VDI-Cyclus Diesel = I/h, L.	PGas=kg/h	-	-	-
s	8.1 Type of drive control		hydrodynamic	hydrodynamic	hydrodynamic
eor	8.2 Operating pressure for attachments *5	bar	Adjustable	Adjustable	Adjustable
Ilan	8.3 Oil volume for attachments	l/min	max. 35	max. 35	max. 35
isce	8.4 Sound level, driver's ear acc. EN 12053	dB (A)	82.7	82.7	82.7
Σ	8.5 Towing coupling, class / type DIN		PIN	PIN	PIN
Miscellaneous		dB (A)			

\*1 Optional with superelastic tyres \*2 Futher lift heights see upright table \*3 At friction coefficient  $\mu$ =0.6 \*4 Diesel = Stage 5 LPG = Stage 5 \*5 Max. 140 bar

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# **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 C60D/C70D

Mast type	Maximum Fork Height	Ma	Freihub (h2)	
	(h3)	Lowered (h1)	Extended	(112)
	mm	mm	mm	mm
	2500	2250	3664	
	2700	2350	3864	
	3000	2500	4164	
	3300	2650	4464	
	3500	2750	4664	
Standard	3700	2850	4864	110
Standard	4000	3000	5164	
	4500	3250	5664	
	5000	3500	6164	
	5500	3750	6664	
	6000	4200	7164	
	6400	4400	7564	
	3850	2313	4980	1211
	4000	2363	5130	1261
	4500	2531	5634	1429
Triple	4900	2665	6036	1563
	6200	3097	7332	1995
	7000	3363	8140	2261
	8000	3695	9140	2593

### Upright table C60L/C70L/C75L

Mast type	Maximum	Ma	Freelift (h2)	
	Fork Height (h3)	Lowered (h1)	Extended	(112)
	mm	mm	mm	mm
	2500	2250	3664	
	2700	2350	3864	
	3000	2500	4164	
	3300	2650	4464	
	3500	2750	4664	110
Standard	3700	2850	4864	110
Stanuaru	4000	3000	5164	
	4500	3250	5664	
	5000	3500	6164	
	5500	3750	6664	
	6000	4200	7164	
	6400	4400	7564	
	3850	2313	4980	1211
	4000	2363	5130	1261
	4500	2531	5634	1429
Triple	4900	2665	6036	1563
	6200	3097	7332	1995
	7000	3363	8140	2261
	8000	3695	9140	2593

### Upright table C80D

Mast type	Maximum Fork Height	Ma	Freelift (h2)	
	(h3)	Lowered (h1)	Extended	(112)
	mm	mm	mm	mm
	2300	2226	3464	
	2500	2326	3664	
	2800	2476	3964	
	3100	2626	4264	
	3300	2726	4464	000
Standard	3500	2826	4664	223
Stariuaru	3800	2976	4964	
	4300	3226	5464	
	4800	3476	5964	
	5300	3726	6464	
	5800	3976	6964	
	6200	4176	7364	
	3650	2313	4790	1211
	3800	2363	4940	1261
	4300	2531	5444	1429
Triple	4700	2665	5846	1563
	6000	3097	7142	1995
	6800	3363	7950	2261
	7800	3695	8950	2593

# Upright table C80D900

Mast type	Maximum Fork Height	M	Freelift (h2)	
	(h3)	Lowered (h1)	Extended	( )
	mm	mm	mm	mm
	3100	2976	4484	
	3600	3046	4984	233
Standard	4600	3546	5984	
	5600	4046	6984	223
	6000	4246	7384	223
	4700	2866	6084	1764
Triple	5430	3096	6814	1994
	6030	3296	7414	2194

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# **PRODUCT DESCRIPTION**



Drawing on the many years of manufacturing in the 6 to 8 ton range of forklifts, Clark offers with the C60-80 series the optimized collection of high quality components making for an extremely powerful truck. The combination of a capable efficient 67kW diesel engine, a fully automatic three speed gearbox and wet disc brakes as a standard together with a one piece robust frame makes this series extraordinary strong and tough. The low operating and maintenance costs as well as the ergonomic designed operator compartment are also highlights of this series of trucks. Exactly what you rightly can expect from a heavy duty truck produced by CLARK.

### Driver's cab

The driver accesses his ergonomically designed compartment via two large, low positioned steps from either side of the machine. A grab handle on the driver's side of entry makes it easy to climb up and down without effort. A full width rubber floor covering in the footwell area prevents slippage. The adjustable steering column (30°) with two spoke steering wheel, an easy to adjust, comfortable operators seat, together with impressive leg room allow perfect adaptation to any driver. Automotive style foot pedals and fully directional hood mounted control levers marked with international symbols avoid confusion for any operator. A clear TFT LCD colour display ensures all operating data is available in real time. 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 automotivestylehandbrake,setthisdriver's cabapart. Additionallythisseriesoffers protected storage compartments integrated in the vehicle frame.

### Engine, Transmission

The CLARK C60-80 series diesel and LPG forklift trucks have high power and torque. The robust engines used are recognised and field-tested worldwide and have a very high performance for their power class. Both the LPG engine (PSI 4X) and the diesel engine (KUBOTA V3800-CR-TE5B) comply with exhaust gas stage 5 and therefore the latest strict EU regulations. The KUBOTA (V3800-CR-TE5B) with 55.4 kW at 2,000 rpm is equipped with a diesel oxidation catalyst (DOC) with exhaust gas recirculation and a diesel particulate filter. This combination not only ensures a low-maintenance operation, but also low-emission during driver usage. Equally low-emission and at the same time powerful is the 4.3-litre PSI 4X, which is powered by LPG. Both engine variants have a standard fully automatic, already proven, "Power Shift" 3-speed transmission. Thus, ensuring the operator can carry out his work precisely and comfortably. The inching pedal has an integrated brake function, allowing controlled driving and fast lifting operations. To prevent possible damage due to overheating, the temperature of the engine and transmission is constantly monitored. A decoupled design of engine, transmission and drive axle also reduces vibrations and noise to a minimum.

### Brake system

All the trucks of this series have wet disc service brakes and an independent drum parking brake as standard. When the parking brake is applied, the transmission is placed in neutral to avoid any unintentional driving against the parking brake. The wet disc brakes have minimum abrasion, are maintenance free and allow very sensitive braking even with a heavy load. Power assisted foot brakes ensure a relaxed and stress free operation allowing the operator to work in a free manner with full focus on the task in hand. Remember, 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 king pins are mounted in lubricated tapered roller bearings for long service life.

Dealer:

CLARK Europe GmbH Dr.-Alfred-Herrhausen-Allee 33 47228 Duisburg / Germany Tel.: +49 (0)2065 499 13-0 Fax: +49 (0)2065 499 13-290 E-Mail: Info-europe@clarkmheu.com www.clarkmheu.com

### 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. Enough hydraulic oil is always available for all functions, because 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 and Triplex versions. The heavy duty interlocked narrow profiles provide high strength even under the heaviest load. The canted (angled) mounted rollers are adjusted or exchangeable without disassembling the upright.

The tilt cylinders are mounted in spherical bearings allowing free movement. This consequently extends the service life of the complete cylinder. 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.

A hydraulic dampening system reduces impacts and vibrations during the transition between the individual lifting sections whilst raising or 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

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

#### Additional equipment

SE tyres, attachments, air-conditioned or heated cabs, integrated or hook on sideshifts, quick-release couplings, spark protection, various seats and much more. For working in confined spaces and in critical areas of the warehouse is optionally a rear view camera or a 360 degree camera system, the CLARK SafeView360 available.

#### Certification

The C60-80 series is CE certified and corresponds to all European safety standards for forklift trucks.

#### The new C80D900

The load-bearing capacity of the C80D900 has been increased by 25% by reinforcing the frame, making the counterweigth heaviaxle and upright and adapting the drive the rails Ideal for demanding applications, such as in the construction industy, construction material yards, woodworking, metalworking industry, paper and beverages industry as well as at forwarding agents and logistic companies.

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

