

C 20/25/30/35

Diesel or LPG engine

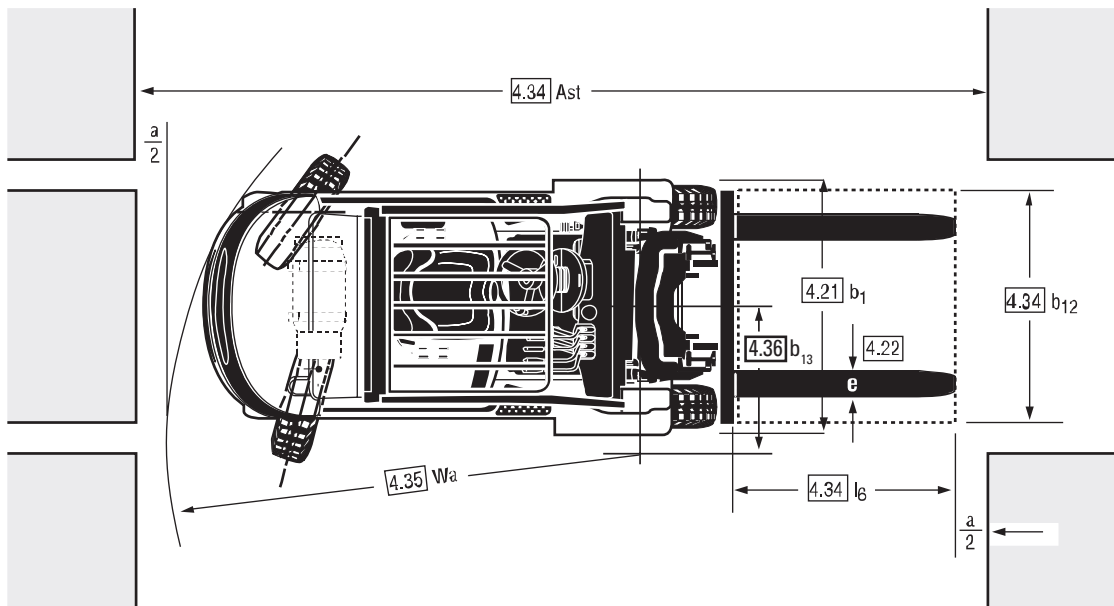
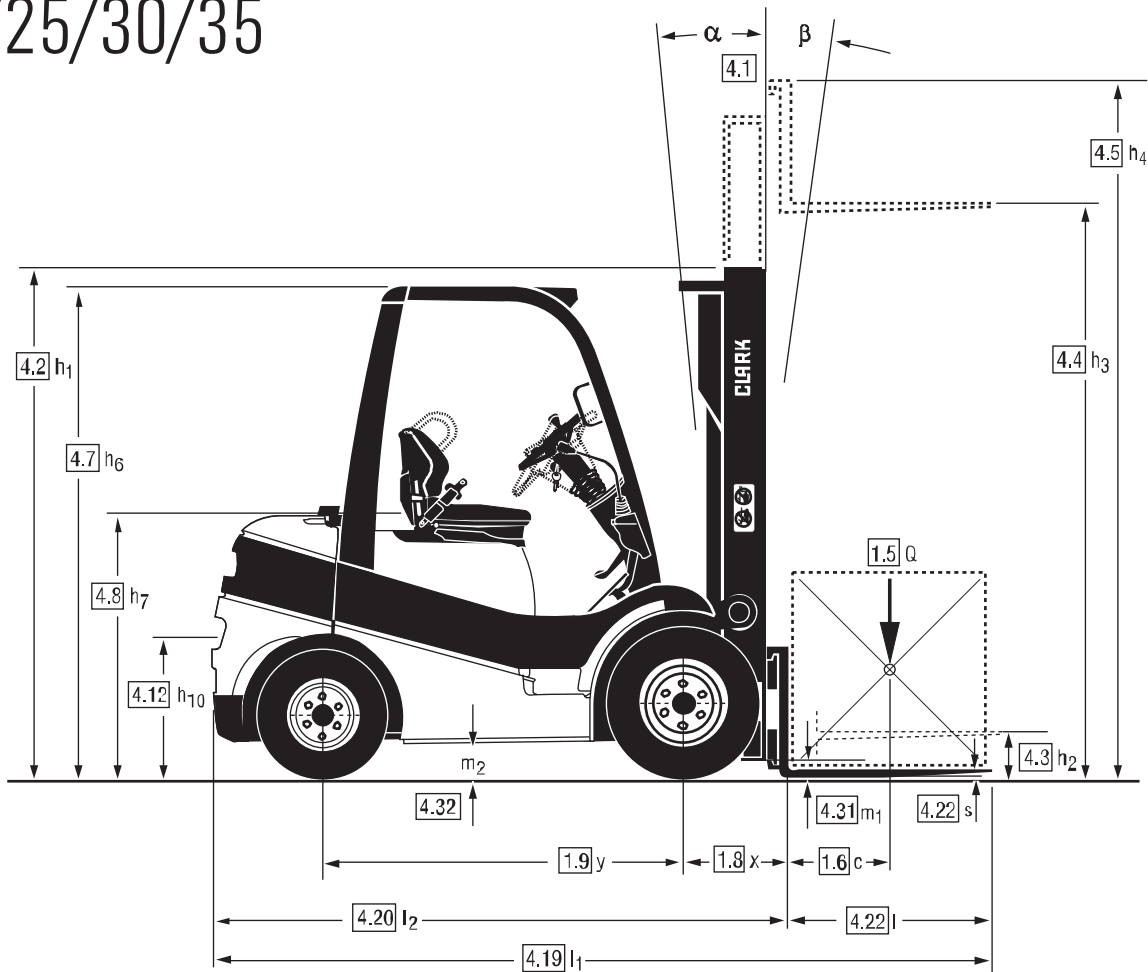
Pneumatic or Superelastic Tyres

2.000 kg 2.500 kg 3.000 kg 3.500 kg



DIMENSIONS

C20/25/30/35



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

applies only if $\frac{b_{12}}{2} < b_{13}$

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

applies only if $\frac{b_{12}}{2} \geq b_{13}$

$$a = 200$$

For corresponding data see
Specification Chart.

SPECIFICATIONS

Product Specifications acc. to VDI 2198

| 1.1 Manufacturer (Abbreviation) | | CLARK | CLARK | CLARK | CLARK |
|--|--|---------------|---------------|---------------|----------------------|
| Specifications | 1.2 Manufacturer's designation | C20D | C25D | C30D | C35D |
| | 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) | 2000 | 2500 | 3000 | 3500 |
| | 1.6 Load centre distance c (mm) | 500 | 500 | 500 | 500 |
| | 1.8 Load centre distance, centre of drive axle to fork face x (mm) | 455 | 455 | 455 | 475 |
| | 1.9 Wheelbase y (mm) | 1620 | 1620 | 1700 | 1700 |
| WT | 2.1 Service weight kg | 3411 | 3755 | 4189 | 4626 |
| | 2.2 Axle loading, laden front/rear kg | 4854/577 | 5576/679 | 6372/816 | 6901/1025(7069/1057) |
| | 2.3 Axle loading, unladen front/rear kg | 1675/1736 | 1602/2153 | 1687/2502 | 1697/2929 |
| Tyres, Chassis | 3.1 Tyre type, P = pneumatic, SE = superelastic, C = cushion 1) | P | P | P | P |
| | 3.2 Tyre size, front | 7X12 -14PR | 7X12 -14PR | 28X9x15 -14PR | 250x15-18PR |
| | 3.3 Tyre size, rear | 6X9 -10PR | 6X9 -10PR | 6.50x10-12PR | 6.50x10-12PR |
| | 3.5 Wheels, number front/rear (x = drive wheels) | 2X/2 | 2X/2 | 2X/2 | 2X/2 |
| | 3.6 Tread, front b10 (mm) | 994 | 994 | 1028 | 1050 |
| | 3.7 Tread, rear b11 (mm) | 904 | 904 | 912 | 912 |
| Dimensions | 4.1 Tilt of upright/fork carriage, α/β Grad | 10/8 | 10/8 | 10/8 | 10/8 |
| | 4.2 Height, upright lowered h1(mm) | 2165 | 2165 | 2180 | 2200 |
| | 4.3 Freelift h2(mm) | 110 | 110 | 110 | 115 |
| | 4.4 Lift height 2) h3(mm) | 3300 | 3300 | 3300 | 3165 |
| | 4.5 Height, upright extended h4(mm) | 3897 | 3897 | 3897 | 3903 |
| | 4.7 Height overheadguard Std. (Cabin 5) h6(mm) | 2165(2180) | 2165(2180) | 2180(2195) | 2195(2210) |
| | 4.8 Seat height h7(mm) | 1139 | 1139 | 1139 | 1139 |
| | 4.12 Coupling height h10(mm) | 410 | 410 | 410 | 410 |
| | 4.19 Overall length l1(mm) | 3566 | 3628 | 3738 | 3837 |
| | 4.20 Length to face of forks l2(mm) | 2496 | 2558 | 2668 | 2770 |
| | 4.21 Width b1, b2 (mm) | 1187 | 1187 | 1237 | 1315 |
| | 4.22 Fork dimensions s • e • l (mm) | 45X100X1070 | 45X100X1070 | 45X122X1070 | 50X122X1070 |
| | 4.23 Fork carriage DIN 15173, A, B | Class II A | Class II A | Class III A | Class III A |
| | 4.24 Fork carriage width b3 (mm) | 1041 | 1041 | 1041 | 1143 |
| | 4.31 Ground clearance minimum m1 (mm) | 135 | 135 | 150 | 170 |
| | 4.32 Ground clearance centre of wheelbase m2 (mm) | 155 | 155 | 165 | 165 |
| 4.33 Aisle width for pallets 1000 x 1200 crossways Ast(mm) | 3900 | 3955 | 4060 | 4155 | |
| 4.34 Aisle width for pallets 800 x 1200 lengthways Ast(mm) | 4100 | 4155 | 4260 | 4355 | |
| 4.35 Turning radius (mm) | 2245 | 2300 | 2405 | 2480 | |
| 4.36 Internal turning radius b13 (mm) | 825 | 825 | 852 | 889 | |
| Performances | 5.1 Travel speed laden/unladen km/h | 19/19.9 | 19/19.9 | 20/20.6 | 20.6/21.2 |
| | 5.2 Lift speed laden/unladen m/s | 0.56/0.65 | 0.55/0.65 | 0.54/0.65 | 0.50/0.63 |
| | 5.3 Lowering speed laden/unladen m/s | 0.47/0.43 | 0.47/0.43 | 0.47/0.43 | 0.47/0.43 |
| | 5.6 Max. drawbar pull laden/unladen 3) N | 24162/9859 | 24309/9427 | 22082/9928 | 20503/9987 |
| | 5.8 Max. gradeability laden/unladen 3) % | 51.1/23 | 43.4/20.1 | 33.0/19.4 | 26.5/17.6 |
| | 5.9 Acceleration time laden/unladen (0 - 15 m) s | 4.6/4.0 | 4.6/4.0 | 4.6/4.0 | 4.6/4.0 |
| | 5.10 Service brake | Drum&Shoe | Drum&Shoe | Drum&Shoe | Drum&Shoe |
| I.C.- Engine | 7.1 Manufacturer / Type 5) | Yanmar 4TNE98 | Yanmar 4TNE98 | Yanmar 4TNE98 | Yanmar 4TNE98 |
| | 7.2 Rated output acc. SAE J 1349 kW | 43 | 43 | 43 | 43 |
| | 7.3 Rated speed acc. SAE J 1349 min-1 | 2300 | 2300 | 2300 | 2300 |
| | 7.4 No. of cylinders / displacement /cm3 | 4/3319 | 4/3319 | 4/3319 | 4/3319 |
| | 7.5 Fuel consumption acc. VDI-Cyclus Diesel = l/h, L.P.-Gas = kg/h | - | - | - | - |
| Miscellaneous | 8.2 Operating pressure for attachments bar | 140 | 140 | 140 | 140 |
| | 8.3 Oil volume for attachments l/min | - | - | - | - |
| | 8.4 Sound level, driver's ear acc. EN 12053 dB (A) | 81 | 81 | 81 | 81 |
| | 8.5 Towing coupling, class/type DIN | - | - | - | - |

*1) Optional with super-elastic tyres *2) Further lift heights see upright table *3) At friction coefficient $\mu=0.6$ *4) Diesel = TIER 3 / LPG = TIER 0 (MMC)

*5) Height overheadguard with Radio +60m (radio antenna)

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

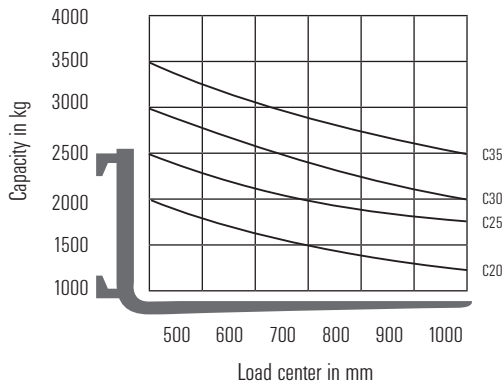
| 1.1 Manufacturer (Abbreviation) | | CLARK | CLARK | CLARK | CLARK |
|---|--|--|------------------------------------|------------------------------------|------------------------------------|
| Specifications | 1.2 Manufacturer's designation | C20L | C25L | C30L | C35L |
| | 1.3 Drive unit Diesel, L.P. Gas | LPG | LPG | LPG | LPG |
| | 1.4 Operator type stand on/ driver seated | Driver Seated | Driver Seated | Driver Seated | Driver Seated |
| | 1.5 Load capacity/ rated load Q (kg) | 2000 | 2500 | 3000 | 3500 |
| | 1.6 Load centre distance c (mm) | 500 | 500 | 500 | 500 |
| | 1.8 Load centre distance, centre of drive axle to fork face x (mm) | 455 | 455 | 455 | 475 |
| | 1.9 Wheelbase y (mm) | 1620 | 1620 | 1700 | 1700 |
| WT | 2.1 Service weight kg | 3301 | 3645 | 4078 | 4516 |
| | 2.2 Axle loading, laden front/rear kg | 4817/484 | 5538/607 | 6332/747 | 7005/1011 |
| | 2.3 Axle loading, unladen front/rear kg | 1638/1663 | 1565/2080 | 1646/2432 | 1656/2860 |
| Tyres, Chassis | 3.1 Tyre type, P = pneumatic, SE = superelastic, C = cushion 1) | P | P | P | P |
| | 3.2 Tyre size, front | 7X12 -14PR | 7X12 -14PR | 28X9X15-14PR | 250X15-18PR |
| | 3.3 Tyre size, rear | 6X9 -10PR | 6X9 -10PR | 6.50x10-12PR | 6.50x10-12PR |
| | 3.5 Wheels, number front/rear (x = drive wheels) | 2X/2 | 2X/2 | 2X/2 | 2X/2 |
| | 3.6 Tread, front b10 (mm) | 994 | 994 | 1028 | 1050 |
| | 3.7 Tread, rear b11 (mm) | 904 | 904 | 912 | 912 |
| | Dimensions | 4.1 Tilt of upright/fork carriage, α/β Grad | 10/8 | 10/8 | 10/8 |
| 4.2 Height, upright lowered h1 (mm) | | 2165 | 2165 | 2180 | 2200 |
| 4.3 Freelift h2 (mm) | | 110 | 110 | 110 | 115 |
| 4.4 Lift height 2) h3 (mm) | | 3300 | 3300 | 3300 | 3165 |
| 4.5 Height, upright extended h4 (mm) | | 4519 | 4519 | 4519 | 4384 |
| 4.7 Height overheadguard Std. (Cabin) 5) h6 (mm) | | 2165(2180) | 2165(2180) | 2180(2195) | 2195(2210) |
| 4.8 Seat height h7 (mm) | | 1139 | 1139 | 1139 | 1139 |
| 4.12 Coupling height h10 (mm) | | 410 | 410 | 410 | 410 |
| 4.19 Overall length l1 (mm) | | 3566 | 3628 | 3738 | 3837 |
| 4.20 Length to face of forks l2 (mm) | | 2496 | 2558 | 2668 | 2770 |
| 4.21 Width b1, b2 (mm) | | 1187 | 1187 | 1237 | 1315 |
| 4.22 Fork dimensions s • e • l (mm) | | 45X100X1070 | 45X100X1070 | 45X122X1070 | 50X122X1070 |
| 4.23 Fork carriage DIN 15173, A, B | | Class II A | Class II A | Class III A | Class III A |
| 4.24 Fork carriage width b3 (mm) | | 1041 | 1041 | 1041 | 1143 |
| 4.31 Ground clearance minimum m1 (mm) | | 135 | 135 | 150 | 170 |
| 4.32 Ground clearance centre of wheelbase m2 (mm) | | 155 | 155 | 165 | 165 |
| 4.33 Aisle width for pallets 1000 x 1200 crossways Ast (mm) | | 3900 | 3955 | 4060 | 4155 |
| 4.34 Aisle width for pallets 800 x 1200 lengthways Ast (mm) | | 4100 | 4155 | 4260 | 4355 |
| 4.35 Turning radius (mm) | | 2245 | 2300 | 2405 | 2480 |
| 4.36 Internal turning radius b13 (mm) | 825 | 825 | 850 | 889 | |
| Performances | 5.1 Travel speed laden/unladen km/h | 19.1/20.3 | 18.8/20.3 | 20.3/21.6 | 21.6/22.1 |
| | 5.2 Lift speed laden/unladen m/s | 0.55/0.58 | 0.54/0.58 | 0.53/0.58 | 0.52/0.58 |
| | 5.3 Lowering speed laden/unladen m/s | 0.47/0.43 | 0.47/0.43 | 0.47/0.43 | 0.47/0.43 |
| | 5.6 Max. drawbar pull laden/unladen 3) N | 21722/7904 | 21977/7473 | 19996/7855 | 18446/7129 |
| | 5.8 Max. gradeability laden/unladen 3) % | 45.7/24.2 | 38.8/21.5 | 29.8/19.9 | 24.1/17.1 |
| | 5.9 Acceleration time laden/unladen (0 -15 m) s | - | - | - | - |
| | 5.10 Service brake | Drum&Shoe | Drum&Shoe | Drum&Shoe | Drum&Shoe |
| I.C.- Engine | 7.1 Manufacturer / Type 4) | Mitsubishi/4G64 PSI fuel-system | Mitsubishi/4G64 PSI fuel-system | Mitsubishi/4G64 PSI fuel-system | Mitsubishi/4G64 PSI fuel-system |
| | 7.2 Rated output acc. SAE J 1349 kW | 51.6 | 51.6 | 51.6 | 51.6 |
| | 7.3 Rated speed acc. SAE J 1349 min-1 | 2650 | 2650 | 2650 | 2650 |
| | 7.4 No. of cylinders / displacement /cm3 | 4/2350 | 4/2350 | 4/2350 | 4/2350 |
| | 7.5 Fuel consumption acc. VDI-Cyclus Diesel = l/h, L.P.-Gas = kg/h | - | - | - | - |
| Miscellaneous | 8.2 Operating pressure for attachments bar | 140 | 140 | 140 | 140 |
| | 8.3 Oil volume for attachments l/min | - | - | - | - |
| | 8.4 Sound level, driver's ear acc. EN 12053 dB (A) | 79 | 79 | 79 | 79 |
| | 8.5 Towing coupling, class / type DIN | - | - | - | - |

*1) Optional with super-elastic tyres *2) Further lift heights see upright table *3) At friction coefficient $\mu=0.6$ *4) Diesel = TIER 3 / LPG = TIER 0 (MMC)
5) Height overheadguard with Radio +60m (radio antenna)

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.

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 for C20/25/30 and 3165mm for C35. 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 C20/30

| 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 |
| Standard | mm | mm | mm | mm | mm | mm |
| | 2120 | 1575 | 3339 | 2717 | | |
| | 2680 | 1855 | 3899 | 3277 | | |
| | 2980 | 2005 | 4199 | 3577 | | |
| | 3300 | 2165 | 4519 | 3897 | | |
| | 3725 | 2455 | 4944 | 4322 | 110 | 110 |
| | 3860 | 2530 | 5079 | 4457 | | |
| | 4165 | 2800 | 5384 | 4762 | | |
| | 4380 | 3000 | 5599 | 4977 | | |
| | 4620 | 3230 | 5839 | 5217 | | |
| 5170 | 3495 | 6389 | 5767 | | | |
| Triple | 3860 | 1855 | 5079 | 4483 | 636 | 1232 |
| | 4320 | 2005 | 5539 | 4943 | 786 | 1382 |
| | 4800 | 2165 | 6019 | 5423 | 946 | 1542 |
| | 5210 | 2305 | 6429 | 5833 | 1086 | 1682 |
| | 5520 | 2455 | 6739 | 6143 | 1236 | 1832 |
| | 5740 | 2530 | 6959 | 6363 | 1311 | 1907 |
| | 6100 | 2690 | 7319 | 6723 | 1471 | 2067 |
| | 6370 | 2800 | 7589 | 6993 | 1581 | 2177 |
| | 6830 | 3000 | 8049 | 7453 | 1781 | 2377 |
| | 7315 | 3230 | 8534 | 7938 | 2011 | 2607 |
| Hi-Lo | 2935 | 1955 | 4147 | 3520 | 736 | 1363 |
| | 3255 | 2115 | 4437 | 3810 | 881 | 1508 |
| | 3530 | 2255 | 4737 | 4110 | 1031 | 1658 |
| | 3760 | 2405 | 4917 | 4290 | 1121 | 1748 |
| | 3910 | 2480 | 5032 | 4405 | 1191 | 1818 |

Note: mast lowered and freelif for C30 are 15mm higher than above mentioned values

Upright table C35

| | Maximum fork height (h3) | Mast lowered (h1) | Mast extended | | Free lift(h2) | |
|----------|--------------------------|-------------------|--------------------|-----------------------|--------------------|-----------------------|
| | | | with load backrest | without load backrest | with load backrest | without load backrest |
| Standard | mm | mm | mm | mm | mm | mm |
| | 1985 | 1610 | 3204 | 2723 | | |
| | 2545 | 1890 | 3764 | 3283 | | |
| | 2845 | 2040 | 4064 | 3583 | | |
| | 3165 | 2200 | 4384 | 3903 | | |
| | 3590 | 2490 | 4809 | 4328 | 115 | 115 |
| | 3725 | 2565 | 4944 | 4463 | | |
| | 4030 | 2835 | 5249 | 4768 | | |
| | 4245 | 3035 | 5464 | 4983 | | |
| | 4485 | 3265 | 5704 | 5223 | | |
| 5035 | 3530 | 6254 | 5773 | | | |
| Triple | 3680 | 1890 | 4899 | 4418 | 671 | 1126 |
| | 4140 | 2040 | 5359 | 4878 | 821 | 1276 |
| | 4620 | 2200 | 5839 | 5358 | 981 | 1436 |
| | 5030 | 2340 | 6249 | 5768 | 1121 | 1576 |
| | 5340 | 2490 | 6559 | 6078 | 1271 | 1726 |
| | 5560 | 2565 | 6779 | 6298 | 1346 | 1801 |
| | 5920 | 2725 | 7139 | 6658 | 1506 | 1961 |
| | 6190 | 2835 | 7409 | 6928 | 1616 | 2071 |
| | 6650 | 3035 | 7869 | 7388 | 1816 | 2271 |
| | 7135 | 3265 | 8354 | 7873 | 2046 | 2501 |

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 DESCRIPTION



The C20-35 series from CLARK marks a further highlight 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 Compartment

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. A rubber isolated operator cell provides a quiet, comfortable and spacious environment for the operator.

The adjustable steering column (38°) with spoke steering wheel and an easy-to adjust, yet comfortable CLARK seat together with impressive leg room allow perfect adaptation to any driver. Automotive style foot pedals and fully directional cowl-mounted control levers with international symbols avoid confusion for any operator. The operating data is displayed in real-time on the clear 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. An ideally positioned foot operated parking brake, completes this driver's compartment.

Engine, Transmission

The CLARK C20-35 forklifts with LPG, gasoline or diesel power enable excellent acceleration and high driving performance. A Yanmar 4TNE98 diesel engine with 43 kW at 2500 revolutions per minute is just as impressive as the LPG propelled Mitsubishi 4G64 with 2.4 litres and PSI (Power Systems Incorporated) fuel-system. With 51.6 kw engine power our LPG forklifts C20-35L are thus more and more a great alternative to Diesel powered forklifts.

Brake system

A drum/shoe brake ensures a reliable high level of safety. Low effort service brake ensures 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.

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(only C20-C30). 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 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, paintwork in the bright safety colour "CLARK Green", driver's compartment and upright in black, rims in white.

Additional equipment

SE tyres, wide drive, dual drive, Non-marking tyres, heated cabs (with single or folded doors), integrated or hook on sideshifts, various other attachments, fuel cap lock, quick-release couplings, various seats, acoustic reversing alarm and much more.

Security

The C20-35 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.

CLARK Europe GmbH

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