



Efficient, robust, comfortable and easy to use forklift trucks with retractable mast

The Neos II 14-16-20 ac forklift trucks with retractable mast are the best products of their kind available on the market and can provide maximum performance under any operating conditions. Each component is duly tested and subjected to the most rigorous trials so that we can obtain a competitive and satisfactory product. The motors, the electronic controls and the masts meet the strictest quality standards, bringing actual added value to this type of products.

Frame

The monobloc construction of the frame ensures maximum stability and enhanced mechanical resistance during stacking and travelling, maintaining high residual capacities even at maximum height. The battery compartment can be easily opened, simplifying the daily and periodical battery recharge and check operations. Standard lateral battery extraction system with rollers for readily battery replacement in case of intensive use during multiple work shifts.

Drive

Powerful and reliable three-phase ac traction motors, able to satisfy even the most demanding requests for performance, providing the necessary amount of power every time, as the speed of the truck can be adjusted by changing the position of the accelerator pedal.

Steering

Easy to use servo-assisted electric steering with electronic equipment and dedicated ac motor for safe, silent and simple operation. The steering wheel can be longitudinally adjusted for enhanced driving comfort, with the possibility of selecting between 180° or 360° guidance by simply pressing the selection button.

Hydraulic functions

Powerful and silent ac lift motor, capable of adjusting the number of revolutions of the pump, providing the appropriate amount of oil every time. All hydraulic functions can be controlled using finger tips for precise and safe load handling. Mast with built-in braking system for gradual slowdown at the end of the stroke, preventing any sudden stops that might affect the stability of the load.

Masts

The masts made of cold extruded profiles highly resistant to twisting and bending are available in the following versions:

- triplex masts with high overall free lift and lift capacities from 4,160 to 10,460 mm and above (on request);
- Tilting Forks;
- forks with built-in lateral shift adjustment to prevent changing the centre of gravity and for maintaining optimal residual capacities at any height.

Braking system

Independent braking systems available on all the products in this range:

- regenerative braking by reversing the running direction;
- regenerative braking by releasing the accelerator pedal; a real advantage for this type of product
- electromagnetic parking brake on the drive wheel;
- hydraulic braking on load wheels (only on Neos II 16 and 20 ac models).

Electronic system

All products in the Neos II range are fitted with cutting edge electronic controls that check and enable all machine functions and allow unlimited adjustments for performance optimisation, adapting the truck to the operation to be carried out. All hydraulic functions, electric drive and braking parameters can be set electronically from dashboard or remote desktop (directly by OMG), according to customer's requirements.

Operator's compartment

- fabric seat adjustable in depth and height;
- depth adjustable steering wheel;
- non-slip footrest;
- LCD display showing the most important operating data:
 - parking brake indicator;
 - warning lights (neutral position, controller and motor overheating);
 - operating hours timer;
 - travel speed display;
 - speed limiter "ON" indicator (tortoise button);
 - various operating modes E/S/H, E=economy S=standard H=super;
 - battery level indicator.



Finger tip

All hydraulic functions can be controlled using proportional finger tips for precise and safe load handling.



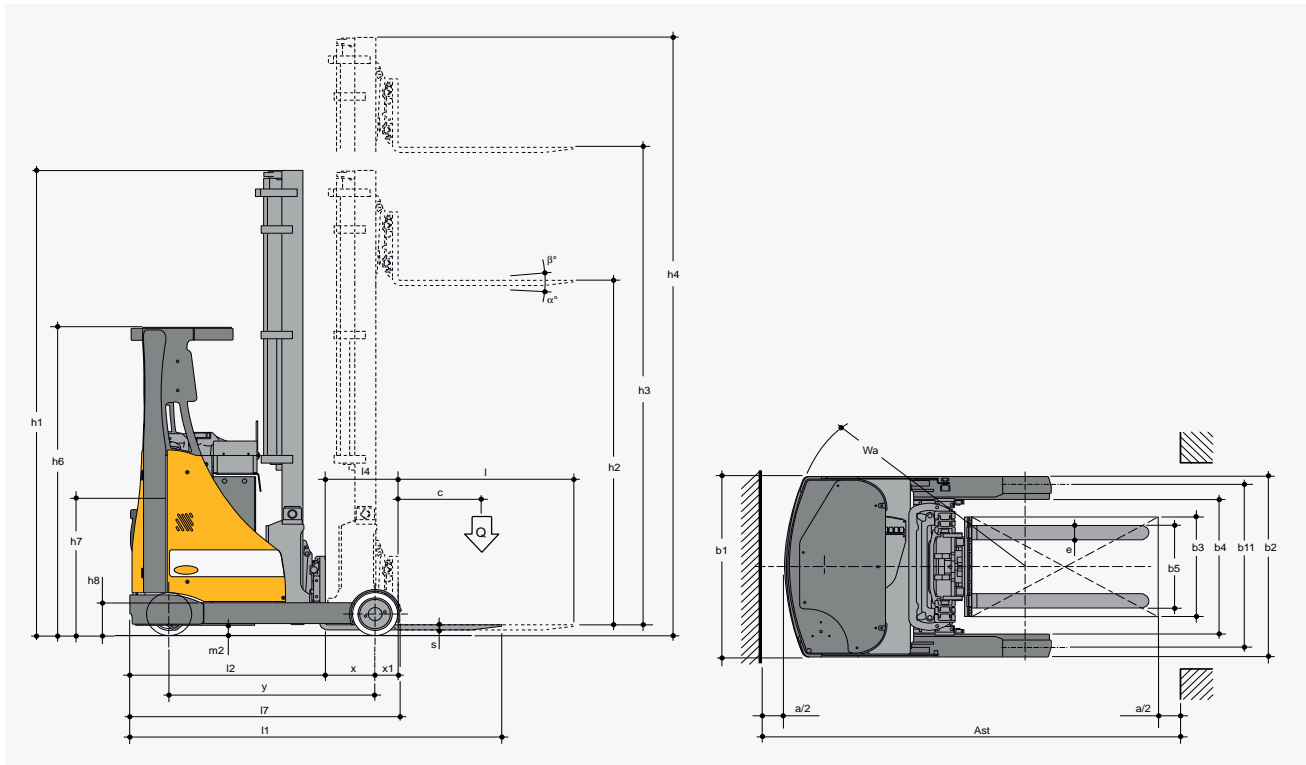
Lateral battery extraction

Lateral battery extraction system with rollers for readily battery replacement in case of intensive use during multiple work shifts.



| Standard masts | | | | | | | | Capacities: | | |
|----------------|---------------------------------------|--------------------------------|---------------------------------|--|-----------------------------|---|---------------------------|---------------|---------------|------|
| Description | Lowered mast height h ₁ | Forks stroke h ₃ | Total lift h ₃ +s | Extended mast height h ₄ | Free lift h ₂ | Forks support plate tilting system fwd/bwd / (°) | with shifter (t) c=600 mm | | | |
| | | | | | | | Neos II 14 ac | Neos II 16 ac | Neos II 20 ac | |
| Triplex-GAL | mm | 2,085 | 4,160 | 4,200 | 4,820 | 1,470 | 3 / 5 | 1.4 | 1.6 | 2.0 |
| | mm | 2,185 | 4,460 | 4,500 | 5,120 | 1,570 | 3 / 5 | 1.4 | 1.6 | 2.0 |
| | mm | 2,415 | 5,160 | 5,200 | 5,820 | 1,800 | 3 / 5 | 1.4 | 1.6 | 1.9 |
| | mm | 2,665 | 5,960 | 6,000 | 6,620 | 2,060 | 3 / 5 | 1.4 | 1.6 | 1.75 |
| | mm | 2,925 | 6,660 | 6,700 | 7,320 | 2,310 | 3 / 5 | 1.4 | 1.5 | 1.6 |
| | mm | 3,190 | 7,460 | 7,500 | 8,120 | 2,580 | 3 / 5 | 1.25 | 1.4 | 1.5 |
| | mm | 3,490 | 8,210 | 8,250 | 8,870 | 2,880 | 3 / 5 | 1.0 | 1.4 | 1.5 |
| | mm | 3,825 | 8,960 | 9,000 | 9,620 | 3,220 | 3 / 5 | * | 1.0 | 1.2 |
| | mm | 4,020 | 9,460 | 9,500 | 10,120 | 3,400 | 3 / 5 | * | * | 1.1 |
| | mm | 4,230 | 10,460 | 10,500 | 10,120 | 3,620 | 3 / 5 | * | * | 0.80 |

* available on request



Accessories and special features

| | | | |
|--|--------------------------|--|--------------------------|
| multifunction monojoystick | <input type="checkbox"/> | metal cabin | <input type="checkbox"/> |
| reverse buzzer and beacon light | <input type="checkbox"/> | metal cabin protected against adverse weather conditions | <input type="checkbox"/> |
| “tilting forks” tilting system for forks support plate | <input type="checkbox"/> | protection for cold store | <input type="checkbox"/> |
| forks support plate with built-in lateral shift adjustment | <input type="checkbox"/> | heating system for cold storage | <input type="checkbox"/> |
| lateral battery extraction system | <input type="checkbox"/> | heated seat 24V | <input type="checkbox"/> |
| single lateral battery extraction roller with wheels | <input type="checkbox"/> | widened spars for special pallets | <input type="checkbox"/> |
| digital lifting display and preselector for 10 levels | <input type="checkbox"/> | work lights | <input type="checkbox"/> |
| built-in shifter self-centring button | <input type="checkbox"/> | safety grid for bulky loads | <input type="checkbox"/> |
| button for automatic horizontal positioning of the forks | <input type="checkbox"/> | seat belts | <input type="checkbox"/> |
| video camera placed on the forks and colour display in the cabin | <input type="checkbox"/> | access keypad with pin code | <input type="checkbox"/> |
| video camera placed on the plate and colour display in the cabin | <input type="checkbox"/> | additional hydraulic function | <input type="checkbox"/> |

standard

optional

| Characteristics | 1.1 | Manufacturer | | OMG S.r.l. Single member company | | | | |
|-----------------|--------------------------------|--|--|----------------------------------|---------------|---------------|---------------|---------------|
| | 1.2 | Model | | Neos II 14 ac | Neos II 16 ac | Neos II 20 ac | | |
| | 1.3 | Operation | | electrical | | | | |
| | 1.4 | Operator position | | ride-on | | | | |
| | 1.5 | Capacity | Q | t | 1.4 | 1.6 | 2.0 | |
| | 1.6 | Load centre of gravity | c | mm | 600 | | | |
| | 1.8 | Load distance | x | mm | 325 | 425 | 425 | |
| | | Extended mast | x1 | mm | 190 | 220 | 220 | |
| | 1.9 | Centre distance | y | mm | 1,345 | 1,470 | 1,470 | |
| Weights | 2.1 | Truck weight incl. battery (see line 6.5) | | kg | 3,350 | 3,800 | 3,900 | |
| | 2.3 | Weight on axis without front / rear load | | kg | 2,150 / 1,200 | 2,360 / 1,440 | 2,452 / 1,448 | |
| | 2.4 | Weight on axis with front / rear load and extended mast | | kg | 724 / 4,028 | 942 / 4,760 | 735 / 5,165 | |
| | 2.5 | Weight on axis with front / rear load and retracted mast | | kg | 1,846 / 2,908 | 1,960 / 3,440 | 2,275 / 3,625 | |
| Wheels Frame | 3.1 | Wheels and tyres | | vulkollan | | | | |
| | 3.2 | Front wheel size | | mm | 300 | 343 | 343 | |
| | 3.3 | Rear wheels size | | mm | 350 | 350 | 350 | |
| | 3.5 | Number of front / rear wheels (x = drive) | | | no. | 1x / 2 | | |
| | 3.6 | Front track | b10 | mm | / | | | |
| | 3.7 | Rear track | b11 | mm | 1,177 | 1,182 | 1,182 | |
| | Base dimensions | 4.1 | Mast/forks support plate inclination, forward/backward | | / | ° | 3 / 5 | |
| 4.2 | | Lowered mast height | | h1 | mm | 2,665 | | |
| 4.3 | | Free lift | | h2 | mm | 2,060 | | |
| 4.4 | | Forks lifting stroke | | h3 | mm | 5,960 | | |
| 4.5 | | Extended mast height | | h4 | mm | 6,620 | | |
| 4.7 | | Upper edge overhead guard height (cabin) | | h6 | mm | 2,100 | | |
| 4.8 | | Seat height / Platform height | | h7 | mm | 1,050 | | |
| 4.10 | | Forks height | | h8 | mm | 225 | 225 | 225 |
| 4.19 | | Overall length | | l1 | mm | 2,425 | 2,470 | 2,470 |
| 4.20 | | Length including forks heel | | l2 | mm | 1,275 | 1,320 | 1,320 |
| 4.21 | | Overall width | | b1/b2 | mm | 1,270 | 1,270 | 1,270 |
| 4.22 | | Forks size | | s/e/l | mm | 40/100/1,150 | 40/120/ 1,150 | 40/120/ 1,150 |
| 4.23 | | Forks support plate ISO 2328, class/type A, B | | | | Fem 2/A | | |
| 4.24 | | Forks support plate width | | b3 | mm | 840 | | |
| 4.25 | | Width over forks | | b5 | mm | 720 | | |
| 4.26 | | Forks internal gauge | | b4 | mm | 948 | 948 | 948 |
| 4.28 | | Mast stroke | | l4 | mm | 533 | 655 | 655 |
| 4.31 | | Clearance under the mast with load | | m1 | mm | / | / | / |
| 4.32 | | Clearance at mid stroke | | m2 | mm | 75 | 75 | 75 |
| 4.33 | | Working aisle width with 1000 x 1200 transversal pallet | | Ast | mm | 2,685 | 2,775 | 2,775 |
| 4.34 | | Working aisle width with 800 x 1200 longitudinal pallet | | Ast | mm | 2,725 | 2,812 | 2,812 |
| | | | Truck diagonal | D | mm | | | |
| 4.35 | | Turning radius | | Wa | mm | 1,610 | 1,740 | 1,740 |
| 4.37 | Length including support forks | | l7 | mm | 1,740 | 1,970 | 1,970 | |
| Performance | 5.1 | Speed with / without load | | km/h | 13 / 13 | 13 / 13 | 13 / 13 | |
| | 5.2 | Lifting speed with / without load | | m/s | 0.35 / 0.50 | 0.35 / 0.50 | 0.35 / 0.50 | |
| | 5.3 | Lowering speed with/without load | | m/s | 0.50 / 0.45 | | | |
| | 5.4 | Mast speed with/without load | | m/s | 0.10 / 0.10 | | | |
| | 5.8 | Max. feasible gradient with / without load | | % | 10 / 15 | 13 / 20 | 13 / 20 | |
| | 5.9 | Acceleration with / without load | | s | 6 / 5.6 | | | |
| | 5.10 | Service brake | | | electrical | hydraulic | hydraulic | |
| | 5.11 | Parking brake | | | electrical | | | |
| | Electric motors | 6.1 | Traction motor, performance with S2 60 min | | kW | 6.5 | | |
| | | 6.2 | Lift motor, performance with S3 15% | | kW | 15 | | |
| | | 6.3 | Battery as per DIN 43531 / 35 / 36 A, B, C, no | | | no | | |
| 6.4 | | K5 battery voltage, nominal capacity | | V/Ah | 48 / 465 | 48 / 620 | 48 / 620 | |
| 6.5 | | Battery weight | | kg | 700 | 950 | 950 | |
| 6.6 | | Power consumption as per VDI cycle | | kW/h | | | | |
| Miscellaneous | 8.1 | Type of electronic system | | | AC inverter | | | |
| | 8.2 | Equipment operating pressure | | bar | 180 | | | |
| | 8.3 | Oil flow rate for equipment | | l/min | 25 | | | |
| | 8.4 | Noise threshold as per EN 12 053 | | dB(A) | < 70 | | | |
| | | | | | | | * optional | |

Technical data sheet referring to pallet truck in standard version; data determined in compliance with VDI 2198. These values may differ if your product is fitted with other types of wheels and tires, supports and accessories. All data and images herein are indicative, OMG S.r.l. Single member company reserves the right to modify the documentation without prior notice.