



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

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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.

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### **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.

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## 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.



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## Finger tip

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



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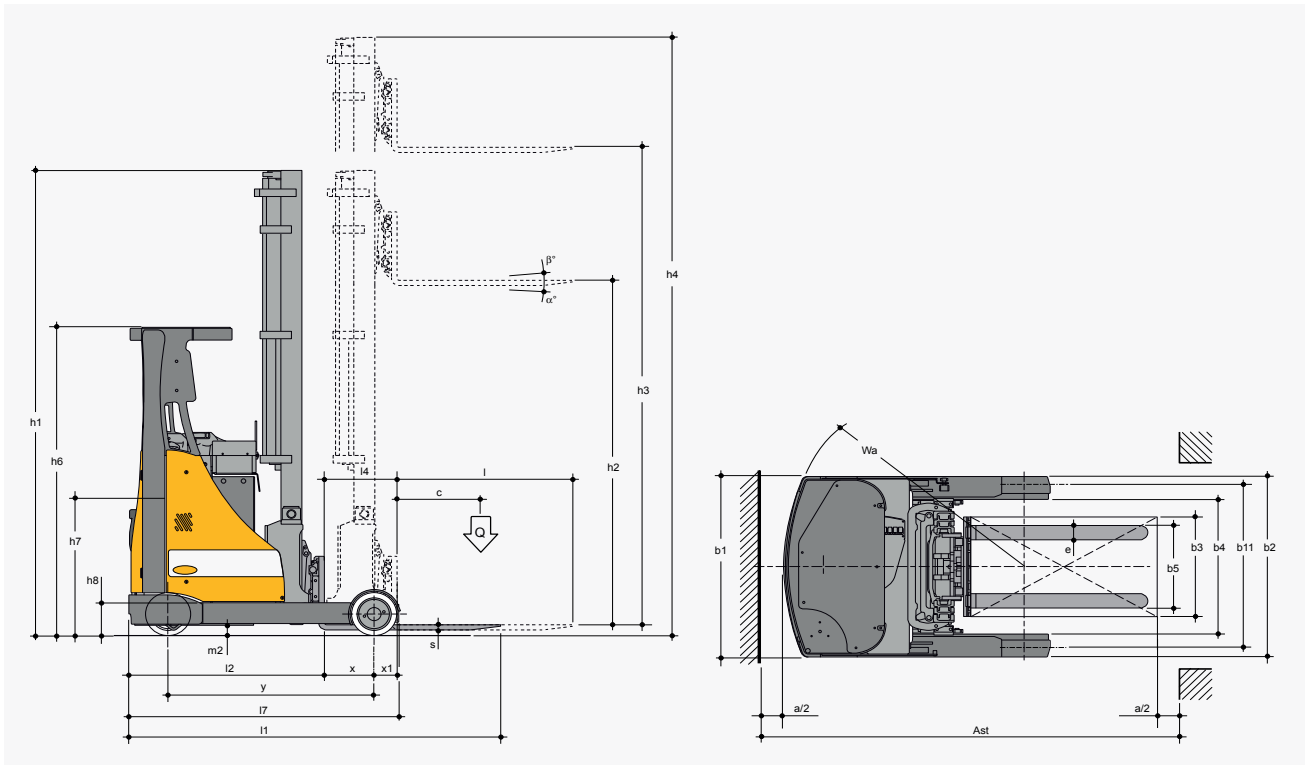
## Lateral battery extraction

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 <sub>1</sub>	Forks stroke h <sub>3</sub>	Total lift h <sub>3</sub> +s	Extended mast height h <sub>4</sub>	Free lift h <sub>2</sub>	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 checked="" type="checkbox"/>	metal cabin	<input checked="" type="checkbox"/>
reverse buzzer and beacon light	<input checked="" type="checkbox"/>	metal cabin protected against adverse weather conditions	<input checked="" type="checkbox"/>
“tilting forks” tilting system for forks support plate	<input checked="" type="checkbox"/>	protection for cold store	<input checked="" type="checkbox"/>
forks support plate with built-in lateral shift adjustment	<input checked="" type="checkbox"/>	heating system for cold storage	<input checked="" type="checkbox"/>
lateral battery extraction system	<input checked="" type="checkbox"/>	heated seat 24V	<input checked="" type="checkbox"/>
single lateral battery extraction roller with wheels	<input checked="" type="checkbox"/>	widened spars for special pallets	<input checked="" type="checkbox"/>
digital lifting display and preselector for 10 levels	<input checked="" type="checkbox"/>	work lights	<input checked="" type="checkbox"/>
built-in shifter self-centring button	<input checked="" type="checkbox"/>	safety grid for bulky loads	<input checked="" type="checkbox"/>
button for automatic horizontal positioning of the forks	<input checked="" type="checkbox"/>	seat belts	<input checked="" type="checkbox"/>
video camera placed on the forks and colour display in the cabin	<input checked="" type="checkbox"/>	access keypad with pin code	<input checked="" type="checkbox"/>
video camera placed on the plate and colour display in the cabin	<input checked="" type="checkbox"/>	additional hydraulic function	<input checked="" 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.