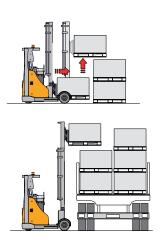


# Forklift truck with retractable mast Neos II 16-20 SE ac

Forklift trucks with retractable mast and superelastic tyres: innovative, robust, suitable for any type of floor





The revolutionary Neos II 16 20 SE ac forklift trucks come with retractable mast and superelastic tyres. They actually can be used just like the traditional front forklift trucks while also benefiting from the functions, features and compact size of a retractable forklift truck. The superelastic wheels (drive and load) and the electric steering with dedicated motor and electronic control for safe, accurate and silent operation, render these trucks efficient on any type of floors, even on irregular ones that usually represent an obstacle for this category of products.

#### **Frame**

The monobloc construction of the chassis 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 revo-

lutions 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 8,210 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.

# **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.



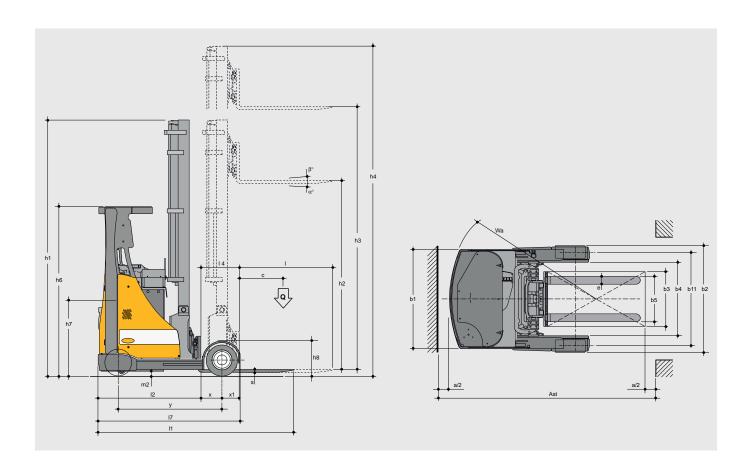
# **Lateral battery extraction**

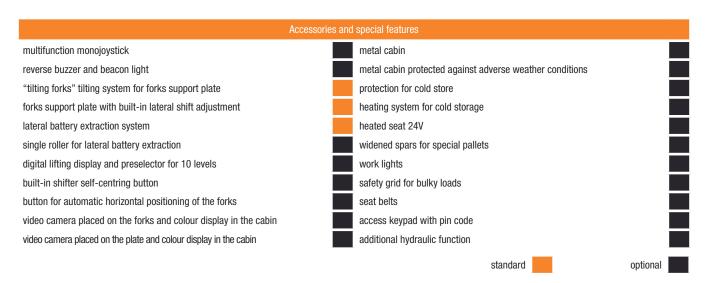
Lateral battery extraction system with rollers for readily battery replacement in case of intensive use during multiple work shifts.





Standard masts								Capacities:		
Description		Lowered mast height	Forks stroke	Total lift	Extended mast	Free lift	Forks support plate tilting sys-	with shifter (	t) c=600 mm	
		ŭ			height		tem fwd/bwd	Neos II 16 SE ac	Neos II 20 SE ac	
		h1	h3	h3+s	h4	h2	/ (°)	NOOS II TO OL UC	14000 II 20 OL do	
	mm	2,085	4,160	4,200	4,820	1,470	3/5	1.6	2.0	
	mm	2,185	4,460	4,500	5,120	1,570	3/5	1.6	2.0	
	mm	2,415	5,160	5,200	5,820	1,800	3/5	1.6	2.0	
Triplex-GAL	mm	2,665	5,960	6,000	6,620	2,060	3/5	1.6	1.9	
	mm	2,925	6,660	6,700	7,320	2,310	3/5	1.5	1.8	
	mm	3,190	7,460	7,500	8,120	2,580	3 / 5	1.4	1.7	
	mm	3,490	8,210	8,250	8,870	2,880	3/5	1.4	1.6	





Characteristics	1.1	Manufacturer	OMG S.r.l. Single member company				
	1.2	Model		Neos II 16 SE ac Neos II 20 SE ac			
	1.3	Operation		electrical			
	1.4	Operator position		ride-on			
	1.5	Capacity	t	1.6	2.0		
	1.6	Load centre distance	С	mm	60		
	1.8	Load distance	X	mm	370	490	
		Extended mast	X1	mm	27	75	
	1.9	Centre distance	у	mm	1,405	1,700	
Weights	2.1	Truck weight incl. battery (see line 6.5)		kg	3,775	3,560	
	2.3	Weight on axis without front / rear load	kg	2,427 / 1,348	2,450 / 1,41		
	2.4	Weight on axis with front / rear load and extended mast	kg	735 / 4,640	735 / 4,640 700 / 5,170		
	2.5	Weight on axis with front / rear load and retracted mast	kg	2,080 / 3,295 2,300 / 3			
Wheels	3.1	Wheels and tyres		superelastic			
Frame	3.2	Front wheel size	mm	454x200 (200/50-10)			
	3.3	Rear wheels size	mm	457x178 (18x7-8)			
	3.5	Number of front / rear wheels (x = drive)	no.	1x / 2			
	3.6	Front track		1			
			b10	mm	1.0	10	
	3.7	Rear track	b11	mm	1,3		
Base	4.1	Mast/forks support plate inclination, forward/backward	/	0	3/		
dimensions	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	2,155		
	4.8	Seat height / Platform height	h7	mm	1,140		
	4.10	Forks height	h8	mm	47	476	
	4.19	Overall length	lı	mm	2,480	2,655	
	4.20	Length including forks heel	l2	mm	1,330	1,505	
	4.21	Overall width	b1/b2	mm			
	4.22	Forks size		1,275 / 1,460			
			mm	40 / 120 / 1,150			
	4.23	Forks support plate ISO 2328, class/type A, B		2/A			
	4.24	Forks support plate width	mm	730			
	4.25	Width over forks	mm	720			
	4.26	Forks internal gauge	b4	mm	948		
	4.28	Mast stroke	14	mm	645	765	
	4.31	Clearance under the mast with load	m1	mm	/		
	4.32	Clearance at mid stroke	m <sub>2</sub>	mm	80	0	
	4.33	Working aisle width with 1000 x 1200 transversal pallet	Ast	mm	2,869	2,979	
	4.34	Working aisle width with 800 x 1200 longitudinal pallet	Ast	mm	2,820	3,005	
		Truck diagonal	D	mm			
	4.35	Turning radius	Wa	mm	1,700	1,992	
	4.37	Length including support forks	l <sub>7</sub>	mm	1.975	2,245	
Performance	5.1	Speed with / without load		km/h	11.5 / 12.5	11 / 12.5	
- I CHOITHANCE	5.2	Lifting speed with / without load	m/s	0.35 / 0.50	0.30 / 0.50		
	5.3	Lowering speed with/without load  Lowering speed with/without load	m/s				
				0.50 / 0.45 0.10 / 0.10			
	5.4	Mast speed with/without load	m/s				
	5.8	Max. feasible gradient with / without load	%	13 / 20	11/20		
	5.9	Acceleration with / without load	S	6 / 5.6 hydraulic electrical			
	5.10	Service brake					
	5.11	Parking brake					
Electric	6.1	Traction motor, performance with S2 60 min	kW	6.			
motors	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 / 620 (*775)			
	6.5	Battery weight	kg	1,020			
	6.6	Power consumption as per VDI cycle	kW/h				
Miscellaneous	8.1	Type of electronic system		ΔC inv	verter		
Miscellatieous	8.2	Equipment operating pressure	bar	AC inverter 180			
		Oil flow rate for equipment		25			
	8.3		I/min	< 80			
	8.4	Noise threshold as per EN 12 053		dB(A)	< 0	30	

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.

