

Multi-directional forklift truck with retractable mast and cushion wheels: the ideal match between technology, flexibility and robustness



The NEOS II 25 Multi CH ac multi-directional forklift trucks with retractable mast are specially designed and constructed for transporting long loads through even the smallest spaces and warehouses. They represent the perfect combination between the versatility of a traditional lateral forklift truck, as they can move in all directions, and the convenience of a compact truck, thanks to their small sizes. Available with large opening for forks positioning, specially designed for transporting long loads. Nine automatic wheel positioning programmes are available for normal operation, rotation, lateral and transversal movement. Cushion wheels ensure maximum performance even in outdoor and paved areas.

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.

Electronic system

All products in the Neos II range come with electronic inverters. These controls 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.

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 external profiles highly resistant to twisting and bending, are available in the following versions:

- triplex masts with high overall free lift and lift capacities from 4.800 to 8.250 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.

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 overheating, 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.
- Graphic display for automatic wheels positioning:
 - F1 normal
 - F2 lateral (steering on load wheels)
 - F3 multi-directional at 360°
 - F4 free "ad hoc" movement (6 modes available)

Braking system

- regenerative braking by reversing the running direction;
- regenerative braking by releasing the accelerator pedal;
- electromagnetic parking brake on the drive wheel;
- hydraulic braking on load wheels.



Mono-joystick (optional)

The mono-joystick controls all hydraulic functions of the machine.

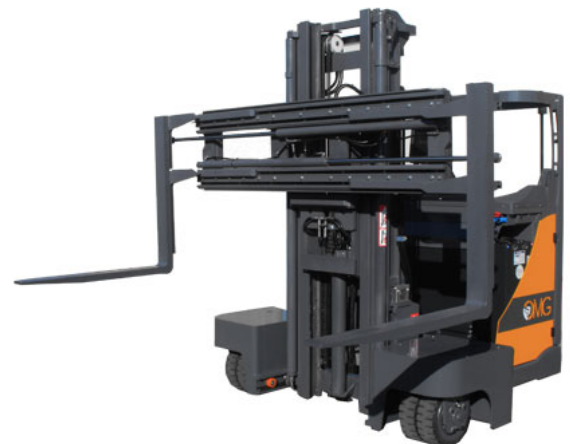
Finger tip (standard)

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

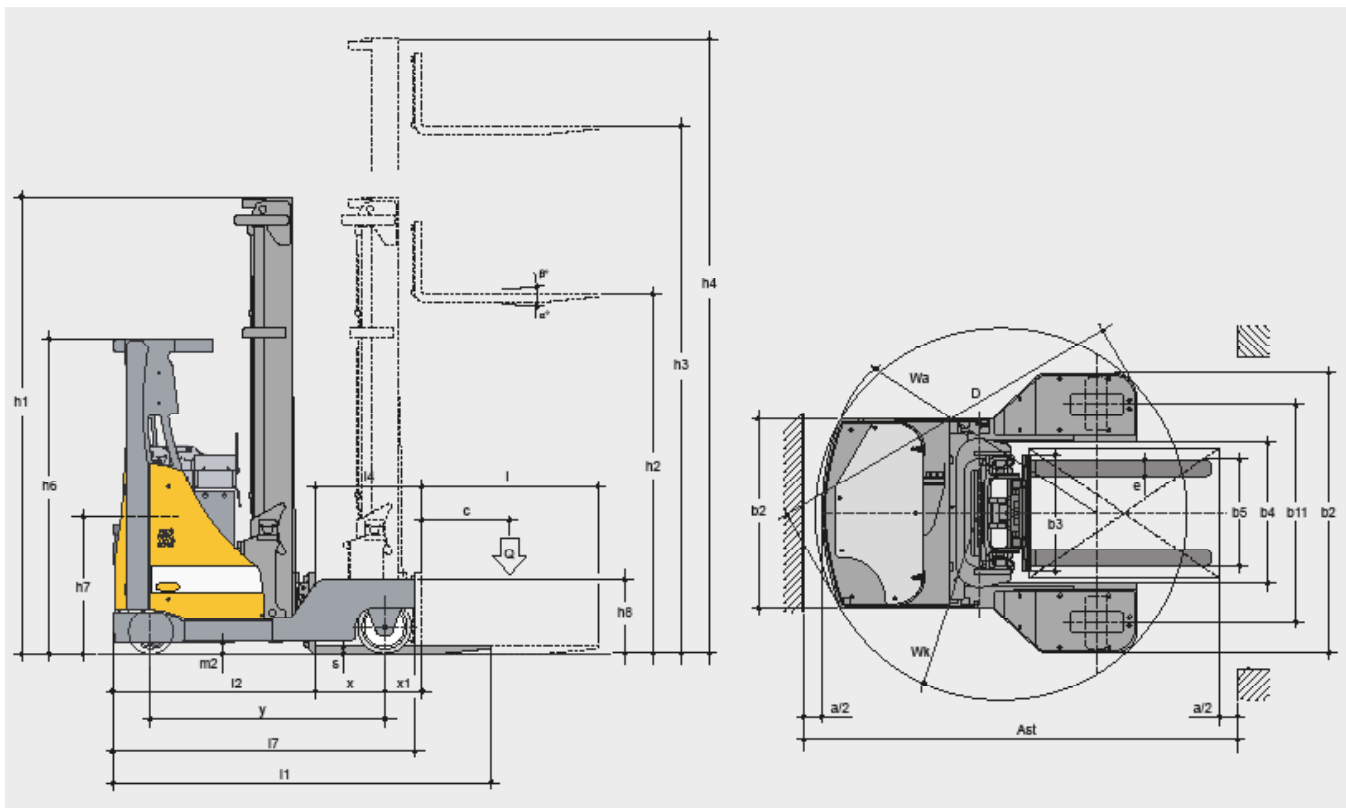


Forks positioner (optional)

NEOS II 25 Multi CH ac pac can be equipped with an optional large opening forks positioner (600 > 2.600 mm), for safe and precise picking and stacking of long and bulky loads.



Standard masts								Capacities:
Description	Lowered mast height	Forks stroke	Total lift	Extended mast height	Free lift	Forks support plate fwd/bwd tilting α / β (°)	with shifter (t) c=600 mm	
							NEOS II 25 Multi CH ac	
Triplex-GAL	mm	2.125	4.800	4.850	5.325	1.600	3/5	2.5
	mm	2.275	5.250	5.300	5.775	1.750	3/5	2.5
	mm	2.575	6.050	6.100	6.575	2.050	3/5	2.2
	mm	2.875	6.950	7.000	7.475	2.350	3/5	2.0
	mm	3.075	7.500	7.550	8.025	2.550	3/5	1.9
	mm	3.375	8.250	8.300	8.775	2.850	3/5	1.6



Accessories and special features

- multifunction monojoystick
- reverse buzzer and beacon light
- “tilting forks” tilting system for forks support plate
- forks support plate with built-in lateral shift adjustment
- lateral battery extraction system
- single lateral battery extraction roller with wheels
- digital lifting display and preselector for 10 levels
- built-in shifter self-centring button
- button for automatic horizontal positioning of the forks
- video camera placed on the forks and colour display in the cabin
- video camera placed on the plate and colour display in the cabin

- metal cabin
- metal cabin protected against adverse weather conditions
- protection for cold store
- heating system for cold storage
- heated seat 24V
- work lights
- safety grid for bulky loads
- seat belts
- access keypad with pin code
- additional hydraulic function
- forks positioner with large opening (600 > 2.600 mm)

standard ■

optional ■

Characteristics	1.1	Manufacturer			OMG S.r.l.	
	1.2	Model			NEOS II 25 Multi CH ac	
	1.3	Operation			electrical	
	1.4	Operator position			ride-on	
	1.5	Capacity	Q	t	2.5	
	1.6	Load centre distance	c	mm	600	
	1.8	Load distance	x	mm	492	
		Extended mast	x1	mm	250	
	1.9	Centre distance	y	mm	1.650	
Weights	2.1	Truck weight incl. battery (see line 6.5)			kg	4.990
	2.3	Weight on axis without front / rear load			kg	2.800 / 2.210
	2.4	Weight on axis with front / rear load and extended mast			kg	668 / 6.500
	2.5	Weight on axis with front / rear load and retracted mast			kg	2.650 / 4.850
Wheels Frame	3.1	Wheels and tyres			Cushion	
	3.2	Front wheel size			mm	457 x 178
	3.3	Rear wheels size			mm	381 x 127
	3.5	Number of front / rear wheels (x = drive)			n°	1x / 4 (tandem)
	3.6	Front track	b10	mm	/	
	3.7	Rear track	b11	mm	1.600	
	Base dimensions	4.1	Mast/forks support plate inclination, forward/backward	α / β	°	3/5
4.2		Lowered mast height	h1	mm	2.575	
4.3		Free lift	h2	mm	2.050	
4.4		Forks lifting stroke	h3	mm	6.050	
4.5		Extended mast height	h4	mm	6.575	
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	558	
4.19		Overall length	l1	mm	2.600	
4.20		Length including forks heel	l2	mm	1.453	
4.21		Overall width	b1/b2	mm	1.270 / 2.130	
4.22		Forks size	s/e/l	mm	45 x 120 x 1.150	
4.23		Forks support plate ISO 2328, class/type A, B			2/A	
4.24		Forks support plate width	b3	mm	720	
4.25		Width over forks	b5	mm		
4.26		Forks internal gauge	b4	mm	1.030	
4.28		Mast stroke	l4	mm	785	
4.31		Clearance under the mast with load	m1	mm		
4.32		Clearance at mid stroke	m2	mm	73	
4.33		Working aisle width with 1000 x 1200 transversal pallet	Ast	mm		
4.34		Working aisle width with 800 x 1200 longitudinal pallet	Ast	mm	2.958	
		Truck diagonal	D	mm	2.670	
4.35		Turning radius	Wa	mm	1.945	
4.37	Length including support forks	l7	mm	2.190		
Performance	5.1	Speed with / without load			km/h	11.5 / 12.5
	5.2	Lifting speed with / without load			m/s	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	010 / 010
	5.7	Max. feasible gradient with / without load			%	
	5.9	Acceleration with / without load			s	6.5 / 7
	5.10	Service brake			hydraulic	
	5.11	Parking brake			electromagnetic	
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 / 620 (optional 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			inverter ac	
	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)	<80

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. reserves the right to modify the documentation without prior notice.