



***Li-ion*** ***NL SERIES LITHIUM BATTERY COUNTERBALANCE FORKLIFT***



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**INNOVATIVE POWER**  
**THE UN FORKLIFT TRUCK**



**UN FORKLIFT**



# NL Series Lithium Battery Counterbalance Forklift

capacity 2,000 to 3,500kg

The NL series new lithium battery forklift adopts UN internal combustion forklift's design with the strong chassis, frame, counterweight and mast. The power structure is designed to adopt UN electric forklift's concept, which use full AC system, Italy imported ZAPI controller, BMS control system and high quality lithium battery. This combination of IC forklift and electric forklift makes an ideal solution to reach customers' satisfaction on cost saving and environmental friendly.

## COMFORT AND ERGONOMICS

Owing to the low center of gravity and good stability, the driver feels comfortable during turning. Bigger leg space than standard Li-ion forklifts.



Large foot space



Low and Wide Step



Zapi controller with multifunctional instrument panel



Led lights: energy saving, long life



Pedals with comfortable angle



# LITHIUM

DIESEL

ELECTRIC

**LITHIUM BATTERY FORKLIFT IS CONVERTED FROM DIESEL FORKLIFT**

## TWO IN ONE, ONE FOR TWO





# ADVANTAGES OF LITHIUM BATTERY TECHNOLOGY

## Strong and Durable Chassis

Using the IC truck structures, which has been tested by the market for more than 20 years.

**5 YEARS WARRANTY**



### Long Term Performance

The battery can be charged and discharged 4000 times. With 5 years guarantee on lithium battery gives customers great satisfaction and long time life cycle.



### Eco-Friendly

Using low-carbon, clean, and environmental friendly lithium battery. Lower noise, zero emission, and less vibration.



### Lower Total Ownership Cost (TOC)

The purchase price is similar to a regular IC forklift. No fuel consumption cost, no maintenance fee for air filter, oil filter or engine oil changes compare to a regular IC forklift.



### Multi-Scenario Usage

Adopting the IC forklift structures enable to operate indoors and outdoors, with great waterproof and dustproof performance.



### Fast Charging (gun plug optional)

Fully charge only needs 2 hours, and it can be charged at any time during the day to ensure multiple shifts.





## MAIN SPECIFICATIONS (STANDARD PERFORMANCE)

General	1	Model	FB20-Y	FB25-Y	FB30-Y	FB35-Y		
	2	Rated Load Capacity	Q(kg)	2000	2500	3000	3500	
3	Load Centre	C(mm)	500	500	500	500		
Characteristic & Dimension	4	Rated Lift Height	H <sub>3</sub> (mm)	3000	3000	3000	3000	
	5	Free Lift Height	H <sub>2</sub> (mm)	100	100	100	100	
	6	Fork Size (LxWxT)	mm	1070x120x40	1070x120x40	1070x125x45	1070x125x50	
	7	Mast Tilt Angle (F/R, α°/β°)	deg	6°/12°	6°/12°	6°/12°	6°/12°	
	8	Fork Overhang (Wheel Center to Fork Face)	X <sub>1</sub> (mm)	479	479	484	484	
	9	Rear Overhang	X <sub>2</sub> (mm)	520	520	595	635	
	10	Ground Clearance (Bottom of Mast)	H <sub>7</sub> (mm)	130	130	145	145	
	11	Length to Face of Fork (Without Fork)	L <sub>1</sub> (mm)	2660	2660	2700	2775	
	12	Overall Width	B <sub>1</sub> (mm)	1150	1150	1225	1225	
	13	Mast Lowered Height	H <sub>1</sub> (mm)	2055	2055	2070	2070	
Performance	14	Mast Extended Height (With Backrest)	H <sub>4</sub> (mm)	4070	4070	4070	4070	
	15	Overhead Guard Height	H <sub>5</sub> (mm)	2215	2215	2235	2235	
	16	Turning Radius (Outside)	W <sub>a</sub> (mm)	2365	2365	2425	2500	
	17	Min.Aisle width for pallets	A <sub>s</sub> (mm)	4120	4120	4180	4255	
	18	Travel Speed (Full Load/No Load)	km/h	11/12	11/12	11/12	11/12	
	19	Lifting Speed (Full Load/No Load)	mm/sec	260/380	260/380	250/360	220/340	
	20	Lowering Speed (Full Load)	mm/sec	450	450	450	450	
	21	Max.Gradeability (Full Load)	%	15	15	12	12	
	Chassis	22	Tyre (Front x 2)	mm	7.00-12-12PR	7.00-12-12PR	28x9-15-12PR	28x9-15-12PR
		23	Tyre (Rear x 2)	mm	6.00-9-10PR	6.00-9-10PR	6.50-10-10PR	6.50-10-10PR
24		Front Tread	B <sub>2</sub> (mm)	970	970	1000	1000	
25		Rear Tread	B <sub>3</sub> (mm)	980	980	980	980	
Weight	26	Wheelbase	Y(mm)	1650	1650	1700	1700	
	27	Total Weight	kg	3385	3605	4460	4775	
	28	Front Axle Weight Distribution (No Load/Full Load)	kg	1354/4846	1442/5494	1784/6714	1910/6997	
Power & Transmission	29	Rear Axle Weight Distribution (No Load/Full Load)	kg	2031/538	2163/610	2676/746	2865/777	
	30	Battery	V/Ah	80V/150AH option 220AH option 270AH option 350AH	80V/175AH option 270AH option 350AH	80V/220AH option 270AH option 350AH	80V/270AH option 350AH	
	31	Drive Motor	KW	10	10	10	10	
	32	Lift Motor	KW	12	12	12	12	
	33	Operating Pressure (For Attachments)	Mpa	17.5	17.5	17.5	17.5	

## 2.0-2.5 TON MAST SPECIFICATIONS & RATED CAPACITIES

Mast Type	Mast Name	Max.Fork Height(mm)	Load Capacity(kg)				Overall Height (mm)			Free Lift (mm)		Tilt Angle (Single)	Tilt Angle (Double)
			Lowered		Extended		Without Backrest	With Bracket	Without Backrest	With Bracket			
			FD20/ FD20T	FD20/ FD20T(Double)	FD25/ FD25T	FD25/ FD25T(Double)					2.0/2.5t		
Wide View Mast	M300	3000	2000	2000	2500	2500	2055	3580	4070	100	100	6-12	6-12
	M330	3300	2000	2000	2500	2500	2205	3880	4370	100	100	6-12	6-12
	M400	4000	2000	2000	2450	2450	2605	4580	5070	100	100	6-6	*6-12
	M450	4500	1800	*1900	2000	*2400	2855	5080	5570	100	100	6-6	*6-12
	M470	4700	1450	*1850	1750	*2050	2955	5280	5770	100	100	6-6	*6-12
	M500	5000	1300	*1700	1600	*2100	3155	5580	6070	100	100	6-6	*6-6
2-Stage Full Free Wide View Mast	M550	5500	1100	*1500	1350	*1700	3405	6080	6570	100	100	3-6	*3-6
	M600	6000	950	*1300	1050	*1500	3655	6580	7070	100	100	3-6	*3-6
	FM300	3000	2000	2000	2500	2500	2070	3605	4068	1470	1007	6-12	6-12
	FM370	3700	2000	2000	2500	2500	2420	4255	4718	1800	1357	6-6	6-6
	FM400	4000	2000	2000	2500	2500	2670	4605	5068	2000	1607	6-6	*6-12
	TFM450	4500	1700	*1800	2000	*2300	2095	5107	5570	1498	1035	6-6	*6-6
3-Stage Full Free Wide View Mast	TFM470	4700	1600	*1750	1900	*2200	2145	5307	5770	1548	1085	6-6	*6-6
	TFM500	5000	1400	*1600	1500	*2000	2245	5607	6070	1648	1185	6-6	*6-6
	TFM550	5500	1100	*1500	1200	*1800	2445	6107	6570	1800	1385	3-6	*3-6
	TFM600	6000	800	*1400	850	*1600	2645	6607	7070	2000	1585	3-6	*3-6
	TFM650	6500	500	*1100	550	*1200	2895	7107	7570	2200	1835	3-6	*3-6
	TFM700	7000	100	*700	150	*800	3095	7607	8070	2300	2035	3-6	*3-6

Note: 1.With Separated Side shifter, load capacity subtract 200Kg. With Integrated side shifter, load capacity subtract 50Kg.  
2. \* (Asterisk ) is for double front wheels model.

## 3.0-3.5 TON MAST SPECIFICATIONS & RATED CAPACITIES

Mast Type	Mast Name	Max.Fork Height(mm)	Load Capacity(kg)				Overall Height (mm)			Free Lift (mm)		Tilt Angle (Single)	Tilt Angle (Double)
			Lowered		Extended		Without Backrest	With Bracket	Without Backrest	With Bracket			
			FD30/ FD30T	FD30/ FD30T(Double)	FD35/ FD35T	FD35/ FD35T(Double)					3.0/3.5t		
Wide View Mast	M300	3000	3000	3000	3500	3500	2070	3595	4070	100	100	6-12	6-12
	M330	3300	3000	3000	3500	3500	2220	3895	4370	100	100	6-12	6-12
	M370	3700	3000	3000	3400	3400	2420	4295	4770	100	100	6-6	6-6
	M400	4000	2950	2950	3250	3250	2620	4595	5070	100	100	6-6	*6-12
	M450	4500	2600	*2900	2900	*3000	2870	5095	5570	100	100	6-6	*6-12
	M470	4700	2500	2800	2800	2900	2970	5295	5770	100	100	6-6	*6-12
2-Stage Full Free Wide View Mast	M500	5000	2200	*2550	2400	*2800	3170	5595	6070	100	100	6-6	*6-6
	M550	5500	2000	*2400	2200	*2600	3420	6095	6570	100	100	3-6	*3-6
	M600	6000	1500	*2000	1600	*2400	3670	6595	7070	100	100	3-6	*3-6
	FM300	3000	3000	3000	3500	3500	2070	3590	4065	1382	907	6-12	6-12
	FM330	3300	3000	3000	3500	3500	2220	3940	4415	1532	1057	6-12	6-12
	FM370	3700	3000	3000	3500	3500	2420	4240	4715	1732	1257	6-6	6-6
3-Stage Full Free Wide View Mast	FM400	4000	3000	3000	3250	*3500	2670	4590	5065	1982	1507	6-6	*6-12
	TFM450	4500	2600	*2800	2800	*3200	2110	5200	5675	1422	947	6-6	*6-6
	TFM470	4700	2400	*2700	2500	*3000	2160	5400	5875	1472	997	6-6	*6-6
	TFM500	5000	2100	*2400	2300	*2800	2260	5700	6175	1572	1097	6-6	*6-6
	TFM550	5500	1650	*2250	1800	*2550	2460	6200	6675	1772	1297	3-6	*3-6
	TFM600	6000	1200	*2100	1300	*2300	2660	6700	7175	1972	1497	3-6	*3-6
TFM650	6500	950	*1700	1050	*1800	2910	7200	7675	2200	1747	3-6	*3-6	
TFM700	7000	650	*1400	750	*1500	3110	7700	8175	2300	1947	3-6	*3-6	

Note: 1.With Separated Side shifter, load capacity subtract 200Kg. With Integrated side shifter, load capacity subtract 50Kg.  
2. \* (Asterisk ) is for double front wheels model.

