



NPV20N2

NPV20PD

NPF25N2

PLATFORM POWER

SPECIFICATIONS

PLATFORM POWER PALLET TRUCKS 24V, 2.0 - 2.5 TONNES



CARRY MORE AND WALK LESS

DESIGNED FOR LOAD TRANSPORT OVER MEDIUM AND LONG DISTANCES, AS WELL AS VEHICLE LOADING AND UNLOADING, THESE POWER PALLET TRUCKS REDUCE THE LEGWORK WITH THEIR FOLD-DOWN OR FIXED RIDE-ON PLATFORMS. THE RANGE INCLUDES A DOUBLE PALLET HANDLER THAT HALVES THE NUMBER OF MOVEMENTS REQUIRED.



The NPV20N2 is a highly capable 2.0 tonne machine, well suited to medium and heavy duties but still compact and manoeuvrable enough to work in the back of goods vehicles. It is fitted with a fold-down platform.



The NPV20PD double pallet handler with foldable platform saves time by carrying two pallets simultaneously (one above the other). It is perfect for double stacking on the loading ramp and for transporting incoming or outgoing loads over short, medium or long distances.



The NPF25N2 offers a higher lift capacity (2.5 tonnes) and a more powerful battery for the heaviest loads and most intensive applications. Its fixed platform and side barriers, with an integrated backrest, increase driver protection and comfort.

LOWER COST OF OWNERSHIP

- Sturdy chassis construction and endurance-tested forks provide enhanced robustness and reliability even in the toughest conditions.
- Sealed chassis and waterproof electrics resist moisture, dirt and corrosion - increasing uptime, cutting maintenance costs and prolonging truck life.
- Easy access to critical truck components allows faster fault diagnosis and speedier maintenance, squeezing downtime still further.
- Closed compartment with steel cover protects battery against impact, postponing costly battery replacement (NPV20N2, NPF25N2).
- Standard battery size allows interchangeability (NPV20N2, NPF25N2).
- Dust-shielded load wheels help extend life of wheel bearings.

UNMATCHED PRODUCTIVITY

- AC motor results in very precise drive control, for easier operation.
- Ergonomic tiller arm helps keep operators fresh with comfortable, easy-to-use controls.
- Excellent drive and traction characteristics suit intensive work over medium and long distances.
- Programmable controller lets users prioritise between faster performance and smoother handling with lower energy consumption, prolonging shift life.
- Truck can be driven with tiller arm in vertical position in ultra-low-speed mode to maximise manoeuvrability.
- Folding platform stays down, saving time when operators go to remount (NPV20N2, NPV20PD).
- Increased fork lift height suits work even on steep ramps and loading docks (NPV20N2/NPF25N2).
- Narrower truck body makes loading/unloading in confined areas like goods vehicle trailers much easier (NPV20N2, NPF25N2).
- Double pallet handling capability halves the number of movements required (NPV20PD).
- Fast maximum drive speed (12 km/h unloaded, 9 km/h loaded) boosts performance of fixed platform model (NPF25N2).
- Electric steering wheel with crosswise driving position increases efficiency over longer distances (NPF25N2).

SAFETY AND ERGONOMICS

- Low step height for mounting/dismounting without effort.
- Strong folding sidebars protect and support operators at all times (standard on NPV20N2, optional on NPV20PD).
- Large lift/lower buttons (standard on NPV20PD) or levers (optional on NPV20N2) allow easy one-handed control even with gloves.
- Linked suspension castor wheels ensure highest possible truck stability - whatever the load (NPV20N2, NPF25N2).
- Five-point chassis with hydraulic friction force system and anti-rollback functionality enhances ergonomics and safety (NPV20PD).
- High ground clearance of operator platform reduces the risk of impact on inclines or uneven surfaces (NPV20N2, NPF25N2).
- Fixed platform options with a variety of barrier and entry/exit designs add extra safety and comfort (NPV20PD).
- Minimum upper body and neck movement required, resulting in less strain for the operator (NPF25N2).



STANDARD EQUIPMENT AND OPTIONS

	NPV20N2	NPV20PD	NPF25N2		NPV20N2	NPV20PD	NPF25N2
GENERAL				WHEEL OPTIONS			
Micro-computer incl. hour meter and battery indicator with cutout (ATC T4)	—	●	—	Polyurethane traction and load wheels	●	●	●
Multifunctional display incl. BDI & hour meter	●	—	●	Power friction traction wheel	○	○	○
PIN code login 100 codes	—	●	●	Non-marking drive wheel	—	○	—
PIN code login 4 codes	○	—	—	Anti-static drive wheel	—	○	—
Foldable platform	●	●	—	Pallet entry/exit rollers	○	○	○
Fixed platform, rear entry	—	—	●	OTHER OPTIONS			
Foldable sidebars	●	●	—	Driver protected platform rear entry	—	○	●
Short tiller arm with display and keypad	—	●	—	Driver protected platform side entry	—	○	—
Multifunctional steering wheel	—	—	●	Power steering	○	○	●
Chill store design, down to 1°C, with rust-protected axles	—	●	—	Warm environment fan	●	○	●
Speed regulated lift motor	●	●	●	Overhead guard	—	○	—
Proportional valve for lowering, controlled by rocker switch on tiller head	—	●	—	Load backrest low or high	—	○	—
Proportional valve for lift & lowering, controlled by fingertip levers on tiller head	○	—	—	Load backrest, h=1300mm	○	—	○
Proportional valve for lift & lowering, controlled by fingertip levers on steering wheel	—	—	○	Key switch entry	●	○	●
Polyurethane wheels	●	●	●	12V DC power socket	—	○	—
Initial lift	—	●	—	Equipment bar	○	○	○
Tandem load wheels Polyurethane	●	●	●	Writing desk incl. RAM C holder	—	○	—
Single load wheel	○	○	—	Equipment bar holder RAM system size C	—	○	—
Battery rollers	○	●	○	Equipment bar holder RAM system size C, 2 pcs	—	○	—
Li-ion batteries	—	○	—	Working light	○	—	○
ENVIRONMENT				Equipment bar holder RAM size D	—	○	—
Cold store design, 0C° to -35C°	○	○	○	Increased drive speed with/without load 10/12.5 km/h	○	○	○
DRIVE AND LIFT CONTROLS				Prepared for frequent battery changeover, (BCO)	○	○	○
Heavy duty tiller head - with key switch entry	—	○	—	Special RAL colour	○	○	○
Tiller arm - adjustable in length	—	○	—				
Tiller up drive	●	○	○				

● Standard ○ Option

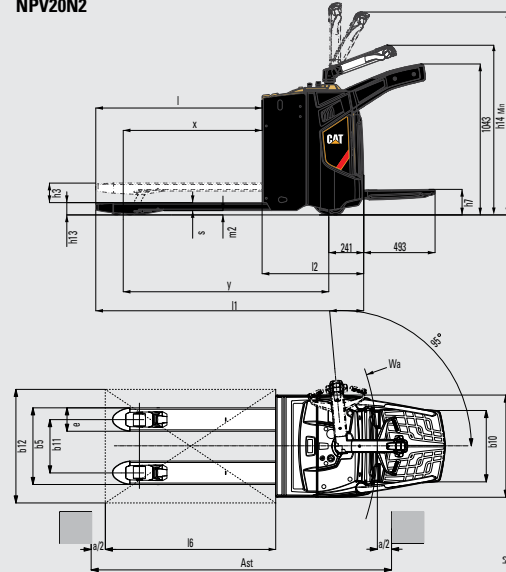
Characteristics		
1.1	Manufacturer	
1.2	Manufacturer's model designation	
1.3	Power source	
1.4	Operator type	
1.5	Load capacity	Q (kg)
1.6	Load centre distance	c (mm)
1.8	Load wheel axle to fork face (forks lowered)	x (mm)
1.9	Wheelbase	y (mm)
2.0 Weight		
2.1	Truck weight without load, with maximum battery weight	kg
2.2	Axle loadings with nominal load & maximum battery weight, drive / load side	kg
2.3	Axle loadings without load & with maximum battery weight, drive / load side	kg
3.0 Wheels, Drive Train		
3.1	Tyres: PT = Power Thane, Vul = Vulkollan, P = Polyurethane, N = Nylon, R = Rubber drive / load side	
3.2	Tyre dimensions, drive side	(mm)
3.3	Tyre dimensions, load side	(mm)
3.4	Castor wheel dimensions (diameter x width)	(mm)
3.5	Number of wheels, load / drive side (x = driven)	
3.6	Track width (centre of tyres), drive side	b10 (mm)
3.7	Track width (centre of tyres), load side	b11 (mm)
4.0 Dimensions		
4.2	Height with mast lowered	h1 (mm)
4.4	Lift height	h3 (mm)
4.5	Height with mast extended	h4 (mm)
4.6	Initial lift	h5 (mm)
4.7	Height to top of overhead guard	h6 (mm)
4.8	Seat or stand height	h7 (mm)
4.9	Height of tiller arm / steering console (min/max)	h14 (mm)
4.10	Height of support legs	h8 (mm)
4.15	Fork height, fully lowered	h13 (mm)
4.19	Overall length	l1 (mm)
4.20	Length to fork face	l2 (mm)
4.21	Overall width	b1/b2 (mm)
4.22	Fork dimensions (thickness, width, length)	s / e / l (mm)
4.24	Fork carriage width	b3 (mm)
4.25	Outside width over forks (minimum / maximum)	b5 (mm)
4.32	Ground clearance at centre of wheelbase, (forks lowered)	m2 (mm)
4.33c	Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast (mm)
4.33d	Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	Ast3 (mm)
4.34c	Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast (mm)
4.34d	Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	Ast3 (mm)
4.35	Turning radius	Wa (mm)
5.0 Performance		
5.1	Travel speed, with / without load	km / h
5.2	Lifting speed, with / without load	m / s
5.3	Lowering speed, with / without load	m / s
5.7	Gradeability, with / without load	%
5.8	Maximum gradeability with / without load	%
5.9	Acceleration time (10 metres) with / without load	s
5.10	Service brakes (mechanical / hydraulic / electric / pneumatic)	
6.0 Electric motors		
6.1	Drive motor capacity (60 min. short duty)	kW
6.2	Lift motor output at 15% duty factor	kW
6.4	Battery voltage/capacity at 5-hour discharge	V / Ah
6.5	Battery weight	kg
8.0 Miscellaneous		
8.1	Type of drive control	
10.7	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ	dB (A)
10.7.1	Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ	dB (A)

	Cat Lift Trucks NPV20N2	Cat Lift Trucks NPF25N2	Cat Lift Trucks NPV20PD
Battery	Battery	Battery	Battery
Pedestrian/stand-on	Pedestrian/stand-on	Stand-on	Pedestrian/stand-on
Load capacity	2000	2500	2000 / 1000 + 1000
Load centre distance	600	600	600
Load wheel axle to fork face (forks lowered)	960	960	982/832
Wheelbase	1421	1501	1754 / 1604
Truck weight without load, with maximum battery weight	660	787	1270
Axle loadings with nominal load & maximum battery weight, drive / load side	950 / 1710	1155 / 2144	1230 / 2040
Axle loadings without load & with maximum battery weight, drive / load side	535 / 125	640 / 147	940 / 330
Tyres	Vul / Vul	Vul / Vul	Vul / Vul
Tyre dimensions, drive side	230 x 70	230 x 70	230 x 90
Tyre dimensions, load side	85 x 75	85 x 75	85 x 70
Castor wheel dimensions (diameter x width)	125 x 55	125 x 55	150 x 60
Number of wheels, load / drive side (x = driven)	4 / 1 x + 2	4 / 1 x + 2	1 x + 2 / 4(2)
Track width (centre of tyres), drive side	480	480	526
Track width (centre of tyres), load side	375	375	390
Height with mast lowered	-	-	1410 / 1560
Lift height	135	135	1585 / 2000
Height with mast extended	-	-	2095 / 2395
Initial lift	-	-	120
Height to top of overhead guard	-	-	2287
Seat or stand height	177	170	165
Height of tiller arm / steering console (min/max)	1180 / 1350	1143 / 1290	1135 / 1475
Height of support legs	-	-	87
Fork height, fully lowered	85	85	90
Overall length	1852 ¹⁾ / 2346 ¹⁾	2277 ²⁾	2185 / 2571
Length to fork face	702 ¹⁾ / 1195 ¹⁾	1127 ²⁾	1035
Overall width	720	720	770
Fork dimensions (thickness, width, length)	55 / 165 / 1150	55 / 165 / 1150	65/180/1150,1000
Fork carriage width	-	-	590
Outside width over forks (minimum / maximum)	540	540	570
Ground clearance at centre of wheelbase, (forks lowered)	30	29	17
Working aisle width (Ast) with 1000 x 1200 mm pallets, load crosswise, platform up/down	-	-	2685 / 3072
Working aisle width (Ast3) with 1000 x 1200 mm pallets, load crosswise, platform up/down	1920 ¹⁾ / 2400 ¹⁾	2395 ²⁾	-
Working aisle width (Ast) with 800 x 1200 mm pallets, load lengthwise, platform up/down	-	-	2668 / 3055
Working aisle width (Ast3) with 800 x 1200 mm pallets, load lengthwise, platform up/down	2120 ¹⁾ / 2600 ¹⁾	2595 ²⁾	2430 / 2817
Turning radius	1680 ¹⁾ / 2160 ¹⁾	2155 ²⁾	1030 + x / 1417 + x
Travel speed, with / without load	9.0 / 9.0 (12.0) ²⁾	9.0 / 12.0	10 / 10 (12.5)
Lifting speed, with / without load	0.03 / 0.05	0.03 / 0.05	0.20 / 0.32
Lowering speed, with / without load	0.07 / 0.08	0.07 / 0.08	0.39 / 0.24
Gradeability, with / without load	9 / 25	9 / 20	6.5 / 17.2
Maximum gradeability with / without load	-	-	14.5 / 27.7
Acceleration time (10 metres) with / without load	-	-	6.1 / 4.9
Service brakes (mechanical / hydraulic / electric / pneumatic)	Electric	Electric	Electric
Drive motor capacity (60 min. short duty)	2.3	2.3	2.2
Lift motor output at 15% duty factor	1.2 (10%)	1.2	3.2
Battery voltage/capacity at 5-hour discharge	24 / 250 - 375 ¹⁾	24 / 375 - 500 ²⁾	24 / 220 - 400
Battery weight	212 - 291	291 - 380	250 - 370
Type of drive control	Stepless	Stepless	Stepless
Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871 in work LpAZ	-	-	60.1
Level of noise at the ear level of the driver according to EN 12 053:2001 and EN ISO 4871, drive/lift/idle LpAZ	66	65	-

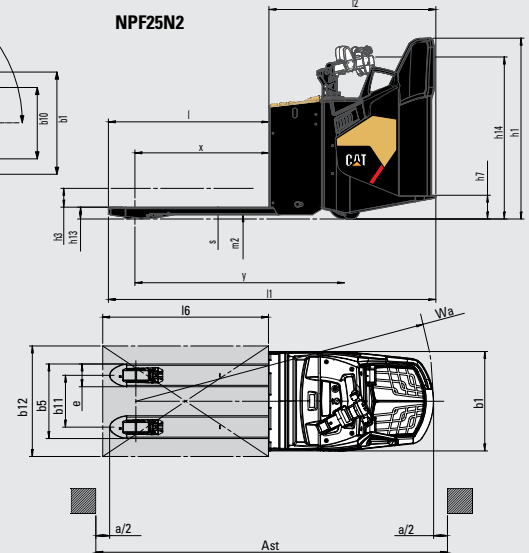
Ast = Wa-x+l6+200
Ast = Working aisle width
Wa = Turning radius

1) With 375Ah battery the l2 dimension increases 72mm
2) With 500Ah battery the l2 dimension increases 72mm

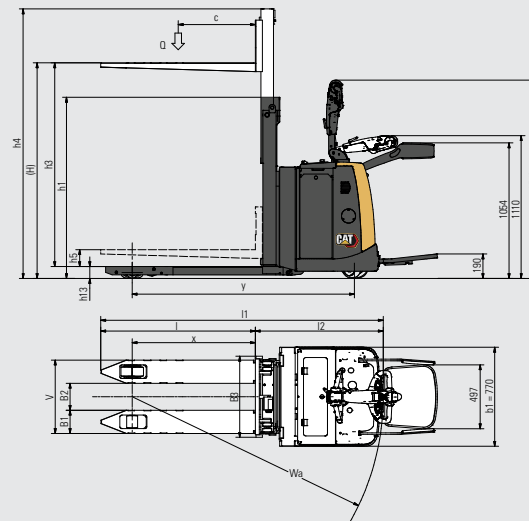
NPV20N2



NPF25N2



NPV20PD



- h1 Height with mast lowered
- h2 Standard free lift
- h3 Lift height
- h13 Fork height, fully lowered

NPV20PD			
Mast Type	h3+h13	h1*	h2+h13
	mm	mm	mm
Duplex Without Free Lift (DS)	1675	1410	NA
	2090	1560	NA

* h1 closed mast height includes polycarbonate finger protection. Mast height excl. finger protection is 1343mm / 1493mm

LI-ION BATTERIES

CONSIDER THE BENEFITS OF LI-ION BATTERY TECHNOLOGY ON THE NPV20PD MODEL



Like all components on Cat® lift trucks, batteries are carefully chosen and specified for optimum compatibility with each individual truck and its application requirements. As a leader in forklift development, we are ready to adopt new component technologies as soon as they become genuinely cost-effective.

At present, the needs of most lift trucks are still met optimally by lead-acid batteries, but in some cases lithium-ion (Li-ion) batteries now offer a realistic alternative. This is especially true in high-energy, multi-shift, 24/7 operations.

In view of the improved performance and affordability of today's Li-ion batteries, we have introduced them as an option. They will be offered on particular trucks, whenever they make economic and practical sense for you and your business.



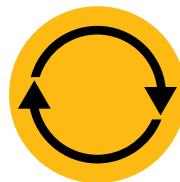
**LONGER
LIFE**



**HIGHER
EFFICIENCY**



**LONGER
RUNTIME**



**CONSISTENT
PERFORMANCE**



**FASTER
CHARGING**



**NO
MAINTENANCE**



**INBUILT
PROTECTION**

Will Li-ion work for you?

Li-ion batteries offer tremendous advantages over traditional lead-acid batteries. The big question is whether those benefits are sufficient – in your situation – to justify the large difference in purchase price. To answer this, you must consider their total cost of ownership (TCO). The key factors are summarised below.

Li-ion cost savings compared to lead-acid

These include savings on energy, equipment, labour and downtime.

- Longer life – 3 to 4 times lead-acid lifespan – reduces overall battery investment
- Higher efficiency – energy losses during charging and discharging are around 30% lower, so electricity consumption is reduced
- Longer runtime – thanks to higher energy capacity, lower losses and more efficient recovery of current from regenerative braking
- Consistently high performance – with a more constant voltage curve – maintains greater truck productivity, even toward the end of a shift
- Faster charging and opportunity charging – full charge within 1 to 2 hours – enables top-ups during short breaks, without damaging the battery or shortening its lifespan
- No battery changing – fast opportunity charges enable continuous operation with just one battery and minimise the need to buy, store and maintain spares
- No maintenance – the battery stays on board the truck for charging and there is no need for top-ups or electrolyte checks
- No gas – avoids the space, equipment and running costs of a battery room and ventilation system
- Inbuilt protection – intelligent battery management system (BMS) automatically prevents excessive discharge, charge, voltage and temperature, as well as virtually eliminating application errors

LI-ION BATTERIES

CONSIDER THE BENEFITS OF LI-ION BATTERY TECHNOLOGY ON THE NPV20PD MODEL



Li-ion extra costs compared to lead-acid

Li-ion battery purchase prices are higher – although they are coming down as production volumes increase. You may also need to invest in extra charging points and electrical infrastructure to support them.

Further advantages of Li-ion compared to lead-acid

Money should not be your only consideration. Li-ion batteries also have important safety and environmental benefits.

- Greater safety – no explosive gas, acid spills or regular battery lifting
- Smaller carbon footprint – better efficiency means less energy consumption, while longer life lowers the requirement for manufacture of additional batteries



Cat lift trucks with Li-ion

The necessary LIBAT option can be built into new trucks or retrofitted to your existing fleet using a fast and easy conversion kit. LIBAT ensures perfect integration of the Li-ion battery and lift truck. Along with the necessary cabling and connections, it includes a battery lock.

For extra peace of mind, Li-ion batteries come with the option of a service contract, full warranty and feedback on battery status. Data collected by the battery's inbuilt battery management system (BMS) is uploaded and analysed to help the dealer advise you on its condition and usage. The report may, for example, indicate a need for changes in your practices to improve efficiency and battery life.

Batteries and chargers with different capacities are available. Your dealer will identify the best combination for your needs.

NPV20PD LI-ION BATTERY AND CHARGER	
Battery capacity, Ah	208 / 260
Charger capacity, A, 1 - 2,5 hour*	100 / 200

* Both values possible for 208Ah Li Ion battery, depending on charger

info@catliftruck.com | www.catliftruck.com

WESC1994(10/19) ©2019, MCFE. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

NOTE: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications, or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Cat lift trucks Dealer. Cat Lift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.



DOWNLOAD
BROCHURE



WATCH
VIDEOS



DOWNLOAD
OUR APP

