

SPECIFICATIONS

TOW TRUCKS, 24V, 3.0 - 5.0 TONNES



EFFECTIVE OPERATORS AND EFFICIENT LOGISTICS

CAT® N2-GENERATION TOW TRUCKS BOOST BOTH MACHINE AND OPERATOR EFFECTIVENESS, THANKS TO MARKET-LEADING ENERGY EFFICIENCY, CONTROL AND COMFORT. THEIR SUPERIORITY IS BASED LARGELY ON CLEVER DESIGNS AND INTELLIGENT SYSTEMS DEVELOPED AND PROVEN IN THE ENERGISING NO-N2 LOW-LEVEL ORDER PICKER RANGE.









For high comfort, low fatigue and maximum time efficiency, the spacious operator compartment has a low step height and offers unobstructed walk-through and on-off access. A vibration-dampening, triple-suspension floor and a comfortable backrest add further luxury.



Walk-beside operation, giving a clearer view of the trailer, is especially useful when manoeuvring to couple or uncouple. It also allows easy short movements of the truck. From a walking position, the 'flying start' function enables operators to begin acceleration before stepping aboard.



Ergonomically shaped controls, integrated into the innovative steering wheel, are easily reached by the driver without releasing his or her grip. The vibration-dampened steering unit is effortless to operate with either hand and is adjustable to the perfect height and angle.

LOWER COST OF OPERATION

- Integrated single-unit motor and gear design adds reliability and delivers the best energy efficiency in the market.
- Simplified one-piece main frame, with welded steel construction, is durable and trouble-free.
- Simple and quick accessibility of systems and components for checks and servicing minimises downtime and bills.
- Inspection holes in chassis enable fast checking of gears, castor wheel and drive wheel screw.
- Easy removal of motor compartment shield on front of truck (secured by two screws) gives rapid access to main service point.
- Additional removable service hatch speeds up inspection and greasing of drive unit, as well as drive wheel changes.
- Display of service hours and battery status encourages correct maintenance (and optional user interface with colour display offers comprehensive information).
- PIN code access option prevents unauthorised use.
- Li-ion battery option increases efficiency and output, especially in intensive, multi-shift, 24/7 operations.

UNMATCHED PRODUCTIVITY

- Advanced steering functionality adapts rapidly to every change in operator steering behaviour and travel speed, for smooth, relaxed and safe driving.
- Unique intelligent curve control constantly adjusts steering sensitivity, cornering speed and angle limitation to maintain fluent motion, traction and balance from start to finish of turns.
- Steering control characteristics are modified when reversing, to allow for driver's sideways position and one-handed operation.
- Latest advances in traction control ensure smooth, rapid acceleration and prevent wheelspin and related wear when driving on slippery surfaces or pulling heavy loads.
- Deceleration rate and stopping distance are easy to control and predict, for perfect positioning, and are programmable using TruckTool.
- ECO and PRO driving modes can be chosen according to the operator and application, and customised settings can be applied to meet more specific requirements.
- Walk-beside operation can be controlled via the steering wheel, with angles limited for safety, to improve view of trailer, to manoeuvre when coupling and uncoupling, and to make short movements (optional side-mounted controls are available).
- 'Flying start' function allows operator to begin acceleration from walk-beside position, before stepping onto the presence-detecting floor mat, for quicker access to drive.

- Spacious and unobstructed operator compartment, with non-slip mat, low step height and no tripping hazards, ensures guick walk-through access.
- Simple battery access, connection and locking mechanisms allow exchanges in seconds, for minimal downtime.
- Different coupling solutions available; standard manual or optional automatic trailer coupling which
 instantly locks the truck and trailer once they are in the right position, while an additional manual
 decoupling option enables release without leaving the operator compartment.
- Connector options enable use of trailers with hydraulic or electric functions for easier and faster handling.

SAFETY AND ERGONOMICS

- High-comfort, triple-suspension floor offers floating structure to dampen shocks and vibrations, sideways dampening to relax knees and ankles, and thick state-of-the-art matting to reduce microvibration.
- Angled footrest minimises strain for seated (see options) and tall operators.
- Optimised backrest shape and height give maximum walk-through access width at hip level, easy passage for operators carrying goods, and a secure leaning position during turns.
- Innovative steering wheel, with vibration damping, is effortless to operate with either hand and can be adjusted for height and angle to maximise comfort.
- Ergonomically shaped accelerator triggers and other controls, integrated into steering wheel, are easily reached by operator without releasing grip.
- Top-of-steering-wheel hand positioning choice enables comfortable and controlled reversing with reduced twisting of shoulders and wrists.
- Regenerative braking, optimised to eliminate swaying effect at full stop, combines with hill hold function and anti-lock brakes to aid smooth operation, confidence and safety in all conditions.
- Additional safety features (optional) include warning devices driving light, strobe, blue spot or programmable alarm — as well as wide side mirrors for use when towed loads are wider than the truck.

STANDARD EQUIPMENT AND OPTIONS

	NTR30N2	NTR50N2
GENERAL		
Multifunctional steering wheel (electric 200°)	•	•
Power ON/OFF by Key switch	•	•
Hourmeter & BDI	•	•
ECO/PRO mode	•	•
High drive speed 13 km/h (without load)	•	•
Drive speed reduction in curves	•	•
Maximum drive speed adjusted according to load weight	•	•
Floor mat acting as dead man's pedal	•	•
Crane battery change	•	•
Polyurethane wheels	•	•
Suspended operator's platform	•	•
Hill hold	•	•
Automatic parking brake	•	•
POWER SOURCE		
Li-lon battery*	0	0
Lead-acid battery	0	0
TRAILER COUPLING		
Manually operated plug coupling, pin diameter 25mm	0	0
Manually operated plug coupling, pin diameter 22mm	0	0
Automatic coupling, pin diameter 25mm	0	0
Automatic coupling with ergonomic unlocking handle, pin diameter 25mm	0	0
No trailer coupling	0	0
TRAILER INTERFACE		
Electrical 4-pin Trailer socket connection of trailer	0	0
Electrical 7-pin Trailer socket connection of trailer	0	0
Auxiliary hydraulics for hydraulic coupling of trailer	0	0
ENVIRONMENT		
Cold store design, OC° to -35C°	0	0
DRIVE CONTROLS		
Walk beside drive button in backrest, FWD/BWD	0	0
SAFETY		
Blue point safety light towards driving direction	0	0
Red point safety light towards driving direction	0	0
Driving light towards driving direction	0	0
Rear working light	0	0
Wide rear view mirrors	0	0
Warning strobe, yellow	0	0
Drive alarm (programmable)	0	0
Fire extinguisher	0	0

^{*}Li-ion battery option is available in selected regions.





FULL LI-ION* BATTERY INTEGRATION

Full integration of Li-ion battery communication on Cat tow trucks enables all battery-related information to be presented clearly via the truck's inbuilt display.



STANDARD EQUIPMENT AND OPTIONS

	NTR30N2	NTR50N2
WHEEL OPTIONS		
Polyurethane traction and load wheels	•	•
Power friction traction wheel	0	0
Solid rubber traction wheel	0	0
Treaded Super-Elastic rear wheels	0	0
Solid rubber rear wheels	0	0
OUTLOOK		
Special RAL colour on front machinery steel cover	0	0
OTHER OPTIONS		
PIN code access with BDI display	0	0
PIN code access with colour display	0	0
Colour display without PIN code access	0	0
Accessory rail in front	0	0
Scanner holder	0	0
Equipment holder (RAM mountings)	0	0
Wrapping holder	0	0
Rear grab handle on backrest	0	0
Sideways battery change	0	0
Clipboard, A4	0	0
Front storage boxes	0	0
Storage folder on bottom of the platform	0	0
Back cushion, tiltable to seat position for back & feet rest. Adjustable in height.	0	0
Power supply, 12 V	0	0
Power supply, USB 5 V	0	0
Heavy duty front nylon strip covered bumper	0	0
Raised front guard plate	0	0
Power source: optional Li-Ion battery (standard lead-acid battery)	0	0



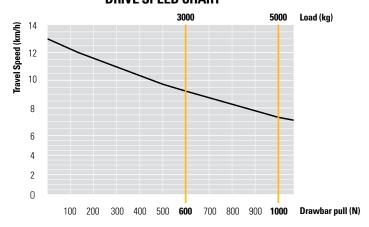
	Characteristics		
1.1	Manufacturer		
1.2	Manufacturer's model designation		
1.3	Power source		
1.4	Operator type		
1.5	Load capacity	0	(kg)
1.7	Rated drawbar pull	F	(N)
1.7	Wheelhase	y	(mm)
1.3	Weight	7	(111111)
2.1b	Truck weight without load, with maximum battery weight		kg
2.10	Axle loadings without load & with maximum battery weight, drive/load side		kq
2.3	Wheels. Drive Train		кy
0.4	Tyres: PT=Power Thane, Vul=Vulkollan, P=Polyurethane, N=Nylon, R=Rubber drive/load side		
3.1			(mm)
3.2	Tyre dimensions, drive side		(mm)
3.3	Tyre dimensions, load side		(mm)
3.5	Number of wheels, load/drive side (x=driven)	b11	()
3.7	Track width (center of tyres), load side	DII	(mm)
4.01	Dimensions	L1	()
4.2b	Height	h1 h7	(mm)
4.8	Seat- or stand height		(mm)
4.12	Coupling height	h10	(mm)
4.19	Overall length	11	(mm)
4.21	Overall width	b1/b2	(mm)
4.25	Outside width over forks (minimum/maximum)	b5	(mm)
4.32	Ground clearance at center of wheelbase, (forks lowered)	m2	(mm)
4.35	Turning radius	Wa	(mm)
	Performance		
5.1	Travel speed, with/without load		km/h
5.7	Gradeability, with/without load		%
5.10	Service brake		
	Electric motors		
6.1	Drive motor capacity (60 min. short duty)		kW
6.4	Battery voltage/capacity at 5-hour discharge		V /Ah
6.5	Battery weight		kg
6.6a	Energy consumption according to EN16796		kWh/h
	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)
10.7.2	Whole-body vibration (EN 13 059:2002)		
10.7.3	Hand-arm vibration (EN 13 059:2002)		
10.8	Towing coupling design / DIN type, ref.		

Cat Lift Trucks	Cat Lift Trucks
NTR30N2	NTR50N2
Battery	Battery
Stand-on	Stand-on
3000	5000
600	1000
1120 3)	1120 3)
1120	1120
1106	1106
616 / 490	616 / 490
0107 400	0107 400
Vul / Vul	Vul / Vul
ø250	ø250
ø250	ø250
2/1x	2 / 1 x
650	650
000	000
1173	1173
123	123
155 1)	155 1)
1450 ³⁾	1450 ³⁾
800	800
794	794
50	50
1306 ³⁾	1306 3)
1300 *	1300 "
9.0 / 13.0 ²⁾	7.0 / 13.0 ²⁾
6 / 15	4 / 15
Electric	Electric
LIGUTIU	Liccuit
2.6	2.6
24/ 465 - 620	24/ 465 - 620
355 – 493	355 – 493
0.92	1.23
0.32	1.20
Stepless	Stepless
69 4)	69 4)
73 / - / - 4)	73 / - / - 4)
0.9	0.9

	RATIONAL
	m2 h7
	у
	135 Na
b11	

- 1) Other coupling heights available
- 2) See drive speed chart
- 3) With 620Ah battery +100mm!
- 4) Inaccuracy of 4 dB(A)

DRIVE SPEED CHART



LI-ION BATTERIES

TIME TO SWITCH?



Lithium-ion (Li-ion) battery technology is available in the Cat® electric counterbalance and warehouse truck ranges. While lead-acid batteries remain a popular choice for our customers, and still have much to offer, they present various challenges which Li-ion can overcome.

Perhaps the most noticeable change when switching to Li-ion is the use of opportunity charging. Instead of exchanging batteries between shifts, you can simply plug into a fast charger during short breaks and keep the same battery going 24/7. This, together with other efficiency, environmental and safety benefits, makes Li-ion a very appealing alternative.



LONGER LIFE



HIGHER EFFICIENCY



LONGER RUNTIME



CONSISTENT PERFORMANCE



FASTER CHARGING



NO BATTERY CHANGING



NO DAILY MAINTENANCE



INBUILT PROTECTION

Cat Li-ion advantages over lead-acid

Li-ion is an investment which should be viewed against ongoing 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 up to 30% lower, so electricity consumption is reduced
- **Longer runtime** thanks to more efficient battery performance and use of opportunity charges, which can be given at any time without damaging the battery or shortening its lifespan
- **Consistently high performance** with a more constant voltage curve maintains greater truck productivity, even toward the end of a shift
- **Faster charging** enables full charge in as little as 1 hour with the fastest chargers
- **No battery changing** fast opportunity charges 15 minutes for several hours of extra runtime enable continuous operation with just one battery and minimise the need to buy, store and maintain spares
- **No daily maintenance** the battery stays on board the truck for charging and there is no need for water top-ups or electrolyte checks
- No gas or acid spills 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 misuse

Batteries and chargers with different capacities are available. Your dealer will identify the best combination for your needs. You should also ask your dealer about optional 5-year warranties, subject to annual check-ups, which give extra peace of mind.

info@catlifttruck.com | www.catlifttruck.com

WESC2265(09/24) © 2024 MLE B.V. (registration no. 33274459). All rights reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate 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.









