





The latest comprehensive electric counterbalance range from Cat* Lift Trucks is built to meet every need with its dependable performance, durability and adaptability – backed by excellent customer service.

Whatever the challenges of your shift pattern, application or environment, we can offer your business a total solution.



BENEFITS TO YOUR BUSINESS

For a great return on your investment, and low total cost of ownership, you can't beat the energy efficiency, performance, durability and easy maintenance of this range.

Equipped to withstand harsh duties and conditions, and easily programmable, you will find flexible, operator-friendly models for an impressive variety of uses.

Your Cat* lift truck dealer will show you the one that matches your requirements perfectly, and will be there to give you all the support you need to maximise your materials handling productivity and profitability.

BUILT AROUND YOUR OPERATOR

Your most valuable assets of all are your personnel. Like you, we invest heavily in meeting the needs of operators — and that investment generates increased productivity. Here are just a few of the design features that give your operator the comfort and control to do the best job possible.

- Smooth, quiet, precisely controlled performance
- Clear all-round view
- Uncluttered space for legs and feet
- · Adjustable full-suspension seat and tiltable steering column
- Easy-to-reach, easy-to-use controls
- Informative, simple-to-read instrument panel
- Unobstructed on/off access with low step heights and handy grab bars









FLEXIBLE AND TRULY ECONOMICAL

Performance and efficiency can be optimised for each application through full programming, or by simply selecting one of the pre-set operating modes. Profits are maximised by achieving the right balance between output and economy.



MAIN **WAREHOUSE**

NORMAL WAREHOUSE HIGH PERFORMANCE

· Moderate acceleration, moderate travel speed, moderate hydraulic speeds.



SHIPPING AREA

Fast acceleration, fast travel speed, moderate hydraulic speeds.



LONG **SHIFTS**

ECONOMY

Slow acceleration, low travel speed, moderate hydraulic speeds.



OUTSIDE APPLICATION

LONG TRAVEL

Slow acceleration, high travel speed, moderate hydraulic speeds.



RECEIVING AREA

SHORT SHUTTLE

· Fast acceleration, low travel speed, moderate hydraulic speeds.

COMPLETE FLEXIBILITY AND LOW TOTAL COST OF OWNERSHIP

For extra application flexibility, many of our trucks offer panel cabin options and sealing of key components – allowing comfortable and dependable operation both outdoors and indoors.

As well as saving money daily with their low energy consumption, our lift trucks are able to reduce the total cost of ownership through features such as:

- Sealing of components against water and other contaminants
- · Wet disc brakes and other low-maintenance systems
- Use of highly durable materials and designs
- Long service intervals







1.4 - 2.0 TONNES | 48V

AGILE 3 & 4 WHEEL POWER

With their compact design, amazing manoeuvrability and intelligent control systems, these trucks are the automatic choice when space is tight. Ideal for efficient handling in containers, lorries, drive-in racking and other cramped, fast-paced environments, their behaviour rapidly adapts to changes in drivers' wishes and needs. They are also built to stand up to harsh, wet, dirty or dusty conditions.

TYPICAL APPLICATIONS

- Food and beverage manufacturing and wholesale
- · Fishing and fish processing
- · Chemicals, textiles and rubber
- General and refrigerated warehousing and storage
- · Machinery and heavy equipment
- · Electric equipment and components

Tuned in to the driver

How can a forklift truck understand and instantly respond to what the driver wants it to do? How does the truck know what will work best in each situation? To answer such questions fully would require a long explanation involving electronic controllers and sensors, software and multiple algorithms.

To save time, let's just focus on that technology's effects. In short, it makes driving and load handling easier, steadier, safer and more comfortable. Drivers feel the machine is totally in tune with them, so they are happy, confident and highly productive.

The Cat EP14-20A(C)N(T) driving experience begins with its Responsive Drive System (RDS). This monitors and reacts instantly to changes in the speed of foot and pedal movement, telling the truck to adjust performance parameters accordingly. All actions are smoothly controlled, including stops and starts.

Optimised steering

Other systems on the truck constantly adjust steering response to optimise it for the current travel speed. The amount of steering wheel turn and force required to start changing course is increased when driving fast, so there is no need for constant correcting. Activation of turning becomes instant and effortless at low speeds, making the steering lighter for precise manoeuvres.

When turning, the truck uses its advanced curve control — co-ordinating the two independent front drive motors and rear steer motor — to achieve the fastest safe speed. The same system resists the tendency of counterweights to continue moving rapidly sideways when straightening the truck after a high-speed turn. It also prevents tilting in that situation.

Manoeuvring is smooth and agile thanks to dual drive '4-wheel steering'. A +100° rear turning axle allows the truck to be driven sideways without having to push back first. For even greater agility in turning, there is a 360° steering option. This allows the truck to turn and move in the opposite direction (180°) without stopping, and avoids destabilising the load.

3 WHEEL, 48V MODELS						
MODEL	CAPACITY (tonnes)	VOLTAGE (V)	LOAD CENTRE (mm)			
EP14ANT	1.4	48	500			
EP16ACNT	1.6	48	500			
EP18ACNT	1.8	48	500			
EP16ANT	1.6	48	500			
EP18ANT	1.8	48	500			
EP20ANT	2.0	48	500			

4 WHEEL, 48V MODELS						
MODEL	CAPACITY (tonnes)	VOLTAGE (V)	LOAD CENTRE (mm)			
EP16ACN	1.6	48	500			
EP18ACN	1.8	48	500			
EP16AN	1.6	48	500			
EP18AN	1.8	48	500			
EP20AN	2.0	48	500			





1.4 - 2.0 TONNES | 48V

Intelligent hydraulics

A load-sensing hydraulic system automatically adjusts for weight, to maintain precise control. (In forklifts without intelligent hydraulics, lifting and lowering feels very different when the weight of the load is varied.) In addition, there is electronic compensation for load weight when using different hydraulic functions simultaneously (via fingertip controls), so all mast movements remain consistent.

During lifts a passive sway control function, specified as standard, takes effect. This works by keeping the automatic parking brake open so mast sway energy is absorbed by the mass of the whole truck. Reduction of sway and twisting, as well as noise, is enhanced through strong mast design and a low-friction side-shift.

As an option for lifts between about 2 and 3.5 metres (and standard for 3.5 metres upward), hydraulic performance can be automatically modified to provide more stable and calm behaviour. A similar automatic tuning system limits truck acceleration when lifting at those heights. These control systems help further in reducing swaying and twisting of the mast.

Perfect positioning

Drivers of all sizes can easily and quickly step and swing into and out of the spacious operator compartment. An unusually wide range of seat movement and steering column angle adjustment assures a perfect driving position for every user.

From there, the inclined and narrow dashboard design allows clear forward, downward and side views without having to lean. A one-spoke steering wheel and a specially designed free lift cylinder structure minimise obstacles to vision.

Ergonomic controls include an adjustable armrest, with inbuilt fingertip levers, and a set of low-fatigue pedals. Interesting advances include a synchronisation system for the steering knob. This automatically returns it to the correct 8 o'clock position whenever the truck straightens up — even if the wheel has been forced beyond its end stop.

Application matching

For the tightest spaces, a compact (C) chassis can be selected from either the 3 wheel (T) or the 4 wheel model list. The 3 wheel trucks, which have particularly small turning circles, are ideal for intensive short-shuttle work and use in very confined areas.

Amongst many optional features available to match the truck perfectly with your application is a high-visibility overhead guard. While its rear is reinforced with steel, the fully transparent front area has a robust polycarbonate structure with a glass layer to prevent scratches and discoloration.





KEY FEATURES AT A GLANCE

- Efficient motors with high RPM range give better precision in acceleration control, create more torque at low speeds and reduce energy consumption.
- Fully electronic magnetic brakes require less servicing and offer greater energy efficiency.
- Fast battery compartment access speeds up servicing and exchanges.
- Modular design simplifies addition or replacement of parts, including overhead guard and cabin options.
- Responsive Drive System (RDS) adapts
 performance rapidly in reaction to speed of
 pedal operation, and ensures all movements,
 stops and starts are smooth.
- Variable steering ratio and steering force are continuously optimised for different travel speeds.

- Advanced curve control co-ordinates the two front-wheel drive motors and rear steer axle motor to optimise turning speed, stabilise fast sideways movements of the counterweight, and prevent tilting when straightening after high-speed turns.
- Dual drive '4-wheel steering' with a +100° rear turning axle provides smooth and agile manoeuvring, including instant side turns with no need to push back.
- Load-sensing hydraulic system automatically adjusts to the weight being handled, to maintain precise control.
- Passive sway control keeps automatic parking brake open during lifts, so mast sway energy can be absorbed by chassis.
- As standard, truck acceleration and hydraulic performance is automatically limited at lifts from 3.5 metres for steady, controlled handling. As an option, this feature can be set to activate at lifts above 2 metres.

- Pre-set ECO and PRO modes can be selected for different drivers and tasks, or customised settings can be applied by service engineers.
- Inclined and narrow dashboard, one-spoke steering wheel and optimised free lift cylinder structure maximise forward, downward and side visibility.
- Spring-force-optimised fingertip hydraulic controls on adjustable armrest ensure ergonomically perfect hand positioning, anatomical support and free movement.
- Presence Detection System+ includes automatic parking brake, hill hold and – if operator is not seated – prevention of travel and hydraulic movement.



2.5 - 3.5 TONNES | 80V

INTENSIVE PRODUCTIVITY

This range answers the need for high-powered performance in applications where IC engine lift trucks and their emissions are not permissible. Designed to cope with intensive duties and tough conditions, the trucks are highly productive and, at the same time, a pleasure to drive, thanks to their agility, intelligence and comfort.

4 WHEEL, 80V MODELS						
MODEL	CAPACITY (tonnes)	VOLTAGE (V)	LOAD CENTRE (mm)			
EP25N	2.5	80	500			
EP25CN	2.5	80	500			
EP30N	3.0	80	500			
EP30CN	3.0	80	500			
EP35N	3.5	80	500			

TYPICAL APPLICATIONS

- Food and beverage manufacturing and wholesale
- Paper manufacturing and wholesale
- Foundries
- · Chemicals, textiles and rubber
- Machinery and heavy equipment

Agile and intelligent

The perfect lift truck should constantly adjust its own performance characteristics as circumstances change, and in this range the idea of intelligent automatic adaptation has been taken to a whole new level. Its adaptive speed control, which is part of the Responsive Drive System (RDS), seems to know how the driver wants the truck to behave at any moment. Reacting to how quickly the accelerator pedal and hydraulic controls are being moved, it instantly selects the most appropriate mode. RDS also smooths out all stops, starts and other movements.

Compared to traditional cornering systems, this truck's intelligent curve control reduces speed in a much more natural and comfortable way. Starting with a small reduction, as the turn begins, the system responds so smoothly to the steering that the driver notices no sudden change or tilting sensation as the truck corners. Another great advance over its competitors is the next-generation dual drive 4 wheel steering system, which makes the truck much more manoeuvrable. With +100° rear axle rotation and curve control, turns are tight and smooth. When reversing, side turns can be made immediately

without pushing back. Uniquely, the truck can actually be steered using the front axle. As well as giving improved agility and grip, the system reduces tyre wear and stress on the rear axle.

Comfortably in control

The spacious, high-comfort cabin and its equipment are ergonomically designed to allow strain-free operation with minimal need for the driver to move. Features include a flat, unobstructed floor, adjustable seat and steering wheel, pedals at optimum angles and, to maximise the view, a specially inclined dashboard and counterweight. A totally redesigned adjustable armrest brings the new progressive hydraulic controls and related functions within comfortable reach of the operator's fingertips. Even entering or leaving the cabin is easy, thanks to the step's large, high-grip surface, the long grab handle and the curved shape of the battery cover and side panel, which encourage fast, flowing motion.

The operator is kept fully informed via a colour display, which can be read easily from different angles. Clear messages are given in the operator's language, along with helpful symbols. A twin-mode key switch can be set to ECO or PRO, depending on the driver's experience and the need for low energy use or rapid performance.





KEY FEATURES AT A GLANCE

- Responsive Drive System (RDS) with adaptive speed control adjusts truck performance modes in reaction to quickness of foot and fingertip movements, to meet driver's changing needs, and ensures smooth starts and stops.
- Intelligent curve control makes speed reduction in cornering feel natural, with no sensation of leaning, for safe but productive driving.
- Twin-mode key switch offers ECO setting for beginners, or for low energy consumption, and PRO for experienced drivers and high performance, while optional customisation is available to meet specific needs.
- Next-generation dual drive 4 wheel steering system, with curve control, +100° rear axle rotation, instant no-push side turns and unique ability to steer using front axle, delivers unbeatably agile manoeuvring, better traction and longer tyre life.
- Full-colour, weather-protected, clear-view display, with information in operator's own language and simple-to-learn functionality, advises on truck status, avoids misuse and protects your investment.
- Totally redesigned adjustable armrest, combining anatomical support with free movement and perfect hand positioning.
 Features spring-force-optimised fingertip hydraulic controls.
- Wide, high-grip step, long grab handle and curved truck design allow fast, smooth-flowing on-off access to large, comfortable operator space with flat, unobstructed floor.
- Ergonomic layout of controls and display, together with adjustable seat and steering wheel position, optimised pedal angles and excellent all-round view, allows strain-free operation.
- Armrest options include control of forward/ reverse selection, clamp release and automatic tilt centring, using only the driver's fingers.
- Intelligent speed and movement reduction (optional) automatically limits travel and tilt rates when forks are above free lift height, to optimise both stability and agility.
- Automatic hydraulic parking brake and hill hold function, instantly engaged when accelerator is released, prevents rolling on ramps without need for use of a switch or lever.
- High standard specification includes Presence Detection System+ (PDS+), maintenance-free wet disc brakes and IP54 sealing of main components.



4.0 - 5.0 TONNES | 80V

HEAVY DUTY EFFICIENCY

Designed to handle intensive applications and harsh environments, where you would normally expect to use IC engine machines, these powerful trucks offer a clean and extremely efficient alternative. Ideal for both outdoor and indoor operation, and able to use a variety of heavy attachments, there is sure to be a configuration within the range of models, capacities, chassis sizes and options to meet your exact needs.

4 WHEEL, 80V MODELS						
MODEL	CAPACITY (tonnes)	VOLTAGE (V)	LOAD CENTRE (mm)			
EP40C 2	4.0	80	500			
EP40 2	4.0	80	500			
EP40S 2	4.0	80	600			
EP45C 2	4.5	80	500			
EP45 2	4.5	80	500			
EP50 2	4.99	80	500			
EP50S 2	5.0	80	600			

Typical applications:

- Food and beverage manufacturing and wholesale
- Paper and pulp
- Saw mills
- Furniture
- Steel works and foundries
- Ports
- Carpet manufacturing and wholesale
- · Chemicals, textiles and rubber
- Machinery and heavy equipment
- Automotive assembly
- Building and construction

Power and economy

The latest innovations in intelligent, highefficiency design generate maximum power while consuming substantially less energy than competitors' trucks. In most applications a single charge will keep the truck going through two shifts. This has been achieved through developments such as the compact component layout, the market's most advanced AC control system and optimised use of regenerative braking.

Lateral battery extraction, with the option of an ergonomic adapter for the easiest and quickest exchanges in the industry, helps to keep the trucks in constant productive motion. Profits are also maximised by reducing damage and wear through use of long-life components like wet disc brakes and sealed motors. Clear information for operators and engineers, through a premium display, is another aid to extending the truck's life.

Comfort and protection

The high-comfort floating operator cabin has a spacious floor, a fully adjustable, full-suspension seat and a compact steering wheel on a column with both telescopic and tilt adjustment. There is a choice between standard hydrostatic steering and the option of parametric electronic steering, for the ultimate in effortless precision. An adjustable armrest places the hydraulic controls — a fingertip unit or, if you prefer, a joystick — in the perfect position for each operator. Other operator-friendly touches include a full-length convenience tray.

Operators are protected not just by the truck's robust construction but by a host of automated assistance features. These include controls on access, drive speed with forks lifted, cornering speed and movement on ramps. As well as standard lights, there are various optional lighting kits, mirrors and other accessories to meet different practical and safety needs.





KEY FEATURES AT A GLANCE

- Compact component layout minimises material costs and increases efficiency.
- Premium display ensures operator awareness of truck status, through clear, simple, informative readouts, encouraging correct use and maintenance.
- Wet disc brakes require no maintenance and are unaffected by water, dirt or salt.
- Sealing to IP54 standard protects motors and electrical connectors from rain, splashing water, mud and dust.
- Intelligent design reduces energy consumption by up to 25%, allowing non-stop operation and extended shifts.
- The industry's most advanced AC control system delivers smooth, precise operation and minimises the risk of operator error.
- ECO and PRO pack options match the truck to its application, providing the appropriate performance-enhancing features and avoiding excessive wear of components.
- Ergonomic adapter option for battery installation and locking allows quick, easy and safe exchanges.
- Added operator protection features give automated assistance to the user, including access control, drive and lift control, curve control, an anti-rollback function and an automatic parking brake, for safe, smooth, easy operation.
- Automatic parking brake and anti-rollback function hold the truck safely in position, particularly on ramps.
- Drive and lift control smoothly reduces travel speed to a safe level when the forks are elevated.
- Curve control automatically adjusts drive speed, in proportion to the steering angle, for safe cornering.
- Access control prevents use of the truck if the seat belt is not correctly fastened.
- Adjustable armrest with fingertip hydraulic controls makes load handling comfortable, effortless and precise.
- Hydrostatic steering or option of parametric electronic steering – gives high-precision control with minimal effort.

CABINS TO SUIT YOUR APPLICATION







MAXIMISING YOUR UPTIME

To maximise uptime and maintain the performance levels of these durable trucks, we build easy servicing into their design.

Our advanced controllers not only optimise power and efficiency but allow on-the-go system monitoring, self diagnostics and fault memory logging. They warn of problems, tell the technician where to look and even give a reminder when a service is due. With all areas easily accessible, and no need for external test equipment, servicing is fast and simple.

For the best possible return on your investment, your Cat dealer can tailor a cost-effective preventative maintenance plan.



TOTAL SOLUTIONS FOR EVERY CHALLENGE

The performance and durability of these Cat electric lift trucks is without question. It owes much to the expertise, advanced technology and strict quality standards applied by our ultra-modern production centre.

To help you choose the right model and configuration, and maintain its productivity, we have an equally dedicated network of dealers. With their specialist knowledge, wide experience and excellent service they will support you in every way to maximise your profits.

As well as electric counterbalance trucks, they offer a comprehensive range of warehouse equipment and IC engine lift trucks. They also have a broad selection of acquisition options — including outright purchase, short or long term rental and leasing — and will tailor a plan to meet the needs of your business.

Whatever your problem, Cat Lift Trucks and its dealers have the solution.









WATCH VIDEOS

DOWNLOAD OUR APP

www.catlifttruck.com

©2018, MCFE. All Rights Reserved. CAT, CATERPILLAR, BUILT FOR IT, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission. Printed in The Netherlands. 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.

