



# Electric lift trucks

**the complete range.**

Three-wheel and four-wheel counterbalance electric lift trucks to suit every application.

# An electric counterbalance truck for every application.

Choosing the right forklift truck for your business is a vitally important decision. Get the right equipment in place and you'll get the right results in terms of increased productivity and a much greater return on your investment.

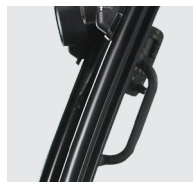
Yale® is committed to helping you select the electric forklift best suited to your business needs.

We have listened closely to our customers, paying particular attention to what you want most from your forklift solutions.

The Yale electric counterbalance range has a truck that's the best fit, whatever your business. Whether for inside or outside applications, for light or heavy duty, for long or short travel distances, for confined areas or unlimited space, we have a solution for you.



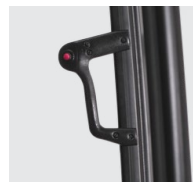
Heads-up display



Standard grab-handle for easy on/off access



Hi-Vis and Clear View masts



Reverse grab handle with integrated horn button



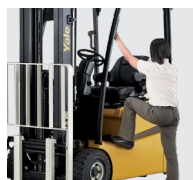
Generous headroom for operators



Seat side Manual or Integrated minilever module



'Flip up' armrest as standard



Lowest single step height in the industry



Infinitely adjustable steering column



Storage space and 12v outlet (option)



Extended steering axle for class leading manoeuvrability



Generous footwell space and open right hand side

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# Standard features and options.

Truck model	ERP13-15VC three-wheel rear-wheel drive 1300-1500 kg	ERP15-20VT three-wheel front-wheel drive 1500-2000 kg	ERP16-20VF compact four-wheel drive 1600-2000 kg	ERC16-20VA four-wheel cushion tyre 1600-2000 kg	ERP22-35VL 80 volt energy efficient 2200-3500 kg	ERC22-35VG compact high performance cushion tyre 80 volt energy efficient 2200-3500 kg	ERP40-55VM 80 volt truck 80 volt energy efficient 4000-5500 kg	ERC40-55VH heavy duty truck with cushion tyres 80 volt energy efficient 4000-5500 kg
Battery	24V/500Ah 24V/840-1000Ah	48V/500Ah SWB 48V/625Ah MWB 48V/755Ah LWB	48V/625Ah MWB 48V/750Ah LWB	48V/660Ah	80V/560Ah MWB 80V/700Ah LWB 48V/755Ah LWB	80V/375Ah SWB 80V/450Ah MWB 48V/600Ah LWB	80V/840-930Ah	80V/675Ah 80V/750Ah
Hi-Vis™ mast – 2 stage LFL and 2 and 3 stage FFL	Clear View™ Mast with class-leading visibility	•	•	•	•	•	•	•
HiP (High Performance) increases speed and acceleration on gradients when fully laden	•	•	•	-	•	•	•	•
ECO-eLo allows operation over longer periods between battery charges without affecting performance	•	•	•	•	•	•	•	•
Fully adjustable full suspension low vibration seat	•	•	•	•	•	•	•	•
Heads up display	•	•	•	•	•	•	•	•
Hall effect sensors, 'O' Ring face seals, electric park brake	•	•	•	•	•	•	•	•
CANbus and AC technology	•	•	•	•	•	•	•	•
Vehicle System Manager (VSM) allows adjustment of truck parameters, monitors key truck functions	•	•	•	•	•	•	•	•
Continuous Stability Enhancement (CSM) System	-	-	-	•	•	•	•	•
e-Balance performance, manoeuvrability and battery shift life	•	•	•	•	•	•	•	•
Auto Regen Braking optimises the shift life of the battery and contributes to an increase in the life of the parts	-	-	•	•	•	•	•	•
The YaleStop™ park brake is always set whenever the truck is stationary	-	•	-	-	-	•	•	•
Smartbelt™ interlock system	•	•	•	•	•	•	•	•
Side battery extraction	-	•	•	Available from June 2017	•	Available from June 2017	Available from June 2017	Available from June 2017
Integral sideshift	•	•	•	•	•	•	•	•
Telescopic steering column with memory tilt	•	•	•	•	•	•	•	•
Adjustable steering column	•	•	•	•	•	•	•	•
LED light packages with visible alarm strobe	•	•	•	•	•	•	•	•
Audible reversing alarm	•	•	•	•	•	•	•	•
Telematics	•	•	•	•	•	•	•	•
AccuTouch™ mini levers	•	•	•	•	•	•	•	•
Non-marking tyres	•	•	•	•	•	•	•	•



## VC Series

**1300kg – 1500kg**  
**Three-wheel superelastic tyre truck**

### Key Industries.

- Printing, publishing and packaging
- Food processing and production
- Timber, wood and furniture products
- Chemical and pharmaceuticals production/ manufacturing
- Clothing and textile manufacturing
- Electrical components
- Medical equipment
- Retail outlets
- DIY stores
- Supermarkets
- Warehousing and distribution

### Applications.

- Block stacking
- Congested Goods-in and Goods-out areas and bays

### Key features.

- Highly compact 24V electric three-wheel counterbalanced forklift truck
- Zero turn radius
- Generous floor space with non-slip rubber floor mat, provides maximum operator leg room and easy on/off access
- Clearview mast for improved forward operator visibility of forks and workplace
- Rear operator grab handle with integrated horn mounted on the overhead guard for easy reach and comfortable reverse driving
- Restricted spaces in manufacturing facilities
- High manoeuvrability
- Rear-wheel driven



## VT Series

**1500kg - 2000kg**  
**Three-wheel superelastic tyre truck**

### Key Industries.

- Printing, publishing and packaging
- Food processing and production
- Manufacturing
- Transport and distribution
- Metal products and fabrication
- Timber, wood and furniture products
- Chemical and pharmaceuticals production/ manufacturing
- Glass products
- Rubber and plastic products
- Clothing and textile manufacturing
- Electrical components
- Medical equipment
- Retail outlets
- DIY stores
- Supermarkets
- Transport and logistics
- Warehousing and distribution

### Applications.

- Block stacking
- Congested Goods-in and Goods-out areas and bays
- Demanding internal warehouse or manufacturing
- Warehouse cross docking
- Heavy duty manufacturing
- Attachment use
- External, outdoor operations

### Key features.

- Highly compact 48V electric three-wheel counterbalanced forklift truck
- Zero turn radius
- Short, medium and long platforms with battery options to suit specific shift patterns and heavier duty applications
- Highly adjustable steering column with memory-tilt option for the most comfortable operator position and comfortable reverse driving
- High manoeuvrability
- Four performance modes available to suit application
- Generous floor space with non-slip rubber floor mat, provides maximum operator leg room and easy on/off access
- Enhanced mast design for improved operator visibility
- Rear operator grab handle with integrated horn mounted on the overhead guard for easy reach
- Automatic park brake
- Front-wheel driven



## VA Series

**1600kg – 2000kg**  
**Four-wheel cushion tyre truck**

### Key Industries.

- Printing, publishing and packaging
- Food processing and production
- Chemical and pharmaceuticals production/ manufacturing
- Clothing and textile manufacturing
- Electrical components
- Medical equipment
- Retail outlets
- DIY stores
- Supermarkets
- Warehousing and distribution

### Applications.

- Block stacking
- Congested Goods-in and Goods-out areas and bays
- Manufacturing industries with restricted space
- High lift height

### Key features.

- Platform width of 945mm (1.6t and 1.8t) and 986 mm (2.0t) for applications that require a tight turning circle and narrow dimensions for stacking 1000mm wide loads
- High seating position provides operators with a clear view of the fork tips for fast and efficient load spotting
- High manoeuvrability
- Auto deceleration system (ADS) helps reduce operator fatigue
- Extended steer axle and continuous stability enhancement system (CSE) optimises steer axle geometry to reduce truck lean when cornering. Allows faster maneuvers in tighter working aisles and comfortable operation over uneven ground conditions. Contributes to confident load handling and faster throughput times



## VF Series

**1600kg – 2000kg**  
**Four-wheel superelastic tyre truck**

### Key Industries.

- Printing, publishing and packaging
- Food processing and production
- Manufacturing
- Transport and distribution
- Metal products and fabrication
- Timber, wood and furniture products
- Chemical and pharmaceuticals production/ manufacturing
- Glass products
- Brick, block and concrete products
- Rubber and plastic products
- Clothing and textile manufacturing
- Electrical components
- Medical equipment
- Retail outlets
- DIY stores
- Supermarkets
- Transport and logistics
- Warehousing and distribution

### Applications.

- Block stacking
- Demanding internal warehouse or manufacturing
- Warehouse cross docking
- Heavy duty manufacturing
- Attachment use
- External, outdoor operations

### Key features.

- Four performance modes available to suit application
- Dual front-wheel drive and a zero turn radius for minimum aisle width, tight or congested area manoeuvrability
- Short chassis length and high battery capacity provides great manoeuvrability
- Short, medium and long platforms with battery options to suit specific shift patterns and heavier duty applications
- Highly adjustable steering column with memory-tilt option for the most comfortable operating position
- High manoeuvrability
- Extended steer axle and continuous stability enhancement system (CSE) optimises steer axle geometry to reduce truck lean when cornering. Allows faster maneuvers in tighter working aisles and comfortable operation over uneven ground conditions. Contributes to confident load handling and faster throughput times
- Generous floor space with non-slip rubber floor mat, provides maximum operator leg room and easy on/off access
- Enhanced mast design for improved operator visibility
- Rear operator grab handle with integrated horn mounted on the overhead guard for easy reach and comfortable reverse driving
- Automatic park brake



## VG Series

**2200kg – 3500kg**  
**Four-wheel cushion tyre truck**

### Key Industries.

- Brewing, bottling and distilling
- Manufacturing
- Glass products
- Rubber and plastic products
- Electrical components
- DIY stores

### Applications.

- Block stacking
- Congested Goods-in and Goods-out areas and bays
- Manufacturing industries with restricted space
- Demanding internal warehouse or manufacturing
- Heavy duty manufacturing

### Key features.

- Four performance modes available to suit the application and load requirements
- High seating position provides operators with a clear view of the fork tips for fast and efficient load handling
- Auto deceleration system (ADS) helps reduce operator fatigue
- Extended steer axle and continuous stability enhancement system (CSE) optimises steer axle geometry to reduce truck lean when cornering. Allows faster maneuvers in tighter working aisles and comfortable operation over uneven ground conditions. Contributes to confident load handling and faster throughput times
- Generous floor space with non-slip rubber floor mat, provides maximum operator leg room and easy on/off access
- Enhanced mast design for improved operator visibility
- High manoeuvrability



## VL Series

**2200kg – 3500kg**  
**Four-wheel superelastic tyre truck**

### Key Industries.

- Printing, publishing and packaging
- Food processing and production
- Brewing, bottling and distilling
- Manufacturing
- Transport and distribution
- Metal products and fabrication
- Timber, wood and furniture products
- Glass products
- Brick, block and concrete products
- Rubber and plastic products
- Electrical components
- Transport and logistics

### Applications.

- Warehouse cross docking
- Heavy duty manufacturing
- Attachment use
- External, outdoor operations

### Key features.

- Highly adjustable steering column with memory-tilt option for the most comfortable operating position
- Four performance modes available to suit the application and load requirements
- Dual front-wheel drive and a zero turn radius for minimum aisle width, tight or congested area manoeuvrability
- Extended steer axle and continuous stability enhancement system (CSE) optimises steer axle geometry to reduce truck lean when cornering. Allows faster maneuvers in tighter working aisles and comfortable operation over uneven ground conditions. Contributes to confident load handling and faster throughput times
- Generous floor space with non-slip rubber floor mat, provides maximum operator leg room and easy on/off access
- Enhanced mast design for improved operator visibility
- Rear operator grab handle with integrated horn mounted on the overhead guard for easy reach and comfortable reverse driving
- Automatic park brake



## VH Series

**4000kg – 5500kg**  
**Four-wheel cushion tyre truck**

### Key Industries.

- Paper manufacturing
- Metal products and fabrication
- Automotive manufacturing and component production
- Timber, wood and furniture products
- Glass products

### Applications.

- Congested Goods-in and Goods-out areas and bays
- Manufacturing industries with restricted space
- Demanding internal warehouse or manufacturing
- Attachment use

### Key features.

- Short, medium and long platforms with battery options to suit specific shift patterns and heavier duty applications
- High seating position provides operators with a clear view of the fork tips for fast and efficient load spotting
- Auto deceleration system (ADS) helps reduce operator fatigue
- Extended steer axle and continuous stability enhancement system (CSE) optimises steer axle geometry to reduce truck lean when cornering. Allows faster maneuvers in tighter working aisles and comfortable operation over uneven ground conditions. Contributes to confident load handling and faster throughput times
- Generous floor space with non-slip rubber floor mat, low intermediate anti slip step provides a comfortable working area with easy on and easy off access
- Enhanced mast design for improved operator visibility
- Automatic park brake
- Rear operator grab handle with integrated horn mounted on the overhead guard for easy reach and comfortable reverse driving
- High manoeuvrability



## VM Series

**4000kg – 5500kg**  
**Four-wheel superelastic tyre truck**

### Key Industries.

- Brewing, bottling and distilling
- Paper manufacturing
- Paper pulp and recycling
- Metal products and fabrication
- Automotive manufacturing and component production
- Timber, wood and furniture products
- Brick, block and concrete products
- Transport and logistics

### Applications.

- Attachment use
- External, outdoor operations

### Key features.

- Highly adjustable steering column with memory-tilt option for the most comfortable operating position
- Four performance modes available to suit the application and load requirements
- Extended steer axle and continuous stability enhancement system (CSE) optimises steer axle geometry to reduce truck lean when cornering. Allows faster maneuvers in tighter working aisles and comfortable operation over uneven ground conditions. Contributes to confident load handling and faster throughput times
- Generous floor space with non-slip rubber floor mat, low intermediate anti slip step provides a comfortable working area with easy on and easy off access
- Enhanced mast design for improved operator visibility
- Automatic park brake

# Battery extraction.



## Horizontal battery extraction

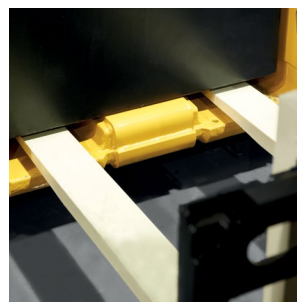
Traditionally, batteries were removed vertically, using a crane system. However the need for more efficient battery exchange with a minimum down-time, has led to an ever-increasing interest in side extraction solutions.

Yale has developed an ingenious system that further simplifies horizontal battery extraction, maximising uptime and productivity. A hinged door that remains attached to the truck, easily opens to reveal the battery sitting in its tray. The battery and tray are simply removed as a complete unit.

The specially designed Yale MS HBE Power Battery Exchange Stacker operates effectively giving efficient battery exchange at all times.



Extraction using a forklift truck



Fork pockets



Integrated battery rollers



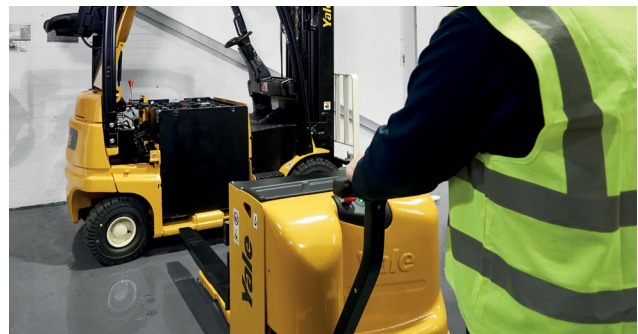


The MS HBE can affect battery removal across the entire range of Yale counterbalance electric trucks.

The MS HBE tiller head features an ergonomic shaped handle with angled grips and the large butterfly buttons that control the direction of travel and speed, as well as the electromagnetic brake and lift and lower buttons, and can be operated with either hand.

The spring-assisted tiller arm is mounted onto the drive unit and the low anchor point ensures minimum steering effort. The long tiller arm increases the operating clearance when working inside the truck's envelope. The creep button, located under the tiller head, allows for precise alignment of the battery before insertion into the counterbalance truck.

The MS24HBE features a powerful 1kW SEM traction motor, which delivers an excellent response to operating commands and maintains sufficient torque in a variety of situations.



**MS HBE powered battery side extractor**



**Tiller head delivers precise control**

# Setting the service standard.

**Yale electric counterbalance trucks are designed to keep your business moving. That means better access to make servicing as easy as possible, reducing your downtime and increasing your productivity.**

#### **Servicing made simple.**

Everything about a Yale electric truck is designed to make maintenance easy. Swing-open doors, fast-release floor plate providing easy access to motors, hydraulics and foot-well components. Maintenance-free 'greased for life' mast rollers, 100% leak-free disconnect hydraulic fittings and user-friendly side access battery extraction. Yale trucks are engineered to optimise uptime.

#### **Working harder for longer.**

Not only are we making servicing easier, we're making the time between each service longer. We recommend intervals of 3,000 hours for hydraulic oil and filter changes, and 1,000 hour transmission oil changes.

#### **Fast fault identification.**

Get your equipment back up and running with our advanced on board diagnostics. A single plug-in service connects the service engineer's laptop to our truck, providing instant access to essential service information, facilitating first time fixes. While our unique dual integrated CANbus technology ensures rapid identification of faults.

#### **Support you can count on.**

No-nonsense Yale back-up and after-sales support means delays and downtime is kept to a minimum. We have 2.5 million parts all available for immediate dispatch.



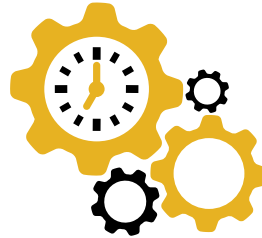
"We wanted to equip our warehouse with a modern intralogistics solution that even with continued growth offers a degree of scalability. Among the many proposed solutions, the Yale concept was the only one that convinced us immediately."

**Bernd Schmidt**  
Chief Executive Officer,  
Ellerhold Zirndorf GmbH

# Telematics.

## Manage your costs, optimise your productivity, protect your assets.

Take your fleet operation to the next level with Yale Vision wireless fleet management. This system helps you to deliver fleet efficiency, improve operator performance, reduce your carbon footprint and lower overall material handling costs.



## Ensure maximum productivity from your lift truck investment.

A lift truck fleet is a significant investment requiring protection from abuse, neglect and unauthorised operation. With impact sensing, periodic maintenance tracking and access control, Yale Vision helps promote improved operator performance.

Using your own pre-shift and post-start checklists, the access control option ensures trucks will not operate until the inspection is complete.

Achieving peace of mind around the clock and wherever your trucks are located.



## Monitor operator behaviour, optimise fleets.

See what your fleet is doing with Yale Vision. Remote hour meters and usage tracking records give access to data and reports showing utilisation from individual trucks to entire fleets. Optimize your fleet size, structure and location for maximum productivity and minimum idle time.



## Manage your total cost of operation.

Knowing your total cost of operation provides business intelligence above and beyond simply knowing asset ownership costs. The comprehensive monitoring of operational costs through Yale Vision, enables you to manage truck, fleet and labour assets, including contract costs, maintenance, acquisition and more. Cost of operation can be viewed and analysed by truck, by fleet and by location. Giving you the knowledge to help you get the best value from your lift trucks.

# Comfort for all.

**A comfortable operator is a happy and more productive operator; that's why we have invested in extensive operator testing in our efforts to design a compartment around an operator's specific needs.**



The result is a cabin that provides ergonomic features designed to make an operator's life easier.

From steps optimised for a wide range of operator heights, to full suspension seats designed to decrease exposure to whole body vibration, the electric range is all about making sure your operators can work comfortably and productively.

#### **Easy operator access and ergonomic seating position**

The Yale range of electric lift trucks have been designed to comfortably accommodate the smallest (<160cm) to the tallest operators (>194cm).

#### **Seating**

Yale puts operator ergonomics and comfort at the forefront of product design.

The full suspension seat has been designed to significantly decrease the operator's exposure to the transmission of ground shocks, resulting in minimum whole body vibration levels.

- Easy adjustment to suit stature and weight, providing the correct suspension and full operator comfort
- Easy forward, reverse and tilt adjustment for ideal seating position
- Swivel seat option for reverse driving comfort: 12° to right and 5° to the left

“The ergonomic conditions for our workers are a fundamental value for us, and the choice of the truck includes both the materials handling operation and the driver’s comfort... this is not to mention the ease of driving, thanks to the presence of joysticks and the ergonomic interior of the cabins.”

**Giuseppe Pellegatta**

General Service and Logistics Manager,  
Sacchi Elettroforniture SpA



Accutouch mini lever



Ergonomic manual-levers

**Mini-lever module and armrest ergonomic functionality designed by experts**

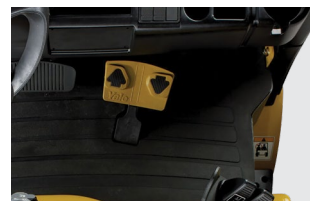
- Accutouch™ minilever module and armrest with height and length adjustment
- Designed to reduce stress on the operator’s arms, hands and fingers
- Integrated direction switch enables operators to control all the major truck functions without removing their arm or hand from the armrest
- Padded construction allows the operator to comfortably lean on the armrest which provides additional comfort over long shifts
- Full integration with the seat, designed to move simultaneously when seat is adjusted
- Ergonomic manual-levers have been designed with soft-touch moulding and a contoured shape, angled outwards to correspond with the way the arm and hand naturally fall. The direction switch is also incorporated into the hoist lever.

**Steering column**

- Steering wheel design, with soft touch and comfort grip knob, provides a comfortable driving posture to alleviate build up of stress on the operators wrist, elbow and arm
- Wider spaced floor pedals provide increased leg room
- Low, wide step for easy access



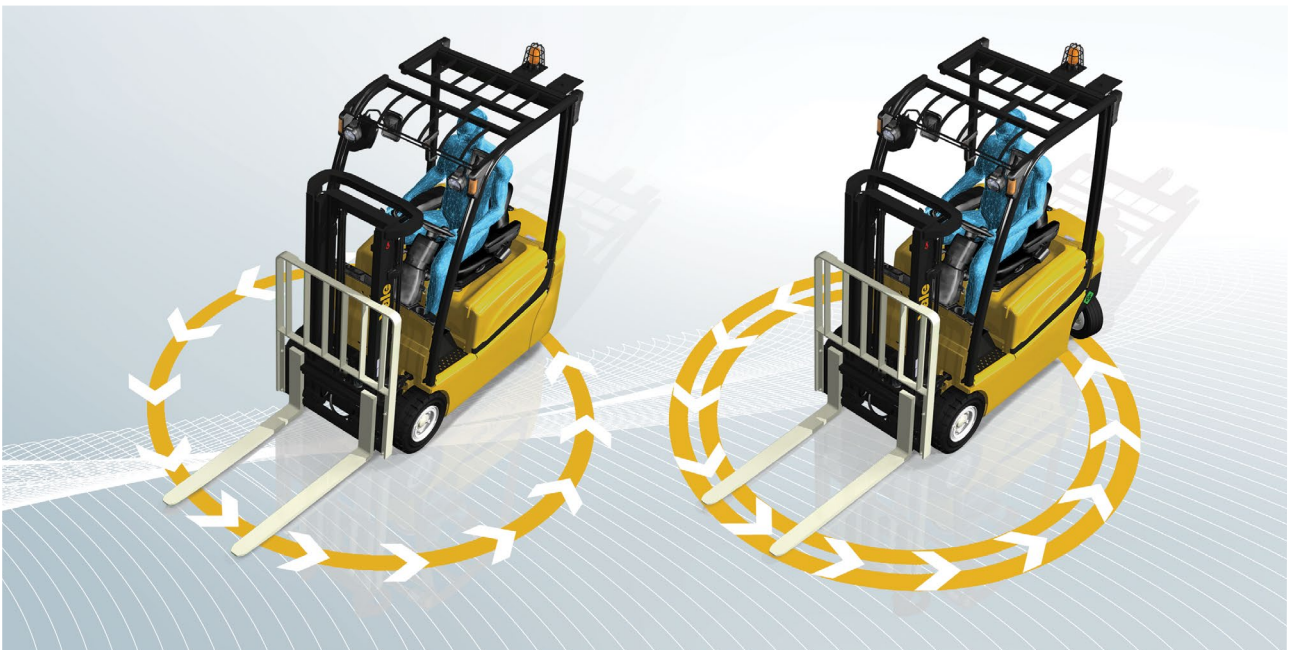
Steering wheel design



Foot directional control

# Maximise productivity.

Many factors impact your operation's productivity; from pallet numbers to truck reliability, from operator efficiency to ease of servicing.



Compact turning circle

Yale trucks combine great performance and precision handling, providing all the tools you need to increase your productivity.

#### More power

When your business demands greater productivity, Yale delivers with motors that provide increased travel and mast speeds, enabling you to move more loads per hour.

#### More control

Yale trucks are designed to offer the best in precision control, enhancing operator performance. Electronic controllers for faster load handling and smooth direction changes, efficient and responsive hydraulics, reactive electronically controlled inching, optional auto-fork levelling and laser load positioning systems are some of the solutions that contribute to maximising productivity.

#### More visibility

Clear View masts offer exceptional forward visibility.

#### More moved

Operators can achieve fast "put away" and "retrieval" times with complete confidence due to the stability and rigidity of Yale trucks masts.

#### More uptime

Yale trucks have been built to work harder, for longer thanks to a large battery capacity and simple battery change system, a robust fully welded frame and simple maintenance.

#### More efficiency

Features such as ECO-eLo energy efficiency mode offer optimised efficiency and reduced energy consumption without significant impact on productivity.

#### Loads more productivity

- Powerful hydraulics
- Dual front-wheel AC drive
- Four performance modes to suit the application
- State of the art steer axle for increased manoeuvrability and reduced turning radius in smaller spaces

# Low cost of ownership.

**When it comes to the overall cost of a forklift truck to your business, the initial purchase price can represent just one small portion.**

There are a host of other factors that need to be taken into consideration in order to arrive at the true operating cost to your business, such as periodic maintenance, unscheduled repairs, replacement parts and ever-increasing energy costs.

#### **Higher efficiency**

Always looking to the future, Yale has developed the ECO-eLo energy efficiency mode. Depending on the application, this setting can deliver low energy consumption without impacting significantly on overall productivity.

#### **Higher residual values**

Yale residual values are amongst the best in the industry. So, if you should ever want to change your Yale electric truck in the future, you know you won't be losing out.

Lower energy consumption and costs. Excellent residual values. Increased uptime. Everything to make your money go further.



# About Yale®

Yale is a leading global manufacturer and supplier of high-quality counterbalance forklift trucks, warehouse equipment and fleet solutions. 'People, products and productivity' sums up our approach to materials handling business. With over 140 years experience, we are proud of our reputation as an innovative, forward-thinking manufacturer.

Yale dealerships provide flexible truck servicing solutions and are linked to one of the industry's most sophisticated parts distribution operations. You'll find support for Yale forklifts throughout the EMEA region – provided by a big regional footprint stretching through Europe, Middle East and Africa.

## Materials handling for



Food



Beverage



Logistics



Retail



Manufacturing



Chemical and hazardous materials

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**Yale®**  
People. Products. Productivity™

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