

CROWN

ESR 4500

Series



# Redefining Performance.

High-throughput levels place heavy demands on reach trucks in real-world applications. The goal - maximise the number of pallets moved at the lowest total cost. It's not enough to have the fastest travel speed, best lift/lower speed or efficient energy consumption. You need the optimum combination of these performance factors - together with operator comfort and safety, precise control and reliability. All of these add up to superior duty cycle performance. Crown's new ESR 4500 Series has evolved to redefine performance... for the reach truck, the operator and your bottom line.

**Put Crown's  
performance advantage  
to work for you.**

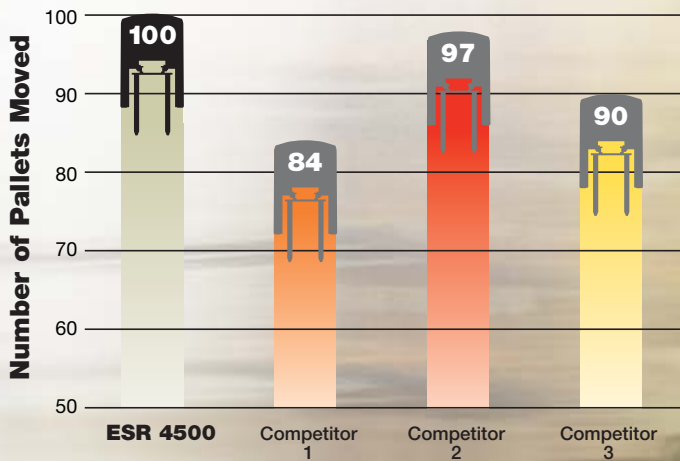


# Productivity Delivered Through System Performance

The most important measure of performance is work completed. All design and engineering decisions for the ESR 4500 Series were based on how they contribute to total performance – both for the truck and the operator. This performance translates into measurable productivity.

## Duty Cycle Comparison

The ESR 4500 Series moved up to 18 percent more pallets per hour than the leading competitors. A measurement that really contributes to your bottom line.



# ... gh a tem of ormance.

**The ultimate goals of Crown engineers and designers were to offer the highest level of reach truck performance while minimising energy consumption.** It was not enough to integrate advances such as AC motors, electric steering or CAN-BUS electronics. Crown's innovative approach to fine tuning and controlling all these systems

simultaneously is what sets the ESR 4500 Series apart from the competition.

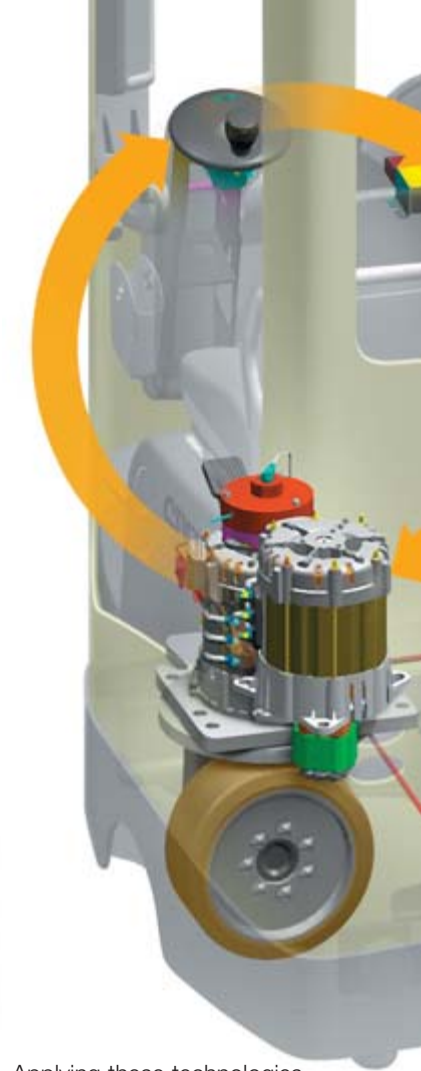
The AC traction system combines the benefits of high motor torque with less energy consumption and low maintenance. The performance improvement is most evident with increased acceleration

and faster response. Superb braking performance contributes to efficiency as energy actually returns to the battery during braking, coasting and reverse travel selection (plugging). All-wheel braking provides operator control and confidence particularly when placing loads at height.

The industry-leading lift and lower speeds are attained through the precision controlled AC hydraulic pump motor. As with the traction motor, its robust design and large diameter ensures that it runs cooler through the longest, toughest, non-stop workday.

The application of SoftLift allows a smooth start to initiate lift or lower functions – an ideal feature for delicate loads and smooth blending of hydraulic functions.

Operators also benefit from SoftStop, which reduces lift speed 300mm before maximum fork height, thus avoiding an abrupt stop at the end of the lift stroke. Additional efficiencies can be gained by adding optional features such as rack height select and tilt position assist.



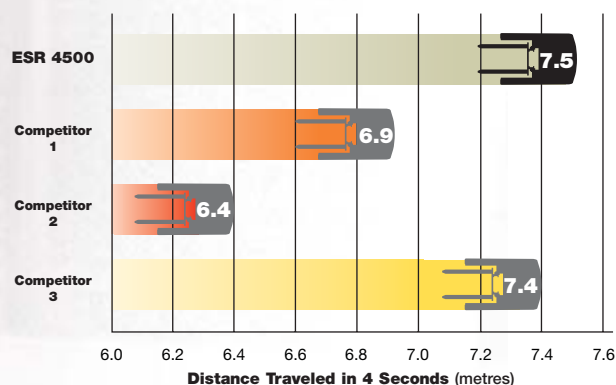
Applying these technologies in an integrated systems approach leads to Crown's performance advantage. The ESR 4500 Series combines the ability to move more pallets per hour with up to 12 percent less energy consumption.

## The formula for performance:

- Enhanced traction and hydraulics
  - + Reduced energy consumption
  - + Superior comfort and control
  - + Strength and reliability
- 
- = Productivity**

## Acceleration Comparison

The ESR 4500 Series has the fastest response.



# Confidence through Structural Integrity

When moving heavy loads is the norm, it's critical to choose a reach truck that is matched to the task. The ESR 4500 Series surpasses industry expectations through the use of heavy-duty steel structures for strength and stability, allowing higher residual capacities and the ultimate in durability.

One way to judge a reach truck is to compare truck weight. The ESR 4500 incorporates 200kg more steel when compared to the competition, giving it unparalleled advantages. Perhaps the most compelling are its heavy-duty mast, stable reach carriage and rigid chassis.

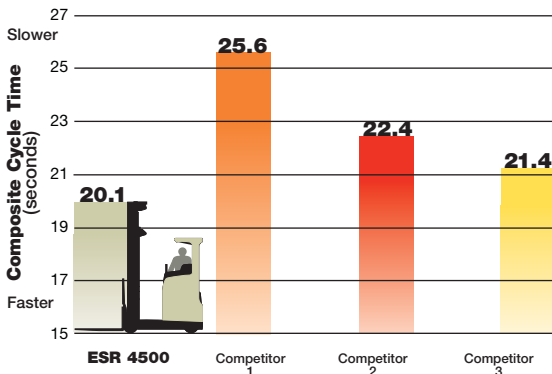
Crown's patented offset, wide-view mast is constructed to standards well above competitive masts in its class. **The robust design reduces static and dynamic deflection by up to 43 percent** allowing precision load handling at height.



**The ESR 4500 Series reach carriage** is constructed of heavy gauge steel plate with four main bearings plus four adjustable side-roller bearings that provide lateral guidance. Two adjustable backing rollers reduce mast swing during reach and retract functions.

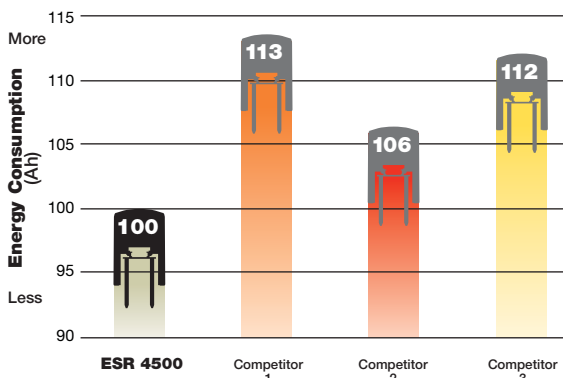
## Lift/Lower Speed Comparison

The measurement that matters – the time required to lift full load to rack height and lower the empty forks. The ESR 4500 Series has the fastest cycle time.



## Energy Consumption Comparison

The ESR 4500 Series performs the same task with up to 12 percent less energy.



ce  
1  
ty.

ose a  
Series  
y-duty  
r



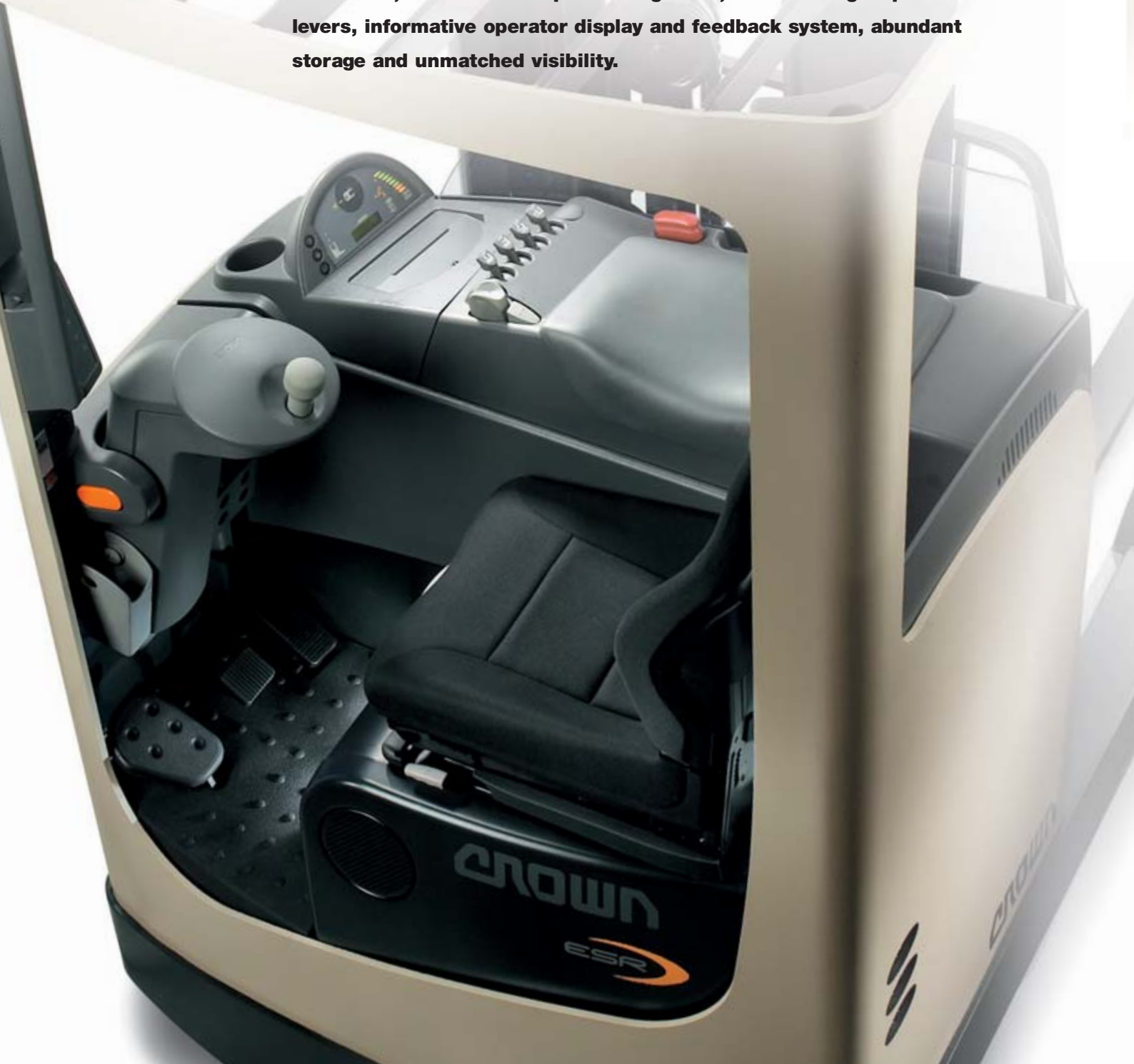
**The one-piece heavy-duty chassis and overhead guard** protect vital truck components and give the operator a feeling of security. It's engineering integrity that provides total confidence. This chassis easily handles load capacities to 2000kg. There are no plastic or sheet metal covers that break or dent on the ESR 4500. Even the battery is fully protected from side impacts.



The ESR 4500 Series reach trucks offer load capacities of 1400, 1600 and 2000kg.

# Performance and Comfort in Control.

**It has been proven that good ergonomics improve overall productivity. The ESR 4500 Series focuses on operator performance and control... with a cleanly designed and comfortable cockpit that includes a non-slip floorboard, unobstructed operator leg room, intuitive fingertip control levers, informative operator display and feedback system, abundant storage and unmatched visibility.**





An adjustable steering column together with a comfort seat provides the ideal working position. The seat adjusts for lateral positioning, seatback tilt, and operator weight.



Whether you're operating in confined areas or wide open spaces, fully loaded or empty, at high speed or slow – 360 Select™ gives your operators the control and confidence to use the ESR 4500 to its full potential.



Every detail from the steering wheel to the steer tyre and the advanced AC electronics has been fine-tuned to provide effortless, precise and predictable response to the operator's command. With 360 Select the operator can choose between 180° or 360° steer tyre rotation to match driving conditions, experience level or personal preference. If a fixed setting is desired the system can be locked in either 180° or 360° mode with password-protected access.

The fingertip levers are ideally placed to give operators enhanced control and the ability to proportionally blend hydraulic functions. These functions are easily understood by even new or inexperienced operators. In addition, a soft, contoured armrest and adjustable seat ensures controls are truly an extension of the fingertips for operators of different sizes.

An informative display on the ESR 4500 Series provides truck status data as well as dynamic information through an easily readable, expanded operator message window.

This thirty-two character window offers a range of feedback in a situation-response format, empowering operators with accurate information about the reach truck. In addition, battery discharge status, steer wheel position, selected travel direction, truck performance setting, and critical maintenance issues are continually displayed. Adding rack height select and load weight indicator options further promotes operator control.

The Crown ESR 4500 Series offers three performance settings (P1, P2 and P3), allowing the reach truck to meet varied application requirements with the ideal blend of performance and energy consumption.

Performance settings can also be fine-tuned to match operator skills and preferences. The use of a PIN code ensures that operators access the truck performance setting appropriate to their level of experience.

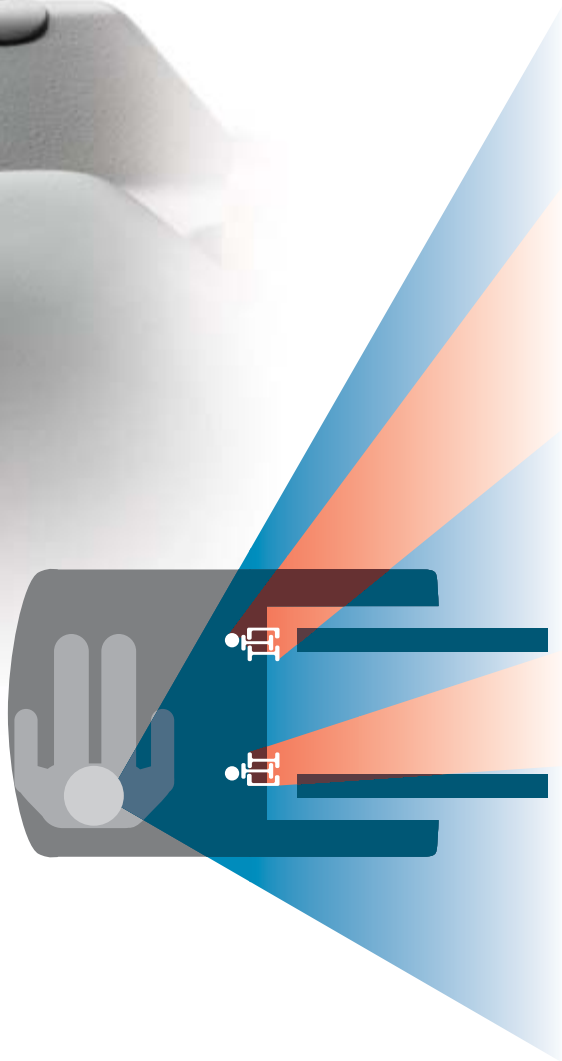


# Unmatched Visibility

Two-line LCD message window displays truck status and enhances operator and service technician information.

Three levels of performance can be selected to match operator skill and preference or application requirement.

**Crown engineers continually focus on improving operator visibility. Every line-of-sight detail has been studied to provide maximum all-around visibility. The result is better pallet handling at all heights, meaning less damage to truck, product and environment.**



**Crown's patented offset mast** provides a wider visibility window inside the mast rails. Combined with a low operator console, the line of sight is increased to both the outriggers and the fork tips for easy pallet entry. Hose and chain pulleys have been

angled and a unique load backrest further increases visibility. Improved upward and forward visibility for positioning loads at heights has been achieved through canted mast tie bars and overhead guard supports.



# Dependable Performance...

**Crown understands that truck uptime means operator uptime and that the operator is the most expensive component in the total cost of ownership.**

**No other lift truck manufacturer has done more to advance service simplicity than Crown.**

It's the result of extensive testing and application-focused design, starting at the component level in Crown facilities and extending to demanding, real-world applications. Our advanced information-on-demand approach helps operators and service engineers quickly and accurately identify and repair problems.

Crown's Access 1 2 3<sup>®</sup> technology, delivered through an enhanced information display, provides immediate

access to critical information on any fault condition without the need for a handset or laptop. It communicates the problem, where it is, what it does, and what to do.

Only Access 1 2 3<sup>®</sup> diagnostics distinguish between electrical, hydraulic or mechanical systems for precise diagnostics that eliminate guesswork and get the truck back in operation faster.

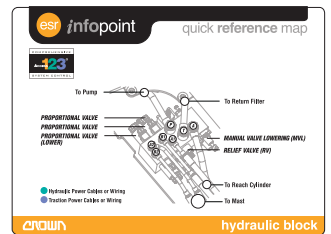
This significantly reduces service time and eliminates the need for unnecessary cover removal, inconclusive continuity checks and random component replacement.

Crown's unique InfoPoint™ component maps allow service engineers to troubleshoot without complicated schematics, wiring diagrams or cumbersome service manuals.



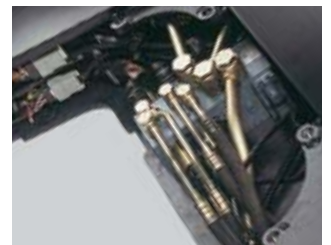
**Step 1**

**If the mast cannot be retracted,** the operator sees a code on the display (in this case 460) which can be easily found via Crown's quick reference system.



**Step 2**

**The InfoPoint map,** located on the reach carriage, provides another critical piece of information – where the problem is. It also clearly displays the component wiring.

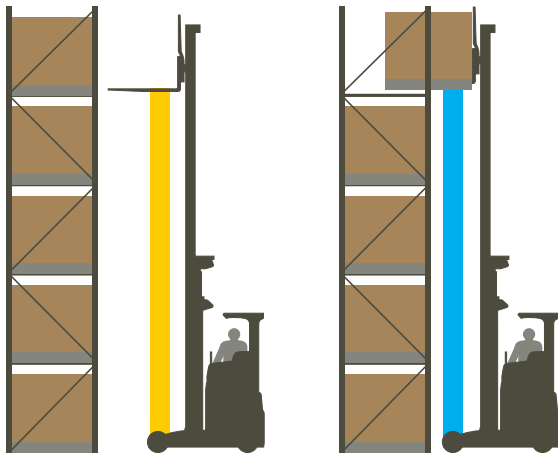


**Step 3**

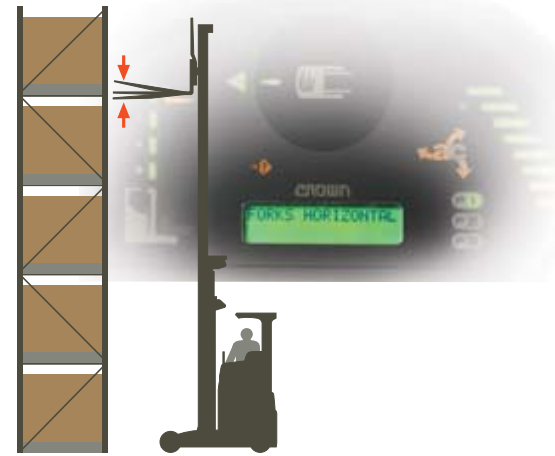
**The component** is immediately identified and tested for replacement, repair or adjustment. Problem solved quickly and accurately.

# Options.

Crown offers a wide range of performance options and Work Assist™ accessories to customise the ESR 4500 Series to each application and operator it supports.



**Rack Height Select** allows the reach truck to be programmed so the forks stop automatically at pre-selected heights. A **Load Recognition System** ensures the forks stop at either pick-up or let-down heights without further operator input.



**Tilt Position Assist** allows the fork tilt to stop automatically at the horizontal position.



**Load Height and Weight Indicator**



**Dual-Axis Controls**



**Colour Monitor** in combination with fork or mast-mounted camera assists in load handling at extreme heights.



**Mast-mounted Camera**



**Fork-mounted Camera**



**Adjustable Front and Rear Work Lights**



**Flashing Beacon**



**Work Assist RF Terminal Mounting Hardware and Hook**



**Mirror**



**Work Assist A4 Clipboard and Hook**



**Cold-Store Cab** allows operators to comfortably work in cold-storage environments at temperatures to  $-30^{\circ}\text{C}$  for extended periods.

# from all Crown Products for **Your Business.**

**From the smallest pallet truck to the highest lifting turret truck, Crown's goal is always to provide the user with the safest, most efficient and ergonomic lift truck possible.**



#### **PTH 50**

The PTH 50 Series features a 2300kg capacity and a variety of fork lengths and models – including scissor lifts and weighing scale versions.



#### **WP 2300**

The WP 2300 Series of powered pallet trucks featuring the X10 Handle™, offers 1600kg and 2000kg load capacities in a range of pedestrian and rider models.



#### **GPC 2000**

The Crown GPC low-level order pickers include models featuring independent lifting forks, lifting platforms for second-level picking and electric steering.



#### **SC 3200**

Three- and four-wheel counterbalanced lift trucks offer capacities from 1250kg to 3000kg.



#### **WE 2300**

Crown's pedestrian and rider stackers featuring the X10 Handle™, range from 1000kg to 1800kg capacities and include both fork-over and straddle versions.



#### **SP 3000**

The Crown range of mid- and high-level order pickers offer both fixed and lifting fork versions with capacities to 1250kg and lift heights over 9 metres.

**Crown****European Headquarters**

Moosacher Strasse 52  
80809 Munich  
Germany

**Tel** +49(0)89-93002-0

**Fax** +49(0)89-93002-133

**German Locations:**

Hamburg  
Berlin  
Hanover  
Cologne  
Dortmund  
Frankfurt  
Stuttgart  
Nuremberg  
Munich

**Crown Lift Trucks Ltd.****Locations in United Kingdom:**

Wokingham, Berkshire RG41 2JT

**Tel** +44(0)845-8509276

**Fax** +44(0)845-8509277

Warrington, Cheshire WA2 8TS

**Tel** +44(0)845-8509280

**Fax** +44(0)845-8509281

Almondsbury, Bristol BS32 4RX

**Tel** +44(0)845-8509268

**Fax** +44(0)845-8509269

Swindon, Wiltshire SN3 4TS

**Tel** +44(0)845-8509270

**Fax** +44(0)845-8509271

Bellshill, Lanarkshire ML4 3LX

**Tel** +44(0)845-8509265

**Fax** +44(0)845-8509266

**Crown Handling NV**

Satenrozen 12

2550 Kontich

Belgium

**Tel** +32(0)3-4507171

**Fax** +32(0)3-4507181

**Crown Intern Transport BV**

Damsluisweg 75

1332 EB Almere

Netherlands

**Tel** +31(0)36-5494180

**Fax** +31(0)36-5494276

The logo for Crown, featuring the word "CROWN" in a stylized, bold, sans-serif font. The letters are interconnected, with the 'C' and 'R' being particularly prominent.

**[www.crown.com](http://www.crown.com)**

Because Crown is continually improving its products, specifications are subject to change without notice.

Crown, the colour beige, the Momentum symbol, X10, The X10 Handle, the stylised X10 logo, Access 1 2 3®, InfoPoint and Work Assist are trademarks of Crown Equipment Corporation.

Copyright 2004 Crown Equipment Corporation  
Wave BROCH GB 09/05, 30 - M01463-006-02  
Printed in Germany