

CROWN

TSP 6000 SERIES



MOVING PERFORMANCE

TO THE NEXT LEVEL WITH THE CROWN TSP 6000 SERIES.



Discover turret stockpicker performance at its best.

This versatile three-point truck maximizes the benefits of cube utilization while answering multiple application needs throughout the warehouse. Crown's performance-enhancing control innovations help operators move more productively, even while turning in intersecting aisles as small as 13 feet, or even less depending upon the application. Additional advantages include exceptional travel speeds, capacities and lift heights, as well as the most stable, heavy-duty mast in the industry. Crown's reputation for thoroughly tested and proven lift truck engineering ensures long-term reliability...

keeping performance on the move for you.

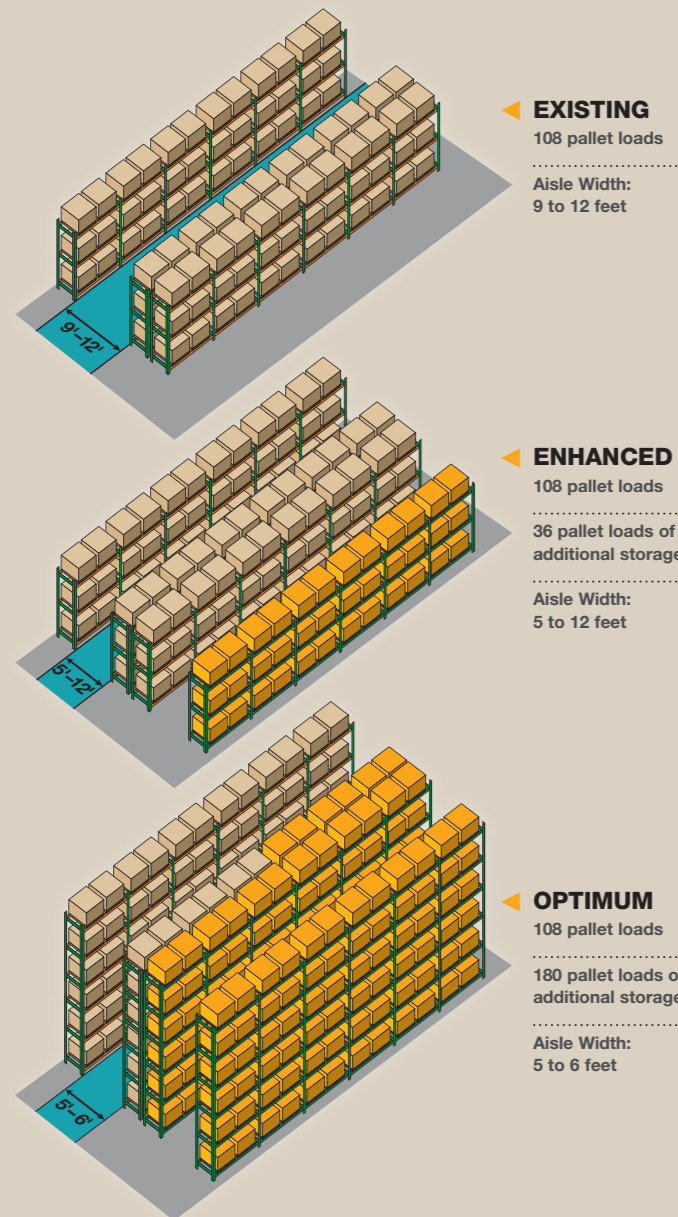
OPTIMIZED WAREHOUSE SOLUTIONS

FOR MORE EFFICIENT AND FLEXIBLE USE OF SPACE.

Its compact design, excellent maneuverability and precise control help you optimize your warehouse, maximizing cube utilization and providing superior performance at heights. You can also use the TSP 6000 Series for multiple tasks. Instead of a reach truck, stockpicker and dock truck combination, use the TSP 6000 Series with only a dock truck to gain significant labor, space and equipment savings. For optimized solutions, move up to the TSP 6000 Series.



Crown's exclusive SureSpec™ software gives you a fast, accurate way to optimize your warehouse space down to the last inch, based on your unique facility specifications.



EXISTING
108 pallet loads
Aisle Width: 9 to 12 feet

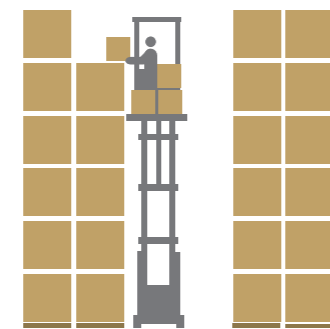
ENHANCED
108 pallet loads
36 pallet loads of additional storage
Aisle Width: 5 to 12 feet

OPTIMUM
108 pallet loads
180 pallet loads of additional storage
Aisle Width: 5 to 6 feet



DOCK WORK

Application: Dock and staging
Lift Truck: Pallet/Counterbalanced
Aisle Width: Open dock/Trailer work



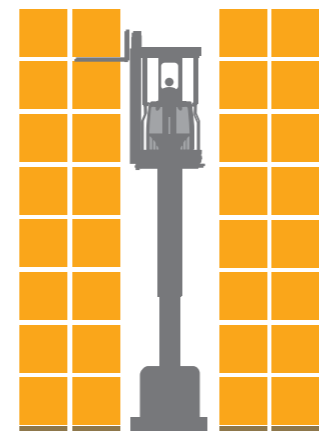
PICKING AISLE

Application: Order picking
Lift Truck: Stockpicker
Aisle Width: 5 to 12 feet



TRADITIONAL STORAGE

Application: Full pallet storage and transport
Lift Truck: Counterbalanced/Narrow aisle reach
Aisle Width: 9 to 12 feet



DOCK WORK + VERY NARROW AISLE

Application: Full pallet storage, order picking and transport
Lift Truck: Turret stockpicker
Aisle Width: 5 to 6 feet

The Crown TSP 6000 Series offers the versatility to handle a wide range of warehousing challenges, from full pallet put-away and picking to transporting and staging. Crown's engineers designed this turret stockpicker to meet key performance requirements for warehousing applications. As a result, operators benefit from a compact three-point design and excellent maneuverability in or out of narrow aisles. They also work more efficiently with an innovative seat and controls that adapt to the task for optimum productivity and enhanced visibility. Crown's Access 1 2 3® Comprehensive System Control provides unsurpassed performance for transporting, lifting and pallet positioning operations, while the stable mast gives operators the confidence and capability to take performance further.



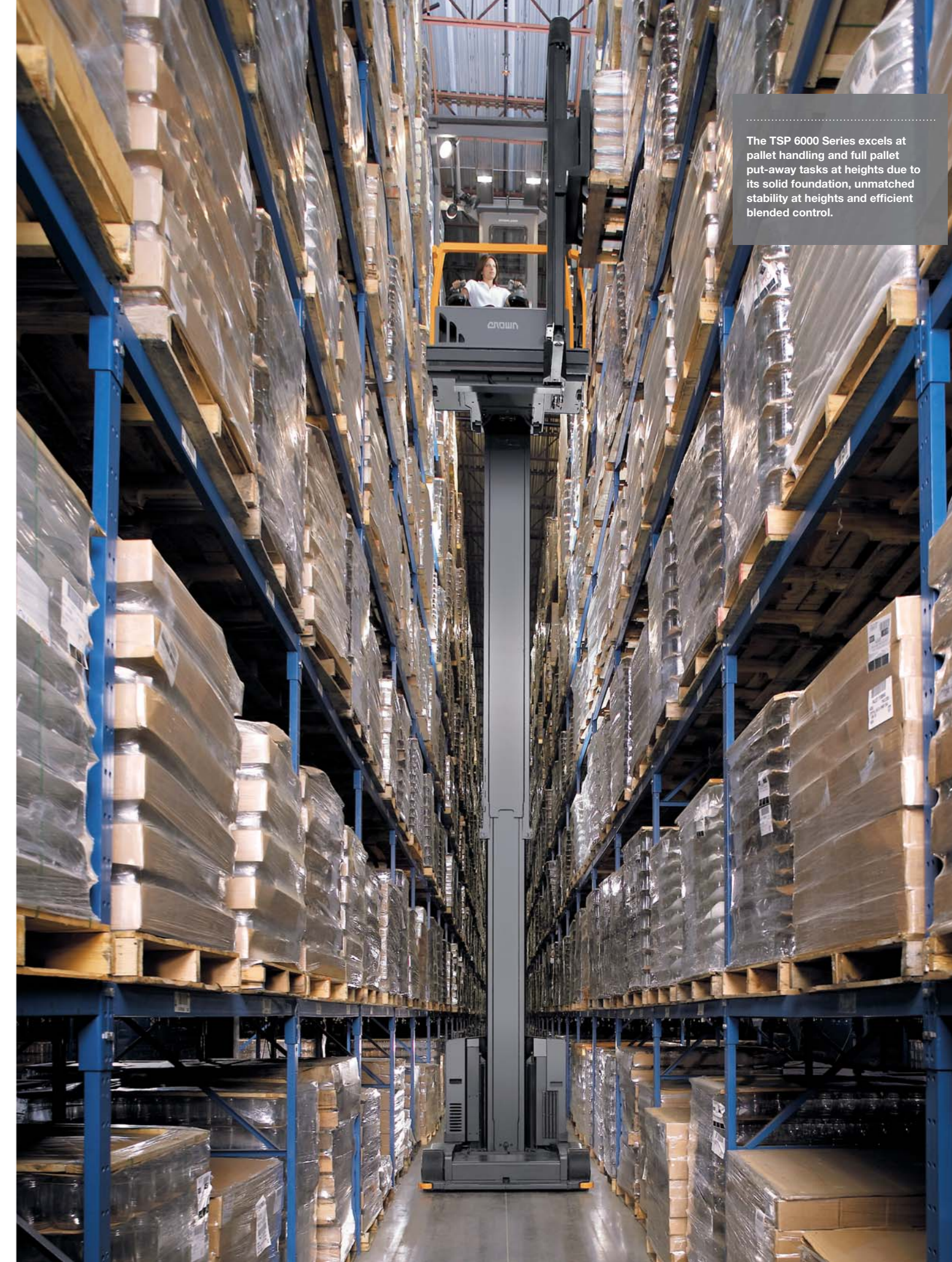
PICKING: Operations improve with the exceptional flexibility of the TSP 6000 Series, allowing the operator to work in close proximity of partial or full pallet loads at multiple elevations with full confidence.



TRANSPORTING: Capabilities of the TSP 6000 Series highlight its value as an all-around warehouse truck, including operator positioning flexibility and unmatched travel speeds to improve productivity.



STAGING: Another operational advantage of the TSP 6000 Series, with its compact three-wheel design providing excellent maneuverability and a tight turning radius to help the operator easily transport and position full pallet loads.



The TSP 6000 Series excels at pallet handling and full pallet put-away tasks at heights due to its solid foundation, unmatched stability at heights and efficient blended control.

BLENDDED EFFICIENCY

IS KEY TO OPERATOR PERFORMANCE.

The Crown TSP 6000 Series blends lift truck engineering and innovation with proven best practices for operator performance.

Superior efficiency is the result. This includes blending of multiple truck functions to address the fast-paced and dynamic challenges of warehouses today. The design also focuses on operator interactions with the truck, clearly evident in the operator platform with its ergonomic features. The advantages continue with Crown's exclusive MoveControl® Seat, blending key operator movements and operational functions.

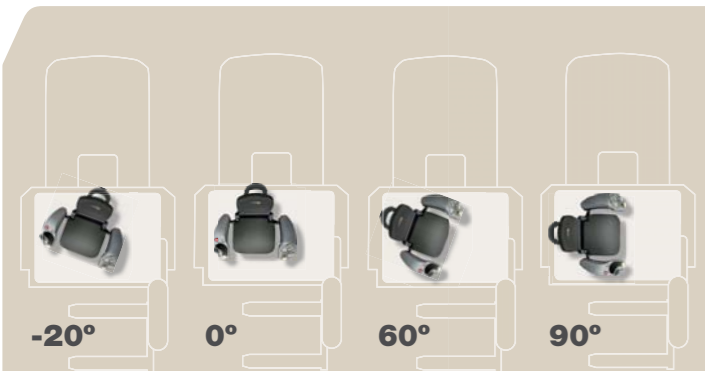
The TSP 6000 Series brings it all together for superior performance and productivity.



MORE CONTROL

WITH EVERY MOVE.

Based on Crown's extensive human factors studies, the TSP 6000 Series provides flexibility without compromising safety to keep operators moving with efficient, focused control. The design doesn't dictate the operator position. Instead, it gives the operator the flexibility to choose the optimum position on the move. That's what improves productivity.



Crown has been an ergonomics leader for years, expertise that's apparent in the engineering of the **MoveControl® Seat**. It's based on studies of challenging warehouse applications, which prove that operators prefer operational flexibility to meet constantly changing conditions.

The **MoveControl Seat** allows operators to adapt on the move for optimum positioning, visibility and comfort. It was specifically designed for the TSP 6000

Series, considering the needs of operators and application challenges. A variety of seat positions gives operators the ideal choice for each task or individual preference, including the flexibility to travel in, out or between aisles. Other integrated features, such as the swivel seat design, seat height adjustability over a range of 7.5 inches and controls that move with the seat also improve safety, productivity and visibility for a variety of tasks.

Flexibility for optimum task positioning results from a seat and controls that easily adapt to standing or sitting operation.



Precision load handling results from the blended efficiency of AC motors, electronics and hydraulics on the TSP 6000 Series.

Tasks that benefit from standing are efficiently accomplished with a seat that folds up and controls that adjust to the ideal operator height.



The sloped power unit design and flexible seat positions give the operator a clear view of the aisle, improving maneuverability and operation in and out of the aisle.

EASIER, FASTER SERVICE.

Adaptability and efficiency are apparent in the blended, multi-task controls on the TSP 6000 Series, providing further productivity improvements.

It starts with an intuitive, operator-centric design that **simplifies control**. Unlike competitors' trucks, controls on the TSP 6000 Series move with the seat for consistent operator orientation. That means no behind-the-back or other awkward positions for the operator. Adjustable armrest controls give the operator optimum positioning for travel, lift/lower or picking functions, while contributing to postural relief, ingress/egress and operator stability.



Crown's exclusive auto pivot feature simplifies operations with automatic blending of traverse and pivot functions.

The innovative steering tiller, another Crown exclusive, can be operated as a finger divot or via a flip-up tiller knob.



Crown's multi-task controls, which offer blending of five primary functions, improve productivity with their intuitive, operator-centric design.



Cushioned armrests can be adjusted to a number of preset positions to meet the needs of the operator and the task.

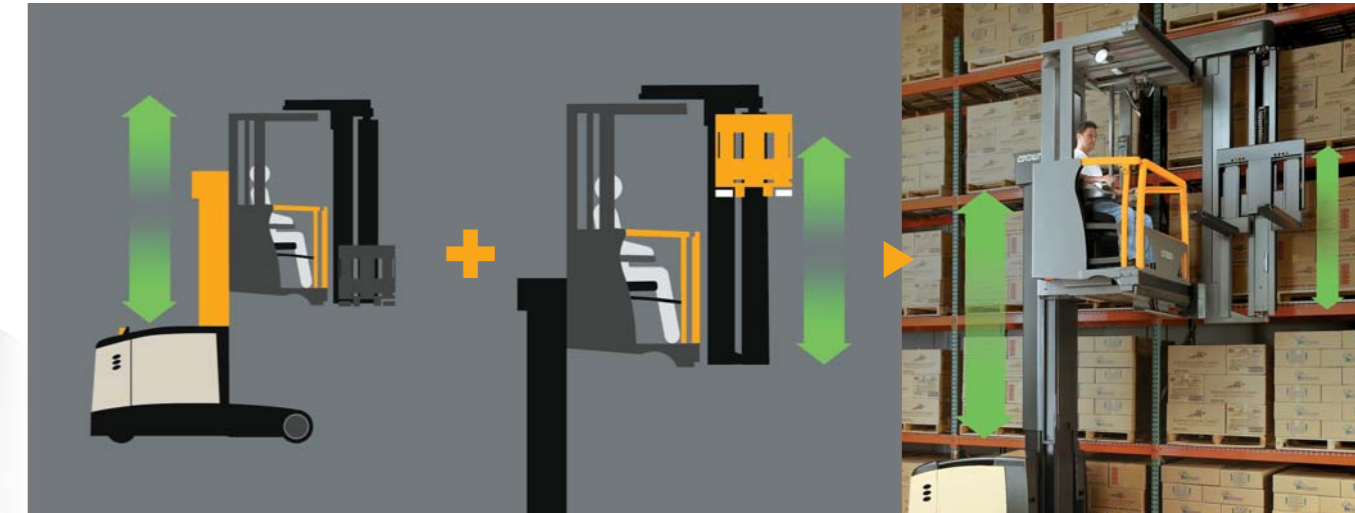
The swivel seat design provides postural relief and additional flexibility and freedom for a number of tasks.



BLENDED LOAD HANDLING

Travel
Forward/Reverse
+
Main mast
Lift/Lower

Operators can travel and lift or lower the platform simultaneously on the TSP 6000 Series, saving valuable positioning time on each task.



Main mast
Lift/Lower
+
Auxiliary mast
Lift/Lower

Lifting or lowering the main mast and auxiliary mast simultaneously allows operators to quickly position the forks at the optimum load handling height.



Traverse
Auxiliary Mast
+
Pivot
Auxiliary Mast

The auto pivot feature automatically coordinates traverse and pivot functions to keep forks/load evenly centered between the racks, improving productivity and reducing rack damage.



BLENDED APPLICATIONS

Full pallet
+
Order picking

Blended efficiency on the TSP 6000 Series includes the ability to answer multiple application needs, ranging from full pallet put-away to order picking.

OPERATOR CONFIDENCE

THE FOUNDATION OF PRODUCTIVITY.

Through the eyes and hands of the operator—that's how the TSP 6000 Series focuses technology on the critical needs of turret stockpicking.

You can see it demonstrated in every touch point throughout the operator compartment. The TSP 6000 Series works with, not against, the operator to enhance confidence and productivity.



Sturdy steel side gates and front rail on the TSP 6000 Series provide a safe and secure working platform for picking.



When the operator feels safe and secure, you'll see increased productivity.

The TSP 6000 Series operator compartment is designed to protect the operator, boost confidence and improve productivity. Operators notice the difference as soon as they enter the truck, with its low step height and large side gate opening with hand holds. This facilitates entry/exit, helpful during floor-level picking. The walk-through design of the cushioned floorboard provides stable footing while reducing fatigue. System-integrated pedals ensure proper operator positioning and provide large target areas for easy actuation. Sensors on the pedals, hand controls and gates communicate to the truck's system controller when both the operator and truck are in the proper position and mode for safe operation. For example, if the side gates are not lowered or the operator's hands are off the controls, the system inhibits key truck functions. Operators also gain confidence and stability due to the side gates, front rail and armrests with integrated controls. Even the top line of the gates and rails are flush to allow easy handling of boxes.

PRODUCTIVITY ENHANCEMENTS ▼

The TSP 6000 Series offers additional enhancements to keep productivity on the move in your warehousing applications. Work lights, dome lights, a fan and a mirror are included as standard Work Assist® Accessories. Other productivity enhancements include streamlined forks to facilitate pallet entry and exit, an anti-fatigue floor mat and ample storage space.

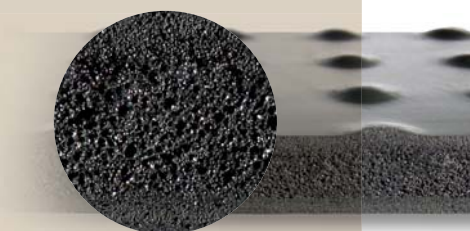


Additional Work Assist Accessories are available to meet specific application needs.

Convenient storage areas are integrated into the TSP 6000 Series operator compartment.



The telescopic fork tips are tapered on the sides and underneath to facilitate pallet entry and exit.



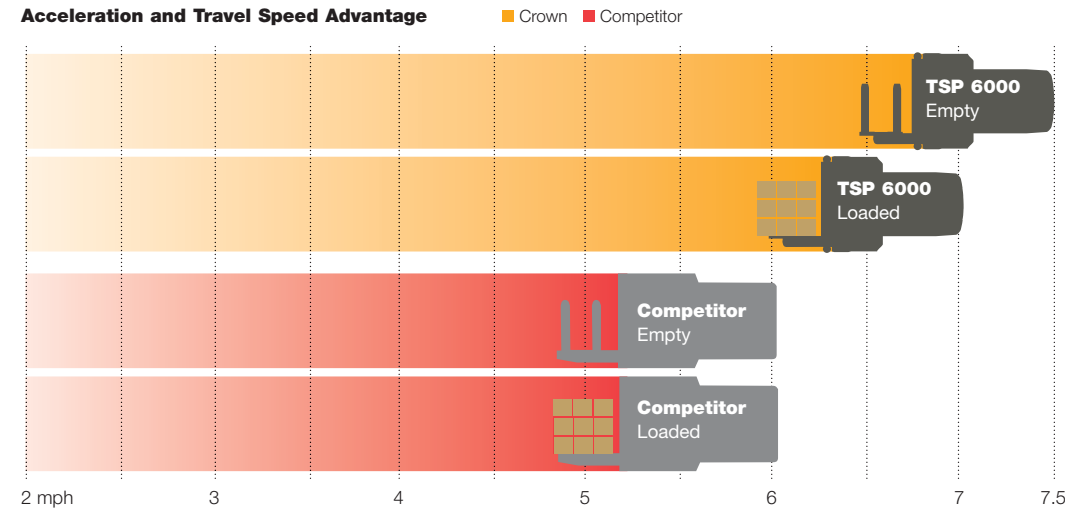
The Crown anti-fatigue floor mat features a microcellular composition designed to reduce discomfort and back stresses that adversely affect productivity.

OUTPERFORM ON EVERY TASK

TO GET MORE DONE.

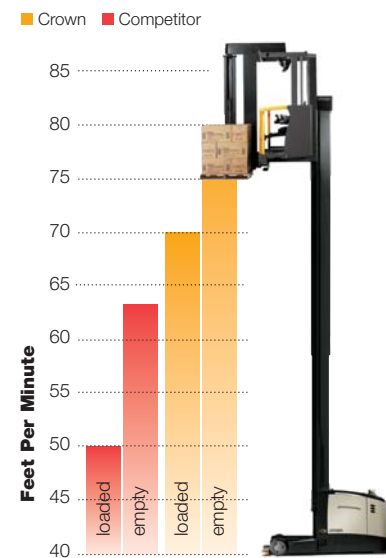
Operators move ahead on every task with the TSP 6000 Series due to its powerful AC lift and traction motors combined with the synchronized control provided by Crown's Access 1 2 3® system.

Acceleration and Travel Speed Advantage



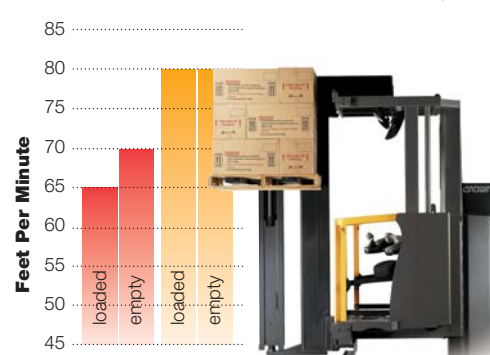
Productivity advantages on the TSP 6000 Series begin with quicker acceleration to get to each task faster, along with superior top travel speeds of 7.5 mph versus 6 mph on the competitor, a 25 percent advantage.

Main Lift Speed - TN/TF Mast



The top speed of the main lift with a load is 70 feet per minute, providing a 40 percent advantage over the competitor.

Auxiliary Lift Speed



The auxiliary mast of the TSP 6000 Series can lift a load 80 feet per minute, which is 23 percent faster than the competitor's top loaded speed.

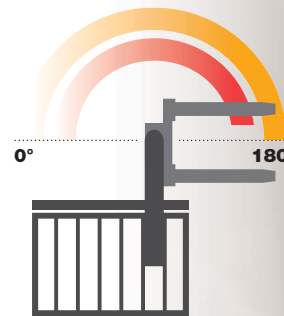
Performance advantages come with smooth, safe operational control on the TSP 6000 Series. The Access 1 2 3 control system continually analyzes operational data, including guidance mode, height of the operator platform and forks, travel direction, load weight and load position, to determine top speeds and maximum acceleration. As a result, operators confidently outperform other turret trucks on every move. Operators also benefit from smooth, precise control of both the truck and the load handler, especially important when positioning loads at heights. In addition, programmable performance capabilities provide situational performance so operators can function at optimal levels whenever and wherever necessary.

The top travel speed of the TSP 6000 Series is 25 percent faster than its typical competitor.

Consider the advantages in long aisles or when using the TSP 6000 Series for transporting applications. The TSP 6000 Series also offers faster acceleration, enabling operators to quickly move from one task to another. Productivity advantages continue with a main mast lift speed 40 percent faster and an auxiliary mast lift speed 23 percent faster than its typical competitor.

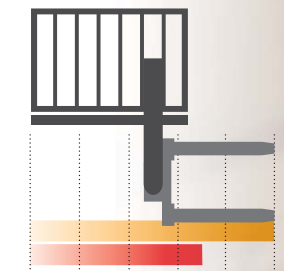
Load handling is another strength of the TSP 6000 Series, adding further productivity advantages. Top pivot speed is 33 percent faster and traverse speed is 50 percent faster than the primary competitor. The advantages add up with every move through superior performance, backed by an intelligent system of safety and control.

Pivot Speed



The forks on the TSP 6000 Series can pivot a full 180 degrees in 6 seconds, which is 33 percent faster than the primary competitor.

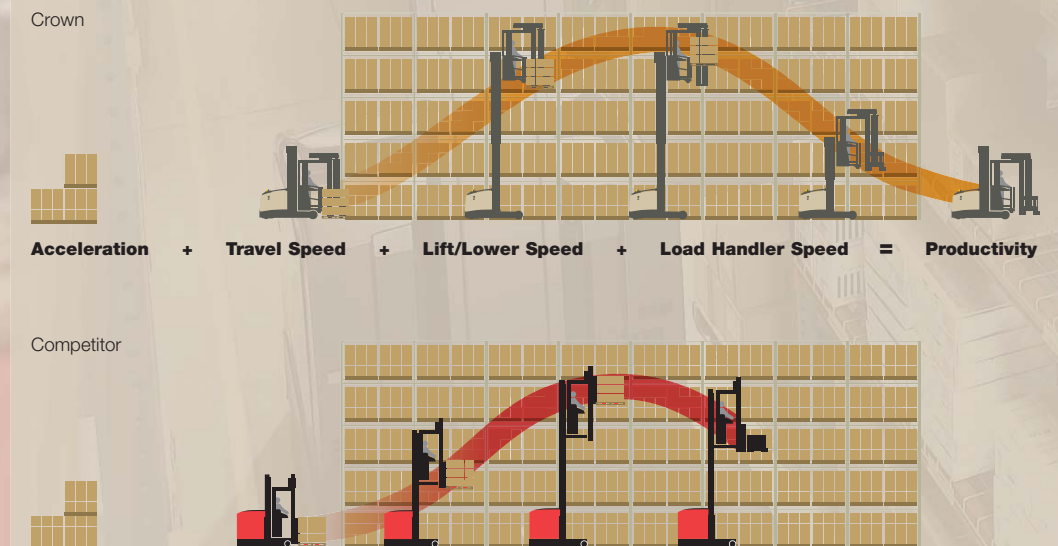
Traverse Speed



The load handler traverses at a rate of 12 inches per second, outperforming the competitor's rate of 8 inches per second by 50 percent.

SPEED = PRODUCTIVITY ADVANTAGE

At the end of the day, the TSP 6000 Series pays off with more work accomplished, because Crown's expertise focuses on the operator and the task at hand, providing the safest, most efficient way to move.



STABILITY DRIVES CONFIDENCE

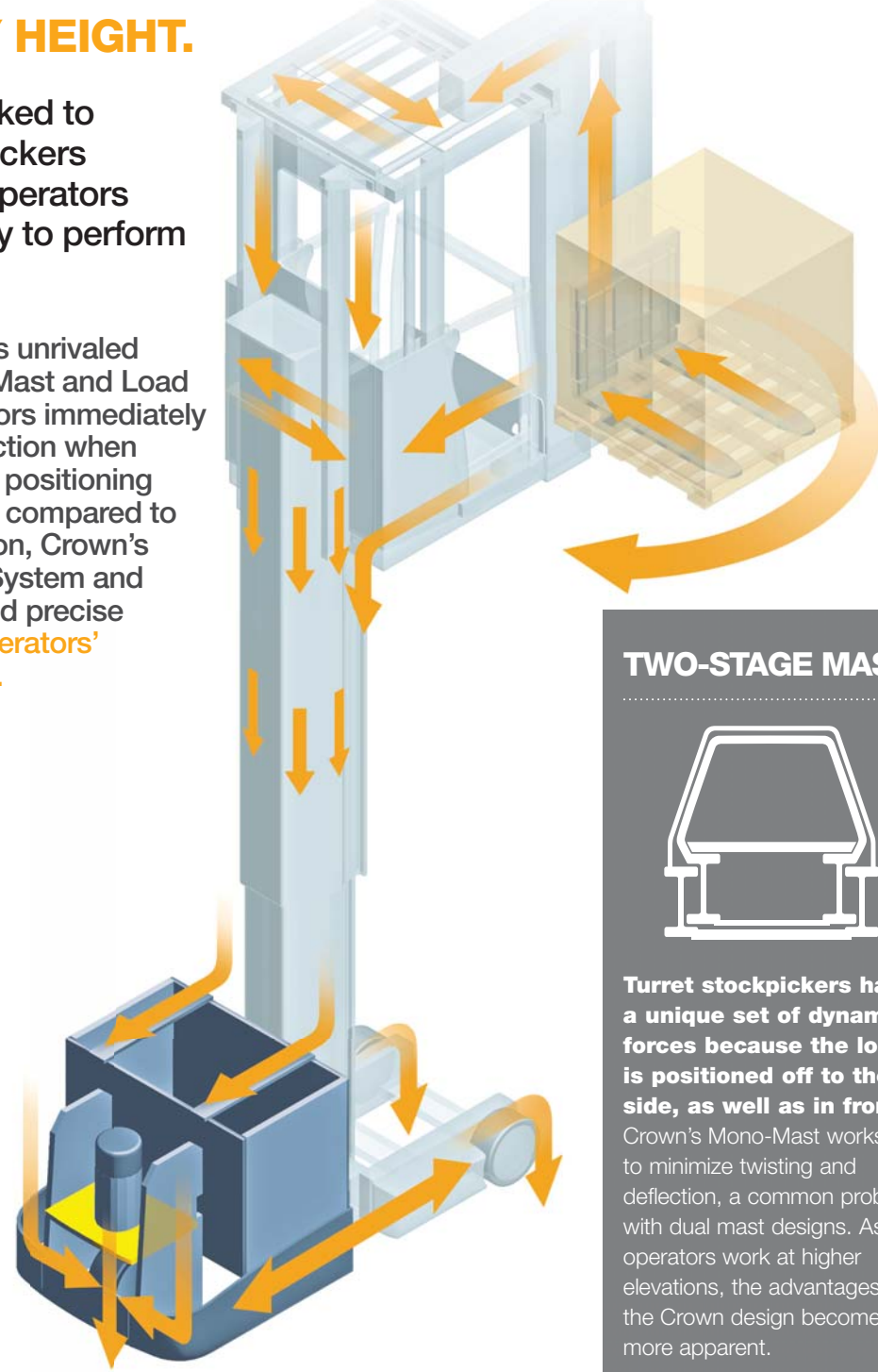
TO WORK AT ANY HEIGHT.

Productivity is directly linked to stability on turret stockpickers because stability gives operators the confidence and safety to perform at faster speeds.

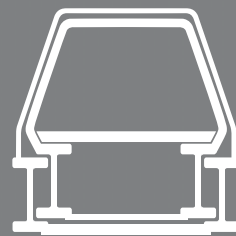
The TSP 6000 Series provides unrivaled stability with Crown's Mono-Mast and Load Path Stability Design. Operators immediately notice its minimal mast deflection when traveling in aisles at height or positioning heavy pallet loads, especially compared to competitors' trucks. In addition, Crown's patented Intelligent Braking System and AC motors ensure smooth and precise control to further enhance operators' confidence and performance.

Crown's exclusive Load Path Stability Design, proven in numerous man-up applications, provides a solid foundation for operator confidence.

It's achieved by evenly distributing the force of the load from the platform through the Mono-Mast to the frame and power unit and through the drive unit to the ground.



TWO-STAGE MAST



Turret stockpickers have a unique set of dynamic forces because the load is positioned off to the side, as well as in front.

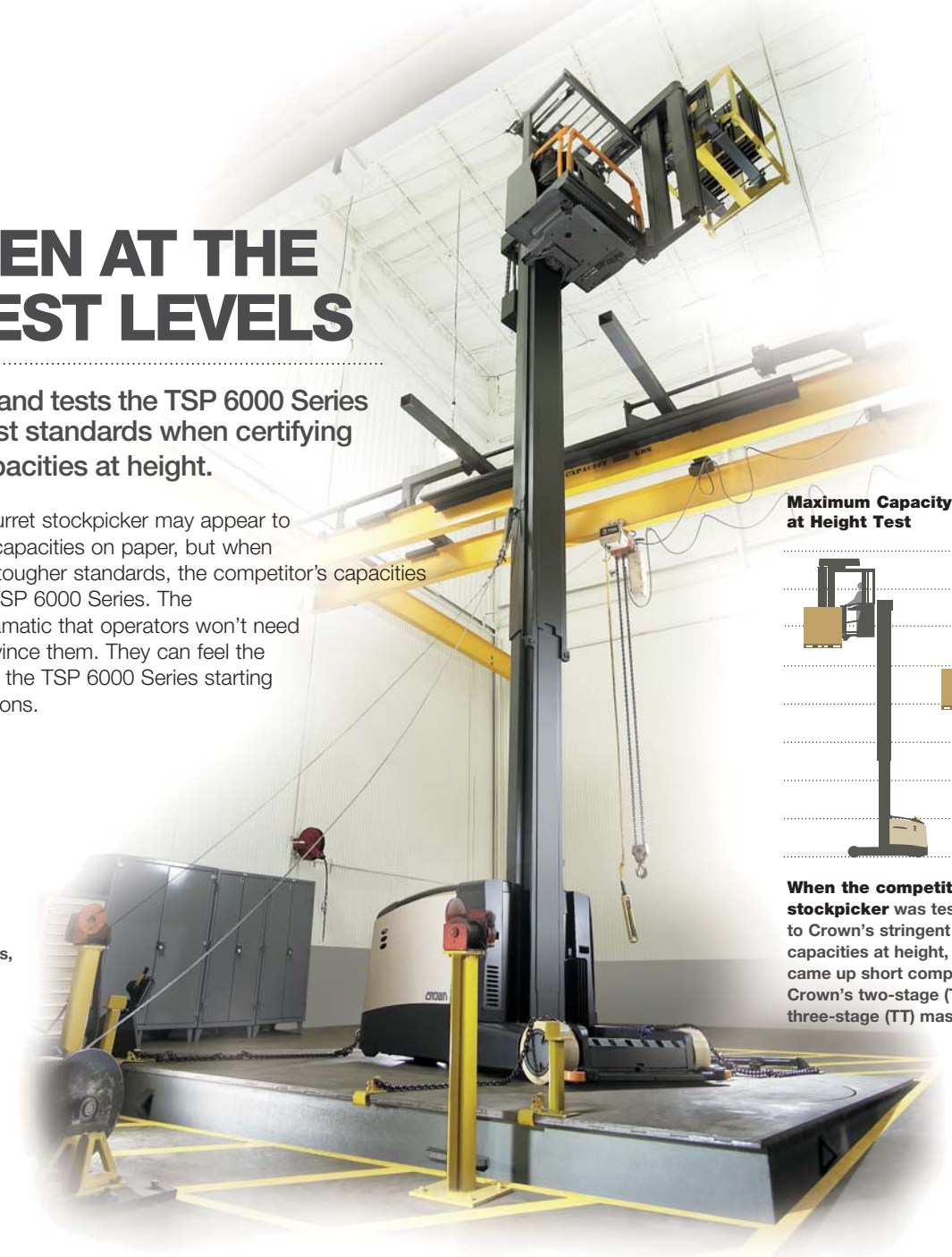
Crown's Mono-Mast works to minimize twisting and deflection, a common problem with dual mast designs. As operators work at higher elevations, the advantages of the Crown design become more apparent.

PROVEN AT THE HIGHEST LEVELS

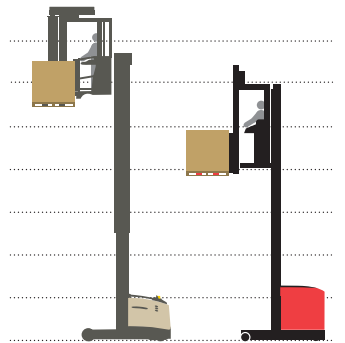
Crown builds and tests the TSP 6000 Series to the toughest standards when certifying maximum capacities at height.

The competitor's turret stockpicker may appear to have comparable capacities on paper, but when tested to Crown's tougher standards, the competitor's capacities are far below the TSP 6000 Series. The difference is so dramatic that operators won't need test results to convince them. They can feel the superior stability of the TSP 6000 Series starting at the lower elevations.

Crown's Tilt Table Test adds dynamic factors, substantially exceeding standards in Tilting Platform Tests, resulting in industry-leading lateral and longitudinal stability.



Maximum Capacity at Height Test



When the competitor's turret stockpicker was tested according to Crown's stringent standards for capacities at height, the competitor came up short compared to Crown's two-stage (TN/TF) or three-stage (TT) masts.

Crown's sturdy Mono-Mast incorporates an exclusive design featuring vertical mast braces to stiffen the outer rails, minimizing mast deflection and providing superior stability.

Mast deflection on competitors' dual masts makes it difficult to position loads and hurts operator productivity – problems which will be greatly magnified at heights.

Crown's exclusive Mono-Mast features a boxed-in design with heavy gauge steel and inner I-beams, tied together with massive cross members to minimize twisting and swaying.

The competitor's mast is subject to dynamic load forces causing its dual masts to twist and sway, especially at higher elevations. This instability quickly impacts operator confidence and productivity.

HIGH PERFORMANCE, LOW COST

THE ULTIMATE VALUE EQUATION.

One look tells you that the TSP 6000 Series is built for long-term reliable performance.

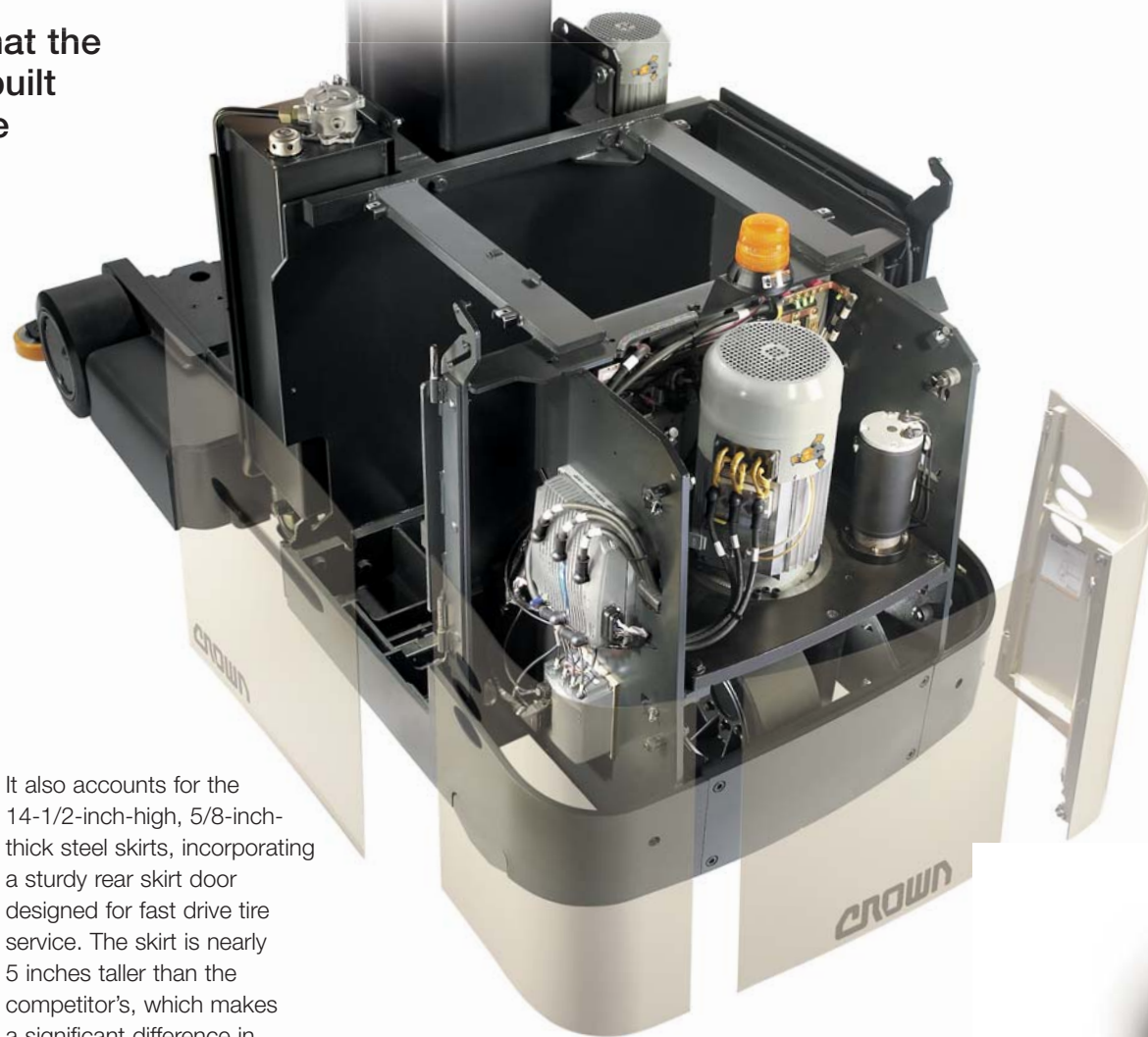
Its tough, durable design protects the truck outside and inside. You can see it in the heavy-duty steel frame, steel covers on the power unit and vertical steel uprights, all of which add up to superior protection for interior components, including electronics. You'll also notice serviceability advantages with the modularity of Crown's Access 1 2 3[®] components, InfoPoint[®] system, hydraulics arrangement and easy battery access. For those areas of performance that aren't so readily apparent, Crown conducts extensive tests covering virtually every system on the TSP 6000 Series. So you can be assured of exceptional uptime, performance and value.

Crown makes it clear with the TSP 6000 Series that ensuring uptime requires durability inside and out. This is no place for plastic. That's why Crown turret stockpickers feature heavy 3/16-inch steel covers all around the power unit, instead of plastic covers found on competitors' trucks.

It also accounts for the 14-1/2-inch-high, 5/8-inch-thick steel skirts, incorporating a sturdy rear skirt door designed for fast drive tire service. The skirt is nearly 5 inches taller than the competitor's, which makes a significant difference in protecting the truck from impacts. In addition, vertical steel uprights designed to protect internal components are only found on the TSP 6000 Series.

The hydraulics design also demonstrates a focus on reliability. Crown's innovative

design features all hydraulics mounted on the truck's main frame. This streamlined approach eliminates hoses, connections and components for improved durability and serviceability. It also separates hydraulics from electrical systems, resulting in cooler and cleaner electronics.



EASIER, FASTER SERVICE.

Serviceability results from a practical, intuitive approach to making service easier, precise and efficient.

On the TSP 6000 Series, service is streamlined through Crown's modular Access 1 2 3 technology, which is backed by Access 1 2 3's industry-leading three-year warranty. It features straightforward diagnostics and programming, InfoPoint troubleshooting and accessible components cohesively integrated into a reliable lift truck system.

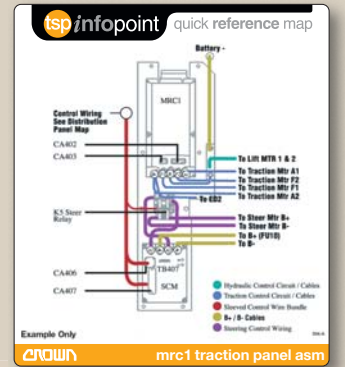
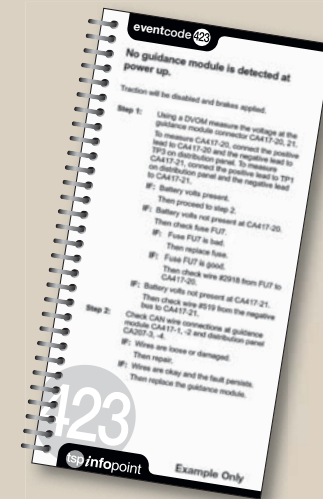
The Access 1 Display uses easily understandable icons to communicate key functions of the TSP 6000 Series. It also eliminates the need for an extra service terminal by providing an efficient interface for system diagnostics, calibration and programmable functions. While an efficient diagnostics system simplifies serviceability, component accessibility also plays a key role. The TSP 6000 Series is designed to allow direct access for individual component replacement without removing other components. This level of access, which improves serviceability and saves time, is often lacking on competitors' trucks.

While Crown's service manuals are recognized as the best in the industry, Crown engineers continually work to reduce the need to use them. For example, Crown's InfoPoint troubleshooting system ensures faster, simpler and higher quality service. The system gives technicians convenient access to critical information about the TSP 6000 Series, allowing them to troubleshoot without schematics, wiring diagrams or service manuals on most repairs. It's the result of the InfoPoint Quick Reference Guide, on-truck component maps and information nuggets located throughout the truck, which depict component location, function and working connections. The system was specifically designed to help technicians fix the truck right the first time and fix it fast. That means more uptime for your trucks and your operators.

Top battery access provides fast in-truck battery maintenance, while battery rollers with ball bearings enable easier and faster battery changes.

tsp infopoint

The TSP 6000 Series InfoPoint Quick Reference Guide and maps simplify service, helping technicians service trucks faster and more effectively by telling them what it is, where it is and what it does.



Access123[®]

Access 1 2 3[®] Comprehensive System Control integrates every system on the truck and provides real-time information to optimize safe performance and uptime.



CROWN'S VALUE EQUATION

PROVEN PRODUCT LINE

+ EXTENSIVE SYSTEMS/ APPLICATION TESTING

+ INTEGRITY PARTS AND SERVICE SYSTEM[®]

= TRUST = PERFORMANCE = VALUE

INTEGRATED SYSTEMS

FOR ENHANCED PERFORMANCE.

Crown offers integrated control systems focused on safe, productivity-enhancing performance. These application-specific options range from automated steering in narrow aisles to programmable end aisle control to fleet management tools with vital monitoring, communication and control capabilities.

WIRE GUIDANCE ▼



Crown's Wire Guidance System relies on a wire embedded in the floor to automatically steer turret trucks along a desired path.

InfoLink



The Crown InfoLink® System monitors and communicates vital fleet truck usage and performance information for significant cost-savings by enhancing efficiency, safety and productivity.

RAIL GUIDANCE ▼

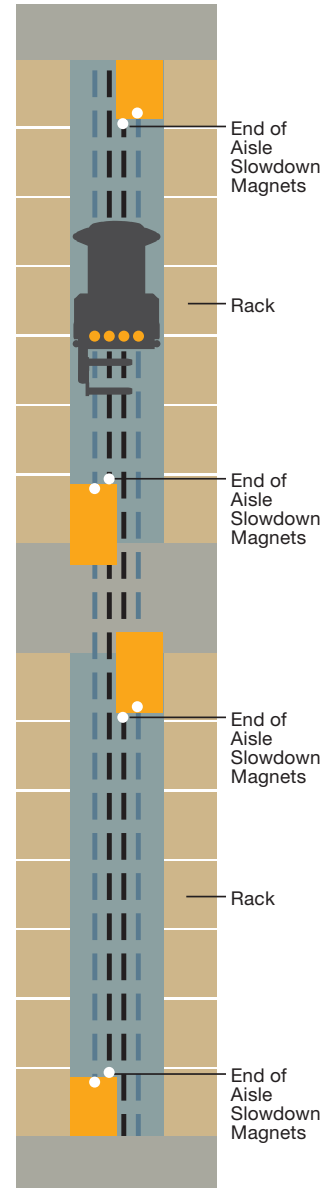


Aisle guide wheels provide reliable performance with Crown rail guidance systems, which are designed to take the day-to-day pounding of the most demanding warehouse applications. While the truck is in the aisle, the electronic system automatically centers the steering. An audible alarm indicates when the truck enters and exits the aisle.



Aisle Guide Rail

END AISLE CONTROL (EAC) ▼



- Manual-Guided Operation
- Auto-Activated Operation
- End of Aisle, Auto-Guided Operation

Crown's EAC System provides a programmable method for automatically slowing the TSP 6000 Series at a particular location and automatically resuming normal travel speed at another location. The system relies on sensors mounted on the TSP 6000 Series that detect magnets installed in the warehouse floor at end aisles and cross aisles.

OPTIONS TO IMPROVE ANY APPLICATIONS.

The versatility of the TSP 6000 Series is further enhanced by the wide selection of performance options designed to meet the unique needs of your application. All of the TSP 6000 Series options are designed for seamless integration and efficient operation.



Standard Set of Work Assist® Accessories (additional set of work lights and extra fan are optional)



Work Assist Accessory Clip Pad and Hook



Narrow Front Rail (requires belt with tether)



Front Bumper (standard with rail guidance and EAC options and optional with wire guidance)



Strobe Lights Under Platform



Zone Select Key Switch



Adjustable Arm Mounting System for WMS Terminal

Crown offers a full-line of turret trucks that complement the TSP 6000 Series in any application, from the smallest facility to the largest warehouse.



TSP 6000



TSP 6500



TSP 7000

ecologic™

Clean Environment. Smart Business.

Printed on elemental chlorine free and sustainably forested paper.

CROWN

You can count on Crown to build lift trucks designed for safe operation, but that's only part of the safety equation. Crown encourages safe operating practices through ongoing operator training, safety-focused supervision, maintenance and a safe working environment. Go to crown.com and view our safety section to learn more.

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

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