SOUTHWEST**SOLUTIONS**GROUP

business organization systems

Shuttle XP Vertical Lift Module
Automated Storage & Retrieval System

High Density Storage in a Compact Footprint
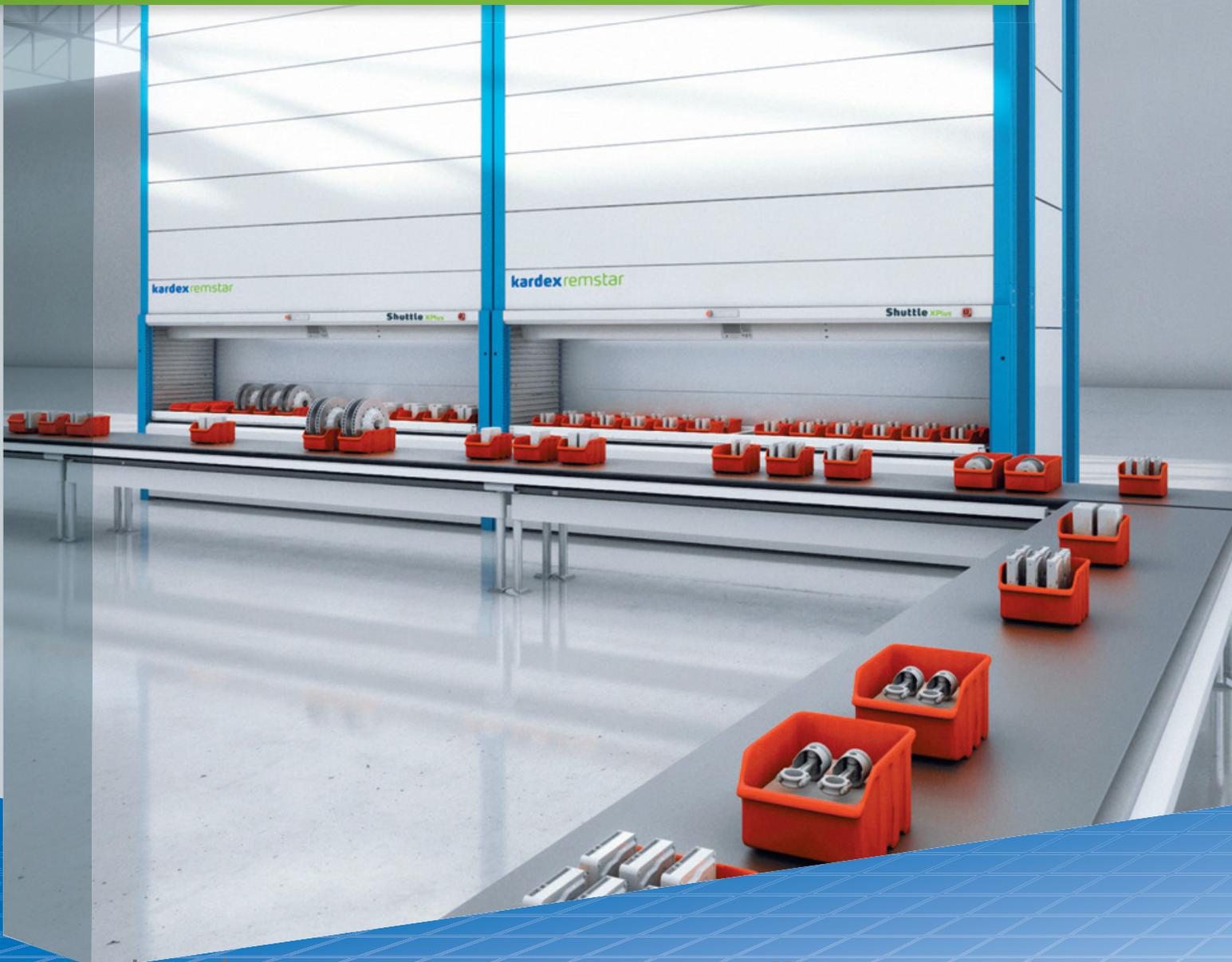
Kardex Remstar Shuttle XP VLM
## Store virtually anything – cost effectively and with fast access!

The Kardex Remstar Shuttle® Vertical Lift Module (VLM) has been designed to meet a broad range of storage and retrieval applications in manufacturing, distribution, retail and warehouse operations. The combination of storage density, flexibility, efficiently and security makes it an ideal storage solution for most every application!

The Principle

The Kardex Remstar Shuttle XP Vertical Lift Module is an enclosed system of vertically arranged trays stored on both sides of the unit with an extractor device placed in the center. The VLM automatically delivers trays with the stored items to the access window with a push of a button or a scan of a barcode. The device is modular in construction allowing the height and number of access windows to be adjusted pre and post construction. Depending on the usable building interior heights, up to 85% of a conventional storage systems occupied fl oor space may be recovered. Using CubeStar® technology the Shuttle VLM automatically scans the height of the product on each tray and finds ideal storage location within the unit. Trays are stored in one inch (25 mm) increments using the least amount of space and maximizing the storage density within the unit.

25 mm

Benefits At A Glance:

– Increased storage capacity in a smaller footprint area

– Faster access times

– Improved precision in inventory levels through integration with internal ERP systems

– Enhanced safety for operator and stored items

–Increased goods handling efficiency
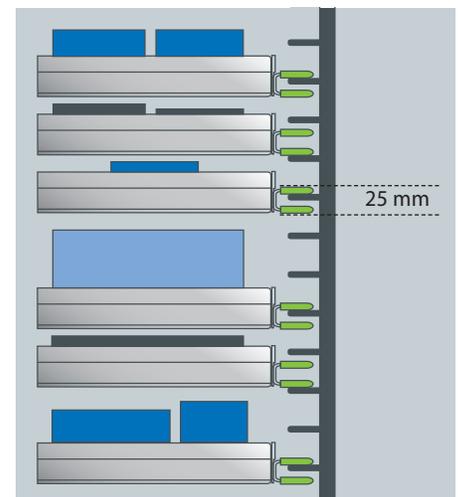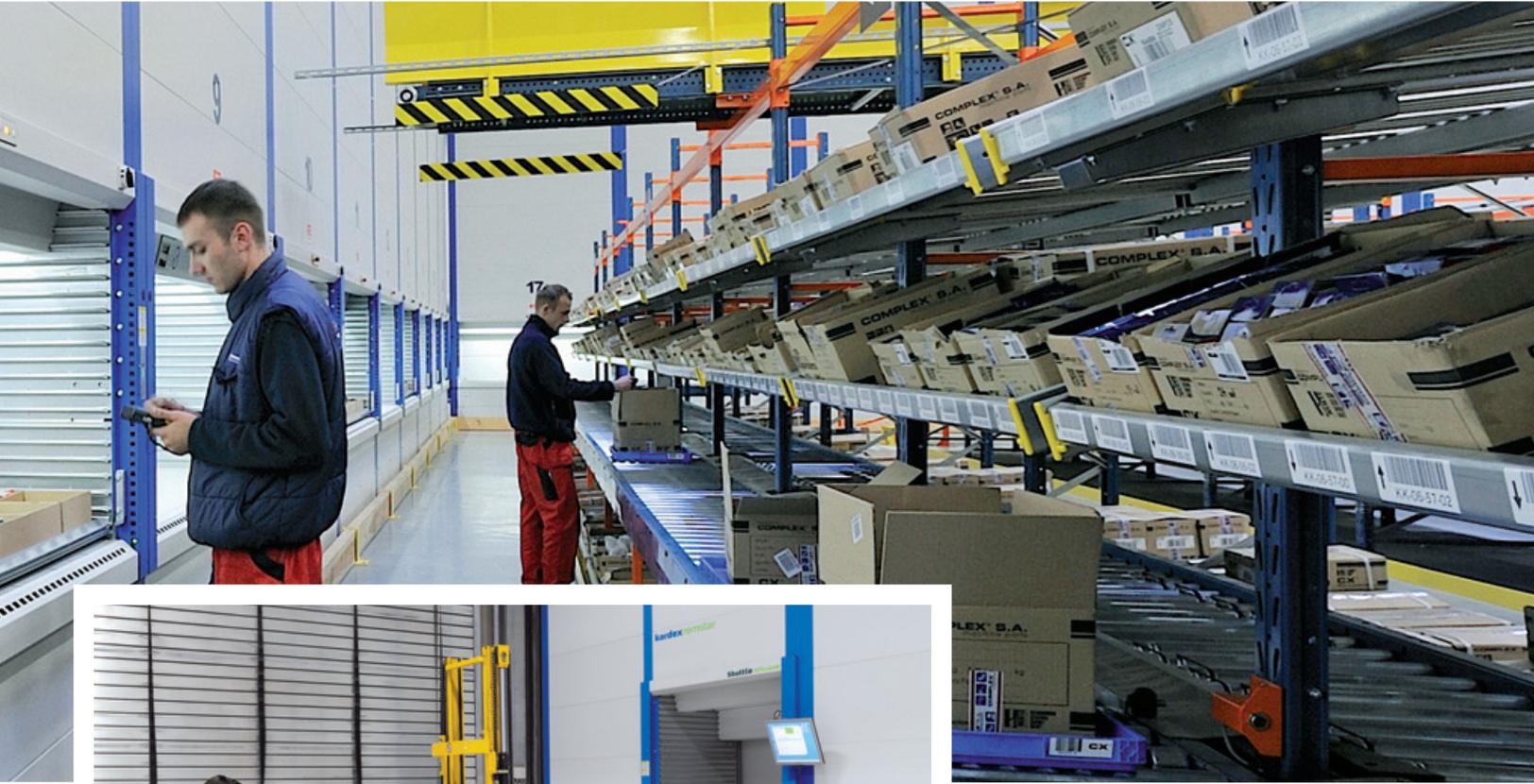
Flexible Storage Strategy

The modular design of the Shuttle VLM ensures almost unlimited flexibility and maximum utilization of ceiling heights. The height of the unit can be chosen in 3.9 inch (100 mm) steps to meet your exact height requirements. Even if you move to another facility, the system can be moved and adapted to the new height requirements by adding or removing modules.

Adapting to the Building Situation

Additional access windows can also be added pre and post installation allowing multiple floors access to the stored item within the unit. The shutter door in every access opening prevents drafts and protects the operators and stored goods.

Kardex Remstar Shuttle XP VLM:
8 Key Features For Excellent Storage

1 **True Modular Construction**
Possibility to change the height quickly and easily to meet future needs.

2 **Tooth Belt Drive**
Provides faster travel and access times, lower noise levels and greater longevity of your machine.

3 **Multiple Capacity Trays**
Various capacity trays can be used in one VLM unit providing storage flexibility and meeting exact storage requirements.

4 **Plug and Play Software Packages**
FastPic5 software easily integrates the Shuttle VLM into an existing WMS or ERP.

5 **CubeStar Technology**
Automatically scans the height of the products stored on each tray to maximize storage density within the VLM.

6 **Internal Weight Management System**
Monitors tray and unit load to prevent overloading of the individual tray or the unit.

7 **Automatic Shutter Doors**
Provides protection for operator and stored goods while decreasing noise levels.
Enables pre-picking by allowing an operator to work with one tray in the access opening while the extractor prepares the next tray for delivery behind the shutter doors.

8 **Flexible Tray Delivery**
Delivers trays to the user's specified ergonomic height and also allows two trays in the access opening for increased productivity.

kardexremstar

Each Kardex Remstar Shuttle XP can be tailored to optimize your facility's unique layout.

Technical Data

Unit Dimensions

Width 5.2 to 14.4 ft (1.580 to 4.380 mm)
Depth 7.6 to 14.1 ft (2.312 to 4.292 mm)
Height 8.4 to 98.6 ft (2.550 – 30.050 mm)

Unit Height Pitch:

3.94 in steps (100 mm)

Performance Data:

Vertical Speed:
adjustable up to 6.6 ft/s (2,0 m/s)

Storage / Retrieval Speed:
adjustable up to 7.5 ft/s (0,7 m/s)

Maximum Load:
147,700/246.550 lbs (67 /120 t)

Options

– Folding Table for Manual Full Tray Extraction
– Automatic Full Tray Extraction
– Transport Cart
– Swivel for Operator Panel
– Position Indicator with LEDs
– TIC (Transaction Information Center)
– Confirmation Bar
– Up to Six Access Openings Per Unit
– Double Access Function
– ESD Version
– Tray Locking Mechanism
– Two Piece Shutter Door
– Tray Stop in Front of Access Opening

Tray Dimensions:

Width 4.1 to 13.3 ft (1.250 – to 4.050 mm)
Depth 2 to 2.8 ft (610 to 1.270 mm)
Adjustment pitch 1 in (25 mm)
Tray pitch 3 in (75 mm)
Maximum load up to 1,598 lbs (725 kg)

Special Options:

Cooler / Freezer Configurations to -25 °C

Class 1.000 – 100.000 / ISO Class 6 – 8 Clean Room Applications

Heated Units to +60 °C

Controlled Atmosphere (5% relative humidity / 10% relative humidity)

kardexremstar

Shuttle XP 700

Shuttle XP 700

8.4 to 98.6 ft (2,550 to 30,050 mm)

5.2 to 14.4 ft
(1,580 to 4,380 mm)

7.6 to 14.1 ft
(2,312 to 4,292 mm)

SOUTHWEST**SOLUTIONS**GROUP
business organization systems

Kardex Remstar Shuttle XP
High density and secure storage

Kardex Remstar Shuttle XP offers even greater flexibility thanks to various options available pre or post installation. It can be resized, moved and altered to meet changing business and facility requirements. The system can be installed almost anywhere and can connect several floors or work areas.

Installation Outside The Building

To increase the existing facility capacity, a Kardex Remstar Shuttle XP VLM can be installed outside the building and walled in with pass-through access.

Manual / Automatic Tray Extraction

The full tray extraction feature was designed for the handling of heavy and bulky goods that often require the aid of a lifting device. Using full tray extraction, the tray is automatically pushed out onto an extraction table mounted to the front of the VLM for loading and unloading. Trays can also be loaded onto the optional transport cart for safe and easy handling.

Installation Through Several Floors

Vertical Lift Modules can be built through several floors with up to 6 access openings placed on the front or rear side of the unit. A mezzanine floor can be installed to enable operation on several levels at the same time (with loading at one level or side and retrieval at the other).

Dual Tray Access

A dual tray delivery option makes it possible to use two work levels in the access opening. A tray is delivered into the first work level in the access opening and the shutter door closes. While items are stored or removed, the next tray is being retrieved and kept in a waiting position behind the access opening, decreasing wait time even further.

Maximize Tray Density
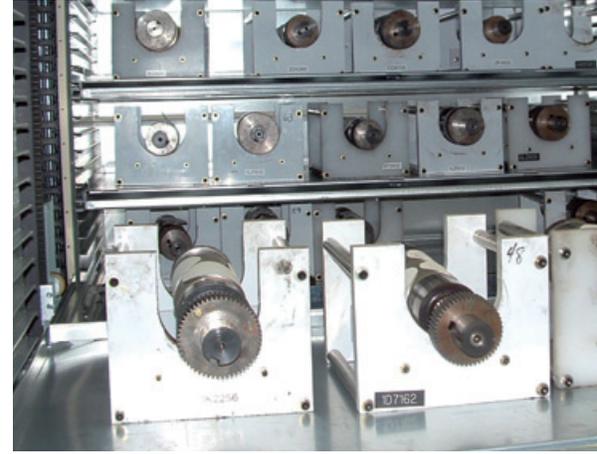
Trays can be organized for every type of stored item with the help of individual partitions and dividers, totes, containers or bins to provide migrations free high density storage. Organizing trays perfectly for your stored material provides easier and faster storage and retrieval of the stored items.

Totes, Bins & Containers

Totes, bins and containers are custom made to fi t the exact dimensions of the Shuttle XP tray, ensuring every inch of space is utilized! Versatile and easy to handle, they are the perfect solution for automated storage systems. Totes, bins and containers can be subdivided to create smaller storage locations when necessary. Each storage location can be labeled for quick and easy recognition when picking.

For enhanced performance and storage density, RemStore totes are available. RemStore totes have been designed to fit exactly into the tray maximizing storage density within the VLM.

Partitions & Dividers

Tray dividers help to streamline your operations, save space and allow immediate overview and fast access to the stored goods. Using partitions and dividers you can create the exact number of storage locations you require in each tray. The size of each storage location is up to you- matching the storage location size to the size of the stored goods maximizes storage density. Each location can be labeled with a part number or description making the retrieval of stored goods faster. Partitions and dividers can be easily reconfi - gured at any time to accommodate changes in the size or quantity of your stored goods.

Holders & Specialty Equipment

All types of specialty holders can be used to organize tools, dies, fixtures for easy and safe storage and retrieval. These holders enable trouble free access and easy manipulation. Automatic or manual tray extraction also make the use of hoists and cranes trouble free.

Common Applications

– Spare Parts

– Maintenance and Repair Parts

– Tools & Dies

– Fixtures

– Fasteners

– Finished Goods

– Buffer Storage

SOUTHWEST**SOLUTIONS**GROUP
business organization systems

Kardex Remstar Shuttle XP VLM:
8 Reasons To Choose The Shuttle XP

1

Benefit: Saving Floor Space
With heights to meet your exact requirements, the Shuttle XP VLM can provide true floor to ceiling storage. Utilizing unused overhead space the Shuttle VLM can recover up to 85% of otherwise wasted space.

2

Benefit: Ergonomics
No need for workers´ bending, reaching, squatting or climbing. The Shuttle XP VLM works on the "Goods to Person" principle and delivers all items automatically to ergonomically positioned access window. Trays can also be delivered to each users specific work height and conveyors, robotic arms and lifting devices can be integrated for maximum work comfort.

3

Benefit: Reduced Labor Costs
Items are automatically delivered to the operator eliminating wasted walk and search time. Integrating optional QuickPic® pick-to-light technology immediately identifies the item and quantity to be picked increasing productivity by up to 2/3.

4
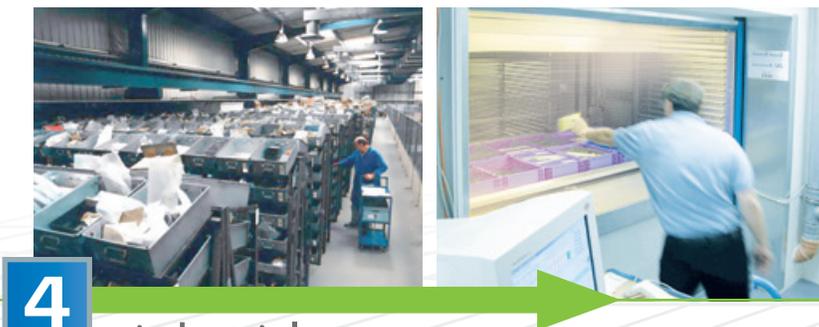
Benefit: Security & Safety
Controlled access to specific trays or tracking user access is not a problem with the Shuttle VLM. Shutter doors provide increased safety and security for operators and stored items.

Toll Free 1-800-803-1083

We provide our customers with dramatically increased levels of employee productivity, reduced floor space requirements and increased inventory visibility and management.

5

Benefit: Accuracy

Integrating QuickPick pick-to-light technology, bar code scanning and software interfaces provide the highest levels of accuracy. By directing the operator to the exact location of the pick accuracy levels can increase up to 99.9%.

6

Benefit: Flexibility

Each tray can be programmed to meet your needs such as: slower speeds for sensitive items, positioning fast moving trays in the "Golden Zone" for fast retrieval and restricted access to individual trays. For maximum flexibility various weight capacity trays can be mixed in one Shuttle XP VLM unit.

7

Benefit: Modularity

A modular design allows for the unit height to be changed to meet a facilities changing work flow and inventory profile.

8

Benefit: Reliability

With the great installation base of VLMs, the Kardex Shuttle XP VLM provides unsurpassed levels of mean time between failure ratings in the industry. From design to manufacturing, installation and service, the Shuttle XP is one of the leading technologies in the industry.

SOUTHWEST**SOLUTIONS**GROUP
business organization systems

Kardex Remstar Shuttle XP VLM:
Intelligent storage with the highest standards.

The Shuttle XP offers maximum capacity on minimum footprint thank to its full usage of available clear height and one inch (25 mm) increments storage. CubeStar technology scans every tray to ensure it is stored in the least amount of space required. Thanks to this technology, different height objects can be effectively stored in one device, from the smallest screw to the largest box.

For maximum protection of the stored goods and operators, each VLM is equipped with a number of security elements such as shutter doors in the access opening and a safety light curtain located in front of the access opening monitoring the entire operating area and protecting the operators.

Extractor

The extractor delivers the requested tray to the access opening or returns a tray to a location within the unit at fast speeds. Both vertical and horizontal travel speeds can be adjusted to accommodate sensitive items.

Shutter Doors

For increased safety and protection of stored items as well as decreased noise levels shutter doors are installed as standard.

Access Opening Shelf Rails

Side walls of the access opening are equipped with shelf rails, enabling the VLM to position more than one tray in the access opening. Also, individual users can adjust the delivery height of the tray to match their physical height providing true ergonomic working conditions.

Safety Light Curtain

When the shutter doors open to deliver or retrieve a tray the safety light curtain located at the frong of the access opening is activated. If the safety light barrier in front of the access opening is interruped, all movement of the device is stopped immediately for operator safety.

Toll Free 1-800-803-1083
www.ssgindustrial.com

Increase your bottom line with integrated technologies. From stand alone units to fully integrated systems – Kardex Remstar can provide the systems integration – on time and on budget.

From standard validation via barcode scanners to a wide range of picking assistance equipment: Kardex Remstar VLM connected to Kardex Remstar FastPic Inventory Management Software or other ERP systems assist the operator to work with greater accuracy.

The Kardex Remstar Shuttle XP VLM offers a wide portfolio of hardware interfaces including bar code scanners or printers, weight scales, QuickPick pick-to-light technologies, ASRS Systems, AGVs(Automated Guided Vehicles), RFID and more.

Usual Applications:

– Picking Items

– Batch Picking

– Consolidation

– Sortation

– Replenishment

Bar Code Scanners

Fast integration of bar code scanners can be used for order identification, picking and confirmation.

Conveyor Systems

For quick picking and consolidation of orders, the connection of work zones via conveyor systems is an ideal solution. Items are delivered automatically to the access opening, picked and then placed into shipping containers on the conveyor.

Manipulation & Lifting Devices

Easy integration of hoists, cranes, grippers and manipulators provide additional ergonomic material handling.

QuickPic Pick – To – Light Technology

QuickPic® pick-to-light technology is designed to increase accuracy and maximize productivity. The Shuttle XP be integrated with a TIC® (Transaction Information Center), confirmation bar and position indicators.

SOUTHWEST SOLUTIONS GROUP
business organization systems

Kardex Remstar Shuttle XP 700
Perfect solution for heavy and bulky stock items.

The Kardex Shuttle XP700 is a vertical lift system built to store bulky storage items up to 1,576 lbs (715 kg), 13.29 ft (4,050 mm) in length and 22 ft (7 m) in height with 2 in (50mm) incremental storage. The Shuttle XP 700 can be enhanced with automatic tray extraction. It also enables easy integration of the manipulation devices such as cranes or pneumatic lifts in order to reduce operators fatigue by handling the bulky and heavy items.

Technical Data

Unit Dimensions:

Width:	5.18 to 14.37 ft
	1580 – 4.380 mm
Height	8.36 to 65.78 ft
	2550 – 20.050 mm
Depth:	7.75 to 10.25 ft
	2.362- 3.124 mm

Vertical Speed Adjustable: up to 1.2 m/s

Trays

Width	4.10 to 13.29 ft
	1250 – 4.050 mm
Depths :	2.00 ft, 2.67 ft, 2.83 ft
	610, 813 and 864 mm
Storage Grid :	2 in (50 mm)
Tray Grid:	4 in (100 mm)
Max Load per Tray:	1,576 lbs (715 kg)

Options

– Automatic Full Tray Extraction
– Transport Cart

www.ssgindustrial.com

Fast Pic5 Inventory Management Software:
The software innovation for controlling storage and retrieval solutions.

Functional Principle of FastPic5
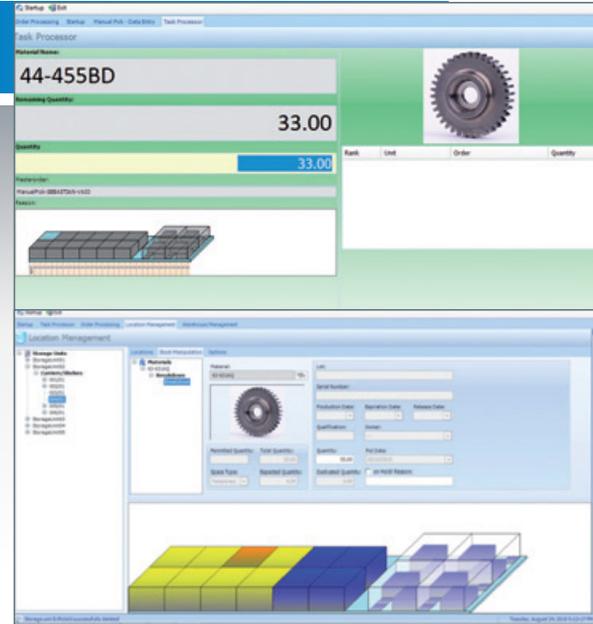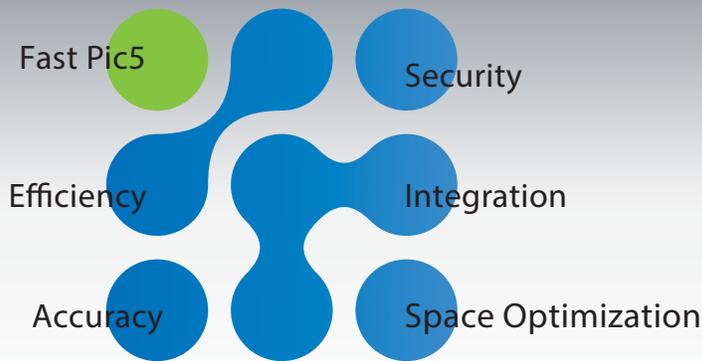
Functional and user friendly Warehouse Management Software with modular structure.

Enhance Your Accuracy
From the standard validation via barcode, handheld or weight control to a wide range of optical user guidance such as Pick–to–Light, Put–to–Light, LED Pointer: FastPic5 Inventory Management Software assists the user to work with greater accuracy.

Achieve Greater Efficiency
Integrating FastPic5 into your processes allows batch order picking. Picking multiple orders at one time increases throughput significantly.

When Security Matters
Through FastPic5 user rights and group rights can be controlled and managed by supervisors. Each transaction is monitored and tracked providing real time inventory data.

Wide Range of Software Solutions
From an easy "Plug and Play" and middleware to customized solutions - all FastPic5 software solutions are based on the latest Windows® technology* can interface with majority of tier one and tier two WMS and ERP providers. It also allows expanding your warehouse into a mobile data acquisition system to simplify the work of your employees and save time.

Modularity
From the smallest store to a complex distribution centre: Fast Pic5 can be perfectly tailored to your requirements – with future security included in the package. This is because we carry out continuous development and expansion of the Fast Pic5 inventory management solutions.

Kardex Remstar offers wide portfolio of software packages:

FastPic IO (Inventory Optimizer)
Software solution for small and medium sized enterprises.

FastPic OP (Order Processor)
Software package for medium sized warehouses.

FastPic TXP (Transaction Processor)
Solution for warehouse operating under ERP or WMS.

Windows® is a registered trademark of the Microsoft Corporation.

www.ssgindustrial.com

Toll Free 1-800-803-1083

SOUTHWEST**SOLUTIONS**GROUP
business organization systems

Kardex Remstar Shuttle® XP:
the intelligent dynamic storage vertical lift system for high density storage in a compact footprint