

BUYER'S GUIDE





Vertical Lift Module

Vertical Carousels

A SIDE BY SIDE COMPARISON —————





Which Machine Fits Your Needs Best?

Looking to switch to vertical storage, but you're not sure where to start? The Vidir Buyer's Guide will help you see the differences between Vertical Lift Modules and Vertical Carousels and help you decide which one suits your needs best.

Benefits of Vertical Storage

Increase Safety

Operator receives material at an ergonomic height, reducing climbing, lifting, stretching, and bending.

Boost Productivity

Centralized inventory improves retreival times and reduces downtime.

Reduce Labor Costs

Single person operation and improved process.

Maximize Storage

Maximize your floor space by fully utilizing overhead space.

Improve Inventory

Track, optimize and integrate with ERP systems.

Small Footprint

Reduce storage footprint by up to 85%.



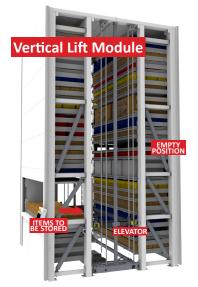
Increase Safety Boost Productivity

Reduce Labor Costs Maximize Storage



How Do They Work?

The Vidir Vertical Lift Module (or VLM) is Vidir's revolutionary new automated storage and retrieval system that provides smart, adaptable inventory management to maximize density and further increase productivity. Making use of 2 tray towers, one in front and one in back, along with a center elevator, trays are extracted and presented quickly, efficiently, and at an ergonomic height for the operator. With item height detection, subsequent trays are stored just above the previous item, automatically making optimal use of your cubic foot space. Storing the trays in vertical towers allows for a minimal footprint, saving floor space up to 85%, and keeping your employees safe.



Operator loads items to be stored on the tray in front access point and uses touchscreen HMI to store items. As the tray gets pulled onto the elevator height sensors scan the items and detects height needed for storage.



Machine determines most efficient available space for the tray and the elevator moves up or down to correct position.



Elevator stops in front of correct position.



Elevator slides tray into position.

The Vidir Pan Carousel is an automated vertical storage and retrieval system (AS/RS) that improves productivity, saves space, and uses sound ergonomic principles to increase safety.

Robust carriers rotate up and down to deliver items to the operator at a comfortable height. Each carrier nests tightly with the one above and below for maximum use of the cubic space within the carousel. Vidir's carousels are programmed to rotate the shortest possible travel time to retrieve either a single item or an entire pick list, increasing picking speeds by up to two-thirds.





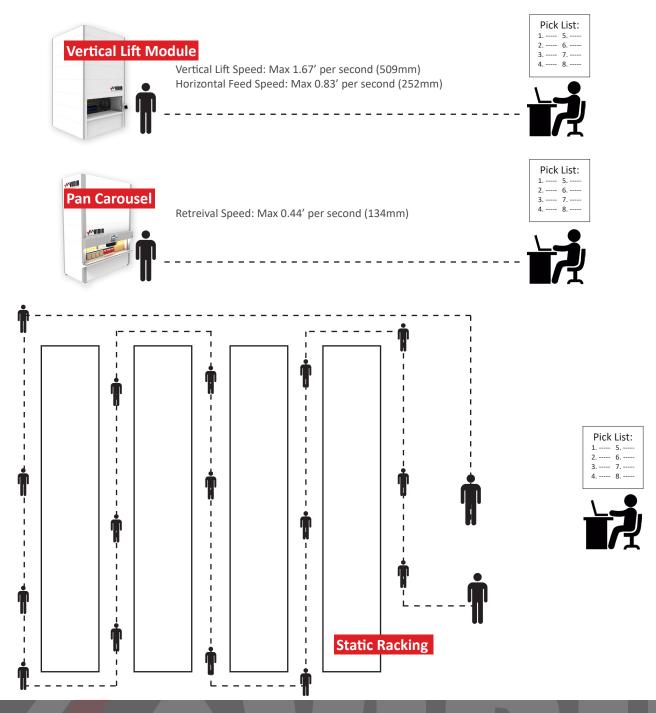
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Retrieval Times

The Vidir VLM and Pan Carousel operate under the product to person principle which ensures that the operator no longer concerns themselves with search and retrieval functions. The machine increases the effectiveness of order processing through a combination of quick retrieval times and increased picking accuracy. Each machine can be integrated with order processing software that will not only track your inventory but process pick lists which provides fast, reliable, and worry free retrieval. Implementation of the product to person principle eliminates wasteful and harmful steps for stocking and retrieving parts.



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Load Capacities



Machine Load Capacity: Up to 132,000lbs (60,000kg) Tray Capacity: 600 lbs | 1000 lbs (272kg | 454kg) Tray Size: 3.5" Pitch (89mm) 32.5" Depth (825mm)

- 96.5" Width (2,451mm)
- Items can vary in size, up to 30" (762mm) in height.
- Trays stored 1" (25mm) above tallest item on previous tray, automatically detected by sensors.
- Entire tray can be removed from machine with optional Transport Tray for convenience.
- Tray dividers available.
- No imbalance.

Vertical Carousel



Machine Load Capacity: Max 39,000 lbs (17,690kg) Carrier Capacity: Max 2500 lbs (1,134kg)

- · Ideal for items all fairly uniform in size.
- · Carriers can not be removed from machine, items removed individually.
- Intermediate shelves and dividers available.
- Unit Imbalance: 2,990lbs (1,356kg)

CARRIER	HEIGHT	DEPTH	WIDTH
P1812-750	12" (457 mm)	18" (457 mm)	72" - 119" (1829 mm - 3023 mm)
P2418-750	18" (457 mm)	24" (610 mm)	72" - 119" (1829 mm - 3023 mm)
P1913-1100	13" (330 mm)	19" (483 mm)	72" - 119" (1829 mm - 3023 mm)
P2418-950	18" (483 mm)	24" (610 mm)	72" - 119" (1829 mm - 3023 mm)
P1912-1600	12" (305 mm)	19" (483 mm)	72" - 119" (1829 mm - 3023 mm)
P2417-1300	17" (457 mm)	24" (610 mm)	72" - 119" (1829 mm - 3023 mm)



Storing trays in 2 vertical towers allows for a minimal footprint. The Vidir VLM saves floor space up to 85% by increasing storage density and using available vertical space, previously inaccessible. Automatic height sensing allows for variable tray spacing maximizing the available space.

A standard VLM is 9'4" W x 9'6.5"D (2,845mm W x 2,908mm D).



The Pan Carousel can increase your available storage capacity by up to 70% by increasing storage density and utilizing previously inaccessible vertical space. The increased density is accomplished through a series of interchangeable dividers and removable intermediary shelves that allow you to easily reconfigure the carousel interior to a diverse range of SKU's.

Vidir's standard Pan Carousel sizing has various widths and depths.

Standard Widths: 12′ 1″ (3683mm) 10' 2" (3099mm) Standard Depths: 5' 8" (1728mm)

8' 2" (2490mm)

6' 0" (1829mm) 6' 10" (2083mm)

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Software

Vidir' inventory management software supports material Picking and Stocking using product identification via serial number, barcode number, or part description. Track the transaction history, and run reports for real time inventory counts. Using pick lists, items are returned via the shortest path (as opposed to sequentially on the list). Import picklists to MSSQL databases. Use barcode scanners to pick or stock items.

Vidir Software Features*

Material Master Data:

- Material Item No.
- Material Description
- UOM Descriptor (EA, Case, Etc.)
- Barcode/RFID
- Controlled Inventory
- FIFO Stock Rotation
- LIFO Stock Rotation

Pick, Put, and Return Material:

- Manual Pick
- Manual Stock
- Supports Pick Lists
- Supports Stock Lists
- Dynamic Material Search
- Warehouse Zone Printer

Miscellaneous:

- Add/Edit/Delete Users
- User Controlled Access
- Manage User Rights
- Supports SSRS Reporting
- Import Inventory Database
- Multiple Materials per Position
- Touch Responsive User Interface
- Requires Windows OS

Stock Locations:

- Supports Multiple Devices
- Warehouse Zone Support
- Integrated Pick Light Support
- Bin Support
- Multiple Materials per Position
- Max stock per bin

Vertical Lift Module

- Advanced inventory control software and user interface
- **REST API for ERP connectivity**
- Remote diagnostics included to address issues quickly or to prepare a technician prior to visiting
- Tray control mode or inventory control mode are both available for flexibility of use
- Tray removal or addition is automatically detected

Vertical Carousel

- Interface with easy to use touchscreen controls
- SOAP API
- Can manage additional storage locations outside of the carousel







Manual Mode Auto Mode

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Health & Safety

All Vidir VLM and Pan Carousels come equipped with the latest photoelectric safety light curtains that meet the most stringent health and safety regulations. Light curtains come standard across the front of the access opening. Safety light curtains will sense an object or person and immediately stop the operation of the machine.



Both the VLM and the Pan Carousel access openings are at a comfortable, ergonomic height. Implementing the product to person principle, all parts are delivered to the operator. No bending, walking, climbing or lifting needed.





Increase Safety Boost Productivity

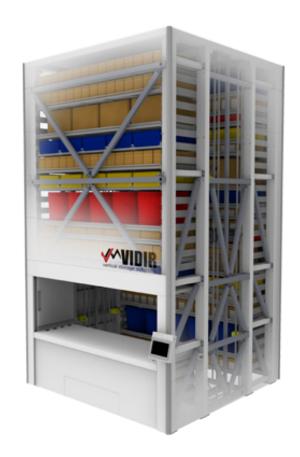
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Machine Specifications

VLM

TECHNICAL SPECIFICATIONS	IMPERIAL	METRIC			
UNIT SPECIFICATIONS					
Height	standard up to 28'	standard up to 8.53 m			
Depth	114.5"	2908 mm			
Width	112"	2845 mm			
TRAY SPECIFICATIONS					
Pitch	3.5"	88.9 mm			
Depth	32.5"	826 mm			
Width	96.5"	2451 mm			
Max Storage Height	30"	762 mm			
Tray Storage Increment	1.2"	30 mm			
CAPACITY SPECIFICATIONS					
Load Capacity	up to 132,000lbs	up to 60,000 kg			
Load per Tray	600lbs 1000lbs	272 kg 454 kg			





PAN CAROUSEL

TECHNICAL SPECIFICATIONS	IMPERIAL	METRIC		
UNIT SPECIFICATIONS				
Height	max. 28'	max. 8,534 mm		
Depth	6′ 0″ / 6′ 10″	1,828 / 2,082 mm		
Width	8' 0" - 12' 3"	2,438 - 3,734 mm		
CARRIER SPECIFICATIONS				
Height	12" - 18"	304 / 457 mm		
Depth	18" - 24"	457 / 609 mm		
Width	71" - 119"	1,803 - 3,022 mm		
CAPACITY SPECIFICATIONS				
Load Capacity	max. 39,000 lbs.	max. 17,690 kg		
Load per Carrier	max. 2,500 lbs.	max. 1,134 kg		
Unit Imbalance	2,990 lbs.	1,357 kg		
Retrieval Speed	22 / 26.5 ft/min	6,706 / 8,077 mm/min		

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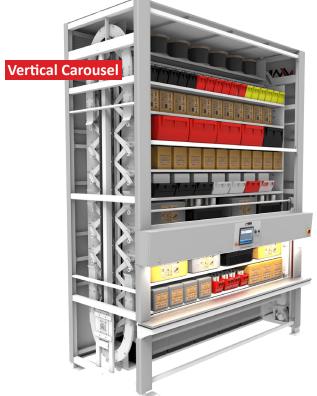


Which One Do You Need?

When choosing your AS/AR hardware, there are some important points to think through regarding your items, how you want to make use of your space, and the operation of each our solutions. Below are some key final factors to consider:

VLM

- ✓ With Item height detection, the VLM automatically makes the best use of available cubic foot space.
- ✓ Best choice for a wide variety of product sizes and weights.
- ✓ Ideal choice for multiple units or if there are plans for expansion.
- ✓ Optimized inventory control and on board remote diagnostics.
- ✓ No chance of an imbalanced load.
- ✓ Best use of space over 18' (5,486mm) height.
- ✓ Add or remove trays as needed.



PAN CAROUSEL

- ✓ Ideal for smaller light weight items of uniform size
- ✓ Can be used with auto-retrieval (retrieve by carrier #) or inventory control
- ✓ Excellent parts security, and manual rotation if required.
- √ Ideal for ceiling height under 18' (5,486mm).