

Section I 100 Selective Storage Rack

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Welcome	page 5	Structural Pal
VVEICUME		Made from solid
to the wide world of	page 6	Ridg-U-Tier™ 1
Ridg-U-Rak storage		Compatible with
system solutions. This	page 7	Rack Impact L
selection guide will give		Wide variety of p
you an overview of the	Section II	
many types of storage		TS De
methods available.		Hariman La Dal
And if you don't	pages 8 - 9	Horizontal Pal High density, de
see exactly what	pages 10-11	Pick Module S
you need, our sales	1 0	Turn-key module
and engineering staff	page 12	Push-bak™ Sto
has the talent,		The ultimate in h
	page 13	System 2000™
tools and experience to		High density pol

meet your specific requirements. Trust Ridg-U-Rak for the total storage solution that provides decades of trouble-free

operation.

page 4	High Performance Ridg-U-Rak Pallet Rack
	Sets the performance standard for all other pallet rack designs.
	Unequaled in rigidity and value for over 50 years.
page 5	Structural Pallet Rack
- 0	Made from solid structural steel channel with either bolted or slotted beam-to-column connections.
page 6	Ridg-U-Tier™ II Pallet Rack
	Compatible with virtually all existing "tear drop" style rack connections - new and old.
page 7	Rack Impact Damage Control
	Wide variety of proven methods to reduce rack damage from accidental lift truck impacts

ensity Storage

pages 8 - 9	Horizontal Pallet Transfer System High density, deep flow pallet staging and transfer system without the need for inclines.
pages 10-11	Pick Module Systems
r.o	Turn-key module systems for order fulfillment and storage operations in distribution centers.
page 12	Push-bak™ Storage
1 0	The ultimate in high density storage utilization and selectivity. Features jam-free cart-on-rail design
page 13	System 2000™ Drive-In Storage
. 0	High density pallet racks with proprietary, extra high strength rail design.
page 13	Structural Drive in Rack
	Upright frames made of structural steel channel. Accepts a variety of pallet support rail designs.
page 14	Gravity Flow Rack
	Feeds pallets and cartons of product to processing, order picking and shipping.
page 14	Mobile Rack Systems
	Complete rack section moves mechanically on floor mounted rails to create access aisles. Extremely high density.
page 15	Very Narrow Aisle Rack
. 0	Provides higher density with 100% selectivity. Uses lift trucks designed to work in narrow aisles.
page 15	Double Deep Pallet Rack
. 0	Increases productive use of floor space by 60% by storing two pallet loads at each aisle lane.
	Uses deep reach lift trucks.

Section III Storage

page 16	Stac-U-Rak [™] Stacker Systems Protects valuable tooling work in process. System is rack supported with integral crane.
page 17	Wide Span Shelving Versatile, adjustable all-steel shelving for industrial or retail use. Rigid and secure.
page 18	Roll-Out Shelf Racks High strength storage ideal for dies, fixtures, heavy parts. Shelves extend 100% of depth.
page 19	Reel Racks Easy way to store and dispense hose, cable, chain or other materials on reels.
page 20	Cantilever Storage Racks Ideal for long or awkward shaped items - pipe, bar stock, etc. Full aisle access to stored items.
page 21	Special Storage Racks Unique solutions for storing and handling special parts, products and materials.

Section IV and Services

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page 23	Laboratory Testing – Installation Services

certified security



When you deal with a storage rack manufacturer, your first question should address their compliance with established industry standards. RMI, The Rack Manufacturers Institute, a voluntary trade organization, has evaluated and set specifications for the design, construction, capacities, and safe implementation of storage racks.

Ridg-U-Rak is a proud (charter) member of RMI and is in full compliance with the latest RMI approved design specifications.

In addition, RMI certified members are committed to the principles of continuous improvement and the highest professional and ethical standards.

This is what we offer you...real solutions to your unique storage problems.

Try us out and see why Ridg-U-Rak has been "Famous for Integrity for over 50 years."



John B. Pellegrino, P.E. President, CEO Ridg-U-Rak Inc.

1 Selective Storage Rack

High Performance Ridg-U-Rak Pallet Rack

High performance Ridg-U-Rak sets the industry standard for rigidity, strength and durability.

This most common rack storage method permits immediate accessibility to every pallet load in the system.

High performance Ridg-U-Rak is available in a virtually unlimited selection of sizes and capabilities.

Reinforcing Groove

Adds strength to upright column.

Solid Corners

No steel removed from corners – extra strength.



Full Fillet Welds For durability and strength – no tack welds.

superior design superior value

Massive Bracing

Both horizontal and diagonal bracing is 3" stiffened channel. Prevents twisting, improves rigidity.

Patented Beam-to -Column Connection

Beam end plate is captured by return flange when hooks are seated – provides rigidity approaching that of a weld.

Offset Anchoring Hole
Permits lower tool installation –
speeds lagging – no need to
pre-drill holes in the floor.

Large Base Plate

Better load distribution – not exposed to aisle traffic.



100% accessible easy to install

Bolted Connection Vertically adjustable on 2" centers Heavy-duty lower horizontal brace is standard Large foot plate has pre-drilled lagging holes. Slotted Connection Vertically adjustable on 2" centers

Welded foot protector is standard.



Structural Pallet Rack

Similar to Ridg-U-Rak High Performance Pallet Rack in capability and capacity, structural systems utilize hot-rolled structural steel channels for uprights and beams. Precise beam-to-frame bolted connections provide a strong, rigid storage structure that is easy to install and easy to repair.

Structural pallet rack also provides 100% accessibility of all stored items.









1 Selective Storage Rack

Ridg-U-Tier™ II Pallet Rack

Ridg-U-Tier™ II rack systems are designed to be compatible with virtually any existing "tear drop" style upright frames. They let you step up to Ridg-U-Rak reliability when expanding your current system.

Ridg-U-Tier™ II also gives you a unique center reinforcing rib, heavier bracing for added strength and rigidity, and larger columns for better impact resistance.

Patented Springlock Mechanism

Ridg-U-Rak's a new Springlock locking mechanism is an integral element of the rack's beam, replacing the "pinch-pin" locking system. The Springlock assembly provides positive beam -to-column engagement, improving installation speed and safety on all Selective and Structural Pallet Rack Systems. heavier bracing better impact resistance

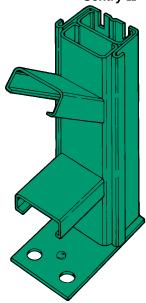






column sentry™ II guards against rack damage

Column Sentry II





Column Sentry II reinforcing creates diaphragmed box section with double-wall thickness and more steel in corners. 32C 3x2-1/4



Column Sentry II 33C 3 x 2-3/4 43C 4 x 2-3/4 33I 3 x 2-3/4



Column Sentry I

For Ridg-U-Tier II 32I Column



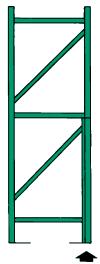
Rack Impact Damage Control

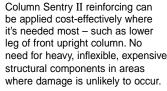
Ridg-U-Rak's Column Sentry II reinforcing is a double-thick, double strength diaphragmed box section that provides exceptional resistance to impact damage of upright rack storage columns.

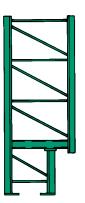
Column Sentry II reinforcing helps guard against rack failure, collapse, and local buckling; at the same time, it increases column load carrying strength.

And that's not all. Column Sentry II reinforcing is compact, thereby saving critical aisle space. Requires no more space than our standard column, and it need be applied only in critical areas subject to impact damage.

No other reinforcing method offers the protection, strength, and economy of Column Sentry II.







Set-back™ Frames



Slant-back™ Frames

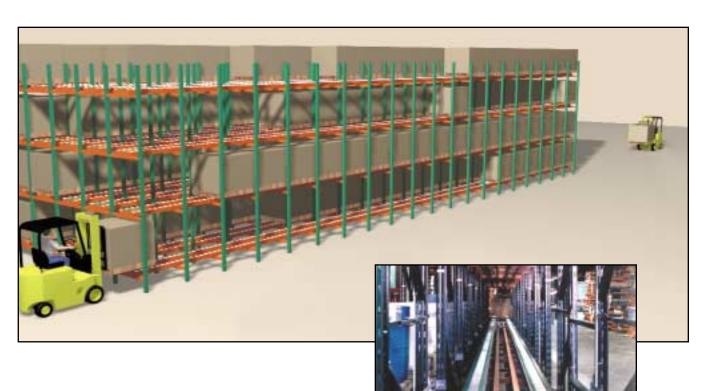
Isolates the column from aisle traffic without a sacrifice in capacity.

Honsity Storage

Horizontal Pallet Transfer System

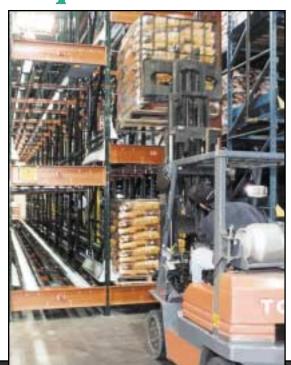
Ridg-U-Rak's Horizontal Pallet Transfer System provides you with a reliable, uninterrupted flow of product without the disadvantages of gravity flow systems. Pallets proceed at a controlled safe forward speed. No incline means no wasted vertical space at the input end and no need for jam-susceptible braking systems. Also eliminated is the fear of runaway pallet loads which can fly off the end of a conventional flow system. What's more, Ridg-U-Rak's patent-pending design permits virtually unlimited lane depth...so you get a system that conforms to your specific material movement needs.

high density...
deep flow





positive pallet control



HPTS™ is deceptively simple in operation. Pallets of materials are loaded onto the input section of the system. Following a programmed control, the pallet is transferred through a sequence of stages to the output end. The pallets ride on rollers and are moved by a motorized carriage through the system where they are banked at the unload aisle. Once loaded and resupplied, HPTS provides unending, immediate access of product to shipping.



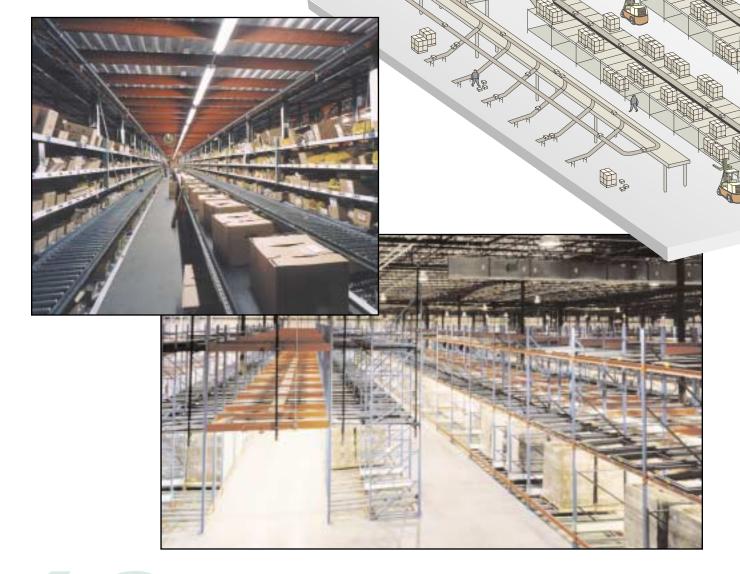




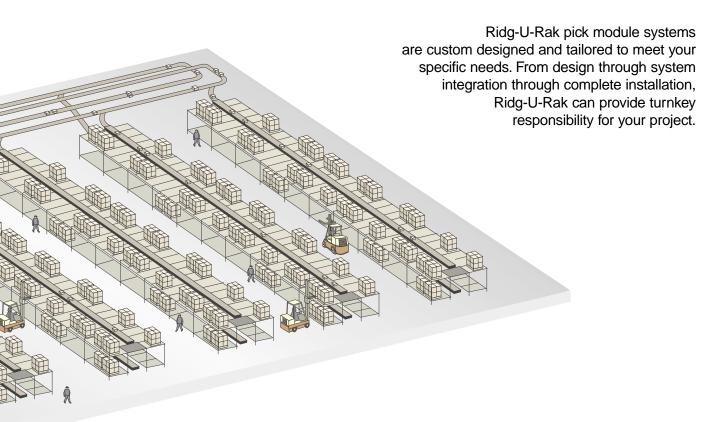
Pick Module Systems

Ridg-U-Rak's modular order picking systems can be deployed in solutions tailored to product delivery requirements. Pallet, case carton and pick-to-light components can be utilized in Push-bak, gravity flow, 100% selective and other storage methods along with flooring and decking selections. This provides the ultimate in productivity and space utilization.











Lensity Storage

Push-bak™ Storage

Ridg-U-Rak Push-bak™ uses a dynamic cart-on-rail system in which pallet loads are literally pushed back into the rack. When a pallet load is retrieved at the aisle, the deeper pallet load automatically advances to the aisle.

Push-bak storage provides a very desirable combination of *high density* and *accessibility*. Push-bak storage density equals that of drive-in storage, yet every lane can be accessed at all times. Any lane can be 100% filled from the aisle without affecting any other adjacent lanes above or below.

If you need to store a larger number of pallets of one SKU for several months and then remove and ship them all as a seasonal product, a drive-in system is an efficient system. In most other cases, Push-bak, or a combination of drive-in and Push-bak, will be more effective. An analysis of your inventory list and inventory turnover data should be the first step in making the best rack selection.

high density uses cart-on-rail system



All 12 lanes accessible from the aisle ALL the time.





high density extra high strength rail

System 2000™ Drive-in Rack

Ridg-U-Rak System 2000[™] drive-in racks are superior in engineering. They provide high density storage with great strength and rigidity. Specially designed Ridg-U-Rail 2000[™] is, pound for pound, the strongest drive-in rail on the market by actual laboratory tests. Perfect for storing common-sized loads.



Structural Drive-in Racks

Same principle of high-density storage as regular drive-ins, but with upright columns produced from structural steel shapes. Unlike competitve structural racks, Ridg-U-Rak structural drive-ins can be equipped with any of the Ridg-U-Rak drive-in rail designs – even Ridg-U-Rail 2000.

Hongity Storage

Gravity Flow Rack

Flow rack systems are a first-in first-out inventory management method. They're ideal for supplying pallet or carton loads of SKUs to sorting and

distribution operations.

Ridg-U-Rak flow rack systems can be customized to meet your individual needs using rack components that are specifically designed for a highly productive, reliable and economical storage solution.

Because each application has its own unique characteristics, Ridg-U-Rak conducts pallet flow tests using the client's actual pallet loads to assure system reliability before production begins. You can trust Ridg-U-Rak to supply an efficient, well designed storage solution.

first-in, first-out management system



Mobile Rack

Mobile rack is a very high density storage system with 100% utilization of pallet positions. The system is comprised of 100% selective back-to-back pallet racks mounted on mobile bases that travel on tracks laid into the floor. The storage carriages are driven by integral electric motors and can be moved individually or as a section, permitting access to any pallet at any time.

Mobile racks are particularly effective in cold or ultra-cold warehouses and other industrial applications where aisle space is at a premium and speed of product movement is not a major concern.





Very Narrow Aisle Rack

Advances in fork lift trucks that can operate in aisles less than five feet wide have made possible the utilization of very narrow aisle (VNA) storage racks. They provide a significant reduction in floor space devoted to aisles and often are used in heights of 40 to 50 feet.

Pallets in VNA systems are 100% selective and can be accessed with turret or side loader lift trucks, or designed with top and bottom monorails.



Double Deep Rack

Ridg-U-Rak double deep storage is a simple adaptation of placing one row of 100% selective rack behind another. Using a deep reach lift truck, the operator places the back pallet into the system first, then places another pallet in front of it. While selectivity has been reduced by one-half over standard pallet rack, twice as many pallets are stored for a given number of aisles.

This increases productive use of floor space about 60% to 65%.

Double deep storage rack has become a very popular choice in "high throughput" operations. It offers low initial cost, high productivity, good selectivity and less equipment damage.

Specialized Storage 112 ed

Stac-U-Rak™ Stacker Systems

Stac-U-Rak[™] rack supported stacking system with integral crane lets you make efficient use of valuable floor space.

It can be used to protect tools, dies and fixtures or to organize components, subassemblies and work-in-progress.

It simplifies the handling of heavy items, speeds storage and retrieval, and ends long waits for lift trucks.

Integral pallets are vertically adjustable and feature a foolproof engagement system.

Available in a wide range of easily customized styles to meet your specific needs.

supported with integral crane







versatile rigid and secure

Wide Span Shelving

All steel Ridg-U-Span™ wide-span shelving is an efficient, cost-effective means of storing bulk materials.

When assembled, Ridg-U-Span's four basic components – upright frames, beams, supports and shelf material – create a rigid and stable hand-loaded, bulk storage system. Optional locking devices provide additional security from accidental dislodgement of beams from upright columns.

Ridg-U-Span's modular design allows a single unit to stand alone or future expansion by use of a common upright frame.

Ideal for storing or displaying medical supplies, hardware, groceries, archives, tires, garments and thousands of other parts, materials or merchandise.





Specialized

Roll-out Shelf Racks

Extendo-Max[™] 100-V[™] roll-out shelf racks have shelves that extend 100% of their depth for easy access to stored items. Solid steel construction with standard shelf capacities of 2,000 or 3,000 lbs. per shelf. Ideal for storing tools, dies, fixtures and other valuable items.



high strength easy way to store



Reel Racks

Storing and dispensing materials on reels is easy and orderly with the Ridg-U-Rak vertical reel storage system.

Vertically adjustable in 1" increments, reel racks are available in either single or double face styles.

Reel bearings accept customers' arbors up to 3" in diameter.





ideal for awkward shaped items



Cantilever Racks

Cantilever racks give you clear frontal access to the storage levels. Unlike conventional racks, cantilevers have no vertical obstructions in the storage area. That lets you make full use of space from side to side on each level. Store items or materials of varying length without interference or modification to the rack.

Ideal for:

- Pipe and tubing
- Bar stock and rods
- Appliances
- Rugs and bolts of fabric
- Furniture
- Merchandise in large boxes
- Lumber and wood products
- TV's, stereos and electronic components



Can Dahilities

Product Design Engineering

At the forefront of Ridg-U-Rak product quality is a strict adherence to the highest engineering standards. We use sophisticated CAD procedures, RMI and A.I.S.I. cold form design specifications to calculate the capacities of all of our rack storage lines.



some of the fine companies we're proud to call customers:

Abbott Laboratories Alfa-Laval **Alumax Mill Products** American Olean Tile Co., Inc. **Associated Wholesale Grocers** B. F. Goodrich Big Bear Stores Co. Big Y Foods Inc. Bil-Mar Foods, Inc. Black & Decker **Blair Corporation Boeing Helicopters Brake Parts** Camp Lejeune **Campbell Soups** Canada Drv Carrier Corp. Caterpillar Inc. Central Swagelok Co. Coca-Cola Co. **Conoco-Phillips Dana Corporation Delaware Valley Pack & Seal Duke Power Duo Fast** E. I. DuPont **Exel Logistics**

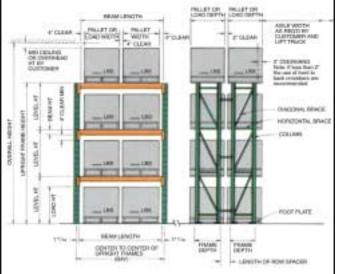
Ford Motor Company Fruit of the Loom General Electric **General Motors Corporation** General Railway Signal Corp. Gerber Products Co. **Golub Corporation** Graybar Electric Co., Inc. **Hamilton Standard** Herman Miller Inc. Hershey Foods Corp. Hill Air Force Base **Home Quarters Horizon Industries Husky Injection Molding Jacksonville Electric Authority** Jefferson Cold Storage Corp. John Deere Johnson & Johnson Corp. Keith Clark Inc. Kelly Air Force Base **Kichler Lighting** L. A. Gear Company Lee Apparel Company **McNeil Consumer Products Mead Papers Med-Line Industries Mobile Oil Corporation National Grocers Naval Air Station Niagara Plastics Company** Office Depot

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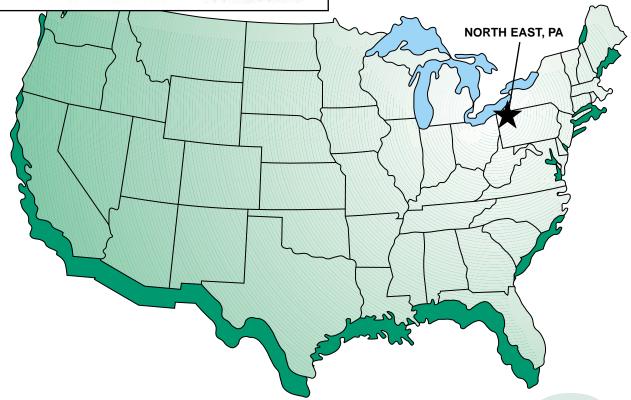
Facilities Engineering

Using proprietary software developed specifically for materials handling applications, our layout and design staff is able to develop a storage system design that not only meets your precise needs but also makes the optimum use of valuable floor space.



Nationwide Service

Good service means teamwork, and we have a great team. Our inside sales department and nationwide force of Regional Managers work closely with our network of more than 100 professional material handling distributors across the country. Together, they make sure your order is everything you expected...before and after the sale.



Can pahilities

Manufacturing

Ridg-U-Rak is one of the largest storage rack manufacturers in North America with an annual production capacity of more than 100,000,000 pounds of product.

Our two production plants in North East, PA, cover 160,000 sq. ft.

Painting and finishing lines comply with environmental guidelines. Throughout the manufacturing process, strict quality policies are followed to insure a reliable finished product.

one of the largest storage rack manufacturers



Stocked Rack

Ridg-U-Rak has a number of stocking distributors across the country that maintain inventories of the most commonly used rack components. If you have an urgent need, count on Ridg-U-Rak for fast service.





independent lab testing

Laboratory Testing

Ridg-U-Rak is one of very few manufacturers to conduct independent laboratory testing of its products to verify calculations.

Every product line has been capacity-rated using this procedure. Every kind of load carrying component has been destructive tested. It's an expensive and time-consuming process, but we feel it's the responsible thing to do. Don't you?





Installation Services

Ridg-U-Rak's full-time installation crews are available to handle installation of your rack system.



For more information on Ridg-U-Rak storage systems, please call for any of these product brochures:



High Density Storage Systems
Manual 37



Horizontal Pallet Transfer System



Pick Module Storage Systems
Manual 40



Wide Span Shelving
Manual 17



Pallet Rack Storage Systems



Stac-U-Rak SystemsManual 32

How to Order

To order, or for more information, call and talk to our specially trained inside sales team. Or for hometown service, call your local Ridg-U-Rak Distributor listed in the Yellow Pages.

Phone: 814-725-8751 Fax: 814-725-5659
Toll Free: 1-866-479-7225 www.ridgurak.com



Famous for integrity for over 50 years

Proud member of these organizations



THE MATERIAL HANDLING INSTITUT

MEMBER COMPANY

Incorporated in 1945, The Material Handling Institute is a national trade association of material handling equipment manufacturers dedicated to promoting the proper and effective use of their equipment and services.

MEMBER COMPANY



RACK MANUFACTURERS INSTITUTE

The Rack Manufacturers Institute, organized in 1958, represents the majority of U.S. rack manufacturers and is dedicated to maintaining rack performance standards.



MHEDA is a professional organization dedicated to further educating, improving the proficiency and enhancing the professional image of material handling distributors nationwide.

Ridg-U-Rak is a proud member in good standing of RMI. The Storage Rack covered by this manual is in full compliance with the latest design specification approved by the members of the RACK MANUFACTURERS INSTITUTE. We believe that it is important to you that your supplier be committed to the principles of continuous improvement in both product design/application, and in the highest professional and ethical standards of performance as embodied in the mission and work conducted within RMI.

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