### STORAGE EQUIPMENT Selection, Application, and Use

**Sponsored by:** 



STORAGE EQUIPMENT MANUFACTURERS ASSOCIATION Presented by: Nelson Cantillo – Tri Boro Shelving & Partition

Mike Guerrero– Western Pacific

**Brian Pelto – Ohio Gratings** 





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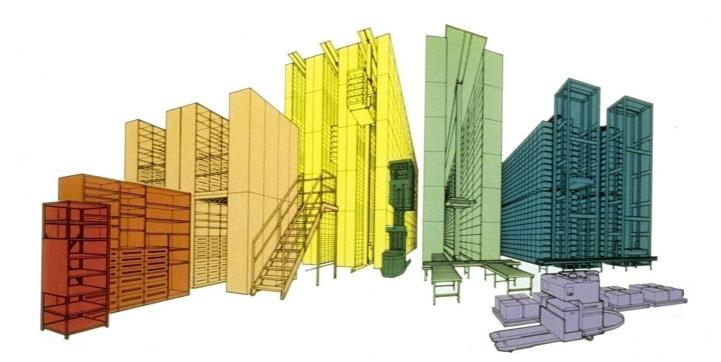
### **About SMA**

- Non-profit Industry Group of MHI
- Formed in 1974 by visionary industry leaders
- Mission: To advance standards, quality, safety and general fitness for intended use of industrial storage equipment
- Membership requirements:
  - Manufacture & control structural design of storage equipment for sale in USA
  - Pay dues
  - Attend meetings
  - Participate in monthly statistical program
  - Voluntarily support design and manufacture of products in accordance with appropriate American National Standards
- Members are leading manufacturers from throughout the world





# Shelving The Flexible Solution







# Shelving Adjustable, Open & Closed



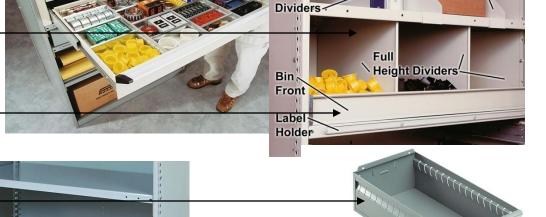






### Accessories

- Drawers <
- Doors
- Dividers -
- Bin Fronts
- Shelf Boxes
- Front Bases



Partial

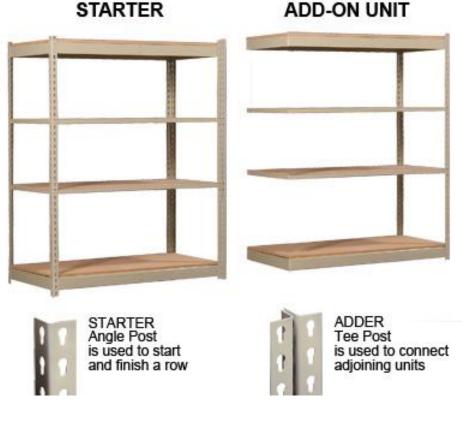




Sliding Dividers

# Adjustable Metal/Wood Shelving Rivet/Stud

















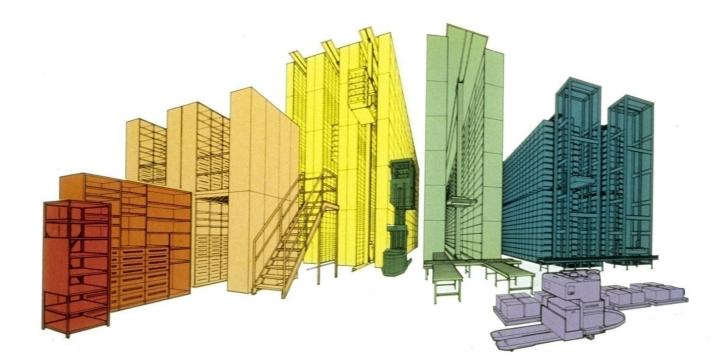








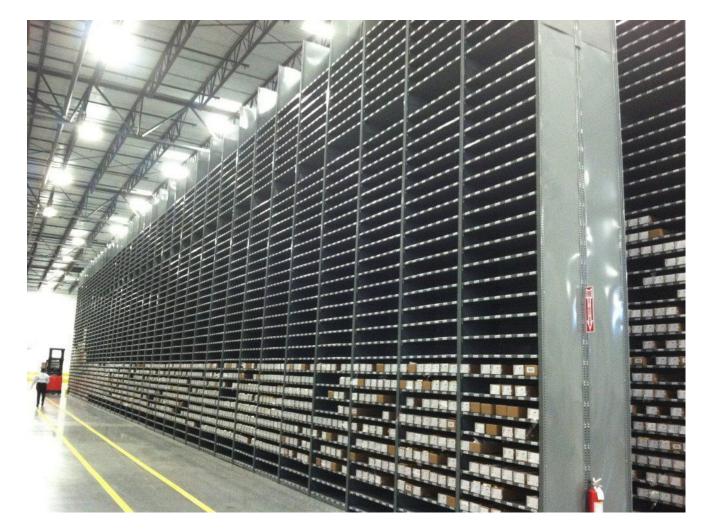
## High Bay Storage & Multi-Level Shelving Pick Modules







### **High Bay Storage**







### **Phase 1 – Designed for Future Catwalk**







### Starting 2<sup>nd</sup> Phase of a 2 Level



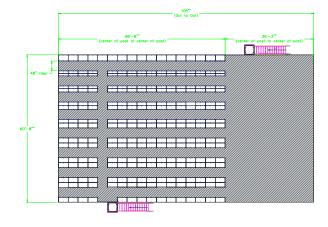








### 2 Level System - With a Deck-Over











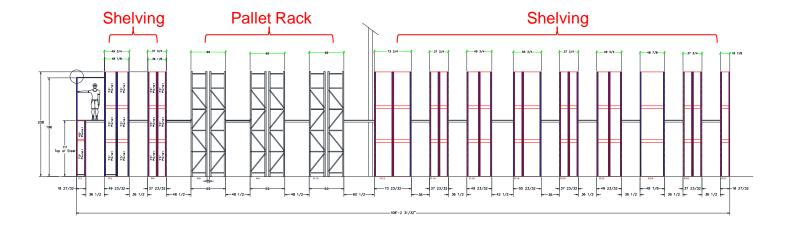
### Typical Guarding When Burying a Column in a Bay







### Pallet Rack Integrated into Pick Module to Handle Bulky Items







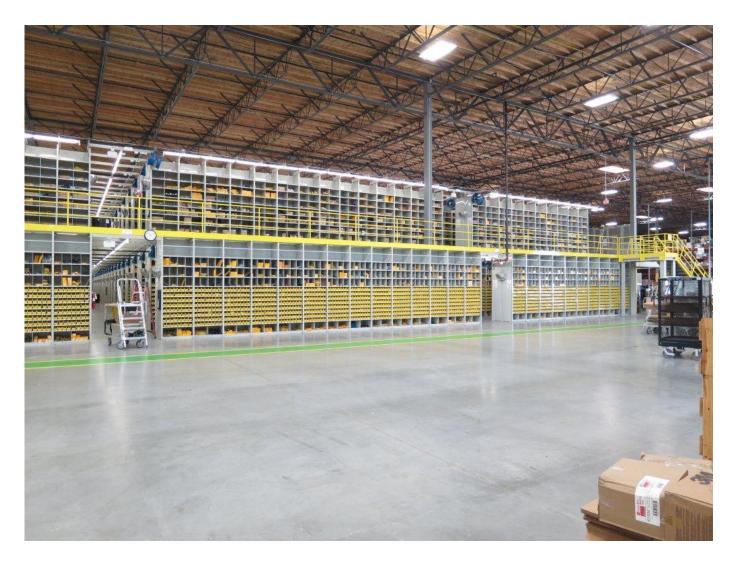
### Pallet Rack Integrated into Pick Module to Handle Bulky Items







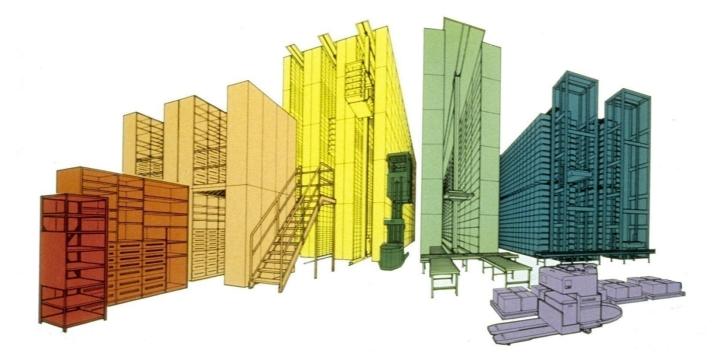
### **Complete Multi-Level Pick Module**







# **Flooring Systems**







### **Components of a Flooring System**



#### Solid Decking Surface

**Open Bar Grating** 





### **Components of a Flooring System**









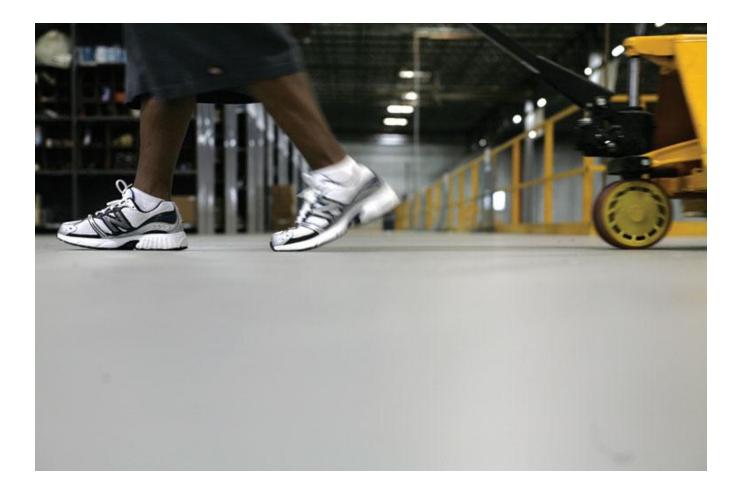


#### MR Engineered Wood Composites





### **MR Engineered Wood Products**







### **Bar Grating**



**Standard Welded Bar Grating** 





### **Bar Grating**



**Shelf Supported Grating Floor** 





### **Bar Grating – Close Mesh**



Suitable for rolling loads





#### Using the Proper Flooring System will Result in Good Versatility & Long Term Performance











### Specifications

- ANSI MH26.1 Specification for the Design and Testing of Industrial Steel Shelving
- ANSI MH26.2 Specification for the Design and Testing of Metal/Wood Shelving
- ANSI MH 26.3 Specification for the Design Manufacture and Installation of Industrial Work Platforms

#### www.mhi.org/sma







### **Considerations & Guidelines**

- Shelving Users Guide
- Nomenclature for Industrial Grade Shelving
- Shelving Applications Brochure
- Multi-Level Shelving Using Industrial Grade Shelving

#### www.mhi.org/sma







**Bluff Manufacturing Cornerstone Specialty Wood Products, Inc. Heartland Engineered Products, LLC** Lyon Workspace Products **Ohio Gratings Inc. Penco Products**, Inc. **Steel King Industries, Inc. Steele Solutions, Inc. Tri-Boro Shelving & Partition Corp.** Western Pacific Storage Solutions Wildeck, Inc.





# **Q** & A







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