# RACKING • MEZZANINES • CONTAINERS • CANTILEVER • SHELVING



DESIGNIMANUFACTUREIINSTALL



Founded in 1967 by Max Prufer, M&P Tool Products Inc. began as a custom machine tool and die manufacturer. Over the last four decades we have evolved from a two man operation into a leading independent manufacturer of steel material storage products and custom metal fabrications with over 100 employees and a global distribution network.

Mission: We strive for excellence in all facets of our organization and are committed to providing our customers with superior service and competitive pricing.

• All products are designed in accordance with governing regulations including the Canadian Standards Association (CSA), Rack Manufacturers Institute (RMI), Municipal and Provincial Building Codes and the Occupational Health and Safety Act (OHSA) where applicable.

- All welding is performed by Canadian Welding Bureau (CWB) certified welders.
- Custom designed engineering programs, AutoCAD and AutoDesk Inventor provide optimal product configurations.
- All products are available in powder coated or galvanized finish.
- Product integration.
- Continuous new product innovations.

## PRODUCTS

MEZZANINES PAGE 3

**CONTAINERS** PAGE 4

**STACKING RACKS** PAGE 4

PALLET RACKING PAGE 5

PALLET RACKING ACCESSORIES PAGE 6

**GUARDING** PAGE 6

DRIVE-IN RACKING PAGE7

PUSHBACK RACKING PAGE7

PALLET FLOW PAGE 8

**CARTON FLOW** PAGE 8

**CANTILEVER** PAGE 9

FENCING PAGE 10

SHELVING PAGE 10

## SERVICES

**INSTALLATION & SERVICE** PAGE 11

PRE-START HEALTH & SAFETY REVIEW (PSR) & ENGINEERING PAGE 12

METAL FABRICATION PAGE 13

POWDER COATING & FINISHING PAGE 14

Our modular designed mezzanine platforms transform wasted overhead space into valuable floor space at a fraction of the cost of new construction. All mezzanine platforms are designed to meet specific customer and building code requirements. Standard capacity is 125lbs./sg.ft. but can be adjusted to suit any capacity and deflection criteria. Modular designs allow for future additions, modifications and relocation if necessary. Structural review and stamped drawings are available by both Professional Engineer and Architect.







Structural

Structural/Rack Supported

### TRUSSES

Pre-engineered open web steel joist or structural wide flange designs are manufactured from 50ksi material. Standard truss heights range from 8" to 14" with larger profiles available to meet increased loading and deflection requirements.

### COLUMNS

Typically range from 3'' sq. -8'' sq. H.S.S. and are designed to suit specific loading conditions.

### HANDRAILS

42" high and manufactured from H.S.S. materials. Our unique vertical picket design with 5" kick plate meets current Municipal, Provincial and National building codes.

### **STAIRCASES**

Constructed using rigid structural components and can be designed for direct or side entry to the mezzanine platform. Egress calculations are used to determine the quantity and placement of stair sets for each project.

### GATES

Pivot gate, sliding gate, and swing gate options are available.

### **FLOORING OPTIONS**

Includes corrugated galvanized roof deck with plywood or checkerplate, rod and bar grating, open steel plank, Mezz-Tread® and ResinDEK®.











Modular Office

**Pivot Gate** 



call now, or visit www.spaceaidmfg.com for more information Tel: (905) 840-5550 | Fax: (905) 840-5560 43 Regan Road, Brampton, Ontario Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc.

**CONTAINER** 

Our rigid welded containers are ideal for a wide range of shipping, processing and storage applications. Stackable up to five high when loaded, their heavy gauge split tube or structural steel frame construction produces a rugged yet economical product. Standard cup feet and four way access make these containers safe and easy to handle. Standard sizes are available in both solid sheet and expanded mesh. Collapsible and drop bottom versions are also available.



### NCE-S-GS2

Size 40" x 48" x 40" O.H. Capacity: 4,000 lbs. 29cu. ft. 3/4-13 Expanded Metal Sides Solid Sheet Floor Two Half Drop Gates on Short Sides \*Also Available in Solid Sheet



### SCE-E-GS2

Capacity: 2,500 lbs. - 15cu. ft. 34-13 Expanded Metal Sides 34-13 Expanded Metal Floor Two Half Drop Gates on Short Sides

### **OPTIONAL FEATURES:**

- Security Lids
- H.S.S. Construction Dividers
- No Gates
- Leg Caps

priced.

- Stenciling / Labeling
- Pin/Target Feet

### SPECIAL CONTAINERS

SCE-S-GS2 Capacity: 3,000 lbs. -15cu. ft.

### SCS-S-GS2

Size 34-1/2" x 40-1/2" x 32-1/4" 0.H. Size: 34-1/2" x 40-1/2" x 32-1/4" 0.H. Size 34-1/2" x 40-1/2" x 32-1/4" 0.H. Capacity: 3,000 lbs. - 15cu. ft. Solid Sheet Sides Solid Sheet Floor Two Half Drop Gates on Short Sides Two Half Drop Gates on Short Sides



34-13 Expanded Metal Sides

Solid Sheet Floor

- Bumpers
- Card Holders
- Long Side Gates
- Casters



An excellent portable alternative to static pallet racking, stacking racks save valuable space by storing bulk items in individual racks. A safe and economical product, stacking racks are typically constructed using structural materials. Collapsible options make empty stacking racks easy to store in only a fraction of the space used when loaded. Each rack is designed to meet your exact loading requirements.

### **OPTIONAL FEATURES:**

- Slave Carts
- Labeling
- Brakes
- Fork Straps
- Collapsible Sides
- Expanded Mesh Floor

43 Regan Road, Brampton, Ontario

- Fork Runners Removable Posts
- Stenciling Casters

Space Aid manufactures our own brand of pallet racking, UNI RAK. Pallet racking systems are designed using two basic components; pre-assembled welded end frames and rigid one-piece interlocking horizontal beams. Beams engage into frames on 3" increments and come standard with safety clips to prevent disengagement from frames. All racking systems are designed and manufactured in accordance with applicable regulations and specifications.





Carpet Racking



Pallet Racking

**Die Racking** 

**FRAMES:** Standard sizes are available in 24" to 72" depths and up to 32' high. Special sizes are available and Space Aid will design and manufacture to suit any customer requirement.

**BEAMS:** Available in roll formed box, welded step and roll formed step styles. Beam capacities range from 1,000 lbs. to 12,000 lbs. per pair and are available in lengths ranging from 24" to 192". Box beams are typically used to store conventional pallets and work best using accessories such as safety bars or wire mesh decks. Step beams allow for drop in decks, shelves and many additional accessories designed for product stacking and hand pick applications.



UNIRAK UNIRAK SD / MD / HD1 SD / MD / HD1 DOUBLE POSTED



UNIRAK HD2



UNIRAK HD3 If attempting to match existing racking it is imperative that you consult Space Aid's Engineering Department to ensure that your system configuration complies with all updated regulations and specifications in accordance with Regulation 851 of the Occupational Health and Safety Act. CSA standard A344.1 User Guide for Steel Storage Racks and A344.2 Standard for the Design and Construction of Steel Storage Racks will be used as the basis for evaluation.

### PALLET RACKING ACCESSORIES

- Welded Safety Bars
- Galvanized Decks
- Backstop Beams
- And More...
- Formed Safety Bars
- Skid Supports
- Row Spacers
- Lock in Safety Bars
- Post Protectors
- Dividers

- Wire Mesh Decks
- Drum Cradles
- Sprinkler Guards
- call now, or visit www.spaceaidmfg.com for more information 43 Regan Road, Brampton, Ontario Tel: (905) 840-5550 | Fax: (905) 840-5560 Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc.





Welded Safety Bar



Adaptor



Lock In Safety Bar



Horseshoe Post Protector



Fork Spacer



Drum Cradle



Wire Mesh Deck (Instep)



Floor Mount Guard



Skid Channel



Row Spacer (2BC Series)



Backstop Beam



Mesh Back Panel



Aisle / Pedestrian Guarding

Heavy Duty Column Guarding



Specialty Guarding

Space Aid can custom manufacture any style of guard, guide rail system, post protector or frame protector to accommodate all needs and environments. Guards are used as a protective element in many different applications including protecting employees, machinery and storage systems or segregating work cells, restricting access, traffic aisles or pedestrian walk ways. All guards are manufactured from formed or structural steel members and come complete with all necessary hardware. Guards are typically offered in a standard safety yellow powder coated finish, however custom colours are available upon request.

GUARDING

Ideal for high density pallet storage applications, Drive-In and Drive-Thru racking are unique First In, Last Out (FILO) styles of racking that have higher storage densities than any other racking systems available. Drive-In racking enables standard fork truck access into the face of the system allowing larger storage blocks which reduces the number of required aisles. Capable of storing almost any pallet size or weight, each system must be specifically designed and analyzed by Space Aid's Engineering Department.







Drive-In Racking

### **OPTIONAL FEATURES**

- Cantilevered Entry Frames
- Rub Rails

- Structural Bases
- Inverted Rails
- Post Protectors
- X-Bracing
- Pallet Stops
- Entry Guides

DRIVE-IN



Push Back Racking (3 Deep System)

Push Back Racking (5 Deep System)

A First In, Last Out system (FILO), Push Back is designed to offer increased storage density with more pick faces than traditional high-density systems. Available in 2 to 6 deep systems Push Back is capable of handling up to 3,000 lbs. per pallet position. Standard designs are for CPC or GMA pallets, but non-standard designs for other weights, pallet sizes and containers are available. Each system is designed by Space Aid's Engineering Department to fit your operational needs. Push Back systems require less space than Pallet Flow systems and can be arranged as back-to-back or stand alone bays.





Pallet Flow Racking

Pallet Flow Racking (Complete with Brake and Pallet Stop)

Offering substantial labour and space savings over selective or Drive-In racking systems, Pallet Flow utilizes a calculated angle of decent to advance pallets along roller track or track beds from restocking position (charge) to the

picking position (discharge) of the system. This First In, First Out system (FIFO) simplifies tracking and locating inventory while ensuring that product receives proper stock rotation. Each system is uniquely designed by Space Aid's Engineering Department to fit your operational requirements. Standard systems are designed to accommodate CPC or GMA pallets, however designs are available to suit non-standard pallets and containers.









Carton Flow (Skate Wheel)

Carton Flow (Poly Wheel)

Ideal for both manual full carton and individual parts picking applications, Carton Flow allows product rotation on a First In, First Out basis (FIFO). Utilizing a calculated angle of decent, Carton Flow roller tracks position cartons automatically from the restocking position (charge) to the picking position (discharge) of the system allowing order pickers and assemblers uninterrupted product supply. Average design loads range from 5 lbs. to 125 lbs. per linear foot with maximum flow lengths up to 144". Flow tracks are constructed from roll formed galvanized channel fitted with polypropylene rollers on riveted steel axles. Entry and exit beams incorporate a track locating channel adjustable on 2" horizontal increments allowing easy and accurate placement of tracks and dividers.

### **OPTIONAL FEATURES**

• Dividers

Card Holders

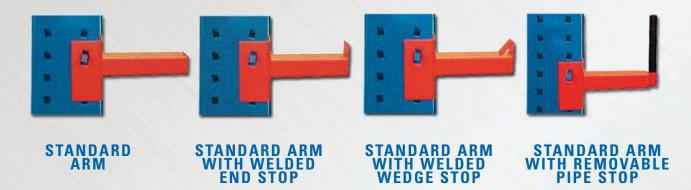
Additional Lanes

Staggered Wheel Patterns

• Wheels on 1.333", 2" or 4" Centres

CARTON FLOW

Our heavy duty Cantilever racking systems are designed to store a wide variety of products with unrestricted front access for standard and oversized items. Reducing handling time and increasing flexibility of storage positions, Cantilever racking allows quick access and is designed to accommodate loads with no vertical obstructions. Standard column heights range from 6' to 32' and Cantilever arms range from 18" to 72". Systems are capable of storing up to 100,000 lbs. per column. Custom designs are common and can be designed to meet your exact requirements.



Cantilever racking offers precision inventory control for any business using material of various lengths and sizes. Typical loads include metal extrusions, steel bars, tubes, pipes and lumber. With the use of narrow aisle or guided rail systems, high density Cantilever racking maximizes floor and vertical space. Floor guide rails and entry guards make cantilever safe and easy to use. Angle runners are also available for custom material handling equipment.



Double Sided System

### **STANDARD COLUMN HEIGHTS** 6'-32'

**STANDARD ARM LENGTHS** 18" - 72"

### VERTICAL BRACE PANEL WIDTHS

24" – 90" Column centers



Single Sided System

### CAPACITIES Per Column (Side) 3,800 lbs - 100,000 lbs. +

Per Arm: (U.D.L. Each) 624 lbs. – 8, 300 lbs.

call now, or visit www.spaceaidmfg.com for more information 43 Regan Road, Brampton, Ontario Tel: (905) 840-5550 | Fax: (905) 840-5560 Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc.

Secure areas within your facility with Space Aid's security fence enclosures. An economical bolt together enclosure can be tailored to suit virtually any customer requirement or configuration. Standard modular panels are 48" x 96" and are constructed from 2" x 2" mesh in a welded angle frame. Posts, doors, and sliding gates each come in a wide range of standard dimensions designed to suit many standard and special applications. Optional roof systems and various wire configurations are also available.







Pallet Racking Safety Fence

Space Aid manufactures three series' of boltless shelving, LD (Light Duty), SD (Standard Duty) and MD (Medium Duty). Designed for superior strength and durability, MAXI SHELF is an ideal product for any application. Beams are adjustable on 2" vertical increments and accommodate many different shelf

types. Standard shelf types include galvanized decks, plywood, particle board and wire mesh decks.



Custom Work Bench

MAXI SHELF SD/MD MAXI SHELF SD and MD series frames are constructed using 14ga. materials, have a 1.5" x 2" post profile, and can be designed to allow up to 3,000 lbs. per shelf level. Welded footpads are standard.

Archival & Box Storage

### **MAXI SHELF LD**

MAXI SHELF LD series frames are constructed using 16ga. materials, have a 1.5" x 1.5" post profile, and can be designed to allow up to 750lbs. per shelf level. Welded footpads are optional.

### ACCESSORIES

- Steel Shelves
- Plywood
- Wall Ties

- Dividers
- Wire Mesh Decks
- Under Shelf Supports
- Particle Board • MDF / HDF
  - Row Spacers And More...
- Melamine Decks



Mobile Shelf Unit

call now, or visit www.spaceaidmfg.com for more information 43 Regan Road, Brampton, Ontario Tel: (905) 840-5550 | Fax: (905) 840-5560

### **NEW INSTALL**

In 2005, Space Aid Manufacturing recognized the importance of providing turn-key solutions to our customers and created our in-house Installation and Service Division. Our installation teams specialize in the installation of all warehouse storage products and are technically proficient in every product that we manufacture. We have completed projects across Canada from large scale multiphase distribution centres to small warehouse additions.



### **RELOCATIONS & MODIFICATIONS**

Space Aid's installation services extend beyond the installation of new product. We have assisted many customers with warehouse relocations and modifications to existing systems in order to maximize space and efficiency. All modifications are supported with engineering analysis and stamped drawings. Any modification to an existing system triggers the requirement for a Pre-Start Health & Safety Review (PSR), which can be provided by Space Aid.



### SAFETY

Space Aid's Installation and Service Division has maintained an impecable safety record. We ensure all of our installers are properly trained in equipment operation, First Aid, fall arrest, Workplace Hazardous Material Information System (WHMIS) and more. In addition to our own Safety Policy, we easily adapt to any customer's additional safety training programs. Prior to the start of any project, we provide a copy of our Installation Safety Policy, Certificates of Training, Workplace Safety Insurance Board (WSIB) Clearance Certificates and a copy of our \$10,000,000 liability insurance. On larger projects, we will register a Notice of Project with the Ministry of Labour.



### **SERVICE & REPAIR**

In 2008, Space Aid expanded its installation services to include a service division dedicated to servicing and repairing damaged systems. In combination with our inspection and engineering services, Space Aid is able to complete ongoing service and repairs for any brand or configuration of warehouse storage system with engineering support. Our service crews are available 7 days a week, 24 hrs per day, allowing us to address small repairs or potentially dangerous rack failures as required.



# PSR & ENGINEERING

### **INSPECTIONS**

Space Aid has developed a formalized inspection program for its customers to ensure that their storage systems remain in compliance with applicable regulations. We complete damage inspections for new and existing customers on a quarterly, semi-annual or annual basis. The inspection is inclusive of a site visit completed by one of Space Aid's certified rack inspectors and a subsequent report. The report includes a summary, checklist, images, and layout drawing with specific recommendations to address damage and improve safety.

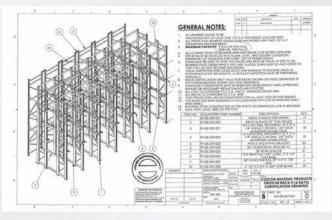


### COMPLIANCE

We have worked with many customers that have had orders to comply issued by the Ministry of Labour and with our systematic program of inspections, services and engineering support we were able to bring their existing systems into compliance. An inspection is the first step towards obtaining proper certification of the system. During the site visit, all system details are compiled including the requirements for service and repair along with the details for engineering analysis. Once all repairs are completed, a finite element analysis specific to the customer's brand and system design is completed to determine an accurate load rating for each elevation. Once the engineered stamped drawings are completed, proper signage is provided to ensure operators are aware of the system loading criteria. This is done with data capacity plaques mounted in highly visible locations throughout the system.

### SYSTEM CERTIFICATION AND PRE-START HEALTH & SAFETY REVIEW

Space Aid offers Pre-Start Health and Safety Review services to bring systems into compliance with the applicable provisions of Regulation for Industrial Establishments as listed in section 7 of Regulation 851 of the Occupational Health & Safety Act. A PSR is a required written report completed by a licensed engineer on the construction, addition or installation of a new apparatus, structure, protective element or process, or modifications to an existing apparatus, structure, protective element or process. The report details the measures necessary to bring the construction, addition, installation or modification into compliance.



### DATA CAPACITY PLAQUES



call now, or visit www.spaceaidmfg.com for more information 43 Regan Road, Brampton, Ontario Tel: (905) 840-5550 | Fax: (905) 840-5560 Copyright © 2012 Space Aid Manufacturing/M & P Tool Products Inc. Space Aid Manufacturing's metal fabrication capabilities include shearing, bending, break forming, stamping, roll forming, tumbling, CWB certified welding, powder coating and assembly processes. Most processes are available in manual single stage or automated progressive operations. In house tool design and fabrication includes milling, drilling, precision grinding, lathe process and quality testing. These features and services provide us with a competitive edge in all forms of metal fabrication. All fabrication and tool design is based on AutoCAD generated drawings.



### PAINT COLOURS AND SPECIFICATIONS

Space Aid's custom powder coating system is able to accommodate parts 48" wide, 72" high and 32' long. A five stage environmentally friendly iron phosphate wash and rinse pre-treatment cycle insures all components are thoroughly cleaned prior to coating guaranteeing superior corrosion resistance between the product and our TGIC free baked on polyester powder coat finish. Typical paint coverage will be 2 mils – 3 mils providing a more durable and even finish with improved hardness, exterior stability and chemical resistance.

Our Standard and Premium Colours are:

### SPACE AID STANDARD COLOURS



### SPACE AID PREMIUM COLOURS



Space Aid Barn Red

Space Aid Safety Yellow

Space Aid Sky White

upon request for an additional cost.Colours may vary slightly when applied to steel.

Premium and custom colours are available

- Standard colours can be used for any product at no additional cost.
- FDA approved powder available at an additional cost

Space Aid Manufacturing offers the following finishing operations:

- Baked on Polyester Powder Coating
- Plastic Coating & Rubber Dipping
- Hot Dip Galvanizing
- Zinc Plating
- Tumbling

Please note that due to differences in colour when printing, colours may not be exactly as shown. Please ask for a sample before selecting your colour.





RACKING • MEZZANINES • CONTAINERS • CANTILEVER • SHELVING MANUFACTURING A DIVISION OF M&P TOOL PRODUCTS INC.

43 REGAN RD, BRAMPTON ON, L7A 1B2 PH: 905.840.5550 FAX: 905.840.5560 WWW.SPACEAIDMFG.COM