



# 8000 Series Uni-Plate™ Technical Specifications

### **Design Elements:**

- The 8000 Series Uni-Plate<sup>™</sup> has been designed with the optimum use of common fasteners, materials, finishes and drive components. Many components and fasteners are shared with the Unified Supply incline slope plate 7000 Series Uni-Claim<sup>™</sup>. Guide and support wheel assemblies are of the same components, enabling the stocking of just one wheel assembly type for spares.
- The carousel curve radius frame design allows the unit to fit the footprint of any existing carousel while utilizing the maximum amount of usable conveying surface in the tightest radius.
- Bolt together frames allow for versatility in shipping and installation. The customer can choose to have the unit frames shipped loose, or assembled for a fee.
- Maintenance issues are reduced with the use of sealed for life bearings in the support and guide wheel assemblies, as well as oil impregnated bronze bushings in the link assemblies.
- Support and guide wheels are much larger than alternative units for better load handling, lower RPMs, less wear, and are spaced optimally for cost effectiveness and stability.





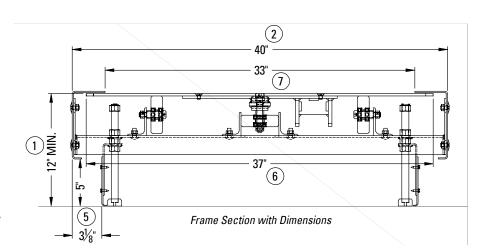


# 8000 SERIES UNI-PLATE™ TECHNICAL SPECIFICATIONS

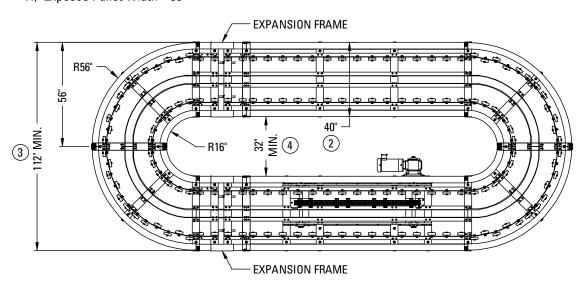
### **General Information:**

All straight and curve frames are bolt-together style, and can be ordered from Unified Supply assembled for an additional cost. Flow direction is typically counterclockwise. Clockwise flow direction is available.

- 1.) Minimum Height to Top of Pallet = 12"
- 2.) Width of Straight Frames = 40"
- 3.) Minimum Overall Outside Width = 112"
- 4.) Minimum Inside Width = 32"
- 5.) Toe Kick Area = 5" minimum x 3 1/8"



- 6.) Overall Pallet Width = 37"
- 7.) Exposed Pallet Width = 33"



Carousel Layout with Dimensions

Center-to-Center Link Hole Distance = 20"

Minimum Static Load Capacity = 200 lbs/Linear Foot

Speed = 90 FPM

Minimum Dynamic Load Capacity = 85 lbs/Linear Foot





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### **Crescent Pallets:**

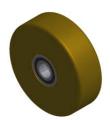
Crescent pallets consist of 1/4" steel plate, powder coated black. Optional polyurethane textured coating for public area use is available.



Crescent Pallets and Pallet Link Assemblies (Crescent Pallets Shown Transparent for Clarity)

### Pallet Links:

Links consist of a 3/8" flat bar tang and clevis design with integrated hardened drive lugs, and come equipped with replaceable oil impregnated bronze flange bearings and UHMW wear pads.



### Support Wheels and Guide Wheels:

Wheels are heavy duty, polyurethane,  $\emptyset 4'' \times 11/4''$  wide with two sealed roller ball bearings per wheel. Support wheels are on a maximum of 8" centers.

Ø4"Wheel

Wheel fastening shoulder bolts are  $\emptyset5/8"$  with 1/2-13 threads. (Some competing units use smaller than  $\emptyset2"$  x 9/16" wide wheels with 7/16" hardware.)

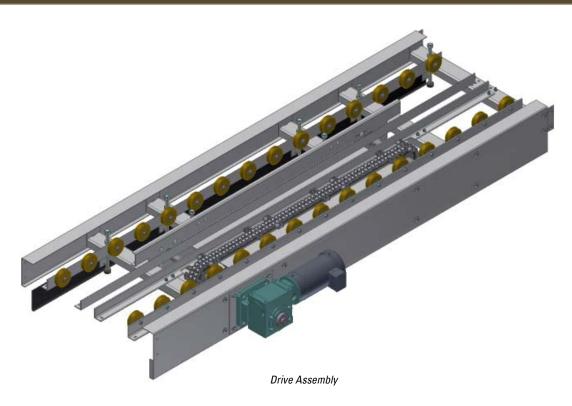


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#### **Drives:**

Drive assemblies are caterpillar style, utilizing two No. 80 double strand sprockets, and a No. 80 double strand roller chain (1" pitch) with  $\emptyset$ 1" drive rollers. (Some competing units have only 3/4" pitch with 3/4" drive rollers). UHMW tracking is utilized for chain alignment and quiet, low maintenance operation. Adjustment screws are provided on the idler shaft bearings for chain tensioning.

A minimum of three pallet links are engaged with the 8000 Series drive at any time, while many other manufacturer's devices will only have two pallet links engaged.

Height adjusting support bolts consist of 3/4-10 hardware, and utilize individual rubber isolation pads for quiet operation.

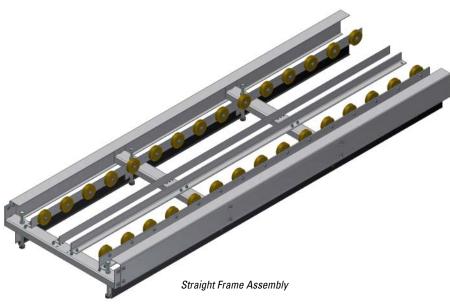
Drive assemblies run at 90 FPM and require an electronic soft start device located in the MCP.

- Drive and idler shaft bearings are Dodge SXR.
- Standard gear reducers are Dodge Tigear-2 shaft mount.
- Standard motors are Baldor or Reliance. "High-slip" Design D motors are required for carrousels with two or more drives running simultaneously.
- Other reducer and motor combinations are available upon request.





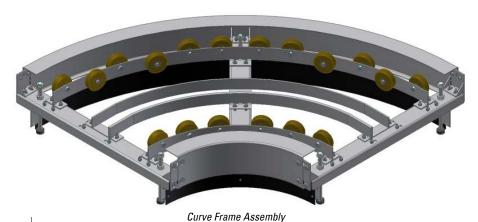
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### Straight Frames:

Straight frame construction consists of 3/16" HRS formed channel bolted on 40" centers maximum. Guide wheel and support wheel angles are made from 3/16" structural angle. Angles and channels bolt together using common 3/8-16 carriage bolts and serrated flange nuts. Height adjusting support bolts consist of 3/4-10 hardware, and utilize individual rubber isolation pads.

Standard straight frame dimensions = 119" Long x 40" Wide



### **Curve Frames:**

Curve frame construction consists of 1/2" and 1/4" formed flat bar for guide wheel and support wheel rails. Frame channels are of formed 3/16" HRS. Wheel rails and support channels bolt together using common 3/8-16 carriage bolts and serrated flange nuts. Height adjusting support bolts consist of 3/4-10 hardware and utilize individual rubber isolation pads.

Outside radius = 56" Inside radius = 16"





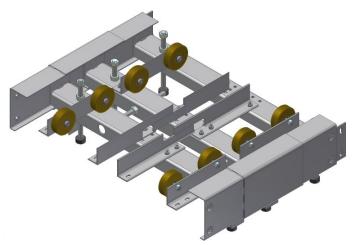
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Carousel with S.S. Trim and S.S. Deck Trim

### Finish, Trim and Side Guards:

All HRS is protected with a powder coat finish. Trim is constructed of 10 Ga. HRS for non-public areas, or 10 Ga. 304 stainless steel with a No. 4 brush finish for public areas. Visible trim fasteners in the public area are stainless steel. Stainless steel deck trim is 6" tall with a 1" wide top flange. HRS side guards are typically 21" tall, with 3/16" vertical stiffeners.



Expansion Frame Assembly

### **Expansion Frames:**

Provision for the unit to be adjusted for break-in and wear is accomplished by the use of expansions frames. The expansion frames feature overlapping guide wheel tracks, and are assisted in adjustment by heavy duty 3/4-10 jacking bolts. Specific trim with welded seams upstream of flow allow frame expansion without replacement of trim.