



7000 Series Uni-Claim Technical Specifications

Design Elements:

- The 7000 Series Uni-Claim[™] Slope Plate Carousel 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 flat plate 1000 Series Uni-Plate[™]. Guide wheel assemblies are of the same components, enabling the stocking of just one wheel assembly type for spares.
- The Uni-Claim can be installed for both baggage claims and make-up areas. A maximum amount of
 volume capacity is available with a minimum use of floor space. Remote loading can be
 accommodated from the floor below, or via belt conveyor overhead. 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.
- Maintenance issues are reduced with the use of sealed bearings in the guide wheel assemblies, as well as oil impregnated bronze bushings in the link assemblies.
 - Guide wheels are sized at 4" diameter for better load handling, lower RPMs, less wear, and are spaced optimally for cost effectiveness and stability.



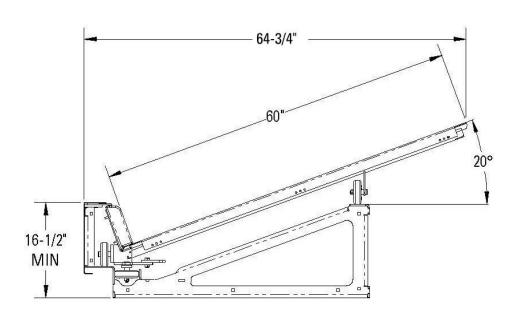
7000 Series Uni-Claim™ Slope Plate Carousel (counterclockwise rotation)

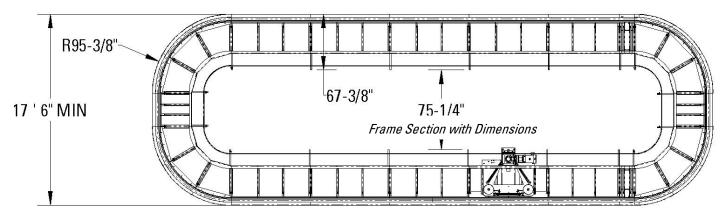
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General Information:

All straight and curve frames are welded assemblies and can be ordered from Unified Supply as complete units. Carousels can be specified to operate in clockwise or counterclockwise directions.

- 1.) Minimum Height to Top of Trim = 16-1/2"
- 2.) Width of Conveying Surface = 60"
- 3.) Distance from Pallet to Trim = 64-3/4"
- 4.) Slope of Conveying Surface = 20°
- 5.) Outside Curve Radius = 95-1/4"
- 6.) Overall Minimum Width = 17' 4-1/2"
- 7.) Minimum Inside Width = 78-3/4"





Carousel Layout with Dimensions

Center-to-Center Link Hole Distance = 16"

Minimum Static Load Capacity = 250 lbs./Linear Foot

Speed = 90 FPM

Minimum Dynamic Load Capacity = 125 lbs./Linear Foot

Flight **Pallets**:

Flight pallets are rectangular shaped and contoured, consisting of 12 GA or 14 GA 304 stainless steel with #4 brush finish. A UHMW-PE strip is applied to the underside of the trailing edge to prevent pallet scoring.



S.S. Pallet and Bumper Bolted to Pallet Support Assembly

Dual Pallet Support Assembly



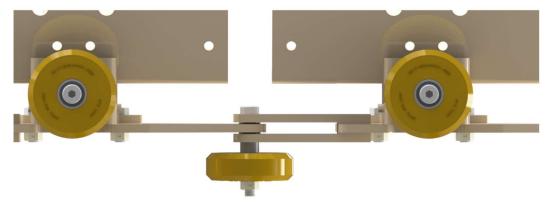
Pallet Support Assemblies:

Each pallet support assembly contains vertical upper and lower support wheels, as well as a lower horizontal guide wheel. The pallet supports are driven by replaceable bolt-on flat sprockets. The flat sprocket teeth engage sequentially into a drive chain located in the triangular drive unit(s). The lower leading and trailing ends of each pallet support form a tang and clevis, forming an endless loop when bolted together.



Support Wheels and Guide Wheels: Wheels are heavy duty, polyurethane, Ø4" x 1-1-1/4" wide with two sealed roller bearings per wheel. Each pallet support implements one upper and one upper support wheel. Guide wheels are on 16" centers, with one guide wheel installed per pallet support assembly.

All wheel fastening shoulder bolts are Ø5/8" with ½-13 threads. Replaceable oil impregnated bronze flange bearings are installed inside the tang and clevis of the pallet supports to provide long life and ease of maintenance.



Bumper Options:

The lower portion of the canted conveying surface is optionally equipped with either individual segmented molded rubber bumper or "3-D" extruded rubber bumper. The tops of the bumpers are covered by a flat extruded rubber finger guard, enclosed by outer HRS or Stainless-Steel trim.



Available Bumper Options

Drives:

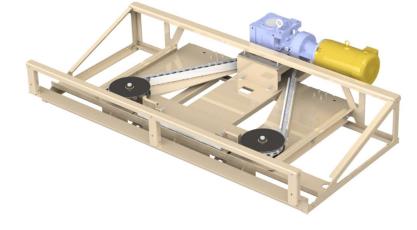
Power is harnessed from a motor and right angle vertical solid shaft reducer assembly, mounted in a triangular drive unit. Dual drive unit carousels implement the use of a sprag clutch to allow for redundancy and synchronization purposes. A reducer drive sprocket rotates a horizontal drive chain assembly in a triangular configuration. The drive chain engages the flat sprockets bolted to the pallet supports. The drive chain is guided and supported by three UHMW channels, located between two idler sheaves and the drive

sprocket. Screw adjustments are provided for proper chain engagement, tensioning, compensation for initial chain break-in, as well as normal wear of the unit.

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

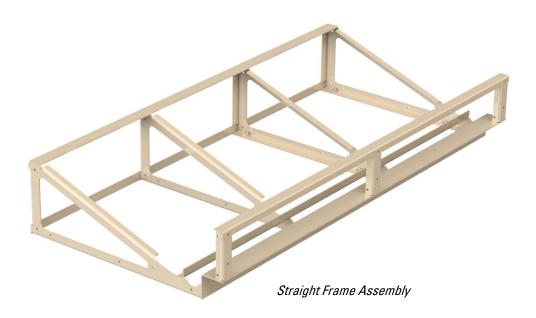
A sprag clutch enables redundant drives to automatically disengage for smooth operation without the additional drag of an unpowered

drive. This also removes the need for high-slip motors in a dual-drive configuration.



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

- Sprag clutch by Formsprag.
- Standard gear reducers are Sumitomo BBB4 or as specified.
- Standard motors are Baldor or Sumitomo.
- Other reducer and motor combinations are available upon request.



Straight Frames:

Straight frames are rib style constructions consisting of 1/4" ribs on 40" centers maximum. Guide wheel and support wheel angles are made from ¼" formed sheet metal. All straight frames are welded in-shop as a complete unit. Height adjusting support bolts consist of 3/4-10 hardware, and utilize individual rubber isolation pads.

• Standard straight frame dimensions = 96" Long x 47-1/2" Wide



Curve Frame Assembly

Curve Frames

Curve frame construction uses similar 1/4" ribs as the straight frame with rolled HRS members. Guide tracks are rolled 1/4" HRS reinforced with 1/4" gussets for a durable guiding surface. Support tracks are ¼" HRS. Curve frames are also welded in-shop as one piece.

• Inside radius = 50-7/8" Outside radius = 95"



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

Finish, Trim and Side Guards:

All HRS is protected with a powder coat finish. The trim is constructed of 12 Ga. HRS for non-public areas, or 12 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 1/2" wide top flange.



Carousel Frame Section, Modular Supports

Frame Supports:

Carousel units for make-up areas are provided with modular support units. Each unit juxtaposes with the correlating carousel modular frame. These frames lift the burden of having to place I-beams underneath for support structure.