Solution Guide

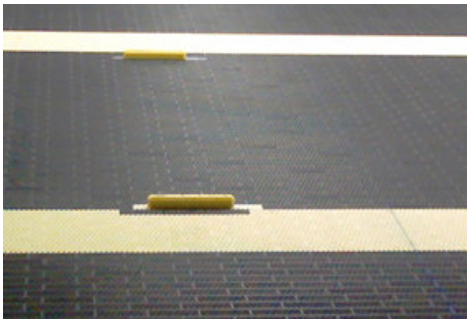
uni XLB Rough 15%
Straight Running Belt

Industry **> Automotive, Water Test Conveyors**

Application **> Automotive Final Inspection, Cars on Wheels**

Description **> Conveying cars through a water spray tunnel to test doors and body compartment seals**

Cars are conveyed through water spray tunnel. Water recirculation system uses treated water to prevent organic growth that can be very corrosive to steel conveyor components.



Problems

> Problem 1
Steel slat top chain requires expensive special coatings and lubrication maintenance to keep water from corroding steel components.

> Problem 2
Concentrated side forces on rollers and guides from drive on/off alignment causes accelerated component wear.

> Problem 3
Large pits are required for the drive and idle ends of the conveyor. Sprockets for a slat top chain tend to be large and require substantial vertical space and a large pit to house the conveyor components.

> Problem 4
Water carry over from large steel slats distribute water over a larger area and increase water consumption.

> Problem 5
The large pitch slat top chain creates a proportional large opening at the end of the conveyor. For safety reasons this can be a hazard.

Solutions

> Solution 1
uni-chains' plastic and stainless steel belt components are non corrosive and do not require lubrication.

> Solution 2
Edge guided and flat plate support surfaces distribute this load over more surface area and reduce the wear damage associated with this type of loading.

> Solution 3
Smaller pitch plastic belts require smaller sprockets reducing the vertical space required for the conveyor, eliminating the need for a large pit and all the accommodations they need. (Ventilation, drainage, lighting, stairs and other features required for a large subsurface compartment).

> Solution 4
Smaller pitch open plastic belts reduces carry over and saves water.

> Solution 5
Plastic belting has a much smaller pitch and it is easier to construct the conveyor with a smaller opening, decreasing the safety hazard.