

CASE STUDY

Mainway successfully integrates TMMC with new equipment within an existing storage system, and a line side dolly in a "Just in Time" environment



COMPANY

Toyota Motors Manufacturing Canada, Inc. (TMMC),
Cambridge, Ontario

SITUATION

Toyota required the ability to load and unload a trailer with full and empty seat pallets from an existing storage conveyor system.

CHALLENGES

- 1) overall system time line, design, fabricate and supply within 12 weeks
- 2) space limitations, existing storage system could not be relocated

3) maintain product sequencing from two level trailer to single level side by side storage system

4) integrate new conveying equipment with existing storage system

SOLUTION

Mainway supplied several custom fabricated items to more effectively use the available floor space. Mainway incorporated a two level drawbridge assembly using chain driven live roller conveyor to extend into the trailers for transporting product into the facility. A chain driven vertical lift with a powered roller platform gave the ability to send and receive product from the two level trailer to the single level storage system. A low profile two level chain transfer/chain driven live roller conveyor allows for charging the side-by-side storage system.

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Full pallets flow from the trailer onto the two level drawbridge. Pallets (3) are staged onto the vertical lift from the drawbridge. The vertical lift raises to the level of the storage system. Pallets are discharged from the vertical lift onto the chain transfer. Depending upon the sequence product may be required to side transfer or travel straight on to fill the storage lane. Pallets are discharged from the storage system, (6) at a time, onto a dolly/cart and delivered to lineside.

RESULTS

Mainway was successful with integrating new trailers, new trailer loading and unloading equipment, existing storage system, and a line side dolly (supplied by an outside source) to allow TMMC the ability to effectively supply their assembly line with product in a "Just in Time" environment.

