

Innovative Solutions

Cami Automotive Inc. - Seats

Project Overview:

The Line:

Chevrolet Equinox Seats/Pontiac Torrent

The Situation:

Cami required the ability to off load “Just-In-Time” (JIT) basis.

The Challenges:

Receive full pallets from two levels of a trailer and return stacks of empty pallets to a single lane within the trailer.

Time required to present product to the assembly line.

Product orientation from trailer assembly line.

Sensing of pallets.

Integration with other suppliers’ equipment.

Limited floor space within the facility.

Personnel traffic aisle between trailers and assembly line.

The Solution:

Mainway supplied a turn key system incorporating chain driven live roller conveyor, scissors lifts, turntables, transfer carts and chain transfers to complete the unload, delivery and load processes required for the seat pallets. The system uses two levels of chain driven live roller for off loading the seat pallets from the trailer which in turn feed a conveyORIZED scissors lift and it discharges onto a pneumatically operated turntable. The turntable is used to re-orientate the pallets for off loading the seat at the assembly line. The seat pallets travel from the turntable onto a cross aisle transfer cart. The transfer cart is capable of transferring 6 pallets per cycle. Once pallets have been off loaded from transfer cart they are delivered to the assembly line using pop up chain transfers and chain driven live roller conveyor. After the seats have been removed from the pallets at the assembly line the empty pallets are fed into a pallet stacker. The pallets are stacked 6 high and returned to the trailer via a separate cross aisle transfer cart, chain driven live roller conveyor and pop up chain transfers. The system has the capability of being controlled manually from several “Human Machine Interface” units installed throughout the system.

The Results:

Mainway supplied a turn key system to off load full seat pallets and load empty seat pallets into customer supplied trailers.