

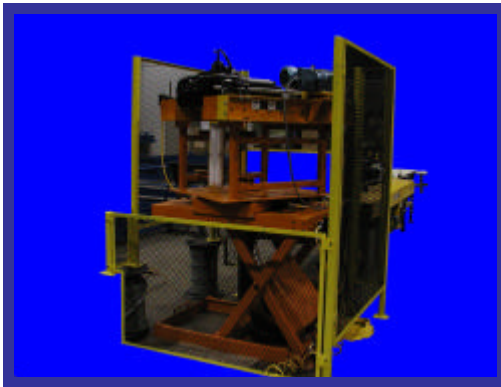
## New Innovative Part Handling Solutions

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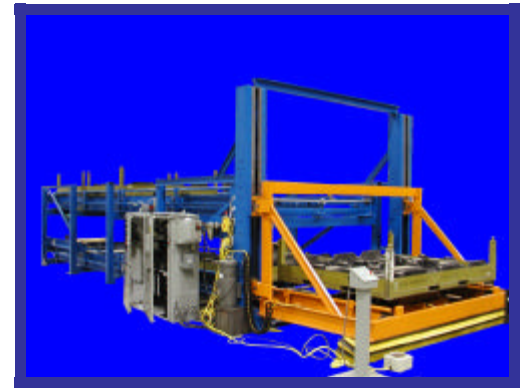
Some of our recent projects include the handling of parts and part racks in automotive assembly plants. Parts have included rear axle assemblies, fuel tanks and modular fixture plates for interiors. Rack handling projects have included

rear axle racks, floor pan racks, interior panel racks, door racks and head liner racks. Over ten powered rack handling systems have been built and shipped to customers in the last three to four months.

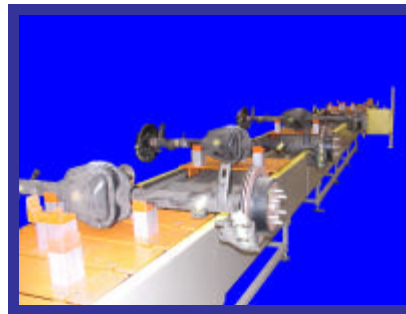
Fuel Tank Sequencing Conveyor



Over/Under Rack System



Rear Axle Sequencing Conveyor

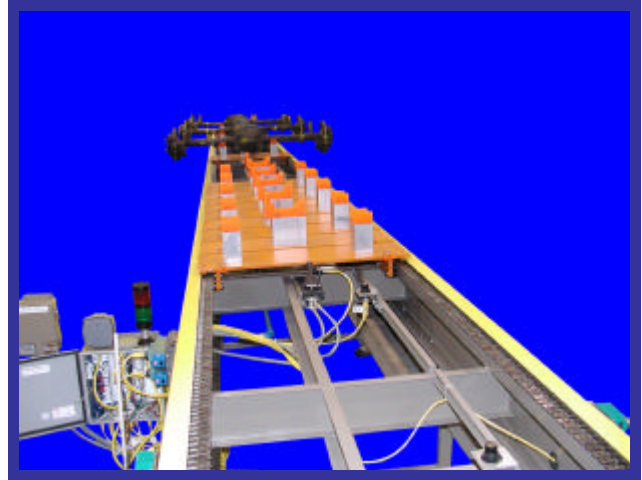
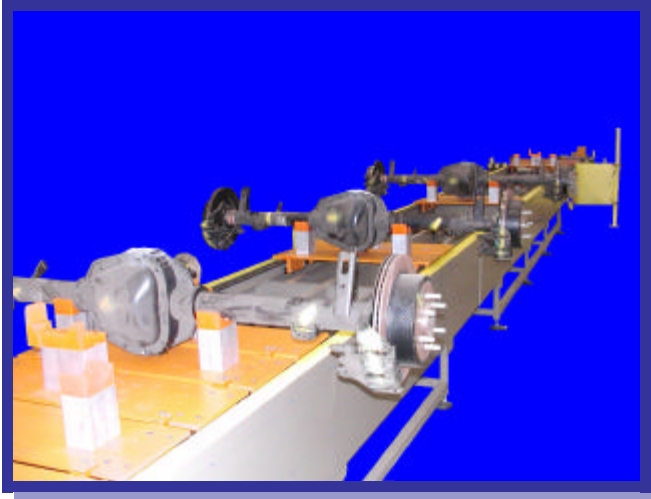


Inside this issue:

|   |   |
|---|---|
| Rear Axle Sequencing Conveyor               | 2 |
| Over/Under Rack System                      | 2 |
| Steering Column Mod. Plate Assembly Fixture | 3 |
| Gas Tank Sequencing Conveyor                | 3 |
| Company Overview                            | 4 |

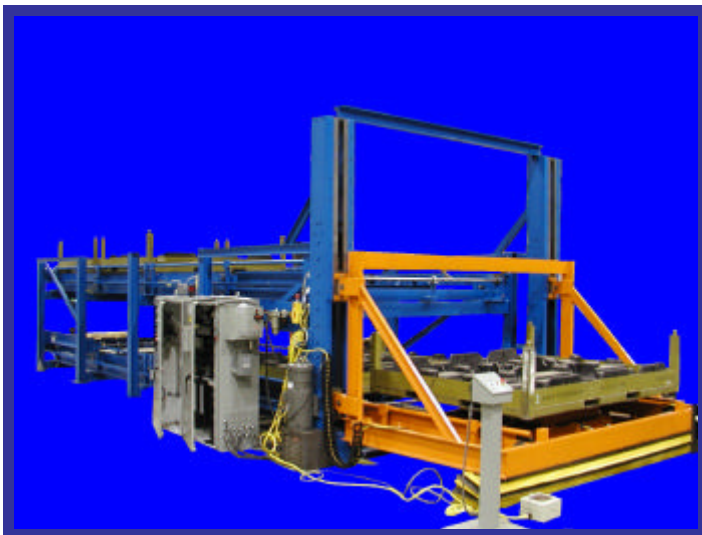
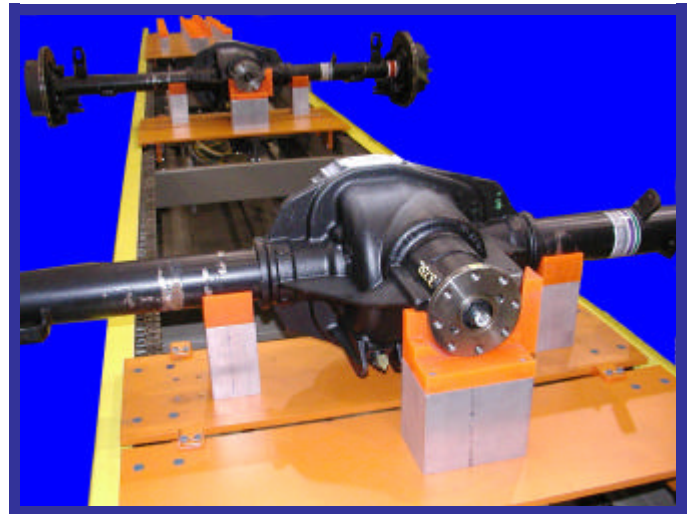


Steering Column Mod.  
Fixture Plate Assembly



## Rear Axle Sequencing Conveyor

Rear Axles are conveyed and sequenced on an Over/Under Accumulating Pallet conveyor. At the load end, the load operator releases a full pallet which travels 60'-0 and accumulates with other full pallets. As axles are unloaded the pallet is released by the unload operator and travels around the head shaft. The empty pallets accumulate on the return side chains and are released from a stop permitting the pallet to travel around the tail sprocket. The pallet pauses at the first upper stop awaiting the operator to load the next axle.

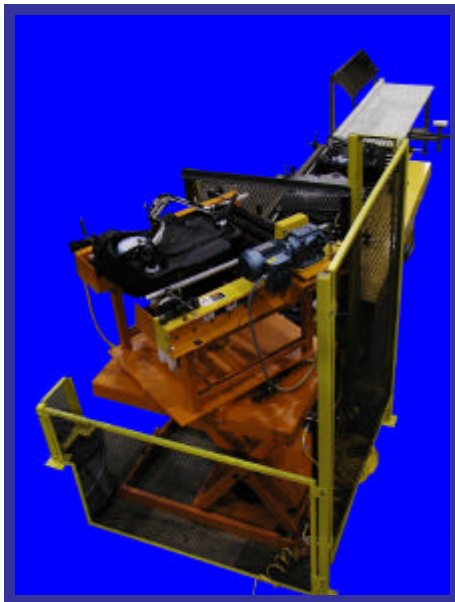
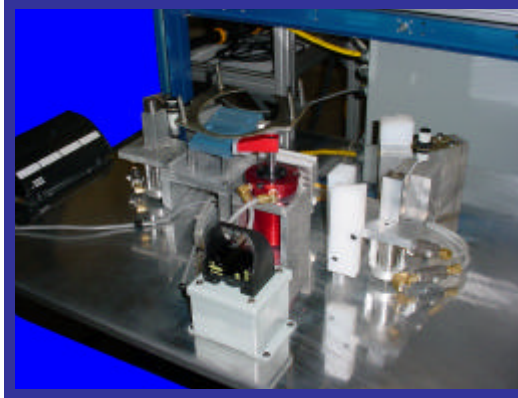


## Over/Under Rack System

Large rear axle racks are handled on a 9-position Over/Under system. The rack is powered throughout on dual strand OMNI Zone chain conveyors. The elevator is powered by dual ball screws. The elevator also includes a powered 180 degree rotate to present parts in proper orientation for removal with a lift assist device.

Steering Column reinforcing plates require assembly and torquing of brackets. The unit is designed to handle six different parts & provide PokaYoke verification before the operator can remove the part. Controls provide for capture of information sent to upper data management systems. The system also generates a barcode label for each assembled part. Ergonomic features include two tool balancers, adjustable height fixture table and two-hand pushbutton controls.

### Steering Column Mod. Plate Assembly Fixture



### Fuel Tank Sequencing Conveyor

Fuel tanks and various tank components are finish assembled on a build table and are pushed off onto a 4-station zero pressure chain driven live roller conveyor. The fuel tank indexes onto a hi-cycle lift table with a powered rotate table. The lift raises 32", the rotate turns 30 degrees and positions the tank for operator pick up with a vacuum cup type manipulator. The operator pushes a cycle button and the lift and rotate return to a load position. The operation then repeats.





*"OMNI is committed to provide continuous quality improvement and solutions that will increase the satisfaction of our customers with efficiency, first run success, on time delivery and zero defects."*

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VISIT US AT  
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OMNI Technical Services Inc. is a single source solution for part, rack and pallet handling problems. We offer a variety of standard and patented systems to help companies reach their goals of higher production and lower costs.

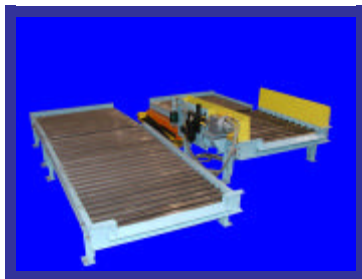
OMNI is located in St. Johns, Michigan. Our engineering professionals have many years of experience in systems design. Our 45,000 ft. facility provides the manufacturing capabilities necessary to meet volume production and delivery requirements.

Established in 1978 to serve manufacturing industries, OMNI has devoted years to the design of pallet handling systems and many more to test and develop them. Through this, we have achieved a proven line of ergonomic products and 18 years ago we started an in-house division. This division, **OMNI Ergonomics**, with its specialized experience and engineering can better handle and integrate your ergonomic applications.



**OMNI Ergonomics**

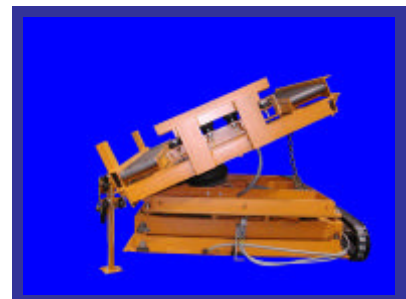
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5-position Side x Side  
with Lift Table



3-position Side x Side with  
Lift, Tilt and Rotate



Lift and Tilt with Conveyor