



Integrated Materials Handling Solution

The automotive industry now requires our customers to build customized commodities like seats, instrument panels and other interior components in separate manufacturing facilities then transport the finished products, in sequence, to the auto assembly plant.

We analyze logistics by studying broadcast time, through-put-rate, assembly complexity, target build time, buffer size requirements, and travel time to the assembly plant. We conceptualize a layout and perform design analysis to arrive at the best-integrated materials handling solution. We work with our clients to develop the best type of build line conveyor and buffer and storage system, how to accumulate and stage full truckloads of finished goods in a guaranteed in-sequence order, and then load the trailer efficiently and safely. We also analyze all factors to determine the optimum number of trailers that are required—balancing trailers to distance.

The result of our design, product selection and application is a working system between the plant and the just-in-time supplier. We work with both plants to ensure seamless integration giving our clients maximum control of staging, shipping and receiving.

Advanced Systems has earned a reputation as a leader in the just-in-time build and delivery process. A recent project was successful because we worked with our customer to understand the complexities in building their products and delivering those products to their customer. Some highlighted features of that installation are listed on the next page.

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Simple Innovations

We sought to put the door at the shipping dock on the outside of the building, using a rolling steel curtain door. This allowed the conveyors inside the building be moved forward right to the edge of the shipping dock. The reduced gap between the conveyor on the dock and the conveyor in the

trailer, ensured a smoother transfer of product and reduced the need for costly powered bridges to cover that span. The result was a savings in equipment and loading/unloading set-up time, improving overall efficiency.



Unload Integration

We developed an integrated unloading system for the client. The truck driver secures the truck to the just-in-time assembly plant building by pushing a single button that locks the trailer restraints. The trailer is then interlocked with the control communications of the assembly plant. A benefit of our design is that if the plant system is too busy to take the

whole truckload at once, it meters out the truckload at line speed. Another benefit is that the truck driver cannot pull away until the system releases him to go, eliminating a premature departure. This integration provides automated processes, improved ergonomics & safety and reduced operational expenses.

Accommodate Different Commodities

At the assembly plant, we had to receive different commodities of vastly different physical dimensions and weights. The 2,000 lb. engine/axle assembly had very different physical attributes than the lightweight instrument panels. We designed, selected and installed a single style of shipping, receiving and trailer system to accommodate both product loads and reduce

spare parts. Our installation included the shipping system at the manufacturing plant, the conveyORIZED trailers and the unload system mentioned above. The result is a system that is a process-driven shipping solution that is designed to exceed their requirements for throughput, flexibility, adaptability and return on investment.



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