SITUATION:

One of our automotive customers had an urgent problem. Their steering system housings were not completely sealed, and as a result, the units were being compromised in northern and eastern regions where snow and salt were entering the housings, corroding the motor drive within, and causing the units to fail.

Further, a large quantity of housings was en route and needed to go out over the next 48 hours, However, with this now known problem, our customer needed to correct the leak issues before any of the housings could be sent out.

Adding to the magnitude of the problem was that if our customer could not solve the problem and get the shipment out on time, they would lose the contract and have to shut down the location.

CHALLENGE:

Our customer recommended we lay all the units out horizontally and then spray them with a wax spray. Then, after drying, flip them over and spray the other side.

However, with available space limitations, drying time, handling...etc. this could not be done expediently enough to meet the deadline. Further, product was already arriving, and there was no time to ship it to another location with more capacity.

Additionally, the wax spray also needed to be kept contained so not to contaminate any other parts, orders, and equipment also in the warehouse.

STRATEGY:

At first, we constructed temporary structures to accommodate greater numbers of units and adjusting the temperature in the warehouse to expedite drying time.

However, keeping the housings on their side and spraying them twice was taking more time than we had left. If the deadline was going to be achieved, then that variable needed to be resolved.

ISS suggested the units be hung vertically, on a swivel hook, which would allow the units to be sprayed completely in a single pass. Our customer's engineers told us that this method would maintain their quality standards and we were approved to proceed.

We could now spray three times as many components on a single rolling rack. This also decreased drying time, and greatly reduced the amount of warehouse space needed.

OUTCOME:

ISS overcame the time and space limitations to set up the warehouse with forks, an overhead hoist, rolling racks, built a plastic containment structure, implemented an efficient process flow and fulfilled every order - all over a single weekend.

ISS ensured the housings met all quality requirements, got every order out before the deadline, and most importantly, our customer did not have to shut down their location.