



# Costly plant expansion? Forget about it...

**Toyota consolidates manufacturing of pickup trucks; ActivRAC™ mobilized storage system puts existing storage space to work**

## **CHALLENGES:**

There are many advantages to consolidation, especially when a manufacturer can keep its plants at full capacity. To do just that, Toyota combined its Tacoma and Tundra operations at the Toyota Motor Manufacturing, Texas, Inc. (TMMX) plant in San Antonio, Texas.

But it also created a challenge: How to effectively store spare parts for production machinery, as well other items, in its General Stores area and avoid a facility expansion. Tougher yet, storage space in General Stores was already maxed out. Plus, materials needed to be organized and extremely easy to access in keeping with Toyota's legendary passion for efficiency.

In short, TMMX officials needed to rethink their existing stationary pallet racking scheme and come up with a way to make 5,000 square feet of storage space do way more than ever before.



The ActiveRAC mobilized storage system allows TMMX to gain 54 percent more storage space in the same footprint – and put the space to work – since it replaces stationary racking systems shown below.



## SOLUTION:

Jim Smith and the San Antonio office of Southwest Solutions Group, an authorized Spacesaver® Industrial™ distributor, recommended an ActivRAC™ mobilized storage system. Manufactured by Spacesaver Industrial, the ActivRAC system designed for TMMX is built with mobilized carriages that move side-to-side on a rail system. The industrial-grade carriages, which ride on wheels mated to rails, can be configured with existing or new pallet racking, shelving and cabinets. In this instance, TMMX was able to use existing pallet rack. Users decide how many carriages to move at a time opening an aisle only where needed to eliminate unnecessary aisle space – and as much as double the amount of storage space in the same footprint.



Recessed rails on the ActivRAC system create a smooth surface for forklift travel.

is equipped with existing and new pallet racking. Pallets, along with a smattering of boxes, sit on wire decks on the pallet racking. The system offers five separate levels of storage – each of which is matched to dimensions of stored materials to conserve space.

A forklift is used to access pallets – a job facilitated by the wire decks. For added efficiency, the ActivRAC system is equipped with remote control so that the forklift operator can select and open an aisle before reaching the storage unit. Otherwise, users simply push a button located on the front of each carriage to open a 12-foot-wide aisle that leaves ample room for forklift maneuverability. The ActivRAC system is also built in an L-shape so forklifts can easily travel past the system diagonally to get from one side of General Stores past the mobile pallet racks and into the plant as required. To

At TMMX, the electric powered ActivRAC system stores nearly 100 percent of the spare parts for machines that keep production up and running. Parts include everything from tiny gaskets and motors to large pumps and transformers. The 16-foot-high mobilized storage system features four carriages that ride on rails. Each carriage



The staggered carriages of the ActivRAC system form an L-shape, providing ample room for storage yet allowing traffic to freely flow in, out and around the General Stores area.

create the L-shape, two carriages are 63 feet long and two others are 36 feet long. Stationary racks located on both sides of the system house consumables and other frequently accessed items.

## RESULTS:

Rather than take on a facility expansion, TMMX put the ActivRAC system to work and gained 54 percent more storage capacity in the same footprint. There's also room for additional storage, even though the plant is humming at peak capacity and producing 200,000 vehicles per year as planned. There's also great pride among those in General Stores since the department is the model of efficiency. With an ActivRAC system in place, the team can quickly locate, access and deliver items – despite a major

increase in the number of additional items stored as part of the consolidation. To borrow from the Toyota slogan, General Stores and the TMMX plant is moving forward.

“ Even before the consolidation there was a lot of congestion in General Stores due to the lack of space. It took much longer to find and retrieve items than we wanted. But now that we have the ActivRAC system in place, we save as much as one hour a day – making it a much better situation for our team and the departments we serve”

Jose Rivera, General Stores  
Assistant Manager  
Toyota Motor Manufacturing,  
Texas, Inc.

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