

UNEX CASE STUDY



“Individuals work from a convenient work table with parts, lights and tools all within reach, rather than having to move around to different locations to find things,”

- Ben Hitchens, Materials Manager

customer: **BraunAbility®**

operation: World's leading manufacturer of wheelchair-accessible vehicles and wheelchair lifts

goal: Add new assembly line in same footprint, improve overall plant productivity

solution: FlowCell from UNEX



Picking up the Pace and Maximizing Space with FlowCell

When car companies launch new minivans and SUVs, workers at BraunAbility® gear up to take them apart.

BraunAbility transforms thousands of vans, SUVs and taxis into handicapped-accessible vehicles and builds tens of thousands of wheelchair lifts every year. The work is complex, fast-paced and growing rapidly.

“To keep pace with growth, we needed to find a new carton flow solution that would allow us to fit more product in our footprint and keep our lines moving quickly,” says Ben Hitchens, Materials Manager for BraunAbility.

FlowCell from UNEX turned out to be the perfect fit, allowing BraunAbility to replace clunky pipe and joint structures with flexible modular and portable workstations for the company's ever-expanding lineside and sub-assembly operations.

The BraunAbility Back Story

In 1962, Ralph Braun built his first motorized wheelchair in a small farm shop. Ralph had spinal muscular atrophy and had been unable to walk since the age of 15. He was determined to find ways to be more mobile, rather than having someone push him in a wheelchair or lift him in and out of vehicles. In addition to the motorized wheelchair, Ralph built tri-wheelers in his parents' garage and invented the first wheelchair lift, paving the way for the first full-sized handicapped accessible vans.

As Ralph's inventions mounted, so did the interest in his mobility solutions. Today, BraunAbility offers the broadest line of wheelchair accessible vehicles and wheelchair lifts across the United States, Canada and various international locations. Approximately 1,000 employees work for BraunAbility.

“It's incredibly rewarding to know that we help thousands of wheelchair users gain mobility and independence every year,” says Ben. “We want to keep building on Ralph Braun's legacy. Having the right equipment helps us do that. That's where UNEX came in.”



FlowCell Racks to the Rescue

BraunAbility geared up for an exciting opportunity in early 2017: upfitting Chrysler's new Pacifica to create the most spacious wheelchair-accessible minivan in the industry. To make that happen, BraunAbility needed to build a new assembly line at its Indiana plant, and the team had to do it fast.

"When a company like Chrysler launches a new vehicle, our clock starts," says Ben. "Developing a new line is like a fire drill. Speed is critical. You can't have any delays in getting product out the door."

In the past, pipe and joint structures served as storage for the multiple parts and tools required to convert vans and cars into accessible vehicles. The structures "were a monster," says Ben. "They had hundreds of tiny components and took hours or days to build. They kept getting bigger and taking up more space. We added small pallet racks, but they did not give us the flexibility we needed."

Greg Miller, Account Manager at Crown, a manufacturer of powered industrial forklift trucks and a variety of material handling solutions, told Ben about UNEX FlowCell and showed him the product on the UNEX website. Ben ordered a handful as a test, and before long, more than 100 FlowCell racks took shape for the Pacifica assembly line and replaced cumbersome storage systems on other lines. "We like the product so much that we keep adding more," says Ben.

Big Benefits for BraunAbility

Better use of space is one of the major benefits of FlowCell for the BraunAbility team. FlowCell is proven to increase space utilization by up to 50 percent.

"Before FlowCell, if we had to add a bin, it was like an act of Congress to pull the rack apart, cut new tubes and install the new rack," says Ben. "With FlowCell, we only have to stock four parts because the racks are modular. We standardized to a 48-inch beam with a 32-inch depth, and the beams are interchangeable. We can swap out parts or expand racks with simple tools and have the line up and running in no time flat."

Productivity also has increased significantly for sub-assembly workers. FlowCell workstations allow workers to efficiently complete small assembly tasks such as welding components, modifying doors or preassembling axels. "Individuals work from a convenient work table with parts, lights and tools all within reach, rather than having to move around to different locations to find things," says Ben.

Workstation designs ensure a safe, ergonomic pick since parts flow directly to the individual. "We don't have to worry about people picking up bins or reaching under a bench to get them. They work right off the flow rack, which helps keep them safe and saves steps and time."

Tough and Clean

FlowCell durability gets high marks from the BraunAbility team. "I can put lightweight parts or flow a 50-pound bin of heavy metal parts and never worry about whether the joints will pop or come apart," says Ben.

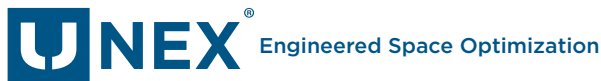
FlowCells are made of heavy gauge steel construction. They are up to 13 times stronger than 28mm tube and joint flow rack systems and will support up to 1,000 pounds per level.

"UNEX gave us a clean, organized solution that makes the plant look uniform and very professional," says Ben. "We're proud of the work we do and proud of the place where we do it."

'No Hiccups'

Partnering with UNEX and Greg Miller at Crown to find the right flow rack solution has been a positive experience for the BraunAbility team. "There have been no hiccups. We're very pleased. Materials get here quickly and without backorders."

Greg adds that introducing BraunAbility to UNEX was a great decision. "UNEX works with the customer to understand their unique business, rather than simply providing a quote on a job." As result of this approach, UNEX delivered a solution for BraunAbility that maximizes space and helps a growing business keep pace with demand.



UNEX MANUFACTURING, INC.

