

CASE STUDY

Problem

An automotive component manufacturer was using specially designed carts to transport air-conditioning cores from final assembly through a wash down/degreaser and on to shipping. Because of the wash down the carts could not be steel for fear of rust and part contamination, so they were constructed using PVC plastic pipe. While the carts functioned well for a time, the combination of weight and constant motion/vibration quickly took their toll and they soon began to fall apart. After realizing the limited lifespan of these carts, management decided an alternative material had to be found.

Solution

The plant engineer decided on AluFab aluminum structural framing for the next generation of carts. The 1" square t-slot extrusion keeps weight to a minimum while retaining the strength needed to support the weight of 36 cores in one load. The clear hard anodized finish holds up well under repeated wash downs and the special anchor fastener assemblies remain tight despite the vibration and rough handling. Because the extrusion t-slots allow for unlimited customization, it was a snap to attach more ergonomic handles, stronger plate-mounted casters and a special hood to keep dust off the cores while awaiting packaging. On top of all that, the aluminum framing looks much better than the plastic pipe. The new aluminum extrusion carts were so well received that the company's Mexico plant is now placing orders to replace their PVC carts as well.