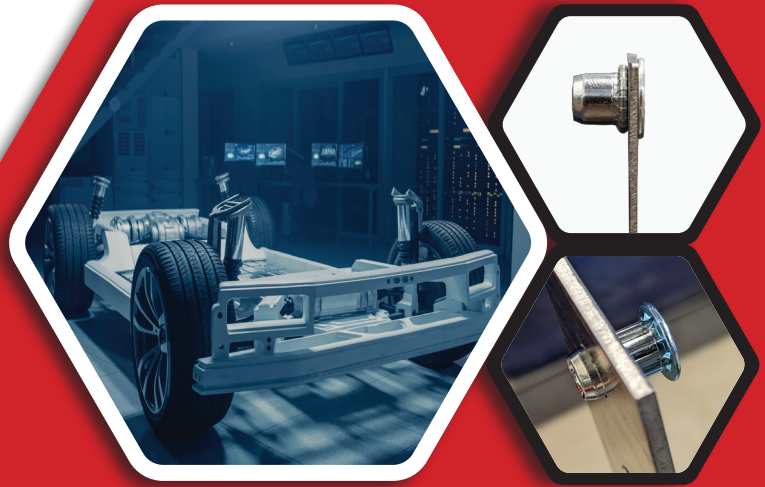




SHEREX FASTENING SOLUTIONS®

# CASE STUDY

## Optisert® Prevents Costly Design Change



### The Challenge

A Tier 1 Automotive supplier in Michigan manufactures aluminum frames for a large electric vehicle truck manufacturer; they were facing problems on the assembly line at the OEM with round body rivet nuts (Sherex CAL Series) the spinout was 8 Nm, while the assembly torque was between 10-12 Nm. This caused significant rework and logistics costs.

With 37 rivet nut installation points combined in both rails, the OEM had a decision to make: redesign the rails to accommodate a hex body rivet nut (FHL Series) that would meet the torque values and spend six-figures to purchase equipment to produce hex holes, or possibly change to an even costlier method of fastening for the installation.

### The Solution

Sherex had a better solution – keep the round holes and use a better performing round body rivet nut with underhead wedges and aggressive knurls. Sherex’s new round body rivet nut, Optisert®, had been released just a few weeks earlier and it was a great opportunity to see how the new standard would work in a high volume application.

The results were great. Optisert achieved more than 20 Nm of spin out in the application.

The tier also adapted Sherex’s Hand Tool Calibration Units to the line. Through regular interval checks, an operator can check the force of their FLEX-5 spin-pull rivet nut tool on a Sherex Hand Tool Calibration Unit to make sure it was pulling at the right force.



Sherex’s Hand Tool Calibration Unit

### The Savings

Since the adaptation of Optisert and the Sherex Hand Tool Calibration Unit, the tier has had a total of ZERO spin-outs and eliminated the rework of installations. By using Optisert, the OEM avoided spending over six-figures on a redesign & new tooling, as well as additional costs for hex body rivet nuts.

Ultimately, shipping the rails back to the tier for rework and OEM line down time were eliminated due to the tier’s willingness to consider new technologies. Optisert provided a better solution with no change to the design and tooling, while providing better quality and throughput.



### Cost savings:

Changing Rails from round to Hex Body:	\$150,000
CAL Series to Hex Body:	\$79,000
CAL Series to Optisert:	\$22,000
Rework / Shipping:	\$23,000
<b>Total Savings:</b>	<b>\$230,000</b>

**Sherex is a global manufacturer with a unique market approach in engineered fastening solutions that combines fasteners, tooling, and automation to deliver the best solution at the lowest total installed cost.**

**Sherex Fastening Solutions**  
400 Riverwalk Pkwy, Suite 600  
Tonawanda, NY 14150  
866.474.3739

info@sherex.com  
www.sherex.com

