# SIMULATION SUPERSEDES PHYSICAL TESTING

## Challenge

*Hilton manufactures products for diverse industries including* ***transportation (truck, bus, rail, & leisure), civil, healthcare, and defence****, many of which have stringent regulatory requirements such as bull bars, bumper bars, and fuel tanks. When developing new products or product variations, regulations typically require* ***expensive physical prototyping and testing****, resulting in delays to product release and high development costs per variation.*

## Solution

*Engineers at Hilton use ANSYS Mechanical to provide useful insights into the structural performance of new designs, identifying opportunities to* ***save weight and improve product stiffness*** *using multiple rounds of virtual testing. Significantly, Hilton's FEA workflow using Ansys has been validated against previous physical testing and is now accepted as satisfying regulatory testing requirements, meaning that a* ***final product design can be certified purely using ANSYS FEA values*** *– resulting in significant cost savings and drastically reducing their time to market.*

## ANSYS Advantage

*"Simulating our mechanical products with ANSYS has delivered Hilton a significant competitive advantage which allows our engineering team to deliver new products much faster and cheaper by removing the requirement for physical testing. Using ANSYS has* ***reduced our certification costs per new product by up to 80%****."*

*Steve Cooper, Head of Engineering, HILTON MANUFACTURING*