



On the home page of the Healey Werks you'll find a simple but appropriate phrase: "the premier automobile restoration company." Cruise around the company's website, www.healeywerks.com, and you'll be dazzled by the vintage Ferrari, Maserati, Jaguar, and Austin Healey cars that the company brought back to their glory days.

But look beneath the glossy paint and glistening chrome and you'll discover that Healey Werks has a secret: many of the cars they have restored are not just as good as the day they rolled out of the factory . . . they're *better*.

"Our goal at The Healey Werks," says President Craig Hillinger "is to achieve a higher level of excellence with each project. As a result, we're constantly asking ourselves, 'How can we do that better?' That's why we bought ZW3D – to help us raise the bar on quality."

The challenge can be daunting. "Often we're asked to start with less than a complete automobile, and customers will frequently say that they want the car to be more reliable, to stop better, to accelerate faster or to handle better. At that point it becomes a design or R&D situation where we are pushing beyond where the factory engineers left off. For that, ZW3D is invaluable."



ZW3D is used constantly at The Healey Werks. It has been used to design such diverse parts as a trigger wheel sensor for a customer who wanted custom designed traction control, intake manifolds for custom fuel injection, and "out of nothing" suspension elements. Sometimes ZW3D is used to replicate specialized factory tools that are no longer available.

ZW3D helps The Healey Werks successfully deal with the sheer age of some of the cars they are restoring. "If we're building a vintage sixties V12 Ferrari and we need a bushing that is thirty-one thousandths bigger to compensate for wear, you can't order it from the factory; they'd just laugh at you," says Nick Lahrs, The Healey Werks shop foreman. "But you can design what you need in ZW3D and use the CAM feature to make it on one of our CNC machines."

With ZW3D, The Healey Werks can move and align parts, whether solid or wire frame, so that they can monitor internal structures and strength. "With ZW3D," Hillinger says, "we can know better what we're building and be intimately familiar with all aspects of a part. We can have a better idea of how the part will react in a real-world setting."



A Triumph TR7 being restored with the help of VX.

Using a digital laser scanner, The Healey Werks can scan parts, import them into ZW3D, manipulate the design in ZW3D, and send the result to the customer for approval. "Importing, visualization, and video enhancement in ZW3D is key to what we do," Hillinger says. "If you're going to morph the fenders of a vintage car so you can install disk brakes, it's infinitely better to be able to do it in ZW3D first."

ZW3D has expanded The Healey Werks' vision of what they can do. "Our focus is much broader now that we have this tool in house," Hillinger says. "Maybe we would have suggested the same approach to meeting the customer's need before, but now – with ZW3D – we can get there a lot

more efficiently. We produce more accurate drawings and discover design or engineering issues before we cut metal."

He adds, "We had the choice of stagnating or moving ahead. It became really apparent that we needed the capability to design and/or replicate parts to serve the restoration work, and that's where ZW3D became an integral part of what we do. Using ZW3D benefits us and our clients as we raise the bar of quality standards higher and higher."

About Healey Works

[The Healey Werks](#) is the premier provider of motor car restoration. We serve a worldwide clientele from North America, Australia, Japan, Argentina, and nearly every European nation. Our diversified forte extends from vintage Ferrari, Maserati, Aston Martin, Jaguar, Austin Healey, and other European specialty/sports cars, to North American Pre-war, vintage, muscle, and luxury vehicles.

We firmly believe that assembling the finest team of talented professionals, utilizing superior products and materials, and holding true to integrity, creates an unsurpassed finished product. We are constantly refining talents, developing methods and procedures, and innovating materials and products to make each finished project better than our last.

More importantly, we believe in treating people with respect and dignity. We believe it is our responsibility to encourage others, keep family priority and to reach out to organizations who make significant impact and life change possible.