The Healey Werks builds classic cars better than new, with the help of VX CAD/CAM

n 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 the company has brought back to their former glory.

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 simply 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 VX, to help us raise the bar on quality."

VX - An Invaluable Tool

The challenge can be daunting. "Often we're asked to start with less than a complete automobile, and frequently customers will say that they want the car to be more reliable, to stop better, or to accelerate or

handle better. Then it becomes a design or R&D situation where we are pushing beyond where the factory engineers left off. For that, VX is invaluable."

VX 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 pieces. Sometimes VX is used to replicate specialized factory tools that are no longer available.

VX helps The Healey Werks deal successfully 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, Healey Werks shop foreman.

"But you can design it in VX and use the CAM

66Our focus is much broader now that we have VX CAD/CAM in house. 99

feature to make it on one of our CNC machines."

Real World Solutions

With VX, The Healey Werks can move and align parts,

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

Using a digital laser scanner,

The Healey Werks can scan parts, import them into VX, manipulate the design in VX, and send the result to the customer for approval. "Importing, visualization, and video enhancement in VX 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 VX first."

VX has
expanded The
Healey Werks'
vision of what they
can do. "Our focus
is much broader
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this tool in house,"
Hillinger says.

"Maybe we would



A Triumph TR7 being restored with the help of VX.

have suggested the same approach to meeting the customer's need before, but now – with VX – 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 VX became an integral part of what we do. It benefits us and our clients as we raise the bar higher and higher."

- About VX Corporation -

VX Corporation is a pioneering developer of advanced, integrated CAD/CAM solutions for engineers and industrial designers. Using VX's design-through-manufacturing solutions, companies can speed time-to-market, increase profitability and gain a sustainable competitive advantage - made possible by new breakthroughs in technology, price and performance. Unlike conventional CAD/CAM systems, VX technology is built on an exclusive, high-performance VX engine that delivers sophisticated 3D hybrid modeling capabilities and provides interoperability with emerging process management and engineering tools. Some of the world's leading manufacturers rely on VX software to power the design, engineering and manufacturing of innovative products.

