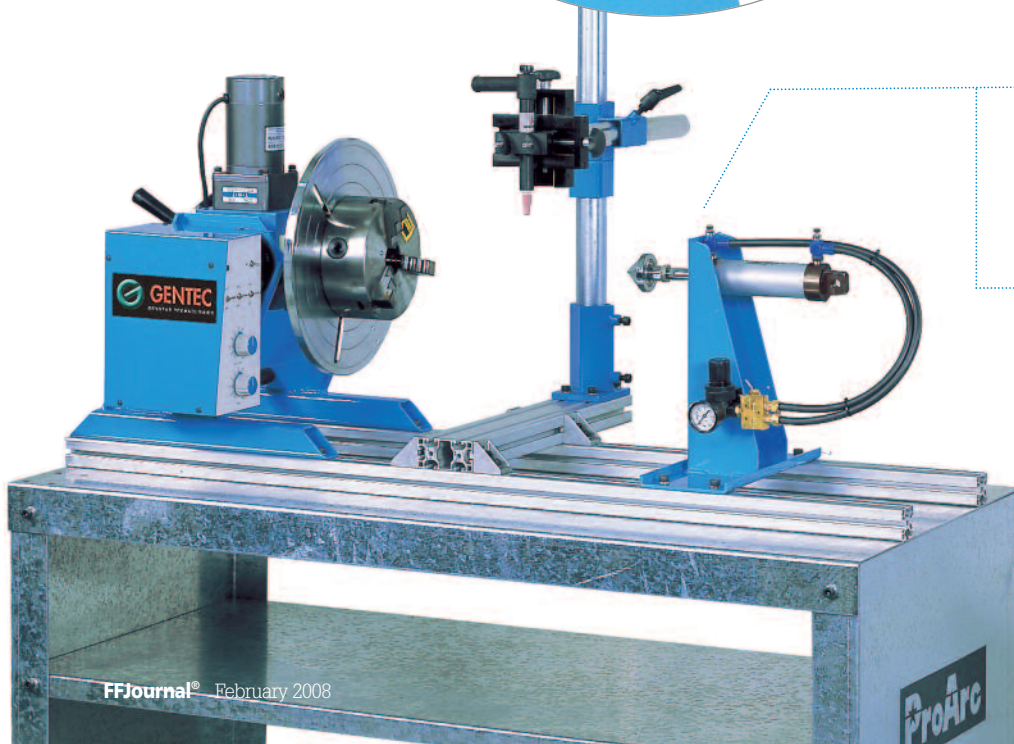
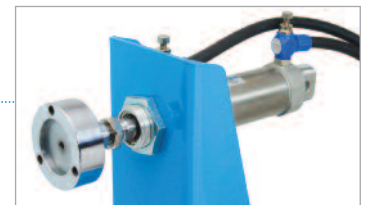
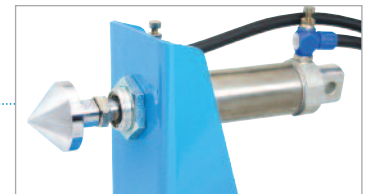


EZ Arc's
functionality is
limited only
by the
creativity of
its users



With four starter kits to choose from and a wide array of accessories, EZ Arc is heavily customizable to a customer's needs.

Television has come a long way since the one-button clicker and four local channels that switched to colored bars after 10 o'clock. The same can also be said for welding.

Today, couch potatoes choose between hundreds of channels offered through countless specialized packages from their cable companies. Only want channels with 24-hour bobsledding coverage or channels that cover the Mongolian parliament? Not a problem. Add in cable recording devices and on-demand services and viewers can pretty much make their television experience be exactly what they want.

That level of deep, personalized customization is also available in automated welding. The EZ Arc is a welding automation system from Genstar Technolo-

tems and have totally customized them," says Victor Palzes, vice president of marketing for Genstar. "They start with a basic kit that's modular. They can build a small system in two-part numbers. From there, they can let their imagination run wild as far as what they can do with the system and how to configure it for the size of their part."

To begin, a user selects a positioner and one of four different do-it-yourself kits: S-type, L-type, U-type or R-type. These base kits come CE conformable with a 1-in. through hole, a remote foot switch for on/off controls, a weld timer,

Indeed, the only vital component to the EZ Arc system not listed on the Genstar Web site is user imagination. Palzes has no shortage of examples of customers taking EZ Arc and implementing it in ways even he didn't know the product was capable of.

"There was one customer that was firing three torches simultaneously and running more than 600 amps through the part at one time," says Palzes, adding that 600 amps is more than twice the EZ Arc's electrical load rating, but that amount of power didn't bother the unit at all.

Another customer has created a master work table with five different EZ Arc systems working together throughout the day. "The only grounding he's using is the common table through the units," says Palzes. "The fact that the different arcs are

Imagination stations

gies, Chino, Calif., that takes the concept of "build your own" to new heights by giving users the freedom to create a system that works exactly how they want it to work.

EZ Arc comes in four different starter kits and has a wide array of accessories that can be attached and implemented in any number of ways, be it to a GTAW, GMAW or plasma application. These accessories are constantly evolving with customer needs. More simply, welding tasks and processes don't need to be shoe-horned to fit EZ Arc because EZ Arc is built to be customized.

If you build it...

With its simple, option-driven approach and distinct, open-ended quality, EZ Arc encourages users to think creatively.

"I've got people that have taken these sys-

tems and a heat- and spatter-resistant air hose. From there, a breadth of kit components is available to meet specific needs and exercise the imagination of the user. Users can select from base rails measuring 24, 48, 60 and 72 inches long; two sizes of mounting rails; end, support and cross brackets; tailstocks; and a V-block torch holder, just to name a few.

There are also optional accessories such as 3-jaw chucks, weld tables, a pneumatic torch lift, a pneumatic torch slide, a variety of control boxes, and a flange-adapting fixture that allows users to build their own jig so that highly sophisticated and hard-to-hold parts can be handled with ease.

"It's a plug-and-play approach to welding automation," says Palzes. "But it's so versatile that you can customize it and personalize it to fit your exact part requirement."

firing on and off at different times during the day has never affected any of the welds or any of the motion."

Palzes also comments on an operation that combined its rail sections and tilted them at a 45 degree angle so parts up to 27 feet long could be accommodated. Still another put the entire system in the vertical plane. "I never saw or could imagine what he was doing with it, but he wanted the thing to literally be straight up and down," says Palzes.

A new methodology

It's this distinct flexibility and feeling of personal ownership with EZ Arc that attracted Manufacturing Methods LLC, Leland, N.C., a total capabilities provider for design, engineering and manufacturing needs. Westwood Mfg., Elizabeth Town

Welding

NC an EZ ARC Distributor designed and integrated a turnkey system for Manufacturing Methods to perform welding tasks on carbon couplings which, once fused, go on to be used in safety equipment.

“We were looking for something that was going to be simple for the operators,” says Pete Peterson, owner and managing partner of Manufacturing Methods, when strategizing with co-owner and managing partner Matthew Gunning about what system to purchase. “We were looking to go fully robotic. However, all of our

welds were completely cylindrical so we didn't really need that ability to have six axes. That was really the main thing. Of course, it was a big cost difference compared to a fully robotic system, as well.”

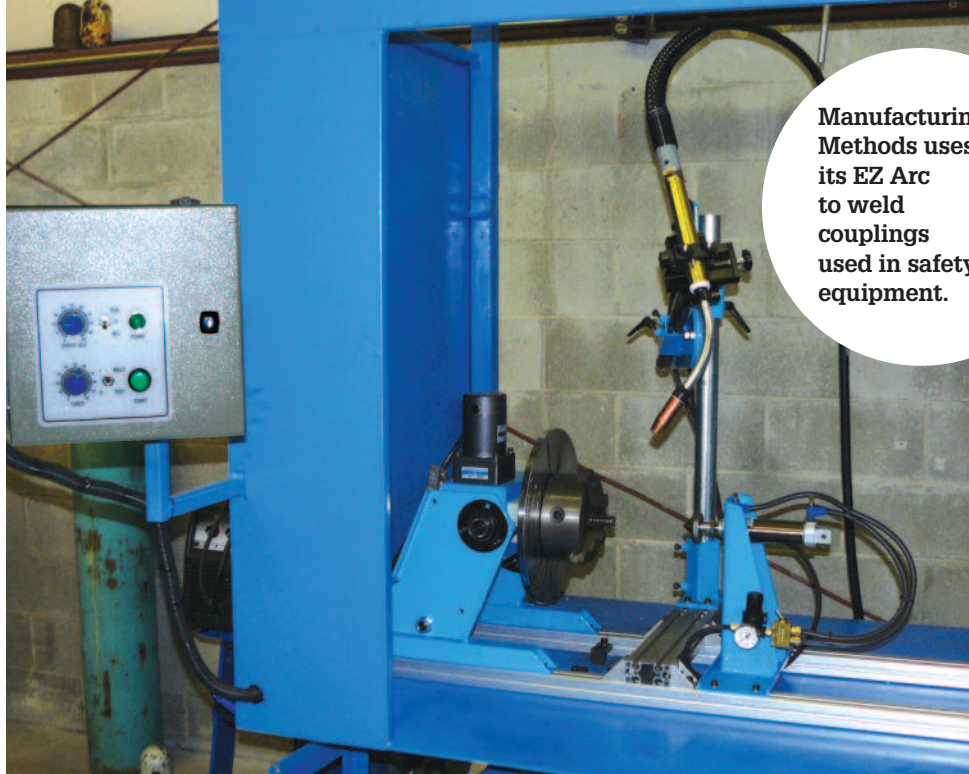
Since implementing the EZ Arc, Manufacturing Methods has seen hourly productivity increase significantly, churning out welded products up to three times as fast as other, similar operations.

“We're probably getting two to three times the hourly productivity that [some of our customers are] getting with their welding cells with the same application,” says Peterson. “They have fully robotic cells that are six axis and their production numbers are nowhere near ours. We have less scrap because it's all hard stop and is joined with a powerful and advanced welding supply.”

In fact, the company is considering purchasing another EZ Arc system for the same function in the future.

While Manufacturing Methods has found efficient uses for the accessories it purchased with the system, such as the pneumatic torch actuator, the company also tapped into its own wells of ingenuity to further configure the system to its specific needs.

“We actually took the system a little bit further and manufactured somewhat of an automated cell for it,” says Peterson, adding that the company had its own version of the automated system with a sequencer



Manufacturing Methods uses its EZ Arc to weld couplings used in safety equipment.

control that EZ Arc offers, so it decided to adapt, manufacture and implement it into the process, with positive results.

Peterson also describes EZ Arc as a “perfect application” for butt connections, phalanges, or basically any type of low or high-cylindrical welding, where everything on the piece is cylindrical.

Specialized savings

One concern with welding automation systems, such as EZ Arc, is what becomes of the skilled labor the system replaces. While EZ Arc does automate menial welding tasks, Palzes sees it a different way.

“I don't think we replace people, I think we free up the skilled people to do things that are more demanding,” says Palzes. “It's what we call simple hard automation. We're allowing a skilled operator to do more important, demanding tasks while giving him something that he can monitor. He can set up the process and then the machine operator can do the repetitive work for him.”

Costs can also be saved elsewhere because the price of replacing or repairing EZ Arc parts pales in comparison to purchasing custom fixtures, which can cost a company tens of thousands of dollars.

“I was talking to a guy who was going to replace a robotic work cell with an EZ Arc,” says Palzes. “Now, EZ Arc won't do everything a robot will do, but obviously he had an application where he was tying

up a robot to do what he could do with one of our systems, at a fraction of the capital cost.” And even more savings are incurred as the robot is freed to do another task more fitting of its capabilities.

Since the base idea for EZ Arc came about some 20 years ago, it has been continually evolving and adapting to customer demand and feedback, with new accessories and attachments constantly being developed. It can interface with virtually all major types of welding process equipment and is compatible with all industry standards.

“They have a good system,” says Peterson. “It's pretty much put together; you just buy the components you need. If you don't need it, you don't buy it.”

EZ Arc strives to be an easy-to-use, efficient system that users can feel is completely their own, whether it is used in simple, single-torch processes or grand, more ambitious applications. And, with a little imagination sprinkled in, there's no telling what its limitations are. **FFJ**

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