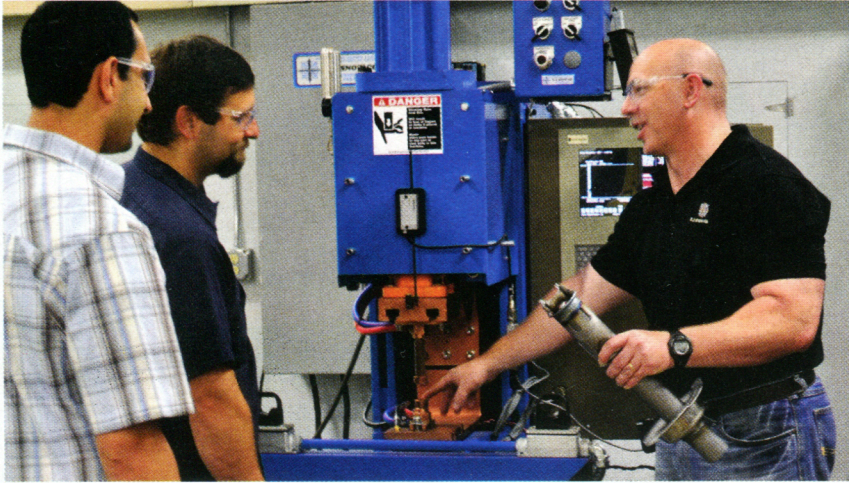


Resistance isn't futile



At the beginning of the year, Tennessee-based T.J. Snow Co. named five of its employees as Certified Resistance Welding Technicians (CRWT), a new designation from the American Welding Society. In November 2014, those five took a 100-question exam on all areas of the resistance welding process. Now, in addition to the resistance welding classes it already offers, T.J. Snow, a supplier of industrial resistance welders, will add training classes to prepare applicants with the specialized knowledge needed to pass the test.

But where does the test fit into the overall awareness, applications and support of resistance welding? What does it do for resistance welders who take this test?

Tom Snow, CEO of T.J. Snow, who has been working in resistance welding for 42 years and also passed the test, says that the certification gives the company's techs added credibility. "It makes us stand out from the crowd and proves that we know what we're doing."

Snow is the first vice chair of the Resistance Welding Manufacturing Alliance, a 75-company-strong committee under the AWS that determines the content of the test. He says that the RWMA has been promoting certification for years because of an industry-wide lack of understanding of the process. Although the AWS has of-

fered certifications related to arc welding for many years, resistance welding has been an orphan.

"Resistance welding has been viewed as a very simple welding process and it is not widely understood outside of the automotive industry," Snow says. "Although it looks simple, there are lots of variables that must be recognized and controlled."

Take automotive manufacturing. With an average of 6,000 spot welds in every car, if it weren't for the resistance welding process, cars would either fall apart or cost a lot more. Within the last three years, General Motors Co. has improved its own spot welding methods for joining aluminum sheet metal instead of retooling operations for riveting or industrial adhesives.

T. J. Snow, founded in 1963 as a supplier of industrial resistance welders and accessories, started offering training classes over 30 years ago in an effort to help customers understand the process and improve weld quality. Although resistance spot welding is one of the least expensive, fastest and strongest ways to join sheet metal, weld quality issues were leading some of Snow's customers to substitute rivets, screws, adhesives and mechanical clinching.

Read the manual

The multiple choice CRWT exam isn't one that even the most seasoned resist-

ance welding tech can breeze through. This inspired the crew at T.J. Snow to re-read the AWS literature from which the exam questions are pulled.

If that sounds like employees don't know their craft, think about how many times you've had to reopen the manual explaining how to do a job you've performed for years.

Learning the resistance welding symbols that are not widely used proved especially challenging, Snow says. "Typically, we get a drawing with a little blurb and arrow that says 'spot weld here,' but I learned the hard way that there are some proper symbols you're supposed to use."

Whether it's an introduction to a new area of resistance welding or simply a refresher, the test establishes a baseline of necessary knowledge. It covers weld safety, processes, destructive testing and more. In the wake of the Great Recession, many of T.J. Snow's customers lost their resistance welding "tribal knowledge" because of layoffs or retirements, leaving a gap of inexperience at some companies. That helped fuel T.J. Snow's training seminars. Now that it has experience with the CRWT test, some customers also ask to buy literature to prepare for the test.

Snow urges companies that rely on resistance welding to get their setup personnel certified soon. If scheduled in advance, the AWS is offering the CRWT beta exam at no charge in conjunction with its Certified Welding Inspector (CWI) exams, which are offered throughout the country.

However, once the beta test stage is complete, taking the exam will cost several hundred dollars. **FFJ**

Applicants must meet education and experience requirements as outlined in AWS C1.5 and QC20. For further information, go to www.aws.org/rwma/crwt/html.

T.J. Snow Co. Inc., Chattanooga, Tenn., 423/894-6234, www.tjsnow.com.