Team WELDS processes into place

Matthew Montgomery | DCMA Public Affairs



Mike Sutton (left), Defense Contract Management Agency Albuquerque quality assurance specialist, inspects the welds of a recently fabricated part with Phil Buckner, Mobile Technical Systems, Inc., quality control inspector, during a recent review of the contractor facility. (Photos by Matthew Montgomery, DCMA Public Affairs)

nsuring portable groundhandling mechanical anddelectrical systems meet

specifications, and are delivered on time is the role of Defense Contract Management Agency personnel working in a contractor facility in Las Cruces, N.M.

"The focus of DCMA in this facility is the processes of paint, welding, product assembly and testing," said Mike Sutton, DCMA Albuquerque quality assurance specialist. "Those are the four areas we check the most."

In addition to QASs in the plant, industrial specialists monitor contracts and make periodic site visits to verify delivery dates. "My main goal is to make sure the contractor delivers on time to their customers," said Janet Bradford, DCMA Albuquerque industrial specialist. "Usually, this means a lot of desk time and communication via phone. Sometimes I need to make site visits to verify the contractor is indeed able to meet delivery deadlines outlined in the contract."

The company in this case is a small contractor located on two acres in the dry landscape of New Mexico. The 6,000 square-foot facility is the work site of about 10 to 20 employees depending on the workload. Their main focus is fabricating equipment for various governmental applications.

Robert Garcia, the company's president,

said DCMA involvement in the process is beneficial to both him and the customer.

"DCMA walked in the door, knew exactly what they were doing and told us basically how they were going to work with us," said Garcia. "They were never overpowering in any way and have established a good relationship — we knew what they were here for and they knew what we were doing."

Bradford said DCMA can also be beneficial in helping to bridge the communication gap between contractor and customers when issues arise. Having an expert on the ground and in the plant can make a big difference.

Garcia said a good example of this was



Mike Sutton, Defense Contract Management Agency Albuquerque quality assurance specialist, inspects the welds of a recently fabricated part during a recent quality assurance visit to Mobile Technical Systems, Inc. (Photos by Matthew Montgomery, DCMA Public Affairs)

a steering bar the company fabricated for the Chinook helicopter. It was difficult to get the first article accepted, and the issues had nothing to do with the part itself. They were all paperwork and documentation related. "Our DCMA representatives here were able to walk the customer through the acceptance process and ensure them the proper steps had been taken." "If we had not had DCMA assistance on that project, I would have either had the first article rejected, or I would have needed to fly out and meet the customer face-to-face to get it resolved," continued Garcia.

Over the years, Garcia said his appreciation for the role of DCMA has increased, stating "some contracts would be almost impossible to complete without "Some of these systems have more than 500 welds and are subjected to numerous nondestructive tests. This means having the right plan and strategy in place to ensure contract compliance is paramount."

 Mike Sutton, Defense Contract Management Agency Albuquerque quality assurance specialist

DCMA being a part of the process."

Bradford said she realizes firsthand how certain aspects of her job help small companies stay on track for delivery schedules and contract obligations. An example she gave is the constant communication and follow-up to ensure on-time delivery.

"As a small contractor, it helps me stay on track because sometimes it is hard to manage all the requirements of running a company and still track contract deadlines," said Garcia. "Over the years, our DCMA contacts have made it a point to follow up on delivery dates and check on the status of contracts periodically."

Bradford said she was excited when the contractor hit a 100 percent on-time delivery rate for the past 12-month period. From a DCMA perspective, she said this means the warfighter is getting the product when they need it.

PROCESS REVIEWS

Welding is one of the most critical aspects of most programs here. "Some of these systems have more than 500 welds and are subjected to numerous nondestructive tests," said Sutton. "This means having the right plan and strategy in place to ensure contract compliance is paramount."

DCMA performs periodic inspections of end process welds, but the time is minimal. This is because of the amount of time spent checking processes and procedures



Mike Sutton (right), Defense Contract Management Agency Albuquerque quality assurance specialist, reviews drawings and contract requirements with Phil Buckner, Mobile Technical Systems, Inc., quality control inspector, during an inspection.

leading up to shipment.

"Doing it this way allows the contractor to go through 98 to 99 percent of their welding and we only need to see a small portion of it," said Sutton. "We're assured of the welds because we've already looked at the wire, the material, verified product certifications and know the drawings are correct. We also have mandatory checks to ensure welder certifications are all up to date."

"We have a record of everything, and look at all the certifications tests to ensure welds are in accordance with military standards," continued Sutton. "Once we have all the upfront part of it done, then the easy part is coming back once or twice a month and looking at specific welds in different areas and checking configurations and matching them to the drawings."

In addition to the internal checks and DCMA oversight, the contractor has an external company come in and perform an annual audit for compliance. The yearly review ensures the company is following the guidelines set forth by the International Organization for Standardization. This audit benefits DCMA and provides additional information about the contractor.

"The ISO management representative looks at the company's logs and identifies corrective action reports written internally for processing areas," said Sutton. "They will then tie those into any trends, if there are any. We look at the final reports and make sure there aren't any areas of concern."

Other external checks are required and many of the welds are put through a crucible of nondestructive tests. These can range from magnetic particle to liquid penetrant tests. "Some products, such as the tow-bars, have a 100 percent liquid penetrant testing requirement," said Sutton. "Any anomalies would cause it to fail, and although we don't perform the tests, we verify they have been

conducted through a process review to ensure compliance."

These nondestructive tests also serve as a gauge by providing insight into processes and procedures used by the company. "If everything is not being done correctly you would never get the results necessary to pass an ND test," said Sutton. "That's why these also serve as their own quality assurance check — allowing us to view the test results and have confidence the process is being performed correctly."

With all the process reviews and checks along the way, Sutton said DCMA personnel don't have to worry about the steps going into production when it is time to review the final product. "We don't have to spend extra time when we have our strategy planned correctly and do everything up front," said Sutton. "We are able to control the process and save time when the final product is ready to ship."