




Aerial view of Keel's site with deep-water access at Yonges Island, South Carolina.

Keel: A Purpose-Built Company

BUILDING TOMORROW'S NUCLEAR NAVY. PROTECTING OUR COUNTRY.

With efforts underway to expand and modernize the U.S. Navy submarine fleet, the defense industry faces a range of challenges. Workforce shortages and reliability in the supply base. The need for greater infrastructure. These can impact the ability to ramp up production and address potential threats facing our country.

Keel – an advanced manufacturer of complex structures for the highest priority programs within the Nuclear Navy and broader defense industry – has attacked industry challenges on multiple fronts. The company is investing in job skills training to cultivate a robust pipeline for skilled talent, while creating a positive work environment that attracts and retains best-in-class workers. To keep pace with industry demand, Keel has made major investments to expand their facilities, ensuring they have the right capacity and capabilities to meet customer needs. The company is also at the forefront of implementing technology in manufacturing processes to increase reliability and efficiency.

“A strong industrial base is key to national security, and Keel is built with that purpose in mind,” said Keel CEO, Brian Carter. “We are committed to supporting the Navy’s stated objective of 2+1 – to deliver two Virginia-class and one Columbia-class submarines a year. Ultimately, what we build helps protect our nation and the brave men and women who serve.”

Built to support critical defense programs

Keel is backed by Arlington Capital Partners and was formed through the combination of Pegasus Steel, Metal Trades, and Merrill Technologies Group to build a platform that could support the U.S. Nuclear Navy. The process began with the acquisition of Pegasus Steel, based in Charleston, South Carolina – a leading

provider of complex fabricated steel structures used in submarines, aircraft carriers, and other naval and industrial systems. Shortly after, Metal Trades was added, enhancing large-scale metal fabrication and ship repair services for the Navy, Army, and commercial customers.

The foundation for serving the U.S. defense sector was strengthened with the acquisition of Merrill Technologies Group in Michigan. This company is a leading manufacturer of large metal parts and structures for the defense, aerospace, and industrial markets, providing essential systems and processes that support further growth in submarine work.

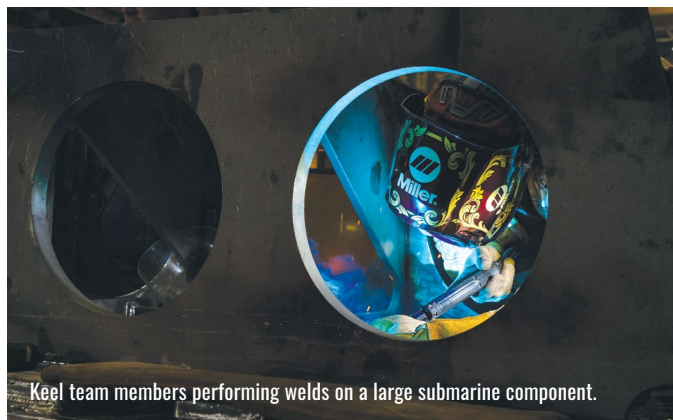
Building a skilled industry talent pipeline

To ensure the industry’s need for skilled workers is met, Keel operates an AWS-certified welding institute. Students are trained by highly skilled instructors to earn AWS-certification in this 12-week, nationally recognized program. They are given the opportunity to participate in a reverse job fair where they interview with prospective employers. The institute has a 98% job placement rate.

While Keel seeks to hire best-in-class workers, it recognizes that hiring is only the first step. Retention is also critical. Keel continues to invest in its facilities, creating an environment and culture where people want to work, day in and day out.

This includes providing ample indoor workspace so welders can work comfortably throughout the year, especially during the hot summers in South Carolina and the long winters in Michigan. Keel also uses indexers and fixturing to weld in position. This is more ergonomic for the welder and produces a more consistent, quality weld.

Furthermore, Keel is committed to helping their employees grow in their careers, including continued education and leadership training. Through all these efforts, Keel seeks to enhance the overall employee experience while ensuring reliable production for their customers.



Keel team members performing welds on a large submarine component.

Building with the right capacity and capabilities

“We focus on serving OEMs and working with the Navy to make sure the company is in lockstep with overall capacity development,” said Carter. “This requires having the right processes in place and the right equipment to keep up with demand. We are making strategic investments that will help fast-track production and delivery to the U.S. defense sector.”

Keel made a \$34.5 million investment to expand its Midwest facilities. This includes machining equipment capacity for Navy and Army programs and the expansion of its fabrication facility to support the Army and Nuclear Navy.

In the Southeast, Keel is investing \$70 million to construct a state-of-the-art paint facility, a dedicated superstructure building and a people building with amenities such as lunchrooms, locker rooms, training spaces and offices. These investments not only support the company’s growing workforce but also enhance their ability to efficiently deliver large-scale manufacturing projects and provide full-scale integration services.

Building more efficiently with technology

Technology implementation is critical to advancing high-priority defense programs by improving efficiency, productivity and reliability. Keel is at the forefront of technology implementation.

When a customer in the maritime defense industry engaged Keel on a time-sensitive project, Keel became the first company to qualify a Naval Sea Systems Command (NAVSEA) collaborative robot (cobot) Welding Procedure Specification through partnership with the U.S. Submarine Industrial Base Council, Newport News Shipbuilding, a Division of HII, General Dynamics Electric Boat, and Lincoln Electric. This positioned Keel as an industry leader in deploying robotic welding for submarine components, building on existing applications of cobots in the field.

The system provides more flexibility and use, reducing labor hours and increasing production rates. Since then, the system has been implemented in commercial areas, Army structures and NAVSEA work.

Keel is also implementing soft automation to reduce tedious work for its employees and improve overall efficiency and reliability. One area this can be found is the implementation of electronic weld records. For every component or part, the weld has to be defined and recorded. Doing this electronically reduces the time welders and their teams spend on record keeping.

Additionally, Keel is exploring automated inspection processes with lasers and robotic inspections. Keel manufactures subassemblies that require precision and accuracy. Automating inspection processes ensures first-time quality and reduces rework, accelerating the integration of subassemblies into larger structures.

Building to future-proof national security

Today, Keel provides complex naval structure production, with the goal to be the first company to build truly outsourced, fully outfitted submarine modules. Keel offers customers a vertically integrated suite of design, engineering, fabrication, machining, integration, assembly, finishing and surface treatment capabilities. In addition, the company is strategically located with direct frontage to deep water that allows for large module delivery by barge to submarine and aircraft carrier customers.

Recognizing the imperative for a modernized Nuclear Navy, Keel is built to support critical naval programs that contribute to national security. Facilities. Equipment. Technology. A skilled workforce. Again and again, Keel is making significant investments to bring to life its purpose of supporting the U.S. defense industry in its efforts to protect our country.