

High Deposition Welding

Remote Machining & Welding

Challenge

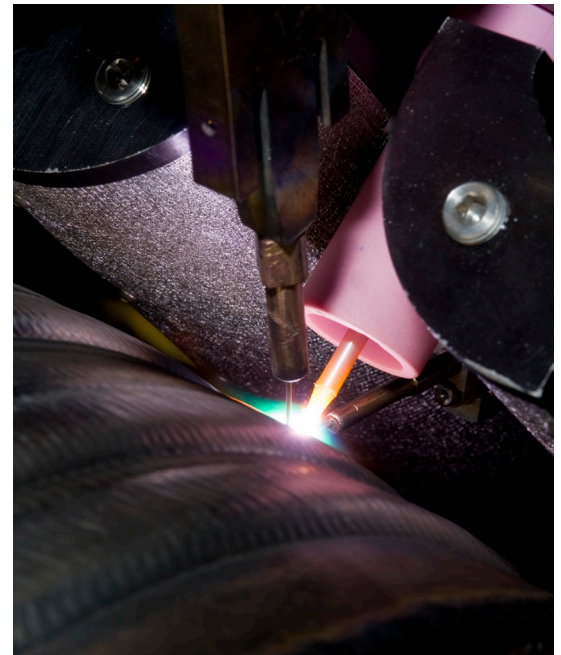
As the industry moves into the next phase of asset management for remaining Alloy 600 mitigation, solutions have been developed for implementation to support our customers' goals, focusing on life-of-plant reliability and efficient outage execution. Conventional and existing welding approaches do not match up to the challenge due to low weld filler deposition rates that result in extended schedules and increased labor cost.

Solution

Our advanced high deposition welding system addresses the need for increased filler metal deposition rates for large diameter weld overlay and large structural reinforcement pad welding projects — including Reactor Vessel Primary Nozzles and additional susceptible Dissimilar Metal Weld configurations on steam generator (SG) and reactor coolant pump (RCP) inlet and outlet nozzles, as well as primary loop branch connection welds.

By utilizing Framatome's optimal high deposition welding solution, our customers will realize the benefits of reduced schedule impacts and minimized crew sizes, while avoiding conflicts with parallel work activities. These advanced welding techniques (which utilize a dual hot/cold wire) significantly increase real-time deposition rates. The front-end design is based on tooling that has been used extensively on weld overlay tasks implemented at PWR and BWR units, as well as narrow groove welding of large-diameter primary piping.

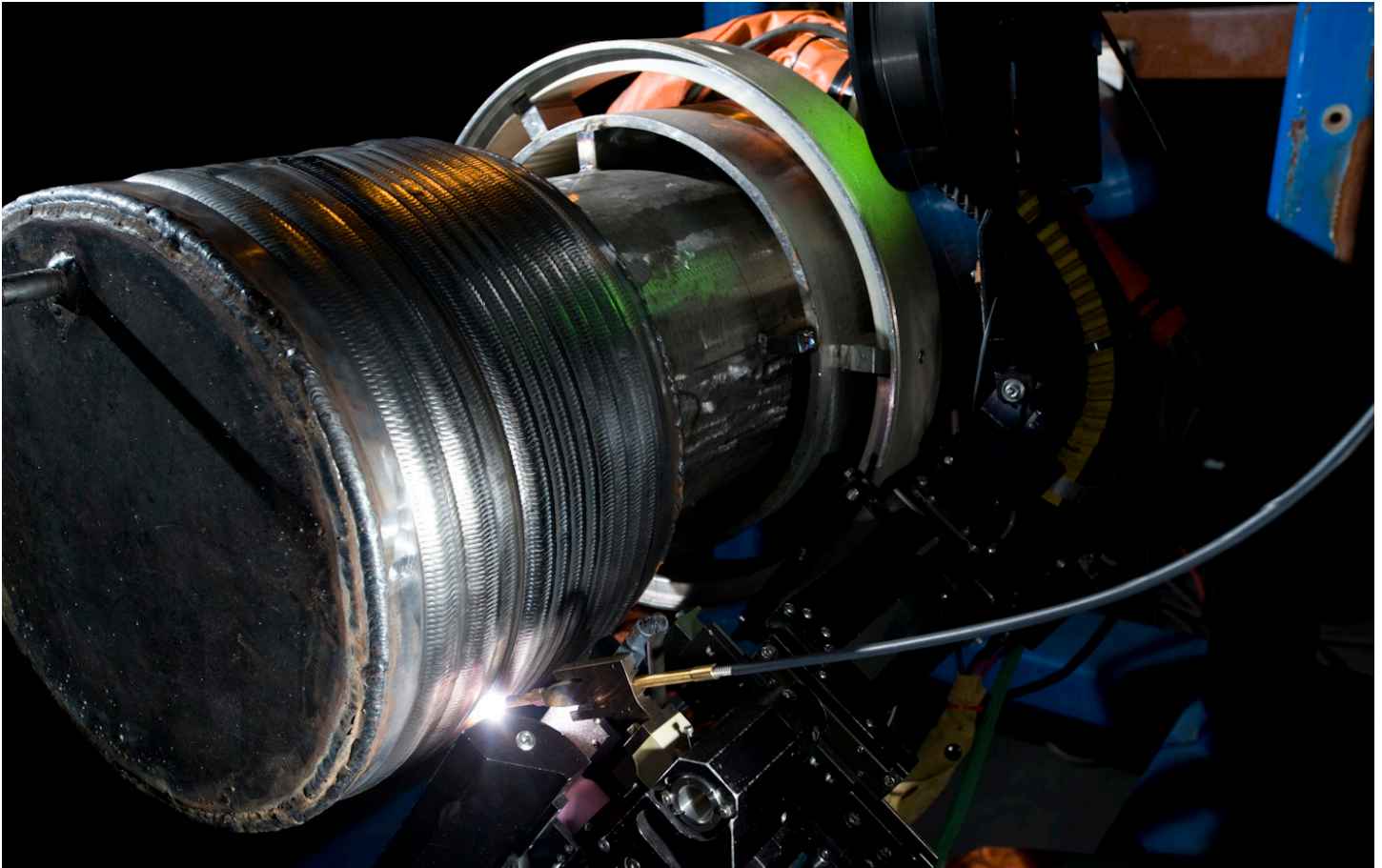
Deposition Rates 3-6 times faster than conventional weld techniques.



Customer benefits

- Reduced welding durations
- Reduced radiation exposure
- Dual Wire GTAW—readily adaptable now
- All position capability
- Deposition rates 3-6 times faster vs. conventional GTAW
- High deposition with first-time quality
- Field-proven in multiple deployments
- Tooling readily adaptable for other applications

Your performance
is **our** everyday **commitment**



Features

Hot Wire

- Electrically heated to ~1000F – DC Source
- Leading the puddle

Cold Wire

- Trailing the puddle

Essential Orbital Parameters

- Higher travel speeds
- Oscillation in 5G & 6G positions

Other Requirements

- Auxiliary shielding
- High deposition with high quality

Contact:

component-repair-replacement@framatome.com

www.framatome.com

The data and information contained herein are provided solely for illustration and informational purposes and create no legal obligations by Framatome. None of the information or data is intended by Framatome to be a representation or a warranty of any kind, expressed or implied, and Framatome assumes no liability for the use of or reliance on any information or data disclosed in this document. Property of Framatome or its affiliates.
© 2020 Framatome Inc. PS_US_706_ENG_06-20

framatome