



Oil & Gas Portfolio

Natural Gas Carbon Steel Flange Replacement

About Us

Since 1985, High Purity Systems has provided precision welding, quality piping installation and fabrication solutions to the industrial sector. High Purity Systems delivers value and responsiveness to meet the ever-changing needs of our clients. Expertise includes Class 100 Clean Room orbital welding, onsite piping installations from stainless steel to carbon steel, piping fabrication shipped nationally and custom prototyping.

Contact Us

8432 Quarry Road
Manassas, VA 20110
www.HighPurity.com
info@HighPurity.com
(703) 330-5094

The Problem

In 2015, one of our valued oil and gas customers reached out to our High Purity Systems team with a problem.

As a supplier of natural gas in the Washington, DC metro area, the company was responsible for maintaining thousands of miles of piping infrastructure. Accountable for so much piping, the customer had to carefully adhere to public safety standards and conduct continuous upgrades.

While performing routine maintenance on a generator/compressor, they discovered that the equipment's outer piping blocked access to the compression chambers. This is not an uncommon issue, but rather a simple challenge of accessibility. When dealing with such large equipment — the compressor was as big as two shipping containers stacked on top of one another — easy access is a must.

The Strategy

The customer contacted HPS thanks to a long history of projects we had previously completed for them. They knew that with fast and experienced welders, HPS could get the system back on line quickly. HPS safely and efficiently cut out the 8" pipe so we could continue working on the compressor.

After talking to the client, our team determined that we should install two flanges at the site of the cut-out to facilitate any future maintenance. We ordered two 8" 300# carbon-steel flanges to be shipped to the customer's site. When HPS' weld crew arrived on site, they completed a routine assessment of the work area and immediately made safety improvements. After covering holes in the floor and securing the ladder, the crew began the flange installation.

The crew prepped the welded the joints, and efficiently demobilized. All in perfect time for our third-party nondestructive testing (NDT) expert to x-ray the joints and turn them over to the customer.



The Result

The story does not end there: based on the quality and speed of HPS' work, our customer's equipment vendor commissioned HPS to make additional stick welds for the same compressor. The vendor needed plate-steel welded to the bottom of the compressor supports in order to shim the intricate equipment. The HPS fabrication shop created, cleaned, and delivered plates the next day.

The result of the initial gas project was not just one, but two happy customers.