



## Oil & Gas Portfolio

# Vaporizer Piping 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

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### The Challenge

One of our long-time partners, a natural gas and propane provider to over a million residential, commercial, and industrial customers, recently called us to work on a new project. The customer reached out to High Purity Systems (HPS) to plan and execute the replacement of four propane vaporizers at its plant. A piping fabrication and installation project in which safety, schedule, and quality were of utmost importance.

Replacing the vaporizers (which were over 50 years old) with large piping spools, demanded a high degree of planning and precise fabrication with minimal margin of error. Over the course of the two month project, the customer asked our team to take measurements of the existing vaporizers, custom fabricate replacement piping to fit the old structure, and connect the four new vaporizers.

### The Strategy

Before we could install the new vaporizers, our team needed to begin by removing the old ones. However, the only way in and out of the system was through the top of the steel structure that was built around the vaporizers; our team utilized an 80-ton crane and articulating lift to access the tops of the vaporizers 35 feet above ground level.

Because the piping was so old, there was also a high risk of shifting once HPS removed the existing units. The client trusted HPS' experience to manage multiple large spools and make precise welds for a single assembly with minimal shifting.

Using RMD/MIG welding equipment, pipe positioners, and traditional stick welding equipment, HPS fabricated the spools, and then prior to installation, performed x-ray, magnaflux, and hydrostatic pressure testing to ensure standard compliance to ASME B31.3 standards.

Halfway through the installation, our on-site team realized that two of the new vaporizers had been manufactured differently, and this created issues that prevented a proper fit. The team quickly identified the discrepancy, brought it to our customer's attention, and worked with the owner to resolve the problem. From start to finish, the customer was appreciative of HPS' proactive communication throughout the project.



## The Result

Prior to this project, HPS had a long history of collaboration with our client and built a reputation of safety, reliability, and high quality work. Our client's project manager mentioned that when working with HPS, their teams never have to worry about oversight or the need to micromanage; the HPS team takes a high degree of accountability for every project, allowing customers to focus on other priorities.

For more information about High Purity Systems installations and our oil and gas industry experience, please visit our [website](#).

