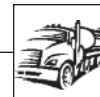


CNG, LNG Stations Becoming A More Common Sight

By Colter Cookson

If natural gas was an Internet video, it would be on the verge of going viral. While many consumers have yet to consider filling up with the domestic wonder, fleet operators across the United States are asking how they can leverage its remarkable ability to reduce expenses, cut emissions, and promote U.S. energy independence. Their calls are flooding the phone lines of the companies that have stepped up to build the infrastructure needed to turn natural gas vehicles from a promising idea into a national sensation.

While there are only 1,100 natural gas fueling stations in the United States today, that number is growing at a faster pace each year. For now, the companies that build compressed natural gas and liquefied natural gas stations are focusing on areas where natural gas can do the most good: in densely populated regions and along major thoroughfares where everyone from taxi drivers to transit authorities, truckers and couriers drives mile after mile.



Compressor Maker

Arrow Engine Company, a compressor and engine manufacturer based in Tulsa, is one of the many oil and gas related companies that have entered the CNG space. “When we saw people starting to take a serious look at NGVs, we knew there would have to be infrastructure built to support the market over time, so we thought we would be one of the first companies in and diversify our business,” relates Arrow Engine President Len Turner.

To enter the market, Arrow Compression Products modified its field gas compressor for use in CNG stations. “We only needed to modify our field gas compressor with a high-pressure cylinder and add a more sophisticated control panel,” says Brent Witte, the company’s vice president of finance. “Arrow uses ASME-stamped vessels for longevity, along with a spill containment system, in all of our skid designs.”

Witte describes the compressor as bulletproof, noting the company has had 600 units of the field gas version in operation without any major failures. “All the design and development work on the compressor has occurred within the past 10 years, so it is one of the most current designs in the industry. We have been able to use modern technologies and incorporate changes that needed to be made,” he adds.

As an example, Witte points out that the compressor uses a three-throw crankshaft configuration that eliminates cylinder offset and the vibration associated with traditional designs. Less vibration means less wear, he notes.

Turner says that in the past two years, Arrow Compression Products’ sales of CNG units have doubled. “Many of our sales have been to municipalities and

fleets that prefer to work with an in-state supplier,” he reports.

In the past year, the company has received more frequent inquiries about its CNG compressor. “NGVs are beginning to catch on, but I think it will take more vehicles coming out with dual fuel capability for the market to really go full throttle,” Turner predicts. □



This natural gas fueling station is one of 10 that uses compressors made by Arrow Engine Co. Arrow reports that inquiries about its CNG compressors, which use a vibration-minimizing design, have become more frequent as fleets’ interest in the fuel grows.