



Toll is ready to roll

Exciting times for Minnesota company after installation of custom-made gas purification system

By Nick Parkinson

Toll Gas & Welding Supply expects an uptick in business after installing a new gas purification system at its specialty gas lab in Plymouth, near Minneapolis.

The system has been operational for two

months when **gasworld** visited Toll's headquarters for a tour and a chance to see the custom-made equipment in action.

Toll President Chuck Allard believes its enhanced specialty gas capabilities strengthens its independence and status

in the market and says it is a huge boost to the company's capabilities.

"One of our focuses is to be as fully independent as possible, not be reliant on other vendors," Allard told **gasworld**.

"One of the challenges was sourcing

these gases. There was not a high level of willingness for the major companies to sell us these products, so we said: 'Well there's no one else doing this.' I think it's a fair statement that Toll has a niche place in the electronics market with these capabilities. I know that other distributors are struggling to get these gases from their suppliers. There are strong opportunities to help other distributors to penetrate those markets with a reliable supply along with our direct customers within our marketplace. "Our focus is to lead the market with our gas capabilities, and I think this will be a successful project for Toll. I have tremendous confidence in our specialty gas group."

High-tech

Toll, which has been 100% employee owned since 1996 and has just under 70 on the payroll, has invested heavily in its equipment construction rental fleet, while fabrication hard goods and consumables is still a base part of business. Gases make up the third segment of Toll's business and specialty gas is of growing importance. "We want to be a high tech gas company and to differentiate ourselves from the rest," Allard said.

Toll has customers in the semiconductor and electronics industries, which requires gases and chemicals of extremely high purity for the pure silicon used by semiconductor-based microprocessors that are common in watches, smart phones, and computers. Toll's clientele includes manufacturers in LED, fiber optics, and superconductivity research. Biotech is another important area for Toll, which works with Boston Scientific and Medtronic among others.

"In this market, biotech is one of the primary industries we focused on when we started developing our specialty gas capabilities," Allard said.

"We put in the right equipment and the right expertise to go after that market. Minneapolis is a major hub for medical device manufacturing, all the major players are here: Boston Scientific, Medtronic, Abbott Laboratories and the University of Minnesota has a very strong biotech program. What we are seeing is also a lot of

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small start-ups. We're trying to work with some of these small start-ups to help with their gas supply as well."

Specialty gas is of particular importance to Toll and integral to the team are Electronics Business Manager Michelle Michaud, EPA Protocol and Flammable Gas Business Manager Thea Bunde and Electronics and Specialty Gases Laboratory Manager Frank Haney.

"We're so excited and thrilled with this gas purification system. It was a dream come true for the vision of the company and executives," Michaud told **gasworld**.

"No company our size has anything similar in the world. Not only has money been spent on the system but also the people that make up the company."

Toll's state-of-the-art specialty gas blends

cells help achieve reduced lead times and repeatability with custom and standard flammable blend requests.

"This has helped supply independents like us, so independents are now buying direct from Toll research and electronic grade argon instead of going to the majors," Bunde added.

As for its capabilities and design, Haney, said, "The system was designed by Joe Bernacki who works for CryoVation.

The purification system has proprietary catalysts that are specifically designed to remove impurities and the specific amounts to meet extremely low level impurities to produce high grade gases including semiconductor and high purity grade gases. They put the system together and they built it like we were a small major.

They designed it so we could run 1000 cylinders a month through the system and could run argon, helium and hydrogen if we wanted to grade 6.5 to 7.0. We want to stay independent. The system will produce grade 7 argon and we will do test cylinders." Allard says Toll's new system can help with the helium shortage.

"With helium supply being what it is, this ▶





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► system allows us to purify the helium," Allard said. "We think there's going to be a benefit with the helium supply having these capabilities."

Toll is seeing increased specialty gas business and Bunde says they have some advantages over their bigger rivals. "Our turnarounds are quicker," Bunde said. "We can make custom mixes in 3-5 business days. Compared to the majors that's really unheard of. Our pricing is very competitive."

Medical

Toll, which is one of five independent companies which have combined to set up an ASU in the Twin Cities area that will be on stream next year, also serves its local medical and healthcare industries with quality medical gases and equipment. Cryotherapy is one area Toll believes it has been at the forefront of.

Bunde said, "We pioneered some of the start-ups, but now it's become quite

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saturated where some haven't been able to make it. I think the boom in cryotherapy may have passed and we're at the peak now in this marketplace. Toll will set up custom-dewars for the right delivery pressure because these units require 20-40psi delivery. When they move to the bulk stage we will design a custom liquid nitrogen delivery at that point in time. We're there at every stage when they are growing."

Michaud says Toll stands out for its safety and education. "We lead with the safety,"

Michaud said. "We don't just deliver the gas. We provide Safe Use & Handling Training as a value added service."

Good times

Specialty gas business is up for Toll, and Allard expects continued growth thanks to the new purification system.

"Our fiscal year starts in November and we're just hitting our stride. Our April financials, we're going to be up 10% from last April," Allard said.

"Our gas business is up substantially. We have had great growth in our gas business for the last three years where we have been averaging 15-20% growth. In terms of the spec gases, we have by far the top capabilities in this region. We can produce it locally which gives us an advantage in terms of lead times and distribution. ISO 17025:2005 accreditation and ISO 9001:2015 certification are at the heart of our quality programs." 

