



XECOVERY: Xenon Recovery

Gene Karwacki

Welcome to another Podcast from Air Products.

Rob Brown: Welcome to another Air Products podcast, I'm Rob Brown. Today I'm here with Gene Karwacki. Gene is the commercial development manager for XECOVERY, a new onsite recovery service offered by Air Products.

Gene, last time we talked, demand for Xenon had really taken off and that was having an impact on pricing. Now I'm told we're seeing the supply side affected, can you tell us about that?

Gene Karwacki: Yes Rob, as you know over the last four months, a lot has happened in the world. Things have changed quite a bit with a world-wide recession, and what this is really causing is a curtailment in the need for oxygen and nitrogen by large users, such as steel mills and chemical plants. This is having an impact on the rare gas production because rare gas is actually derived as a by-product from these air separation plants. As a result of this downturn, what's been happening in the world over the last few months is that we're seeing a dramatic reduction in xenon, all rare gas production, but in particular xenon, we're seeing about a 25% reduction in the volume produced. So, last year we had about 12 million liters produced world-wide, we're now down to about 9 million liters expected in 2009.

Rob: With all that's happened in the past few months, how do you see this impacting the price of xenon?

Gene: I know from conversations with customers that the expectation is that the price of xenon would begin to drop as demand would decrease during this recession. But unfortunately, what's actually happened is because supply is actually decreasing faster, the price is actually remaining pretty much where it has been during most of 2008. And the expectation is, because of the potential shortage occurring due to this reduction in supply that the price will actually begin to increase as we go through the rest of 2009.

Rob: With prices remaining high and supply being constrained, are you seeing Xecovery gathering more momentum?

Gene: Yes, actually it's been very interesting. Not only are we seeing interest within our target marketplace, that being our electronics customers, but I've also experienced quite a bit of interest from some of the other industries, such as aerospace, the lighting industry, and also various materials processing companies that utilize lasers for example, for some type of process. So, what we've actually seen is additional opportunities emerging for Xecovery so we've actually started to work on tailoring our services in order to meet some of these new opportunities.

Rob: Sounds like you've developed a service that addresses a variety of industries and applications. How could a prospective customer know if they can benefit from the new service?

Gene: The best way is to contact us, let us sit down and discuss how you're using xenon and see how our equipment can match up with your processes. What we've done over the past six months is actually expanded our capabilities quite a bit, in order to address a wide variety of needs either in the concentration of xenon that we're trying to collect from a process stream or the total volume of xenon that's available from a customer.

Just to give you some examples, recently we developed our Mark 11, which is kind of the big brother to our first unit. This unit is capable of processing much larger volumes of xenon, in excess of 50,000 liters per year. In addition, we've designed it with a collection system that allows it to collect xenon selectively, from various process reactors, simultaneously. It's actually designed to take signals from the tools and accept xenon only when xenon is in the process stream. With this we are able to accept volumes greater than 500 hundred liters per minute coming out of these mini-chambers and extract the xenon and concentrate it for further processing back at Air Products.

Another improvement we made is developing what we call our Mark III, which is a smaller, simpler package that allows us to really help customers out who may be using smaller volumes of xenon that would not be economically possible to do with these larger units. In addition, the smaller footprint allows us to get it into some areas in plants that may not be easily retrofitted with our other tools. So, we have a lot more flexibility to accept xenon with our Mark III and then we can bring that back also, for further processing.

And then finally, to let you know that we are trying to broaden out this service beyond just xenon. We're looking at other applications, for example, in neon and maybe krypton extraction. And I'd just like to say stay tuned for future details here.

Rob: Gene, what's the one thing you'd want listeners to remember about Xecoverly?

Gene: I think that's really that our goal is to position our service to address a wide range of rare gas recovery needs and that we have the capabilities and the knowledge to work with the customers to develop the most cost-effective solution that will help them reduce their spending for rare gases.

Rob: If customers are interested in Xecoverly, how can they contact you?

Gene: A number of different ways. One, by email, they can contact me at my work email which would be karwacej@airproducts.com. Or, they can call my office number 610-481-5934. Or third, they can go out to the Air Products website.

Rob: Gene's email is karwacej@airproducts.com and his phone number is 610-481-5934. For more information on Xecoverly, we encourage you to go to www.airproducts.com/xecoverly. To hear more podcasts on a range of electronics topics go to <http://www.airproducts.com/electronics> and click on the eLearning Center link.