

Weldcoa has found a Hero for 2020

Hector Villarreal, Weldcoa President, explains why the Hero argon maximizer can save the day

By Nick Parkinson

After a record-breaking year of business for Weldcoa, the Illinois-based equipment manufacturer is excited about the potential of its new Hero argon maximizer. The new product is available from 2020 and Hector Villarreal, President of Weldcoa, is excited about the Hero's capabilities of saving costs by preventing the loss of argon during transfer from bulk tanks to microbulk delivery systems such as Chart's Orca.

Weldcoa has yet to launch its advertising campaign for the Hero, but SJ Smith, the Iowa-based provider of gas, welding, safety and industrial solutions, has been beta testing it for approximately 18 months. Villarreal is confident the Hero will be well received.

"I haven't advertised this product thus far, I've just been asking people if they would be interested, and the interest has been very high," Villarreal told *gasworld*.

"We have been giving people a sneak peak of what we are doing while we finish up some of the R&D and we are pretty excited about it. It's a market that never existed before, no one has really spent any time in this area, so we don't have any competition rolling this thing out. It's a new market sector and we are pretty excited about it."

Villarreal explained how the Hero will fit into the procedure of transferring argon from a tank to a delivery system, and how it avoids lost product.

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the connections and the transfer starts from bulk tank to the Orca, depending on how good the technician is as well as other factors, a cloud of argon that is being vented to the atmosphere starts to develop," Villarreal said.

"It's the angel's portion, as they say. Gas manufacturers and distributors estimate that loss and pass that cost on to the end user, the end consumer, and some people estimate that loss at 20%, others might say it's 40% lost.

"A company called Industrial System Engineering in Iowa contacted me. It's run by an old friend of mine by the name of Ralph Johanson. He told me they had worked with one of our customers, SJ Smith, and they had made this product, an argon maximizer. What they had done was eliminated that lost, or vented product during the transfer of argon from the bulk tank to the Orca.

"They asked if we were interested in partnering with them on perfecting the

process and going to market. We went out and saw the installation. At that point SJ Smith had had it for close to a year and had been very successful.

"My business partner "Maynard "Bud Klotz watched them work the apparatus. He sat down with Johanson and did the math with him. We looked at their data, and said, 'We think you've got a good idea here, right now it's a little complicated and we think we can help you to automate this process and simplify it so anyone can operate it safely and efficiently'. We struck up an agreement, and we have partnered with them to get this product ready for market."

Since that day Weldcoa has been involved in the further development of the Hero, and is the sales arm that will be overseeing the installation and long-term support of the product.

Hero's role

The argon maximizer tower is bolted into a tank farm, and operates between the Orca and the bulk tank.

Villarreal added, "We have argon and nitrogen gas going into the Hero. The nitrogen super cools the argon so the temperature, when it enters the Hero, becomes colder. Which means that the product going into the Orca is denser, which further means that you can put more product into the Orca than ever before possible.

"If you can carry more product, you can make more deliveries, so you can



© Weldcoa | Maynard “Bud” Klotz, Weldcoa Vice-President, explains the argon maximizer at Weldcoa’s Cylinder Filling Operations Seminar in October

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make more money. On top of that you no longer have the loss, so if you were estimating a 20% loss that’s a 20% raise in your bottom line. It’s like getting an instant bonus.

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Amid talk of an argon shortage, the introduction of the Hero is timely.

“It’s excellent timing,” Villarreal said.

“Especially when you consider the near elimination of the argon loss and one of the things we’re looking at for the next version is that we will cycle the argon through the maximizer and then pump it right back into the tank. This means that you’re chilling your tank again. The coldest your tank ever gets is when it gets a fresh delivery, then over time it

starts to saturate, and then at some point your bulk tank vents product to the atmosphere. When you convert too much liquid to gas (and if you’re not delivering to your clients in a timely manner) then it vents to the atmosphere. The idea with the next version of the maximizer, is we’re going to have it automatically re-cool the tanks whenever it senses it has to and that will be a big deal, especially if the experts are right and there is a shortage coming up.”

Record growth

The unveiling of the Hero comes off the back of a big year for Weldcoa, a manufacturer of products that store, transport, fill or analyze compressed gas cylinders or cryogenic liquids. Villarreal is not sure what is driving record growth for Weldcoa, but he is not complaining.

“It’s been a record year for us, across every product line,” Villarreal told **gasworld**.

“In past years I could have pointed at the oil boom or the growth in medical gas field or the reshoring of manufacturing back to the US but this year has been a bit of a mystery – the distributors call and we provide them with the solutions they require! It’s embarrassing to admit but I’m one step

away from the market and I honestly don’t know what is driving all of this growth.”

But one challenge Weldcoa, and other manufacturers, are dealing with is employment.

“I hear all the politicians talk about peak employment and how low employment rates are in the States, what that means to me and every single manufacturer is a stagnation,” Villarreal said.

“We can’t grow, because we can’t find people. What these talking heads are cheering about it actually a lamentation for us. We know we could have grown more if we had been able to recruit more and it’s a frustration of the highest level for myself.”

Weldcoa is meeting this challenge by investing in more automation to do the jobs it cannot fill with workers.

“I’m budgeting for 2020 to continue automating my welding and cutting processes, but now – and this is ridiculous – I’m looking at automation to load the robots and the lasers because, for example, I can’t find people to work my second shift,” Villarreal said.

“I’m buying robots, to run my robots. How insane is that?”

Another development at Weldcoa includes quality control, and the rolling out of a training program with six seminars planned for 2020 (which will be explored in more depth in a future **gasworld** issue).

“We’ve hired people just to monitor our quality control now,” Villarreal said.

“It became obvious in the rush to get product out that some mistakes were made so we have invested in people to monitor our quality and safety. We’ve got a couple of very good new hires who have added a lot of value right away. In addition, our middle management team has created a safety board. They recruited safety experts from outside of Weldcoa to sit on that board. They are planning on performing some mock inspections in 2020. That kind of training is a very valuable thing for a manufacturer like us.” **EW**