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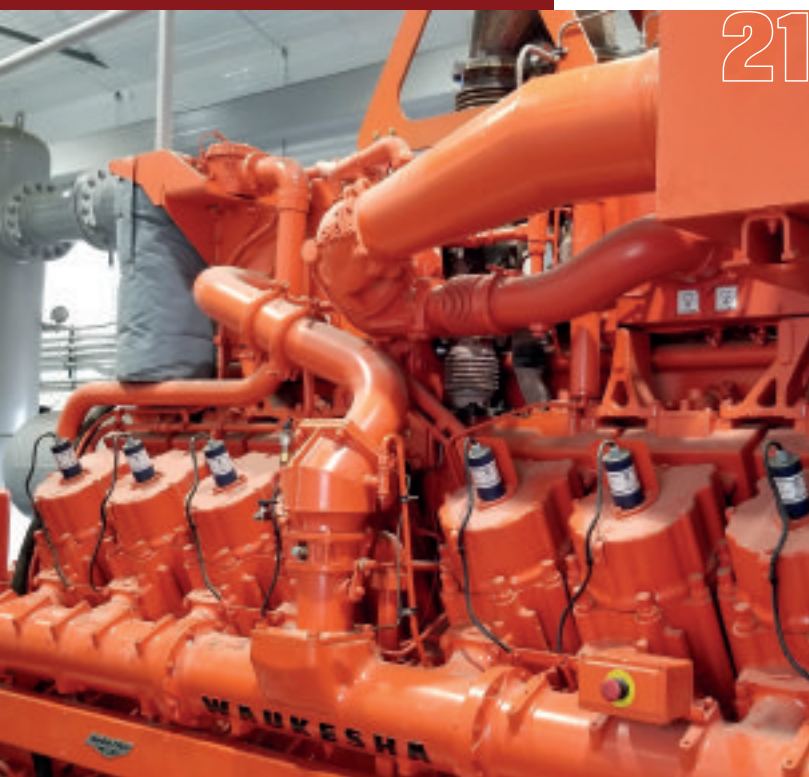
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gains momentum

Take Five
with
Danny
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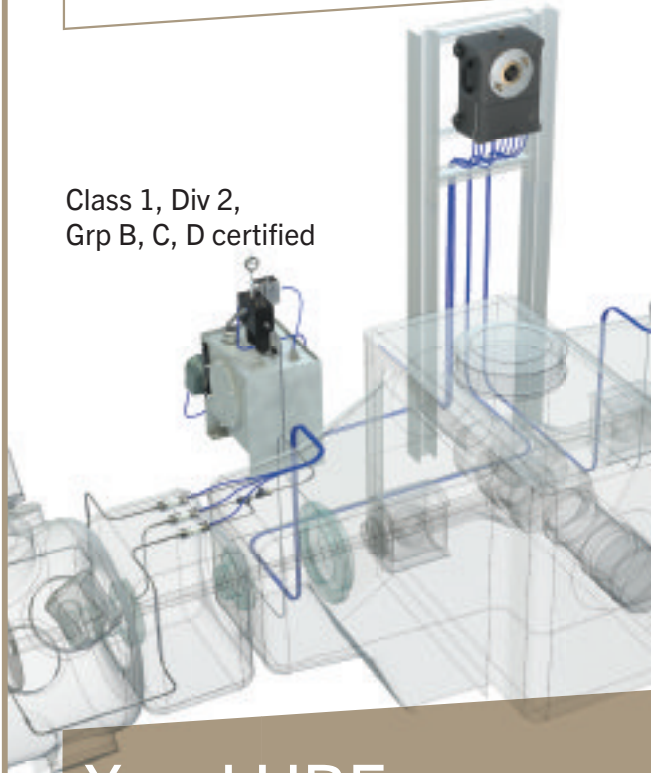
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Valves

adds two new products - with efficiency in mind - to its portfolio.

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A chemical approach

Ultimate Chemical debuts two new cleaning products for compressor valves.

By **DJ Slater**



Ultimate Chemical knows this drill. While performing a heavy duty flush on a cooling system in the field, one of the operators approached Kevin Heidebrecht and David Vannostran with a compressor valve in one hand, brake cleaner in the other and a question – “How do you clean these? This stuff doesn’t work.”

At that time, the Ultimate Chemical pair didn’t have an answer, but the gears were already turning in Heidebrecht’s mind. Through his background and trial and error, Heidebrecht, owner of Ultimate Chemical, brought a chemical solution back to the operator.

The next part plays out almost too simple, said Vannostran, Ultimate Chemical’s vice president of sales.

“We put a bunch of (the company’s) valves in buckets with our solution. We walked away for about 45 minutes and then went to check on them,” he said. “We pulled them out, rinsed them off and they were clean. They thought we’d have to shake them or do all this stuff afterward. All we did was put them in the bucket and pull them out.”

It was Ultimate Chemical’s first impression of its first of two new treatment options for

valves, one the company hopes to replicate as they spread the word on its chemical compounds.

“We just feel like this will change everything,” Vannostran said. “We wonder how many people have this problem because we can solve it.”

Two treatment options

Ultimate Chemical’s two new valve treatment chemical solutions are the VTR and the VTI, which stand for Valve Treatment Removed and Valve Treatment Injection. The VTR is the company’s soaking solution, designed to clean reciprocating compressor valves with a timed submersion. The timing varies depending on the condition of the valve, but

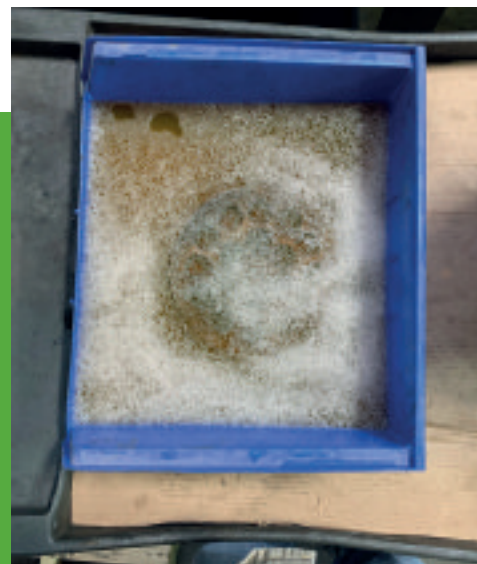
most valves can be cleaned within an hour in the solution, Vannostran said.

“As you use the product on a regular basis, those times may vary,” he said. “Dip it. Leave it. Rinse it. You’re done. You can even reuse the chemical if it’s not too contaminated.”

The VTI treatment consists of a phosphoric acid-mixed chemical compound that is injected into the suction line of a reciprocating compressor while in operation. The chemical is misted into the chamber every minute to

STEP 1

Place a dirty valve into a bin large enough to submerge it in the VTR solution.



STEP 2

Submerge the valve in the VTR solution. Let the valve soak for the fixed amount of time.

Ultimate Chemical's VTR solution is designed to clean reciprocating compressor valves. Soaking time varies, but most valves can be cleaned within an hour, according to the company.

compressor internals from prolonged use.

The origin of the VTI treatment occurred similarly to the VTR. After treating valves in the VTR solution for a customer, Heidebrecht wondered if a similar variation of that formula could be used during compressor operation. Once again, the gears turned, especially when so many operators injected other liquids into their equipment and hoped for a remedy.

"I see people injecting stuff into their equipment all the time," Vannostran said. "They inject diesel, water or some other chemical and it doesn't help their valves. The VTI helps prevent build up and corrosion and won't harm the system."

Extended valve life

While each customer experience is different, many have seen their valves look close to new after about six weeks of use, Vannostran said. The best part, according to Vannostran, is these customers do not have to swap out their valves quarterly. He hopes that they might even be able to stretch their valves for a year or longer before changing them for new ones.

"They are dealing with 100% uptime," he said.



Ultimate Chemical has a wide portfolio of cleaning products, such as its cooler cleaning solution for engine and compressor cooling systems.

It took Heidebrecht about a year to develop the VTI solution, which has had unintended albeit positive ramifications on other parts of the compressors that use it. The VTI solution has not only cleaned the valves but also the cylinders and cooler tubes.

"It's pretty special," Vannostran said. "Not only did the solution work, but it also exceeded our expectations."

Now the gears are turning again for Heidebrecht, who is thinking of additional variations to Ultimate Chemical's products to keep compression equipment running as efficiently as possible.

"Kevin has a makeshift laboratory and he knows his chemistry," Vannostran said.

As these new products continue to become more common in compression applications, Vannostran has his sights set beyond the company's current customer base. He foresees these solutions, and future ones, altering the way operators treat their equipment.

The main obstacle, however, is getting everyone on board with that vision. Some have seen the VTR demonstration, expressed excitement, but then go quiet, Vannostran said. Still, he believes in these products and what they are capable of across the industry.

"It's going to change the business," he said. "It makes the hair on my arm stand up whenever I show it in front of a customer." **CT2**

treat the valves without shutting down the compressor. Most compressor applications in stable environments will use about 1 gpd (3.8 L/d) of the chemical solution. Harsher environments could require more than that, depending on the size, material and amount of buildup, Vannostran said.

With both treatments, the goal remains the same – keeping valves clean to maintain efficient compressor operation, mitigate costs and reduce downtime, Vannostran said. The two products are 90% identical, with the VTI having a few different properties to prevent any potential adverse effects on the

STEP 3

After soaking for the proper duration (dependant on the valve's condition), remove the valve.



STEP 4

Rinse off the valve and let it air dry.