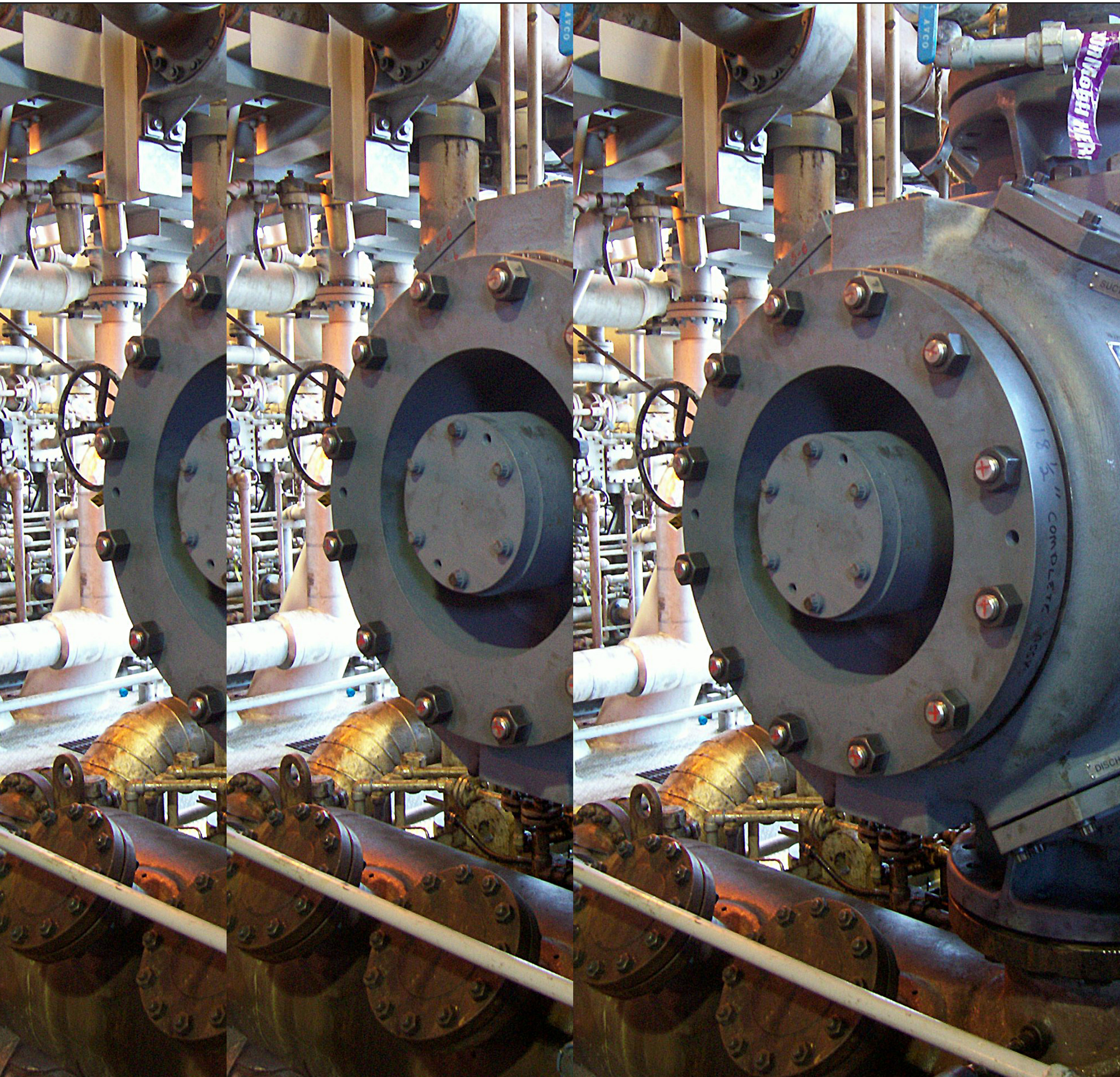


A large industrial machine, possibly a pump or compressor, is the central focus. It has a large circular flange with several bolts. The machine is surrounded by pipes, valves, and other industrial components. The text 'ACI SERVICES' is overlaid in the center in a bold, white, sans-serif font with a black outline. The background is slightly blurred, showing more of the industrial environment.

ACI SERVICES





ACI SERVICES

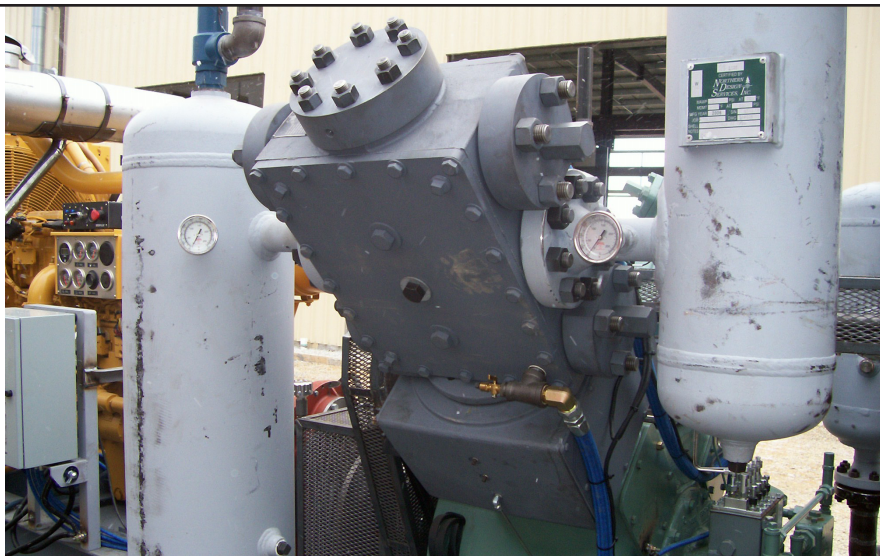
REVOLUTIONARY RECIPROCATING COMPRESSORS

Under pressure

ACI Services loves to work under pressure. High pressure. The company works with large reciprocating—that is, piston type compressors—compressors in various applications used to compress gases under high pressure, be it air, natural gases, process gases—the entire gamut. ACI Services works with any brand of compressor and almost any kind of application, from gathering gas out of the

ground in the upstream market, to processing gas through pipeline transmission, to chemical processing and refinery applications.

Norm Shade, President, ACI Services, Inc. says its focus is on “solving problems.” He says where ACI Services enjoys the greatest success is in solving problems and also helping customers by providing equipment that is efficient and optimally configured to deliver maximum productivity with minimum energy.



Shade says ACI Services has found a real niche in the legacy compressor improvement sector—that is, improving and fixing old models that have been rendered obsolete.

“We are able to design and manufacture improvements for legacy compressors. We are able to improve them with redesigned components and systems that preserve the owner’s asset for the long term,” he continues.

ACI Services does this for hundreds of compressor installations, and this capability results in customers having considerable savings on equipment. ACI Services’ customers range from manufacturers of complete new compressors to which “we provide new compressor cylinders, un-loaders, deactivator-valves and other

components that make the compressors more flexible and reliable for various applications,” says Shade. Other customers include small gas producers right up to the major oil and gas producers and major natural gas transporters, refiners and chemical producers. Shade says, “We are certainly able to play in the big leagues.”

Shade’s company is medium in size—there are about 44 centralized employees—but he uses a broad network of alliance partners that compliment ACI Services’ internal strengths with specialized technologies, niche marketing and increased production capacity.

Shade has reason to be proud of ACI Services. After taking over the reigns of the business five years ago, he grew it from a company that had not reached its potential to levels previously unseen in the company’s history (ACI Services, in different forms, was started in 1960 under the name Yorde Machine and later Anglo Compression Inc.). Shade credits his team, which he describes as “very strong”, as the backbone of ACI’s success.

New technology

Technological advancements have recently augmented the team’s capabilities. “ACI Services



uses many computer tools, the main one being eRCM™, our reciprocating compressor modeler. We can characterize the performance of any kind of reciprocating compressor,” Shade explains. “It is very useful and powerful for us to look at the configuration the owner has, or what configurations might be of service. This allows us to quickly come up with the optimal configuration, whether we need to modify a legacy system or define a new purchase. We look for a solution to provide the best performance.” This software can also be embedded in the controls for the compressor to increase its versatility, efficiency, utilization and reliability.

Going global

“We provide our engineering services and products essentially everywhere in the world,” Shade says about his growing company. ACI

Services has grown principally in North America, but in the past four years they have made steady paths into the global market, so much so that they are seeing over 10 per cent of their business go to the international market.

“We are in a position of success,” explains Shade, “because we are privately owned and because we have in-house experts. Through partner networks we are able to come up with new concepts,” several of which have been described in the dozens of articles published by Shade, a life-long engineering enthusiast.

Revolutionary system

This enthusiasm translates to innovative and progressive strides in compressor technology. This summer saw the completion of the first proof of concept on a field compressor which will in its own way revolutionize the industry. Explains Shade, “Along with one of our alliance partners, Optimum Power Technology, we have several patents pending on a system that uses pulsation attenuation networks (PAN).” The

idea is to tune the damaging pressure pulsations out of a compress system rather than attenuate them. This is done by looking at the make-up of the frequency versus the time characteristics, and then dividing the pressure wave into several components. "It works a lot like noise cancellation headphones, except applied to big systems with heavy pipes and high pressure. With passive energy we are essentially cancelling the pressure pulsation out of a system," says Shade.

The elimination of these pulsations can heighten the efficiency of the system. "The PAN system gets rid of pulsation with almost no loss in

pressure in the pipes. The purpose of a compressor is to increase pressure, but conventional pulsation dampening systems lower the pressure and ultimately the efficiency of the system.

Our new PAN system will improve the bottom line for compressor operators," says Shade.

The technology is now ready to be applied commercially for the first time, and Shade is very excited, because it is so "revolutionary". ACI Services and Optimum introduced the technology at the Gas Machinery Conference in Atlanta in the first week of October, where it was well received. In fact, several major



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pipeline operators are looking at using it on their new and existing compressors.

The other side of the compressor business is tailored to creating a well-based venue where individuals and companies can communicate. ACI Services has a website (www.compressorconnection.com) which connects owners used and decommissioned asset inventory with people looking for replacement equipment and parts. It is an opportunity, says Shade, to help the customer rehabilitate and reapply their old equipment with refurbished components as well as new parts, whichever is

needed to meet the customer's requirements and budget. Who is better to link up customers and dealer in the compressor community? After all, in addition to designing and manufacturing its own parts for virtually any brand of compressor, ACI Services is an authorized parts distributor for the largest compressor manufacturer in the world (Ariel Corporation).

ACI Services is well poised for many more years of innovation and advancements. It is an example of how passion and experience, good management and networks can create limitless possibilities. **IRJ**

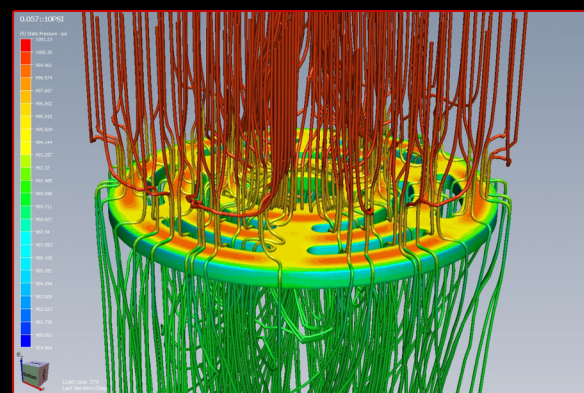
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