

Patented fastener helps Air Liquide achieve leak-free start-up

HYTORC

There is no such thing as a leak on a bolted joint that cannot be stopped. HYTORC truly believes this and has developed solutions in nearly every industry to prove it. The most universal solution, which has allowed HYTORC to offer a zero-leakage guarantee on start-up, is the HYTORC Nut™. This patented three-piece hex nut replacement acts as a mechanical tensioner to apply repeatable bolt load within 5 percent — a previously unheard of feat. With this level of accuracy applied consistently to each bolt, the chances of leakage upon start-up are virtually eliminated. HYTORC offers job supervision for maintenance crews and contractors to ensure everything goes smoothly during installation. In almost every case, the job time for assembly or disassembly can be cut in half and bolt galling is eliminated.

At Air Liquide's Bayport air separation plant in Pasadena, Texas, maintenance crews were constantly working to keep up with a horizontal flange on their compressor that had a history of leakage on start-up. This became a costly and time consuming process, as production had to be stopped to address the leakage almost each time after maintenance on the flange was performed. The rotating machinery engineer, Doug Cousins, at Air Liquide's Gulf Coast Reliability Center, was on a mission to find a permanent solution that would save time during installation and prevent leakage on start-up. HYTORC was called in to survey the unit at the off-site service center, which happens to be the world's largest rotating equipment service organization. The first issue was determining the best tools for the job.

Clearance issues on the horizontal flange made it nearly impossible for maintenance crews to apply even and accurate bolt load using standard hex nuts and jack screw nuts. The HYTORC technician determined the HYTORC Nut would be the perfect solution for the job, and the installation would be done with HYTORC AVANTI™ torque wrenches, which would fit in all areas. This would make the installation faster and safer, while accomplishing the overall goal of zero leakage on start-up. The service center's personnel were trained on the operation of the tools and the

HYTORC Nuts and supervised during installation to assure a smooth transition to this new technology. For the first time upon start-up, the horizontal flange was completely leak-free. Having solved this major headache, the crews noticed a leak on the nearby vertical flange. The unit ran uncovered for about two weeks

until inventory levels became less critical so it could be brought down and HYTORC Nuts could be installed on the vertical flange. Upon this start-up, both flanges were 100-percent leak-free. Almost one year later, the unit is still up and running with zero leaks.

"I wish I would've known about this

technology earlier so we could've saved ourselves a lot of time," said Cousins. "I would recommend this to anyone running into bolting problems."

For more information, visit www.hytorc.com or call (800) FOR HYTORC [367-4986]. ●



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