

OEM flexibility ensures boil-off fuel gas compressor service is completed within 18- day maintenance window

22 February 2022

Having been in service for five years, an LNG carrier was scheduled for dry dock in Singapore, but with just three weeks' notice, the location was changed to Dubai. Burckhardt Compression quickly redeployed its maintenance team and logistics to ensure both gas compressors were serviced within the 18-day window.

The vessel is equipped with two Burckhardt Compression Laby®-GI high-pressure fuel gas supply compressors, simultaneously supplying fuel gas at 300 bar to the 2-stroke engines and feeding a reliquefaction system with excess boil-off gas. The comprehensive boil-off gas management provided by the compressor system directly contributes to the energy efficient propulsion of the vessel and the protection of the transported LNG cargo. In combination with the gas-tight and leakage free compressor design, this contributes to reduced hydrocarbon, sulfur and CO₂ emissions.

Changing times

After five years, or 40'000 hours, in operation, the compressors were due for a scheduled maintenance inspection, which would be completed as part of the ship's overhaul program during dry-dock. In preparation for the project, Burckhardt Compression had completed all the necessary planning to ensure that its service

team could work quickly and efficiently with support from the company's service center in Singapore.

However, shortly before the project was due to start, the location was changed from Singapore to Dubai. Fortunately, Burckhardt Compression has service centers in both locations, so the local support element would remain in place. In addition, the project was originally scheduled to be completed in 21 days, but due to complications with the dry dock itself, this was reduced to 18 days onboard. A plan was also put in place to manage the extreme working conditions with ambient temperatures in Dubai ranging between 38 °C and 42 °C along with 60% humidity.

Streamlined processes

In spite of the last-minute change, the Burckhardt Compression team was able to quickly re-arrange the logistics for both staff and materials. Maksym Riabokon, Fleet Manager Marine Service Solutions for Burckhardt Compression, comments: "Each planned overhaul has a standard list of parts that we expect to replace, but the real challenge is dealing with service requirements outside of the original project scope. We have very limited time to source additional components and deliver them to the team on site. Fortunately, our project managers are able to expedite replacement parts direct from the factory and ensure the overhauls are delivered on time."

As the original equipment manufacturer (OEM), it is a far more stream-lined process to procure replacement components that are also under warranty and guaranteed to deliver a long service life.

Due to the short maintenance period available, the technicians worked on both compressors simultaneously and provided daily reports to the dry dock project

manager. By retaining the same provider for maintenance and repairs, the reporting is delivered in a common format using the same terminology.

“This helps to improve communications,” Maksym explains. “The number of different terms used for the same part is surprising. Our internal training and field experience means that our teams are always using the same language. This also makes it easier for customers to understand the results of any inspection.”

Flexibility and consistency

Burckhardt Compression was also responsible for the management of the team working on the gas coolers, which were removed from the vessel and cleaned in an adjacent workshop. The whole project was a complicated undertaking and required careful planning and coordination. The technicians onboard were supported by a local project manager from the Dubai Service Center as well as a much larger team at the manufacturing plant in Winterthur, Switzerland, where engineering and troubleshooting assistance is provided.

For all those involved in delivering services to a vessel in dry dock, any changes in the schedule, especially a change of location, can present considerable challenges in terms of reorganizing staff, transport and logistics to suit. Burckhardt Compression’s flexibility ensured that all the arrangements could be made, even at short notice, and the compressor overhauls would be completed successfully and on time.

Once the overhaul was complete, a written report was handed over to the customer summarizing the actions taken during this project as well as any notes on performance. These will also be used as part of the preparation work for the next

planned overhaul, which is scheduled to be completed at sea, ensuring a quick and efficient turnaround.

Image captions:



Image 1: Delivery of maintenance spare parts of the vessel



Image 2: Re-assembly of compressor.

The image(s) distributed with this press release are for Editorial use only and are subject to copyright. The image(s) may only be used to accompany the press release mentioned here, no other use is permitted.

About Burckhardt Compression

Burckhardt Compression is the worldwide market leader for reciprocating compressor systems and the only manufacturer and service provider that covers a full range of reciprocating compressor technologies and services. Its customized compressor systems are used in the gas gathering and processing, gas transport and storage, refinery, chemical, petrochemical as well as in the industrial gas and hydrogen mobility and energy sectors. Burckhardt Compression's leading technology, broad portfolio of compressor components and the full range of services help customers around the world to find the optimized solution for their reciprocating compressor systems. Since 1844, its highly skilled workforce has crafted superior solutions and set the benchmark in the gas compression industry.

SIX Swiss Exchange: BCHN

For further information please visit www.burckhardtcompression.com

Press contact:

Burckhardt Compression

Daniela Daron

Global Product Portfolio Manager

daniela.daron@burckhardtcompression.com

PR agency:

DMA Europa

Brittany Kennan

Progress House, Great Western Avenue, Worcester,

WR5 1AQ, UK

Tel.: +44 (0) 1905 917477

brittany@dmaeuropa.com

www.dmaeuropa.com