

Customer Training

TRAVELOGUE 2



In the Kingdom of 1001 Nights

In the last edition of NEA NEWS we reported on, in great detail, two recycle gas compressors from Technip Middle East for an offshore plant in the Arabian Gulf. Since the multi-story NEA compressor plants had to be mounted on the oil platform after transport from Thailand to Abu Dhabi “on-shore”, and as the commissioning time was drawing closer, it was clear for the plant operator that the service personnel would have to undergo intensive training by the NEAC Compressor Service coach. After clarification of the training content, *Norbert Janssen*, Product Training Manager, headed east, to Abu Dhabi.

This meant he had to catch a plane from the airport in Dusseldorf on Sep. 27, 2009 which took him to Abu Dhabi. The next morning, his Arab colleague *Abhijit Bhattacharya*, Service Manager from NEUMAN & ESSER Gulf FZE, picked him up so they could travel the 110 km together to Abu Dhabi. Even on this short stretch, Norbert Janssen found the construction activities overwhelming.

Introduction to the basics

They were met on location and welcomed by 11 of the customer’s employees from the fields of operations, instrumentation, maintenance and rotating equipment. On the first day, in the training center at Technip Middle East, they followed the Norbert Janssen’s remarks about compressor construction and the basics of thermodynamics. In addition to the compressor components, he delved into the details of the functions of the different types of valves, piston rings and guide rings as well as the piston rod sealings, which he had brought with him as visual aids. No detail on the subject of thermodynamics was left out concerning gas compression in a compressor.

How to optimize wear behavior

The second and third day were given over to the project orientation part of the training, which dealt concretely with the observation of the compressor installation. The focus was on the main plant parts such as the cooler, pulsation dampener and the oil system. Norbert Janssen also referred to the bearing clearances and the tightening torques,

which are on the thread connections on the four-crank NEA compressor of the 130 series. The animation which followed helped the participants better understand the issue of bolt tensioners for hydraulic screw fastening in detail, to ensure that the participants are familiar with this technique in future.

A further central theme dealt with lubrication of the various parts. For each plant, the optimization of the operating time of the wear parts should be paramount. Against this background, Mr. Janssen showed how the cylinder and the packaging lubrication should be correctly adjusted, so that the operating time of the rings and packaging are relevantly influenced. This includes also the use of the correct type of oil. The optimal setting of the oil system was also discussed to ensure safe operation of the crankcase lubrication.

It depends on the correct repair measures

Troubleshooting was on the agenda on the last day. Here the participants had to identify possible sources of error that could occur because of elevated pressures or temperatures. This allows the operator of a compressor plant to respond quickly to deviations that might occur and take the right measures to prevent an accident - an issue that brought up plenty for the participants to discuss.

To conclude the three-day training Norbert Janssen asked some test questions so that the participants could revise the material of the past days. They also took the opportunity to ask some questions before Norbert Janssen handed out their participation certificates.

Before heading back to Germany on October 1, Norbert Janssen was given a personal tour of Dubai by Abhijit Bhattacharya. Among the sites they visited the famous hotel Burj al Arab, the impressive Dubai Mall, the largest shopping mall in the world, and the Burj Khalifa*, with 828 m, currently the tallest building in the world.

For Norbert Janssen it was not only fascinating to observe how the inquisitive participants absorbed the training material, but it was also a chance for him to discover another world which had the allure of 1001 nights.

**Editor: In issue 17 we reported that the fine powdered coating on this tower came from the company Jotun, and was produced with NEUMAN & ESSER Impact Classifier Mills (ICM).*

