HEAT TREATMENT 紧急热处理项目案例 - 北海平台

Workscope

Stork were initially contracted to provide two separate workscopes prior to a planned shutdown on TAQA's North Cormorant. This included, heat treatment to nozzles on a vessel and the application of pre and post heat treatment to pipework.

Following changes in client requirements, Stork completed both workscopes simultaneously, during the shutdown and turnaround, ensuring an optimal operating environment for the client.

Solution

Recognising the client's changing needs, Stork adopted a flexible approach to this project. Initially two heat treatment technicians and two sets of equipment were deployed. However, upon quickly identifying the time critical nature of this project, additional technicians and equipment were mobilised proficiently. Stork increased to six multi-disciplined technicians and six sets of equipment, which improved efficiency levels. To support the client, Stork office personnel worked meticulously outwith working hours to manage technicians ensuring mobilisation within 24 hours.

Technicians received training and equipment was double checked to ensure maximum efficiency. High levels of communication and a strong working relationship between TAQA and Stork personnel allowed workscopes and strategies to be agreed and facilitated effectively.

Upon completion of the workscopes both parties ensured a washout meeting was conducted, facilitating the analysis of timesheets and trackers. This made the subsequent invoicing process extremely efficient.

Results

Due to the close working relationships between the operations teams all scopes were completed in a timely manner with no safety issues or concerns whilst working under extreme pressure during the TAR. There was 24 hour cover available onshore for any operational issues; this in turn proved impeccable as challenges over the weekend were quickly rectified.

Project

Location: UK North Sea, Cormorant Alpha **Materials:** Heat Treatment Units

Challenges:

Time critical nature of the project resulted in the fast, efficient mobilisation of additional resources.

Safety:

Project delivered with no lost time incidents

Client Testimonial:

"The service provided has been first class throughout the shutdown. All personnel and equipment arrived offshore with no issues at all. The onshore support has also been exceptional." **Alex Taylor** North Cormorant Construction Focal Point







CASE STUDY: Harburg Freudenberger

DESIGN & MANUFACTURE欧洲应GAS FIRED FURNACE设计利

欧洲应用案例: 设计和制造燃气热处理炉

Solution

Scope of Work

Cooperheat was approached by Harburg Freudenberger, a company based in Belišće Croatia, in July 2019 regarding our ability to build a large gas fired guillotine door furnace, to support part of their manufacturing process within their large facility in Croatia. They contacted Cooperheat because they had previously been given access to a Cooperheat furnace that was operated by another company in Croatia for around 40 years and is still going strong.

Harburg Freudenberger is a manufacturer of machines that produce tyres for cars and lorries; their clients include many of the European and Japanese multinational tyre manufacturers. They will use the furnace to heat treat and normalise parts which are used in the manufacture of their tyre making machines, in order to relieve stress in the parts following welding. This project stood out from other enquiries as the client wanted a full turnkey service, with the successful supplier being responsible for all aspects of the build process. This included manufacturing and installing the chimney for the furnace, designing the groundwork and civil work necessary to accommodate the furnace along with all build and commissioning activity. In addition, the client wanted a design that would allow them to utilise the waste heat from the furnace to provide heating to their facility.

Cooperheat's Senior Commissioning Engineer visited the site and discussed all of the technical aspects of their requirements with the client.

Cooperheat's in-house Design Engineers then developed a detailed initial design that would fully meet the client's requirements. The design incorporated a state of the art furnace control system that would provide complete temperature control in all zones of the furnace. Stork's HVACR Team assisted with the design of a unique twin skinned flue that would incorporate a heat exchanger in order to capture the waste heat being generated by the furnace.

This heat would normally go up the chimney into the atmosphere.

Cooperheat were awarded the contract in November 2019, with a scheduled delivery of the furnace at the beginning of May 2020. Despite the significant global impact of the COVID-19 pandemic, Cooperheat safely delivered all parts of the furnace to the clients site in Croatia.



Project Information

Project: Design & manufacture of a large gas fired guillotine door furnace

Client: Harburg Freudenberger

Type of Facility: Machine Manufactures

Industry: Tyre manufacturers

Site Location: Croatia

