

# DESIGN & MANUFACTURE GAS FIRED FURNACE

## 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 multi-national 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.

## Solution

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

