



Voestalpine steel company: Importance of fire protection and air conditioning



E. Hötzenegger, Voestalpine



Brakel® Estra

Renovation takes over 5 years

The renovation is spread out over 5 years (2014-2018), as the hall's production may not be negatively influenced by the work and we can only ever open the frontage in the summer months, i.e. in warm weather.

Fire protection: key to the company

Fire protection plays a central role in the company and is adhered to accordingly by all employees. In order to minimise the risk of fire and to continuously improve safety for both people and facilities, as well as the availability thereof, the group "Preventative fire protection" has been created, which is involved in all newly constructed buildings and renovations at the site in Linz. For this purpose, tailor-made fire protection solutions are being created – also for the SHEV system.

The solution: Important criteria for the functionality and aesthetics of the SHEV system

The solution: On the one hand, the SHEV system has to be functional. On the other hand, we also want an aesthetically-pleasing solution. Together with our design committee (architects), we decided on transparent louvered ventilators, Brakel® Estra and Brakel® Eura.

SHEV system also for daily ventilation

In the foundry, as well as in almost all other halls, the SHEV system is also used for natural ventilation. Some ventilators are controlled manually, however several are already automatic, which takes energy efficiency into account. This is very important in our company.

Natural ventilation: Waste heat and improved working conditions

The substantial amount of waste heat created in the production halls needs to be diverted in a targeted way. A natural ventilation system of appropriate dimensions also has an indirect positive effect on production and the operational lifespan of a system (e.g. the electrics). Moreover, this also creates improved working conditions for our colleagues.

Collaboration with Brakel

Brakel has already provided us with fantastic support during the basic planning stage. Neither the various construction sizes, nor the coating of the ventilators in our preferred RAL colour were a problem for Brakel. In this way, the design committee's guidelines could be fully adhered to.

In addition, throughout the installation process, Brakel proved to be, along with the implementing company (SCE), a reliable partner who is always on-site, delivers punctually and consistently deals with problems in a solution-oriented, quick and uncomplicated way.



Brakel® Eura



Brakel® Eura-R



Foundry

Brakel collaboration for smoke and heat extraction (SHEV) and natural ventilation

The worldwide voestalpine Group is a steel based technology and industrial goods company. The company is, for example, one of the leading partners of the European automotive industry and household appliance industry, as well as the global oil and gas industry. During the casting of the steel for a renovation, voestalpine worked together with Brakel to put in an SHEV system and natural ventilation. Mr Edwin Hötzenegger, Technical Infrastructure Project Engineer - Industrial Building Technology, talks about the renovation.

Renovation of the steel framework, frontage and roof

The problem was the age of the hall (which was built in 1940). The steel framework of the building had already been heavily affected by corrosion in some places and required renovation. At the same time, the frontage and the roof were also renovated, which gave us the opportunity to install natural ventilation and an SHEV system.

1940: no valid SHEV standards and guidelines

The hall was built back in 1940. Back then there were no standards or guidelines for SHEV yet. There were only a few windows which could be opened for ventilation purposes.

The challenge: Renovating the building during operation

The biggest challenge was, and still is, renovating the building during operation. The renovation work was not allowed to cause any production losses or disruptions. The time schedule was specified precisely in advance, together with the production team and project team, and must be adhered to exactly.