

# Better air for Frauenthal Automotive

AUTOMOTIVE • PRODUCTION HALLS



**Frauenthal Automotive is a major manufacturer of pressure vessels, metalwork and welding, part of the international Frauenthal Group.**

Their factory in Hustopečy is located in the inner city of the village and includes various types of roofs and roofing, including fixed roof and conical polycarbonate skylights. The installation project was carried out in 2018-2019.

# Hustopeče installation project

## What did it look like there?

The factory faced several challenges, including an old building with asphalt roofing and a wooden roof structure. Furthermore, a high amount of metal dust was present, which complicated the installation.

## Project specifics:

- Special obstacles: Old building, asphalt roofing, wooden roof structure, metal dust.
- Different types of roofs: Installation on solid roofs and conical polycarbonate skylights.
- Requirements: Low noise load and efficient installation in difficult conditions.



# Hustopeče installation project



## Used technology:

- 10 pcs of heat extractors: They remove excess heat from production premises.
- 5 pcs of adiabatic coolers: They ensure efficient cooling and humidity control.
- 9 pcs of destratification units: They improve air circulation and reduce the feeling temperature.



# Hustopeče installation project

## **Result:**

Total electricity consumption is a maximum of 15 kW, which is significantly lower than normal operating costs. Our solution ensured effective control of temperature and humidity with minimal energy load.

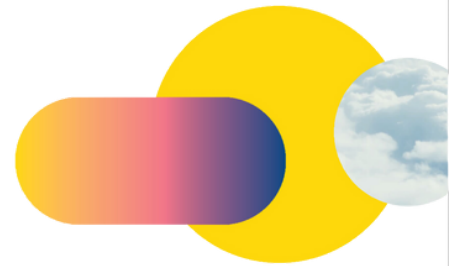
## **Hall size data:**

Total area: Specific data on the size of the hall are not given, but the project included various types of installations adapted to the specific conditions of the production hall with a volume of approx. 35,000 m<sup>3</sup>.

Our solution for Frauenthal Automotive Hustopeče effectively handled the challenging conditions and contributed to a significant reduction in operating costs while maintaining a high level of comfort and performance.



## Used technology:



### **HVLS destratifier**

- It will improve the transport of cooled air,
- lowers the feeling temperature by 4 °C,
- will reduce cooling costs by up to 20%,
- disrupts temperature layers (at 2 meters = + 2°C),
- equalizes the temperature between the ceiling and the floor to 2-3 °C,
- saves up to 40% on heating.



### **Adiabatic coolers**

- Reduces the temperature up to 28°C,
- reduces electricity consumption energy up to 80%,
- cools only with water,
- supplies 100% fresh air,
- 7x more efficient than air conditioning.



### **Heat extractor**

- It reduces the concentration of pathogens microorganisms,
- reduces the temperature load by up to 5 °C,
- removes moisture, VOCs, CO2, etc.,
- reduces ventilation costs by up to 99%.