



# PROJECT INFORMATION

## Wanzl Metal Product Solutions





## Wanzl Metallwarenfabrik GmbH - The Galvanic Challenge

Each and every one of us has certainly already pushed a Wanzl product once in his life. Founded in 1918, the company is the world market leader with an annual production of more than two million shopping and luggage trolleys today. Wanzl employs more than 4,000 people in 22 countries. The company's headquarter is situated in Leipheim, Bavaria.



The roof refurbishment of the galvanic plant 2 in Leipheim, included the renewal of the continuous skylight system and the replacement of the existing SHE systems with PHOENIX multi-purpose ventilators. As electroplating processes produce vapours that lead to corrosion on metal, copper and aluminium, the installed systems were subject to special demands. Thus, the cylinders used are special cylinders with hard chrome-plated piston rod, bellows and a protective sleeve above the lock. All screws are coated with special protective grease and varnish. Control cables have a passage to the outside from where they are laid out in cable ducts on the roof. The hinges of the inner flaps are screwed-retained and can be replaced. All system parts are fitted with a special KTL coating. With expert permission, the use of thermo priority valves (TVV) was waived. The opening of the devices is triggered by the fire alarm system. Five FIREFIGHTER single flaps were installed in the building above the office wing, which ensure a significantly better climate at the workplace on warmer days. Thermal separation prevents condensation water problems, which would occur due to the difference between the in- and outside temperature in winter. With Lumira Aerogel filled opening panels, the systems reach a U-value of under 1.4 W/m<sup>2</sup>K. Ventilation systems and continuous skylights are fitted with fall-through safety grids.

The following systems were installed in the course of refurbishment:

- 7 EUROLIGHT MKIII barrel rooflights with 16/4 opal polycarbonate multi-wall panels and personal safety profile type PSP30
- 12 MEGAPHOENIX 1925 multi-purpose ventilator with fall-through safety grid
- 5 FIREFIGHTER DUO single flaps with 16/3 Lumira filled polycarbonate multi-wall panels



Gerhard Sobczyk | Operational Manager Wanzl Metallwarenfabrik GmbH

"roda's natural venting systems ensure pleasant working conditions in all workshops of our factories in Leipheim, Kirchheim and the Czech Republic. Since the systems are also designed for smoke and heat extraction with opening panels that allow natural daylight to enter the building, our employees enjoy a multi-purpose benefit. We can recommend roda as a specialist company without any restriction. "





Two MEGAPHOENIX systems were each integrated into one continuous skylight.



Special cylinder with bellows and hard chrome-plated piston rod. Feeds within the system are made of plastic.





Feeds were led out of the system and laid in cable ducts over the roof.



FIREFIGHTER venting systems with SHE function are thermally separated.





Filled with Lumira, the polycarbonate infill reaches a U-value of  $1.33 \text{ W/m}^2\text{K}$ .



The systems open via a 230 V linear actuator.