



PROJECT INFORMATION
Lebkuchen-SCHMIDT



Lebkuchen-Schmidt – Modern Systems to Preserve Tradition

A railway wagon full of gingerbread, sent to him by his brother Franz Schmidt from Thuringia, was the starting signal for the invention of the direct shipment of Nuremberg gingerbread by E. Otto Schmidt in 1926. He was so successful with this new business idea that he founded his own small gingerbread bakery in Nuremberg. Today, the company has around 250 permanent employees and up to 1,000 seasonal workers.



roda Licht- und Lufttechnik GmbH was commissioned to replace the complete ventilation system of the production halls and at the same time to find the best possible solution for an eternal problem in the food industry: the discharge of the enormous waste heat generated during baking. Using naturally working smoke and heat extractors and ventilation systems, a completely energy-free dissipation can be achieved. However, the strict hygienic regulations of the food industry stipulate that no small animals must be able to enter the production site for a very good reason. Therefore, ventilation systems must be fitted with insect screens. For light dome, the latter are integrated beneath or within the plinth, which usually allows cleaning only from underneath. With roda, a business partner was found, who is not only able to produce bespoke systems, but also offers special solutions for different industrial sectors. roda integrates their insect screen as a drawer into the ventilation systems. These can be pulled out from the roof and thus be cleaned during operation.

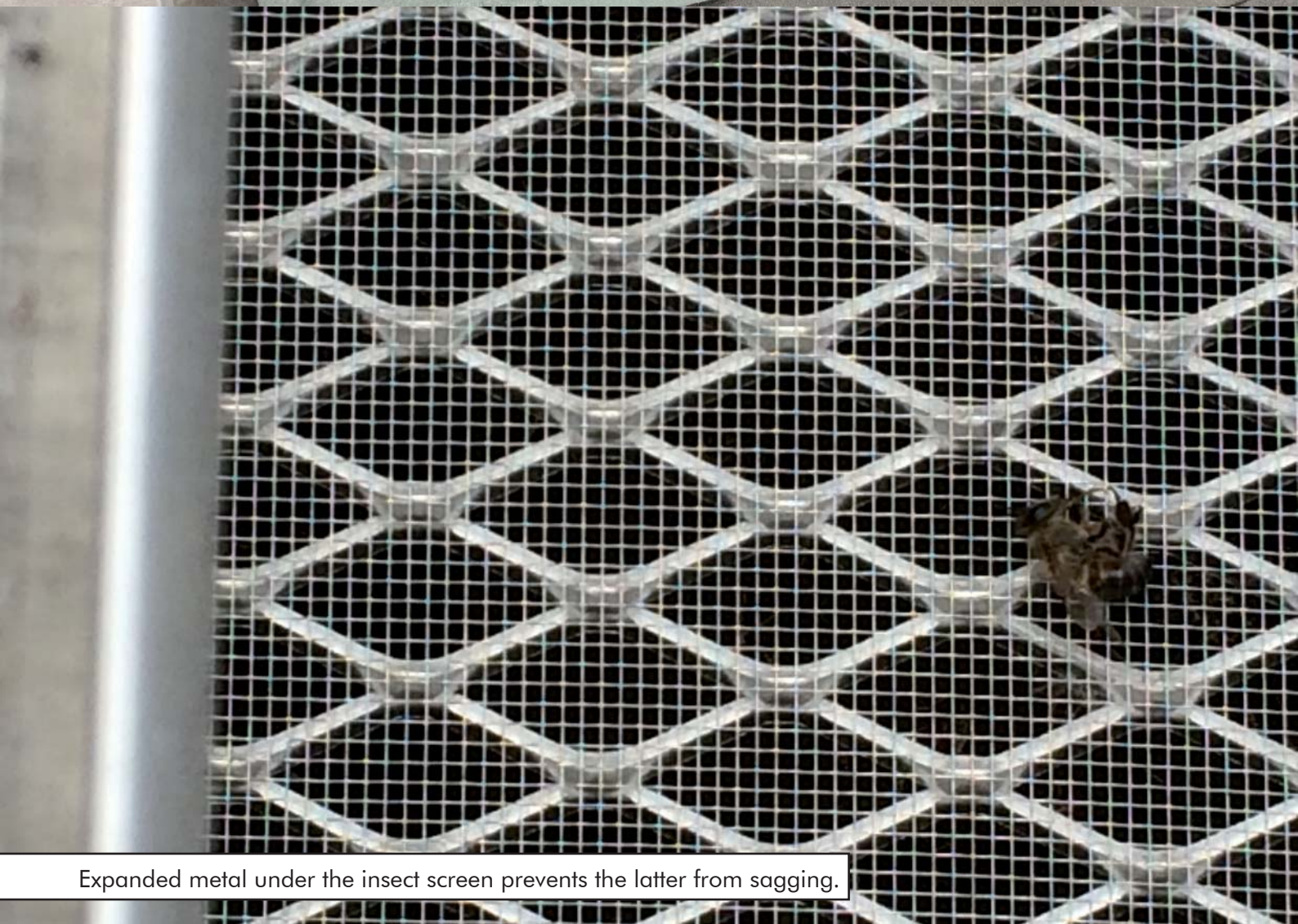
It goes without saying that the waste heat must be discharged too in bad weather conditions, for which a different solution-orientated approach is requested. Here, the so-called multi-purpose ventilators, such as the MULTIJET, come into application. During bad weather conditions, the systems use their rain-tight side flaps for venting. These systems too, feature integrated insect screens designed as a drawer. After the retrofitting, Lebkuchen-Schmidt is now able to discharge the warm exhaust air independently from weather conditions and energy-free without having to stop production for maintenance and cleaning purposes. The following systems were installed at Lebkuchen-Schmidt:

- SMOKEJET louvre ventilator for smoke and heat extraction in case of fire (SHE)
- SMOKEJET louvre ventilator with insect screens for SHE and ventilation
- MULTIJET multi-purpose ventilator with insect screen for SHE and all-weather ventilation
- PHOENIX double flap system for SHE in case of fire
- PHOENIX single flap system for smoke and heat extraction in case of fire
- PHOENIX single flap system with a rigid hood as a pure lighting element

An alternative to naturally working smoke and heat extractors and ventilation systems is offered by mechanical ventilation systems. As to how much could be saved in energy costs, when using naturally working systems, can be found out [here](#).



Systems without insect screen only open in case of fire.



Expanded metal under the insect screen prevents the latter from sagging.



In closed position the drawer is fixed by tension latches.



In bad weather conditions the side boxes can be opened by means of an actuator.