



Infrared Emitters Optimise Drying of Protective Varnishes

Heraeus Carbon infrared emitters help Weweler Colaert to save valuable production space, while, at the same time, minimising energy usage.

Weweler Colaert, based in Belgium, produces steel leaf springs and parabolic springs for heavy goods. Different production speeds are required for sets of different dimensions and curvatures.

During manufacture, steel leaf springs are coated with a water-based varnish to protect against corrosion. The varnish needs to be reliably dried, but the steel must not be heated up completely so that the springs are quickly ready for further manufacturing stages. That is the challenge for varnish drying, while at the same time the drying oven must be able to dry the wide range of springs, without consuming unnecessary energy.

Gert Keuterickx from Weiss Technik "We carried out calculations for various possibilities and established that an infrared oven would be much smaller than the 10 metre long hot air oven, which had been discussed as an alternative."

Finally it was decided to specify an infrared system with individually adjustable emitter zones. The new oven is featured with an Infrared Module of 108 kW nominal power and contains medium wave carbon infrared emitters.

Infrared emitters transfer energy without contact and can be easily controlled. The emitters in the oven run parallel to the production line so that individual emitters can be switched on as required depending on the spring width. Consequently, the IR module is activated only when heat is needed. As a result, and thanks to the ingenious power regulation, the energy consumption of the system can be minimised.



Features

- Drying of water-based varnish to protect against corrosion
- energy-efficient
- Contact free heating

Technical Data

- Medium wave Carbon infrared emitters
- Adjustable for height
- Individually positionable
- Run parallel to the production line
- Oven with 2.5 meters wide und 2 meters long
- Infrared module of 108 /kW nominal power

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