Heraeus



Infrared booster combined with electric hotair oven optimizes paint drying

A test line with IR booster in front of an electric hot air oven (vötschoven) at the Heraeus Noblelight application center in Kleinostheim enables particularly practical tests. Infrared heat brings products to the target temperature very quickly and electric hot air ovens ensure homogeneous heating of the parts, even if they have a complex three-dimensional shape. Practical testing helps to optimally configure the subsequent system and provides the customer with the necessary confidence for a planned investment.

Infrared boosters from Heraeus Noblelight and electric hot air ovens from Weiss Technik can later be retrofitted in a modular fashion. This modular system makes the system configuration flexible. Through the combined knowhow and decades of experience of two leading companies, a customer receives a high level of process reliability. The combination of infrared and hot air has been tested with various products. A particular challenge was a stainless steel ball coated with black powder paint.

Thermocouples showed that the heating was homogeneous over the entire surface of the sphere. The comparison showed a significant reduction in the heating time required for curing when the infrared booster was connected upstream.

The infrared booster increases energy efficiency and shortens process times. The reduced energy consumption thus contributes to optimizing the CO₂ footprint.



Features

- Black powder coating on stainless steel ball is cured in hot air oven
- •Fast and efficient energy transfer
- Shortened process times

Technical Data

- IR boosters speeds up the melting process
- Homogeneous heating due to zone switching of the infrared emitters
- ■9 minutes time saving

		hot air	IR-Booster + hot air
	heating to 170°C	10 minutes	1 minute
	complete curing	20 minutes	11 minutes

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