Heraeus



Infrared Heat speeds up curing of powder coating on aluminum goalposts

A combination of a conventional infrared oven with an infrared booster, helps Goalpost Ireland speed up the curing of painted goalposts and accessories. The new oven provides more precise control of powder coating and helps process a wider range of products.

Goalpost Ireland is a leading designer and manufacturer of sports field equipment for rugby, soccer, field hockey, basketball and tennis. Its products, such as complete goals with support posts, pitchside dugouts and flagpoles, are certified to national and international safety standards and are sold worldwide.

Posts, standpipes and accessories are made of aluminum, but conventionally and in order to comply with sports federation regulations, they are powder coated with white paint. This used to be cured in an infrared oven, through which the parts were continuously passed in a suspended position. However, the process became slower and slower as powder buildup occurred over time due to powder carryover and inefficient curing. The heating power of the furnace was not controllable, and the operator had to rely solely on the dwell time in the furnace. The low height of the oven also limited the possible product groups. Goalpost was convinced in principle of the advantages of an infrared oven over a convection oven and turned to Heraeus Noblelight.

The infrared specialists installed a modern infrared oven with a greater working height, so that assembled products up to a height of two meters can now be processed. In addition, Heraeus Noblelight installed a 120 kW infrared booster in front of the furnace. The booster is divided into four zones and heats the powder so quickly that it is in a gel-like state when it enters the furnace. This minimizes powder carryover and prevents contamination of the furnace.

The new combination of infrared booster and oven has a simple and precise control system. It is now possible to precisely match the infrared heat to the part and coating passing through. Curing is thus three to four times faster than with the old system.



Germany

Heraeus Noblelight GmbH Infrared Process Technology Reinhard-Heraeus-Ring 7 63801 Kleinostheim Phone +49 6181 35-8545 Fax +49 6181 35 16-8410 hng-infrared@heraeus.com www.heraeus-noblelight.com/infrared USA Heraeus Noblelight America LLC 1520C Broadmoor Blvd. Buford, GA 30518

Phone +1 678 835-5764 Fax: +1 678 835-5765 info.hna.ip@heraeus.com www.heraeus-thermal-solutions.com

Features

Curing of white powder coating on aluminumCoating of goalposts, flagpoles and other equipment for sports fields

Increase of production speed

Minimization of powder carryover

Technical Data

conventional IR ovenInfrared booster with 120 kW

Great Britain Heraeus Noblelight Ltd.

Clayhill Industrial Estate Neston, Cheshire CH64 3UZ Phone +44 151 353-2710 Fax +44 151 353-2719 ian.bartley@heraeus.com www.heraeus-infraredsolutions.co.uk

China

Heraeus Noblelight (Shenyang) LTD 2F, 5th Building 5

No. 406, Guilin Rd, Xuhui District 200233 Shanghai Phone +8621 3357-5555 Fax +8621 3357-5333 info.hns@heraeus.com www.heraeus-noblelight.cn