



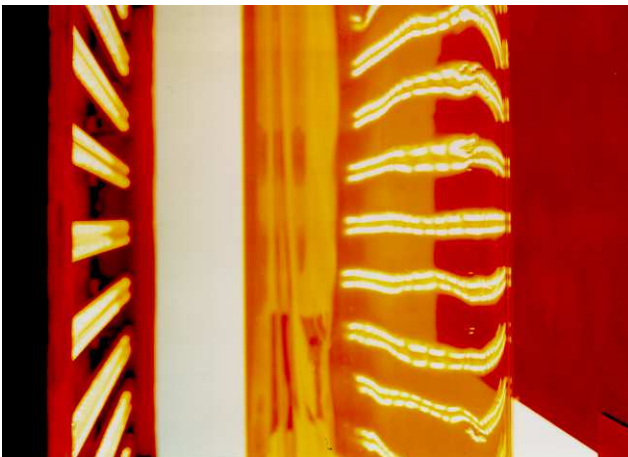
The Wavelength Converter

Infrared radiation transfers large amounts of energy in a short time. The effectiveness of the heating or drying of different materials depends on how well the material can absorb the radiation. Especially with thin materials, a large fraction of the radiation is lost as this fraction passes through the material without any heating effect. Heraeus has found an ingeniously simple solution to this problem: a wavelength converter, consisting of a plate with mineral fibers, absorbs the radiation which has passed through the material and radiates it back into the material at a different wavelength.

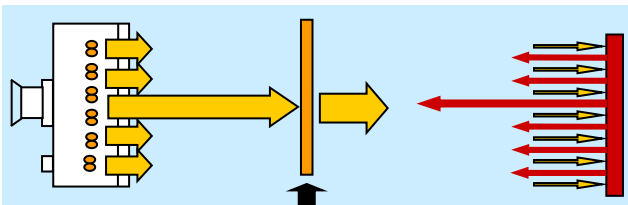
The wavelength converter absorbs transmitted infrared radiation, heats up to 500 - 600°C and then radiates back medium- and long wave radiation.

Consequently, the fraction of infrared radiation which has passed through the material is captured by the converter and absorbed in the material with high efficiency.

The wavelength converter can be tailored to the size of the IR module and the finishing plant where it is used. An IR wavelength converter requires only a small capital investment and significantly increases energy utilization.



Infrared Emitters Foil Wavelength Converter



The Benefits

- Energy saving
- Fast heating
- Shorter heating area
- Low investment cost
- Easy installation

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

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