

## Press release

Kleinostheim, February 2015

### **New Generation: Short Carbon Infrared Emitters For Industrial Heating Processes**

**Carbon infrared emitters from Heraeus Noblelight have a unique design of heating filament and combine the effective medium wave infrared radiation with high surface power output and short response times. This provides a very fast heating process at high efficiency. By using a new manufacturing process, Heraeus can now offer a new generation of carbon infrared emitters. Emitters with a heated length of 50mm upwards are now available for industrial heating processes.**

Medium wave infrared radiation has particularly efficient application in the heating of the edges of small diameter plastic tubes and pipes or in the drying of thin tracks of adhesives. The medium infrared wavelengths are those best absorbed by plastics, water and glass. Heating takes place very efficiently, so saving energy. Carbon infrared emitters (CIR®) transfer this effective heat at high power and are easy to control.

Because of new manufacturing procedures, it is now possible to produce emitters of very short lengths, which can be matched precisely to small items to be heated or dried. The new emitters are particularly suitable for welding or applying adhesive to small plastic components or for application in areas where only partial heating is required.

The new, short carbon infrared emitters are available as twin or single tube emitters and can be fitted with gold or QRC® reflectors or without reflectors, according to customer requirements. They can also be installed horizontally and vertically and, as twin tubes, they emit up to 50 W/cm, at a power variance of 10%.

#### **Medium Wave Infrared Wavelengths are Efficient**

With infrared radiation, part of the emitted energy is absorbed in the irradiated material, part is reflected and the rest passes through the material. Consequently, every material has its own absorption spectrum, that is, the region in which the electromagnetic radiation is best absorbed. If this region is used, then the heating of the material is significantly faster and more effective.

The wavelength of the infrared radiation has a great effect on the process. In general, plastics absorb best in the medium- to long-wave region.

**Heraeus**, the technology group headquartered in Hanau, Germany, is a leading international family-owned company formed in 1851. We create high-value solutions for our customers, strengthening their competitiveness for the long term. Our activities focus on a number of markets: chemical and metals, energy and the environment, communications and electronics, health, mobility, and industrial applications. In fiscal year 2013, Heraeus achieved product revenue of €3.6 billion and precious metals trading revenue of €13.5 billion. With some 12,500 employees in over 110 subsidiaries worldwide, Heraeus holds a leading position in its global markets.

**Heraeus Noblelight GmbH** with its headquarters in Hanau and with subsidiaries in the USA, Great Britain, France, China and Australia, is one of the technology- and market-leaders in the production of specialist light sources and systems. In 2013, Heraeus Noblelight had an annual turnover of 138 Million € and employed 875 people worldwide. The organization develops, manufactures and markets infrared and ultraviolet emitters, systems and solutions for applications in industrial manufacture, environmental protection, medicine and cosmetics, research, development and analytical measurement techniques..

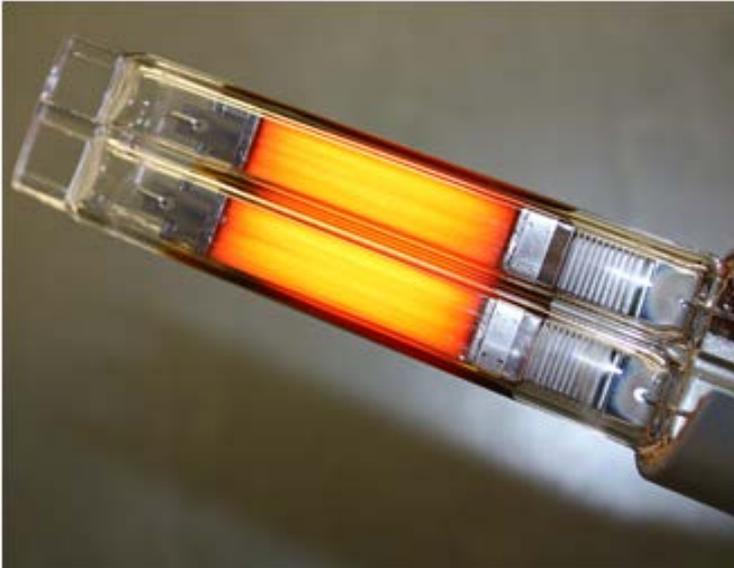
---

For further information, please contact:

Technical: Heraeus Noblelight GmbH  
Reinhard-Heraeus-Ring 7  
D-63801 Kleinostheim  
Tel +49 6181/35-8545, Fax +49 6181/35-16 8545  
E-Mail [hng-infrared@heraeus.com](mailto:hng-infrared@heraeus.com)

Press: Dr. Marie-Luise Bopp  
Heraeus Noblelight GmbH,  
Abteilung Marketing/Werbung  
Tel +49 6181/35-8547, Fax +49 6181/35-16 8547  
E-Mail [marie-luise.bopp@heraeus.com](mailto:marie-luise.bopp@heraeus.com)  
[www.heraeus-noblelight.com](http://www.heraeus-noblelight.com)

**Heraeus pictures:**



Carbon Infrared emitters are now available in very short lengths.

(Picture: Heraeus Noblelight GmbH)