Medium Wave Infrared Emitters
Efficient and economical

Infrared heating technology
Infrared heating technology transfers large amounts of energy in a short time and heats quickly in a targeted fashion. With modern infrared technology, large surface areas as well as small three-dimensional workpieces can be heated.

Infrared emitters allow optimum matching
Infrared emitters are matched to different requirements by the correct selection of wavelength. Short wave emitters offer excellent depth of penetration while medium wave emitters rapidly heat the surface and thin layers.

Medium wave infrared emitters – efficient and economical
Plastics, water and other solvents absorb medium wave radiation especially well. The use of medium wave infrared emitters helps in the effective drying of paints and lacquers and in the economical processing of plastic foils and sheet. Because of their long life, these emitters are best suited for continuous processes. Surface films and very thin materials are heated up extremely efficiently. Medium wave infrared emitters are manufactured in any required length up to 6 m. Twin tube emitters distinguish themselves by their high stability and power density. In addition, because of a gold coating, the radiation is precisely directed and the efficiency significantly increased.

Heraeus
Heraeus has many years experience in infrared heating technology, provides advice and individual attention and offers the resources of an applications center for testing. Heraeus has the optimum spectrum for each application.
- NIR InfraLight – Halogen infrared emitters
- Twin tube infrared emitters in all conventional wavelengths
- CIR® Carbon infrared emitters
- IR modules and control systems for industrial applications
- Emitters for targeted heating in finishing processes and for complex surface geometry

Infrared heating technology offers important advantages:
Heating only where it is required, with the optimum wavelength for the product to be heated and in harmony with the process.

Heraeus Noblelight
Medium Wave Infrared Emitter
- Twin tube emitters of various tube format 18 x 8 mm, 22 x 10 mm, 33 x 15 mm
- Filament temperature 800 – 950 °C
- Peak wavelength 2.4 – 2.7 μm
- Maximum current 8/10/20/A, according to tube format
- Mean power density 18/20/25 W/cm according to tube format
- Maximum surface power 60 kW/m²
- Standard emitters are designed for horizontal operation.
- The emitters are modified for vertical operation.
- Emitters are available in various designs and can be one-side or two-side connected.
- A gold coating of the emitter ensures that the effective radiation is virtually doubled.

Medium Wave IR Emitter Product Range
for standard designs A – H *

<table>
<thead>
<tr>
<th>Tube format</th>
<th>Total Length GL</th>
<th>Heated Length BL</th>
<th>Voltage Leistungs-</th>
<th>Mean power density [W/cm]</th>
<th>Power output at max. current [W]</th>
</tr>
</thead>
<tbody>
<tr>
<td>A x B</td>
<td>[mm]</td>
<td>[mm]</td>
<td>[V]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 x 8</td>
<td>150 – 1050</td>
<td>100 – 1000</td>
<td>230/400</td>
<td>18</td>
<td>180 – 2000</td>
</tr>
<tr>
<td>22 x 10</td>
<td>160 – 1660</td>
<td>100 – 1600</td>
<td>230/400</td>
<td>20</td>
<td>200 – 4800</td>
</tr>
<tr>
<td>33 x 15</td>
<td>170 – 4970</td>
<td>100 – 4900</td>
<td>230/400</td>
<td>25</td>
<td>250 – 14700</td>
</tr>
</tbody>
</table>

Heraeus manufactures medium wave emitters in other designs, lengths, voltages and power intensities to meet the individual requirements of your manufacturing process.

* Not every data in this table is valid for every emitter design

Standard designs for infrared twin tube emitters, with one-side (A,B) or two-side (C,D,H) connections.

Radiation field of medium wave infrared emitters. As well as emitters and emitter fields, Heraeus also offers SYS series electronic controllers and Heratron power controllers.