



Looking for contactless heating? We've got the heat **you** need.

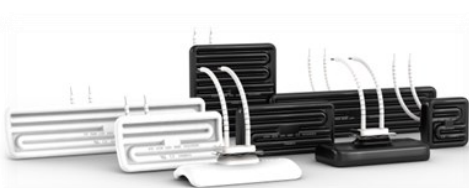
Freek offers long-wave, medium-wave und short-wave infrared emitters!

You are aiming to heat a specific material using infrared radiation? Along with supplying the necessary emitters, we offer our expert advice in a personalised consultation.

Each material is particularly effective at absorbing a specific range of wavelengths, where resonance occurs. Other wavelength ranges are strongly reflected. Therefore, it is essential to match the material with the emitter's wavelength spectrum to achieve energy-efficient and rapid heating to the desired temperature.

When designing your solution, we also take into account whether it is a cyclic or continuous process. For fast process cycles with short heating and cooling times, short-wave quartz halogen emitters are ideal. For continuous processes, broad-spectrum long- and medium-wave quartz and ceramic emitters provide greater energy efficiency in most applications.

Freek offers long-, medium-, and short-wave infrared emitters - as single elements, pre-installed with reflectors, or as ready-to-use platens or ovens with suitable control and regulation technology. Based on your needs, we provide neutral and open-ended advice, delivering the perfect heating solution for your application - from single emitters to fully operational systems.



	Long-Wave Emitters	Medium-Wave Emitters	Short-Wave Emitters
Typ	Ceramic Emitters	Quartz Emitters	Quartz-Halogen-Emitters
λ	2 - 10 μm	1.5 - 8 μm	1 - 6.5 μm
*	4 - 7 Minutes	4 - 6 Minutes	A few seconds

¹Useable wavelength ²Heat up time until 85% of the emitter's surface temperature is reached

Technical changes may apply.

Why Freek?

- Individual consultation based on decades of experience
- Various emitter types depending on your application
- Optimisation of cycle times through precisely tuned wavelength
- Large stock of standard emitters
- Application-based design of ready-to-use panels, incl. controller
- Mobile testing unit to identify the ideal emitter

Any questions?

I'm happy to advise you personally!



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Proven in Practice: Identifying the optimal emitter on-site with the customer

Requirements:

- Development of an infrared conveyor oven for curing of innovative materials
- Lack of detailed information on material properties

Freek Solution:

- On-site use of the mobile test unit to evaluate different emitter types and performance levels
- Design and production of an oven using hollow ceramic emitters, including cycle time estimation

