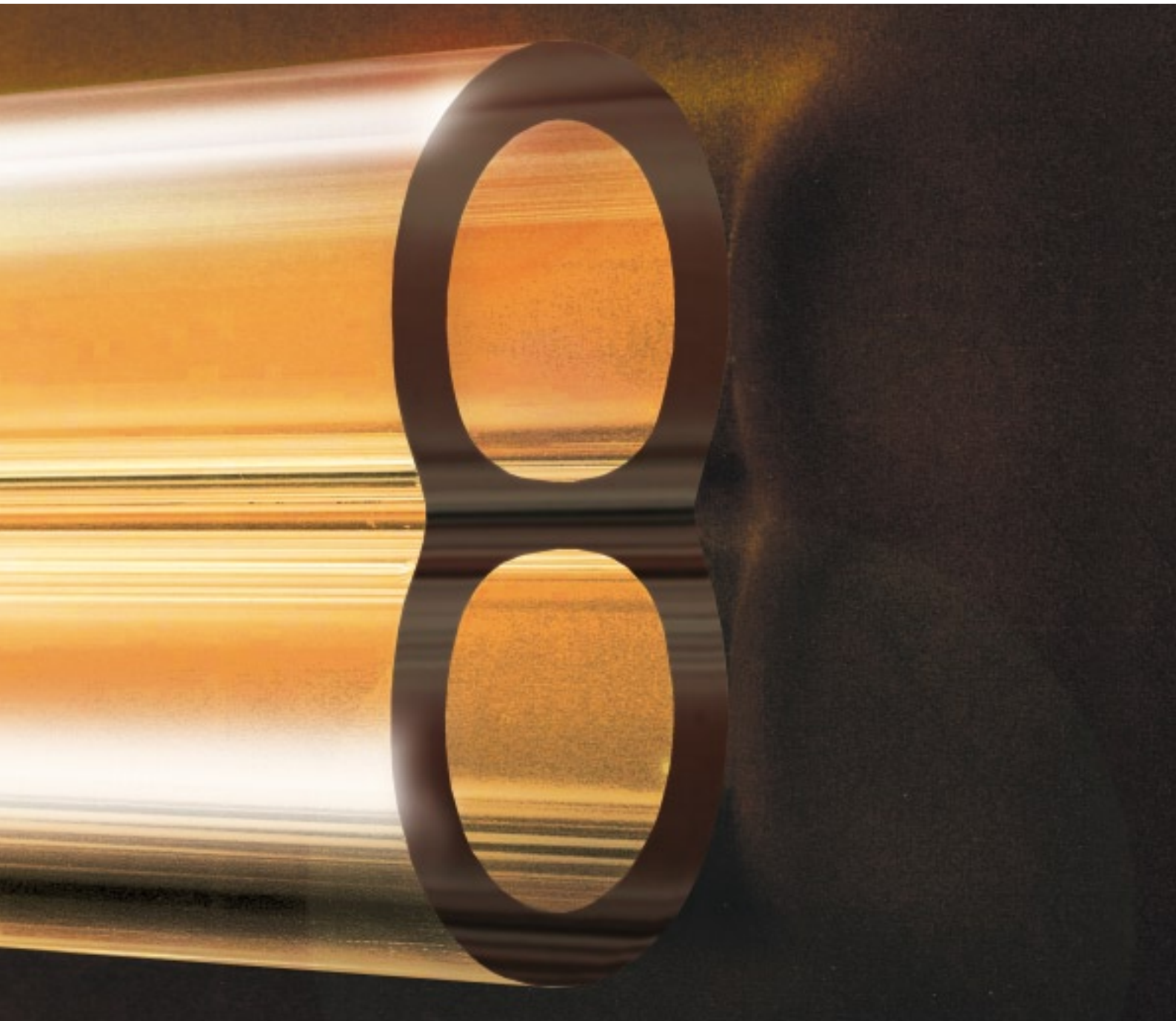


Golden 8

Packaged Heat at the ready





Golden 8

A reliable sign of competence and quality in infrared heating: the Golden 8 is the basis of all our twin tube emitters and is the starting point for new solutions in heating processes.

Quartz Glass

Heraeus Golden 8 infrared emitters are manufactured from high quality quartz tubes. Quartz glass is very pure and provides good transmission and temperature resistance.

Twin Tube

The unique twin tube design offers high radiation power and very good mechanical stability – allowing emitters of lengths up to 6.5 metres. Emitters are available in short wave, medium wave, or fast response medium wave versions. That gives you the possibility to select the optimum wavelength for the material to be heated. Dimensions and filaments are matched to requirements.

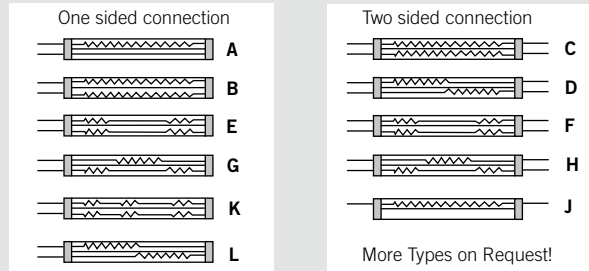
Gold Reflector

Heraeus Noblelight offers infrared emitters which by virtue of a gold reflector can emit heat directly to the product. A gold coating on the infrared emitters reflects the infrared radiation. Consequently the infrared radiation impinging on the product is virtually doubled.

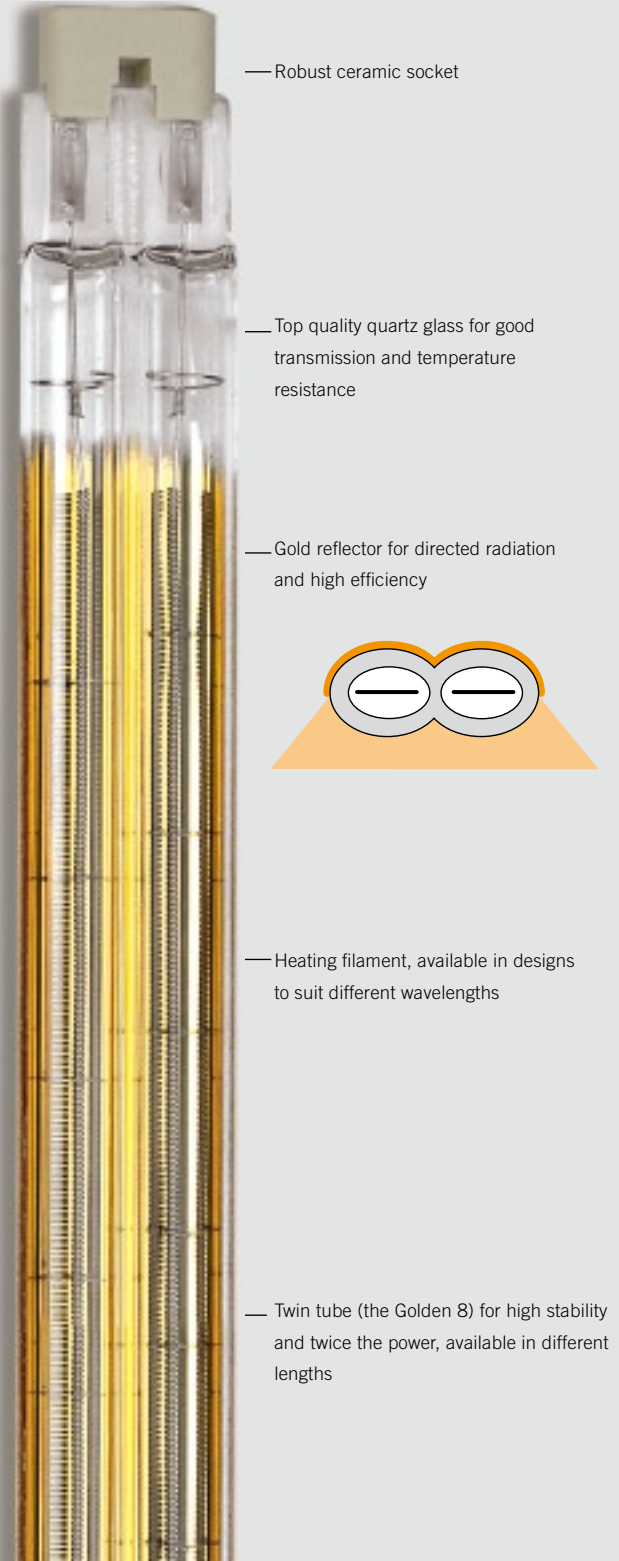
Best materials and technologies

Heraeus Noblelight has inhouse access to advanced quartz glass and gold technology in the Heraeus group. This ensures consistently high quality and performance of all Heraeus emitters and makes new developments for special needs possible.

Design of the twin tube emitter



Emitter characteristics



Infrared emitters fixing innovative technical textiles



Carbon twin emitters flow and cure powder coatings efficiently



Carbon Infrared Emitters CIR®

Heraeus Carbon infrared emitters feature a unique heating filament design so that medium wave radiation offering very fast reaction times is possible. All Carbon infrared emitters CIR® offer high surface power densities and speed up heating processes at high efficiency.

Comprehensive tests have shown that Carbon emitters dry water-based coatings significantly more efficiently than short wave infrared emitters. A Carbon infrared emitter may require only up to 30% of the energy for the same drying process as a conventional short wave infrared emitter. Moreover, many materials such as glass and plastics show a decided preference for thermal radiation in the medium wave region.

Carbon emitters combine medium wave radiation at high Watts density with response times in terms of seconds.

Short wave twin tube emitters are similar to halogen emitters in terms of spectrum but offer significant benefits in terms of lifetime, strength and durability.

Fast response medium wave emitters are twin tube emitters with a spectrum between those of short wave and medium wave emitters. These emitters are offered at lengths of up to 6.5m.

Medium wave emitters distinguish themselves with their high cost-efficiency, stability and operating life. The spectrum is suitable for heating processes in most materials.





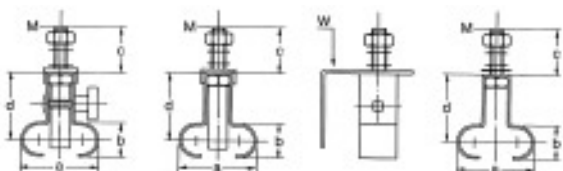
Infrared emitters need a flexible but firm holder so that they can operate correctly



Accessories Needed For Installation

Every infrared emitter requires a clamping spring and a holding spring to ensure that the emitter is held elastically. Long emitters should be supported in the middle and medium wave emitters have a longer operating life when they are supported by a right angled safety bracket. These springs and other accessories can be found on the internet at: www.heraeus-noblelight.com/infrared on the Products/Accessories pages. For further information please contact us!

	Tube format		Dimensions				Item number	
	mm		a	b	c	d		M
Clamp Holder	18 x 8		18	8	20	25	M 5	0975 8010
	22 x 10/23 x 11		22	10	20	25	M 5	0975 8013
	33 x 15/34 x 14		33	15	25	30	M 6	0975 8016
Spring Holder	18 x 8		18	8	20	25	M 5	0975 8011
	22 x 10/23 x 11		22	10	20	25	M 5	0975 8014
	33 x 15/34 x 14		33	15	25	30	M 6	0975 8017
Central Support	18 x 8		18	8	20	25	M 5	0975 8012
	22 x 10/23 x 11		22	10	20	25	M 5	0975 8015
W = Safety Right								
Angle Support	33 x 15/34 x 14		33	15	25	30	M 6	0975 8018



Technical data

Twin tube emitter	Short wave	Fast response medium wave	Medium wave	Carbon
Max. specific power W/cm	< 200	80	18/20/25*	80
Max. heated length mm	6400/2400*	6400/2400*	1500/2000/6500*	3000
Cross-section mm	34 x 14	34 x 14	18 x 8	34 x 14
	23 x 11	23 x 11	22 x 10	
			33 x 15	
Filament temperature °C	1800–2400	1400–1800	800– 950	1200
Peak wavelength µm	1.0–1.4	> 1.4	2.4–2.7	2
Max. surface power density kW/m ²	200	150	60	150
Response time s	1	1–2	60-90	1–2

* Depending on cross-section

Golden 8 standard emitters

	Power [Watts]	Voltage [Volts]	Heated length [mm]	Total length [mm]	Emitter type	Item number
Medium wave	500	230	300	400	B	09752439
	1000	230	500	600	B	09755167
	2000	230	800	900	B	09755054
	2500	230	1000	1100	B	09755255
	3250	230	1300	1420	B	09753187
	3750	230	1500	1600	B	09754585
	4100	400	1700	1800	B	09754863
	4500	400	1800	1920	B	09754783
	5750	400	2300	2400	B	09756083
	6250	400	2500	2600	B	09753874
Short wave	2500	230	1200	1300	C	09753923
	3000	400	1000	1100	A	09751720
	600	115	80	145	B	09751713
	1500	230	200	300	B	09751751
	1200	230	340	405	B	09751741
	3000	400	500	600	B	09751740
	3000	400	500	600	B	09751340
	3000	230	500	650	C	09751761
	4200	230	700	850	C	09751765
	6000	400	1000	1150	C	09751760
Carbon	7000	400	1300	1450	C	09751731
	4600	230	600	745	B	45134868
	4000	230	700	845	B	80009221
	8000	400	1000	1145	B	45134870
	7800	400	1100	1245	B	80012442
	9000	230	1250	1400	C	80012443

Specials available on request!

Starting current

When switching on an emitter, it can reach peak current in a very short time. This needs to be considered when designing your system.

For further information please contact us!

Emitter type	Element temperature	Switch-on current factor
SW	1800–2400 °	12–17
FRMW	1400–1800 °	10–13
MW	800–950 °	1–1,05
Carbon	1200 °	0,8