



Nano InfraRed Energy Saving Heater 纳米红外节能电热圈

特点:

- 发热体采用纳米材料的红外线电热发生器，电热转换率高，热效率达 98% 以上。
- 热惯性小，温度精度高 $\pm 1^{\circ}\text{C}$ 。
- 隔热性能高，发热圈外表温度约在 $45 \sim 70^{\circ}\text{C}$ 之间。
- 节能率为 30~80%。
- 同比电阻式发热方式，可将环境温度下降 $3 \sim 8^{\circ}\text{C}$ 。
- 加热升温比电阻式的发热圈快 20%。
- 2 年全保，正常使用寿命为 5 年以上。
- 直接取代电阻式发热圈，不需增加任何电子板及装置。
- 因为是采用电阻式直接加热方式，不产生谐波，对电网无不利影响。
- 通电时，只产生热辐射，不产生高频辐射，无紫外线。

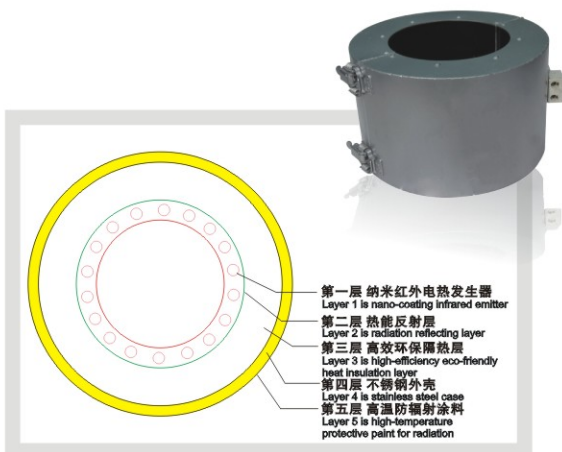


节能加热器专利

CE认证标准

专利技术 & 证书: Patents and Certification:

- 三项实用新型专利
- Utility model patent (3 items)
- EN61000 CE 证书
- EN61000 CE certification
- EN60519 CE 证书
- EN60519 CE certification



产品结构图
Structure of InfraRed Heater

- 第一层 纳米红外电热发生器
Layer 1 is nano-coating infrared emitter
- 第二层 热能反射层
Layer 2 is radiation reflecting layer
- 第三层 高效环保隔热层
Layer 3 is high-efficiency eco-friendly heat insulation layer
- 第四层 不锈钢外壳
Layer 4 is stainless steel case
- 第五层 高温防辐射涂料
Layer 5 is high-temperature protective paint for radiation

Heater Characteristic:

- Heating element utilizes nano coating infrared emitter, high electricity-heat transformation rate and heat transfer efficiency up to 98%
- Low heating mass inertia, high temperature precision of $\pm 1^{\circ}\text{C}$
- Good heat insulation capacity, heater surface temperature about $45 \sim 70^{\circ}\text{C}$
- Energy saving ranges from 30 to 80%
- Comparing resistance heater, InfraRed heating decrease ambient temperature $3 \sim 8^{\circ}\text{C}$
- Temperature rising time is about 20% faster than resistive heater
- Two years full warranty and the normal working life about 5 years
- Direct replacement resistive heater band and without additional electronic card and device
- Direct radiation heating applies to barrel, no harmonic wave and no harmful effect on power network
- When power up, only generate radiation, no high-frequency electromagnetic wave, no ultra-violet light as well

红外线加热费用节省实例

Case Study of Saving on InfraRed Heater

客户资料 Customer Information

测试日期: 2011年3月3-10日
 Test date : March 3-10,2011
 测试地点: 东莞
 Test site : Dongguan
 客户名称: 某港资塑料加工厂
 Customer : HongKong plastics factory

案例 Case Study

产品: 镜片
 Product : Glasses
 材料: PC
 Material
 注塑机名称: 200Fx (200吨锁模力)
 Injection moulding machine : 200Fx (200T Clamping Force)

测试日期 Test Date	测试时间 Test Period	平均用电量/小时(未安装纳米红外电热圈) Electricity Consumption Per Hour (Without Nano InfraRed Heater)	平均用电量/小时(安装纳米红外电热圈) Electricity Consumption Per Hour (With Nano InfraRed Heater)	省电率 Saving Rate
March 3-10	72.5 hours	1.251 kWh	0.78 kWh	37.65%

年节电经济效益 Annual economic benefits from energy saving

	未安装纳米红外电热圈 Without Nano InfraRed Heater	安装纳米红外电热圈 With Nano InfraRed Heater	一年节约电费(元) Annual Electricity Cost Saving(RMB)
年用电量 Annual Electricity Consumption	9,007 kWh	5,616 kWh	RMB 3,391

* 以每年运转 7200 小时, 电费 1元/kWh 计算。
 At 7,200 hours/year, RMB1/kWh

* 实际节能效果根据不同产品尺寸而有所差异
 Actual energy saving effects may vary with different product dimensions.

纳米红外电热圈装置型号 Nano InfraRed Heater Model No.	注塑机锁模力(T) Clamping Force of Injection Moulding Machine (T)	原电阻发热丝功率(kW, 不含射嘴) Resistive Heater Power (kW, excl. Nozzle)	纳米红外电热圈装置型号 Nano InfraRed Heater Model No.	注塑机锁模力(T) Clamping Force of Injection Moulding Machine (T)	原电阻发热丝功率(kW, 不含射嘴) Resistive Heater Power (kW, excl. Nozzle)
IH-007-098	90	6.90	IH-036-265	1,000	36.00
IH-008-098	130	8.40	IH-040-300	1,200	40.00
IH-010-108	160	10.40	IH-040-300	1,250	40.00
IH-013-125	190	12.80	IH-044-320	1,500	45.00
IH-015-135	260	15.00	IH-044-320	1,800	45.00
IH-016-135	320	16.00	IH-065-365	2,200	65.00
IH-021-150	380	21.00	IH-080-400	2,800	80.00
IH-024-170	450	24.00	IH-080-400	2,850	80.00
IH-025-175	500	24.00	IH-080-400	3,000	80.00
IH-030-215	600	30.00	IH-196-410	3,350	196.00
IH-033-265	750	33.00	IH-221-450	4,000	221.00
IH-036-265	900	36.00			

说明: 型号的中间数字代表原电阻发热圈的大约功率 (kW, 不含射嘴), 最后的数字代表熔胶筒的外径尺寸。
 如 IH-007-098, 表示原电阻发热圈的功率为 7kW 和熔胶筒的外径是 98mm。

Remark: The middle number of model number means the power of resistive heater (kW, excluding nozzle), the last number means the outside diameter of barrel, e.g. IH-007-098, means the power of resistive heater is 7kW and the outside diameter of barrel is 98mm.

客户使用现场 Customer Site



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