

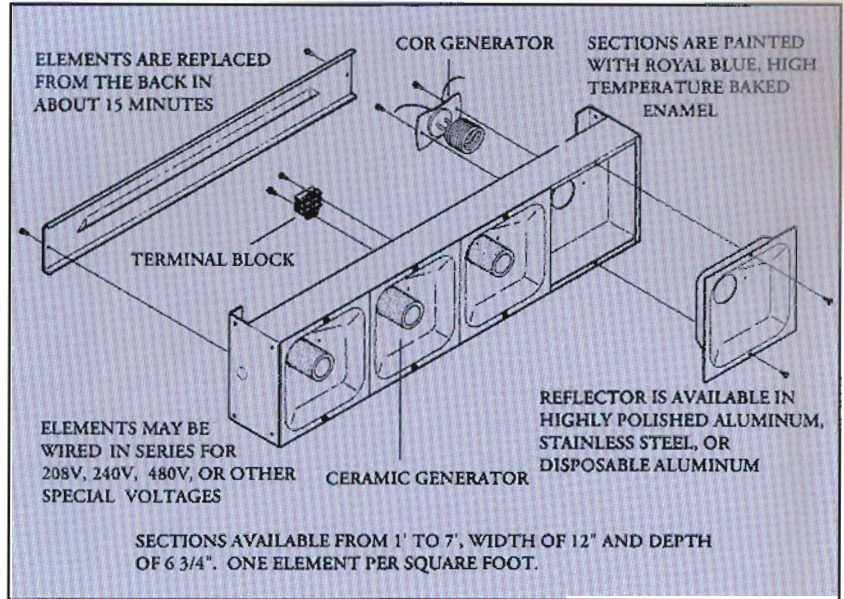
Components and Specifications

Ceramic Generators:

Ceramic generators are ideal for wood, plastic, and other low temperature substrates. The durable nichrome wire wound around a ceramic core is embedded in ceramic material and fired in a kiln. These elements, controlled with a Blasdel control panel, can maintain a very even temperature. Full temperature can be attained within five minutes from start-up.

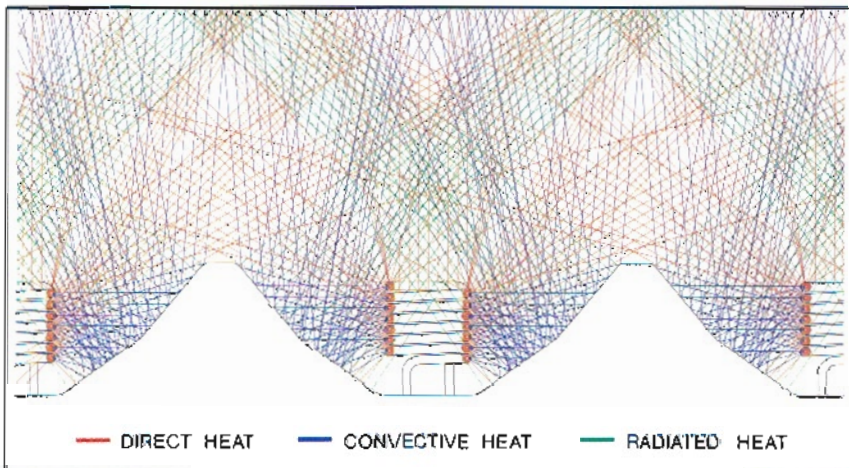
COR Generators:

COR generators are best suited to powder coating, baked enamels, moisture dry off, softening plastics for compression molding or vacuum forming, degreasing, etc. where higher temperatures are required. Fast start-up, within three minutes, is possible with this type of element. Properly controlled, the desired temperature can be accurately maintained.



		Volts								
		104	120	145	155	160	208	240	480	575
W A T T S	500		CX							
	750	CX	CRX	CX				RS		
	1000	RS	CRX	CX			RS	RS	RS	RS
	1500		RX		RS	RS		RS	RS	RS
	2000		RS						RS	

C - Denotes ceramic generator; R - denotes COR generator; X - Denotes standard generator; S - denotes special generator
 Note: Generators are usually wired in series. Be sure that the correct voltage is ordered. 120 volt generators can be series wired for 240 or 480 volt service.



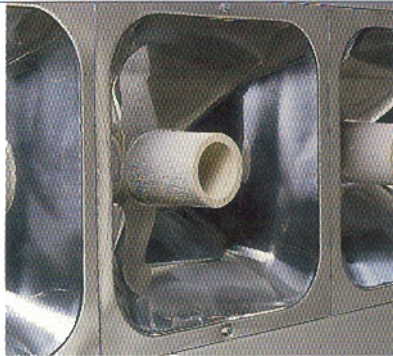
Blasdel reflectors are the key to heating three dimensional objects, producing uniform heat and promoting maximum energy efficiency. The square design with complex angles results in a square pattern of heat distribution with the emitter 8" to 10" away from the product. This eliminates hot and cold spots commonly found in round or trough shaped reflectors.

The element is located totally in front of the reflectors, thus there is no need for an insulating material in the back of the housing. Ceramic panel type heaters have a significant amount of heat absorbed by the insulation rather than projected onto the product.

Blasdel Enterprises, Inc. offers aluminum reflectors as standard or stainless steel as an option. Disposable reflectors are available for special applications.



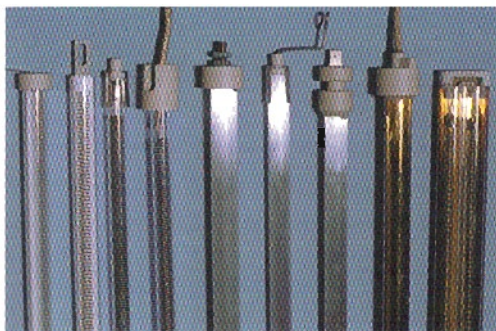
SELECT THE RIGHT EQUIPMENT FOR THE JOB



Ceramic Emitter



COR Emitter



Quartz Tube Emitters

Blasdel Enterprises is continually discovering new applications for infrared technology and determining which emitters are best suited for the situation. Even when the wavelength is the same, the physical material design of the emitter can affect the way in which heat is delivered to the product.

BEI specializes in applications requiring medium wave technology. Primary emitters are ceramic emitters, COR emitters and ceramic panel heaters. Quartz tube heaters are used when heating narrow or selected areas of a product.

CERAMIC EMITTER

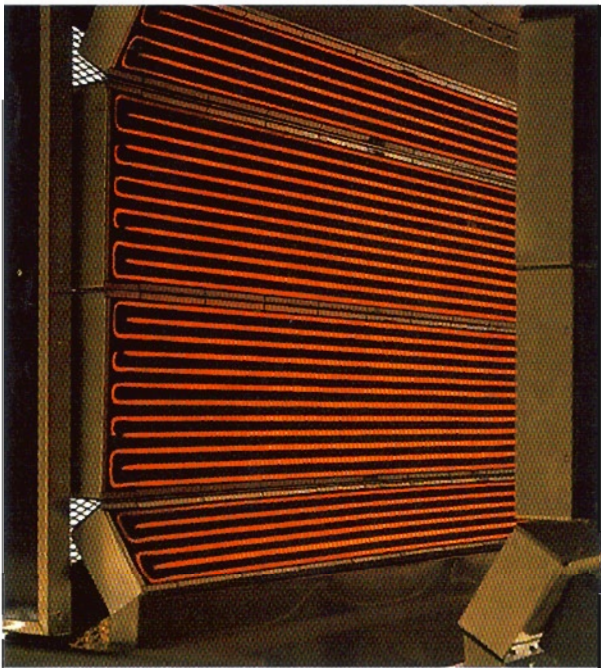
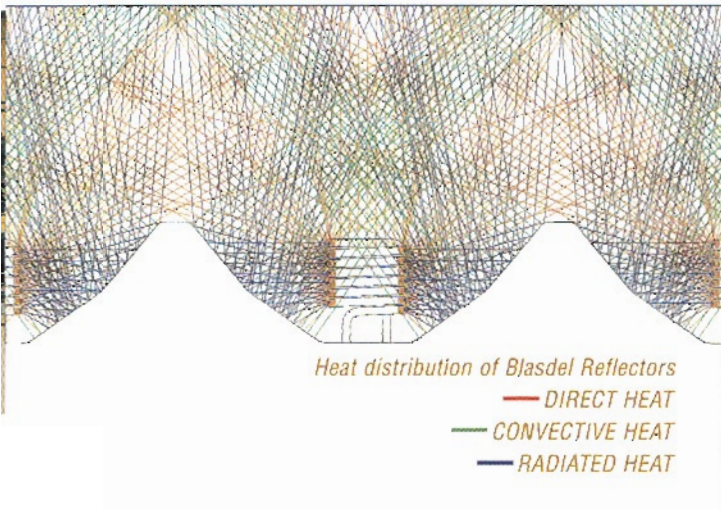
Ceramic emitters are ideal for wood, plastic, and other low temperature substrates. The durable nichrome wire wound around a ceramic core is embedded in a ceramic material and fired in a kiln. These elements, controlled by a Blasdel control panel, can maintain a very even temperature. Full temperature can be attained within five minutes from start-up.

COR EMITTERS

COR emitters are best suited to powder coating, baked liquid coatings, moisture dry-off, softening plastics, compression molding or vacuum forming, degreasing, and paint on plastics, where higher temperatures are required or where cleanliness is critical. Fast start-up, within three minutes, is possible with the COR emitter. Properly controlled, the desired temperature can be accurately maintained.

QUARTZ TUBE EMITTERS

When a fast response is required, medium wave quartz tube emitters are an excellent choice. Generally quartz tube emitters are controlled with SCR or SSR devices such that they are always on to avoid thermal shock to the element but the voltage is modified to change the output of heat. Watt densities can be up to 60 watts/lineal inch. A variety of connectors are available according to the application and environment in which they will be used. Quartz tube emitters have an internal reflector as well as a secondary external reflector. The secondary reflector can focus the infrared heat to a very narrow area while the remainder of the product is virtually unaffected. Average life expectancy of a quartz tube emitter is about 10,000 hours.



Ceramic Panel Heater

REFLECTORS

Blasdel reflectors are the key to heating three dimensional objects, producing uniform heat patterns, and promoting maximum energy efficiency. The square design with complex angles results in a square pattern of heat distribution with the emitter 8" to 12" away from the product. This eliminates hot and cold spots commonly found in round or trough shaped reflectors.

The emitter is located in front of the reflector so there is no need for insulating material in the back of the housing. We use solid aluminum reflectors that have been buffed to a high polished finish. Polished aluminum is significantly more reflective than stainless steel which results in a more efficient oven. Disposable aluminum reflectors are also available for simple maintenance or in specialized applications.

CERAMIC PANEL HEATERS

The ceramic panel heater may be constructed with extremely high watt density. The resistance wire is embedded in a quartz plate and then covered with a quartz cloth. Control is achieved by monitoring the internal temperature of the heater with a thermocouple. The ceramic panel heater also requires very little maintenance, as it has no reflector to clean. Panel heaters deliver heat to the product much differently than the standard Blasdel emitter. The lack of a reflector to direct the heat means that this heater has more true direct radiant heat and a high level of convection occurring to transfer the energy. The convection component is very useful in working with reflective products or coatings. It easily overcomes one of the common challenges in utilizing infrared technology.

This heater is ideal for applications involving massive or reflective products and in compressing the footprint of the system. The high watt density can shorten the oven for a given application since it takes the same amount of BTU or KW delivered to the part to complete the process.