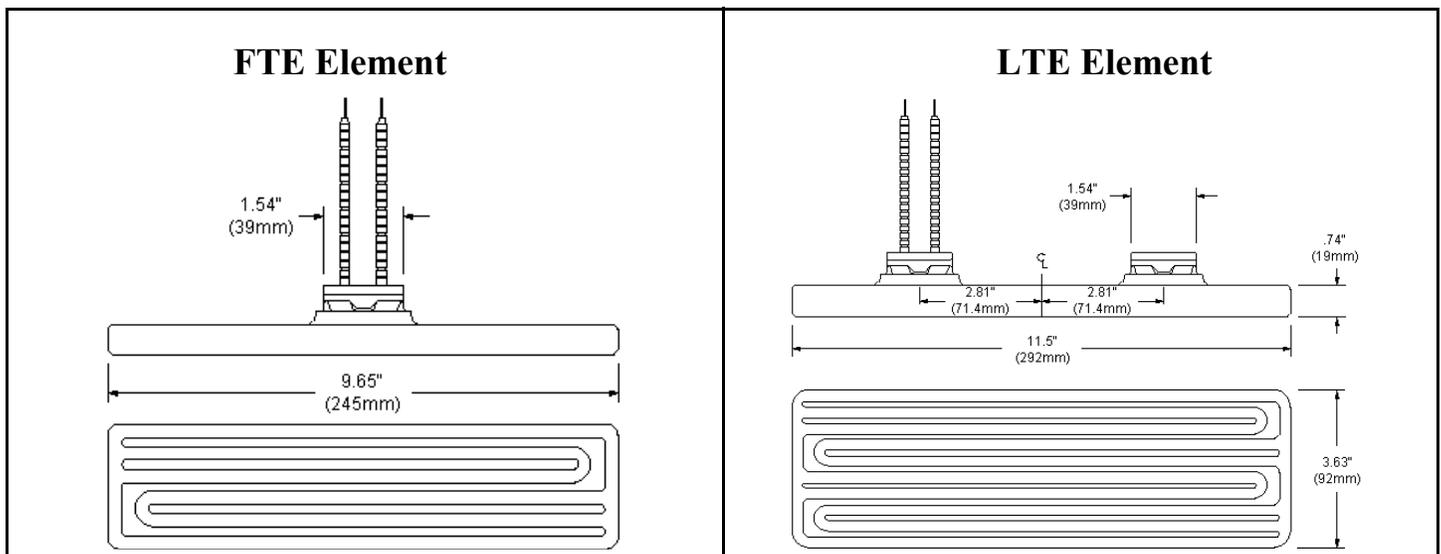


## LTE Elements - More for Less

Platen users all over the country can now give serious consideration to the advantages available from using oversized ceramic emitters. Extra large heaters are manufactured by only a few ceramic heater makers. Infrared Internationale's Large Trough Emitters (LTE's) are being rediscovered for the potential advantages they have to offer over the regular sized element.

Ceramic manufacturers worldwide have standardized on the regular sized emitters in order for the variety of finished products to be able to be used interchangeably. Since the product originated in Europe, the standard size emitter was made to metric measurement. As usage of ceramic heaters spread and developed in the U.S., their metric size often times created problems in adapting to American machines.



The engineers at Infrared Internationale originally designed the LTE element to get maximum watt density in a square foot area. They then designed the Ceramic Radiant Panel to house 3 LTE elements creating a "building block" for single use or panel construction. Panel makers are now discovering that using LTE elements in large panels enable them to cover a specific area with less elements. Less elements means less handling, less electrical connections, and lower maintenance.

Because LTE elements cost more than the standard size, actual savings from using large trough emitters is experienced through time and labor saved. The other advantages come from improved watt density, because larger elements, placed closer together, leave fewer gaps. It also provides for less difficulty in zoning because there are fewer elements to zone, making large area zone control possible.

The LTE heater is proving itself to be not "just another ceramic heater", but the only element designed by imperial measurement specifically for use in American applications, and one of the few options today where actually *more* can be gained by using less.

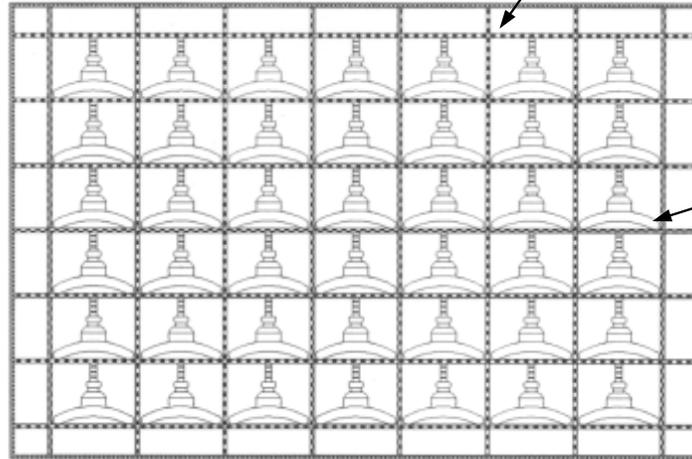
# Bulk Packaging -

Unique to Infrared Internationale is our alternate shipping choice of bulk packaging. If elements are being purchased or resold for OEM use, individual boxes may not be needed. Our large grade 200# boxes will hold 84 full size elements (FTE's.)

CORRUGATED CARDBOARD

CORRUGATED CARDBOARD DIVIDER

Drawing of the top layer of bulk packaging.



CERAMIC HEATERS

Bulk packaging eliminates the time required to remove each element from its individual box and reduces the amount of waste caused by excess boxes.

The cartons have been approved by UPS as appropriate for carrying a ceramic product. They have been in use for two years with no damage occurring and the customers using them are delighted with the efficiency and time savings they offer.

There is no extra charge for bulk packaging, but it must be requested and the quantity ordered must be in amounts of 84 (the maximum amount to fill the box) or close to this amount. Taking advantage of bulk packaging can make both our jobs a little easier.

## A Frequently Asked Question:

### Q. Can ceramic infrared heaters be used to heat metals?

A. If you apply infrared radiation to a polished metal surface, almost all of the incident infrared radiation will be reflected from the metal surface. In this condition the metal will never come up to the temperature required. The only way to effectively heat metals using infrared radiation is to increase the emissivity of the metal surface. Painting the surface of the metal will increase its surface emissivity value to 90%. Now the paint will absorb 90% of the incident infrared radiation and will transfer this heat to the metal via conduction.

### Order Desk - For both Infrared Internationale companies:

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