

Gas fired Vs Electric fired Infrared Heating System

IR radiation is generated using one of three different technologies: electric, gas catalytic, or radiant gas (and radiant gas systems are mainly used for space heating rather than process heating).

Advantages/features	Gas Fired	Electric Fired
Lower-cost energy source	Yes	No
Uses less energy when only surface heating is required	Yes	Yes
Provides well-controlled, low-intensity heat	Yes	Yes
Provides highest-intensity heat	No	Yes
Intensity can be easily adjusted for different products	No	Yes

Electric infrared technology offers more flexibility than gas-catalytic regarding the fancied heating force. Electric and gas-catalytic IR advances have particular qualities that make them pretty much proper relying upon the material and the sort of process. Gas-catalytic IR frameworks by and large oblige a more prominent capital venture than the other two, yet they have lower working costs.

To choose which technology is ideal for a particular item or process, various parameters must be viewed as, including item quality, working costs, and generation rates. In processes that oblige fabric and paper drying, gas-catalytic technology has a marginally predominant heating productivity as a result of the force of the radiation it transmits and the measure of time the item uses in the stove. As a rule, a gas-catalytic IR framework is a decent decision for materials that oblige a considerable measure of vitality, for example, a few materials, in light of the fact that its fuel costs are lower than those of electric IR.

Electric IR is more suited to delicate materials that requires a less-exceptional heat or to processes that need brisk reaction times or shorter blasts of serious radiation from the heating gear

Gas-catalytic IR technology has an altered force thickness that relies on upon the temperature of the fuel-oxygen response; it for the most part does not surpass 2 kilowatts for every square foot (kw/ft²—that is 22 kilowatts for every square meter [kw/m²]). Interestingly, electric IR stoves can rapidly and effectively differ the force of emitted heat while accomplishing force densities of up to 37 kw/ft² (400 kw/m²)—a trademark that makes them predominant for quickly heating metals.

Both the Methods of IR heater firing holds its advantage and limitation it totally depends on the process that is being needed for