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Ceramic Igniter

Production Technology-High Temperature Co Fired Ceramics (HTCC)

HTCC is an acronym for High-temperature co-fired ceramics; HTCC ceramic heating element is made up of high melting point metal heating material such as tungsten, molybdenum or molybdenum – manganese and 92-96% alumina ceramic substrates. The metal heating resistance slurry is printed onto the tape casting ceramic green body according to the design requirement, several layers of ceramic green body are then laminated together and is fired at 1500 ~ 1600 ℃ high temperature, with the aid of 4-8% sintering additive, to form the alumina ceramic heating element.

They are deployed in the following areas

1. Heating applications above 750°C, in which standard heating cartridges would have long since failed.
2. Very precise, rapid heating due to the extremely low thermal mass .
3. Efficient hot gas generation through the extremely large heat transfer surface area.

Our heater portfolio covers a broad performance spectrum (depending on the desired purpose) and various patented structural forms. In addition to this the heating elements can be designed on an individual customer basis and be equipped with a complete electrical connection technology.

Systems

- Straw burner
- Other biomass burner
- Wood pellet burner
- Wood chips burner
- Straw burner
- Other biomass burner

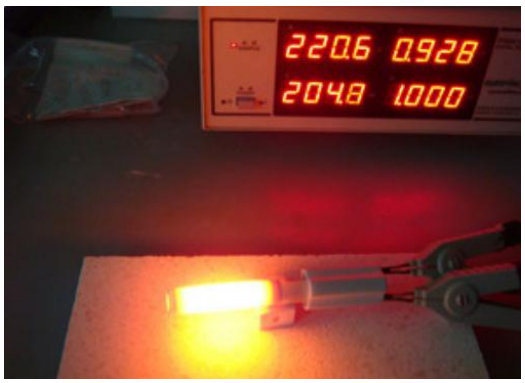
Ceramic Igniters For Solid Fuel Furnaces

Our special application area for the high-temperature heaters is in heating systems that use solid fuels such as wood pellets as the energy source. The challenge here is to ignite the biomass in a very short time while retaining very low emission value. This can only be achieved with a sufficiently high ignition temperature.

Our short surface igniters are perfectly suited for this purpose.

The special geometry of the cylindrical ceramic heaters, in combination with an extremely high surface temperature of 1000°C, heats up the supply air in the shortest possible time to an extremely high temperature. After a maximum of 90 seconds, the fuel is ignited with a fraction of the energy that is required for a hot air of ignition blower.

This works, of course, not only with pellets, but also with wood chips, firewood, coal bricks or other solid fuels made of biomass.



Further product advantages:

- Ready assembled, easy-to-install systems
- Space-saving, noiseless and impervious to overheating (in case the blower fails)
- Extremely long-lasting and resilient
- Minimal energy consumption
- Completely electrically insulated
- No exposed electrical contacts
- No sensitive welding points
- Long lasting (non aging)
- Time to ignition 60~90 seconds
- Available in 100V / 120V / 220V / 240VAC
- Fully electrically insulated with no exposed electric contacts
- Impervious to oxidation and corrosion
- Ignite wood pellet, wood chips, split logs, straw and other biomass
- Comply with RoHS, REACH regulation on Hazardous Subsctances

Not without reason, the high temperature heating elements pellet igniter is the reliable standard ignition system for pellet heating systems in Europe-hundreds of satisfied customers speak for themselves.

Ceramic Igniters For Solid Fuel Furnaces

INC-H1

Model	Voltage/ Power	Size	Ceramic Socket		Wire
			Ceramic	Metal kit	
INC-H1-1	230V 210W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	-	300-500mm
INC-H1-2	230V 225W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	-	300-500mm
INC-H1-3	230V 240W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	-	300-500mm
INC-H1-4	230V 255W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	-	300-500mm

INC-H2

Model	Voltage/ Power	Size	Ceramic Socket		Wire
			Ceramic	Metal kit	
INC-H2-1	230V 160W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	G3/8''	300-500mm
INC-H2-2	230V 180W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	G3/8''	300-500mm

INC-H3

Model	Voltage/ Power	Size	Ceramic Socket		Wire
			Ceramic	Metal kit	
INC-H3-1	120V 230W	90*Φ10.5*φ6.5mm	OD17.5*35/OD24 *45/OD25*35	G3/8''	300-500mm

INC-H4

Model	Voltage/ Power	Size	Ceramic Socket		Wire
			Ceramic	Metal kit	
INC-H4-1	230V 350W	108*Φ11.5*φ6.5mm	OD17.5*35	-	300-500mm
INC-H4-2	230V 300W	108*Φ11.5*φ6.5mm	OD17.5*35	-	300-500mm

INC-H5

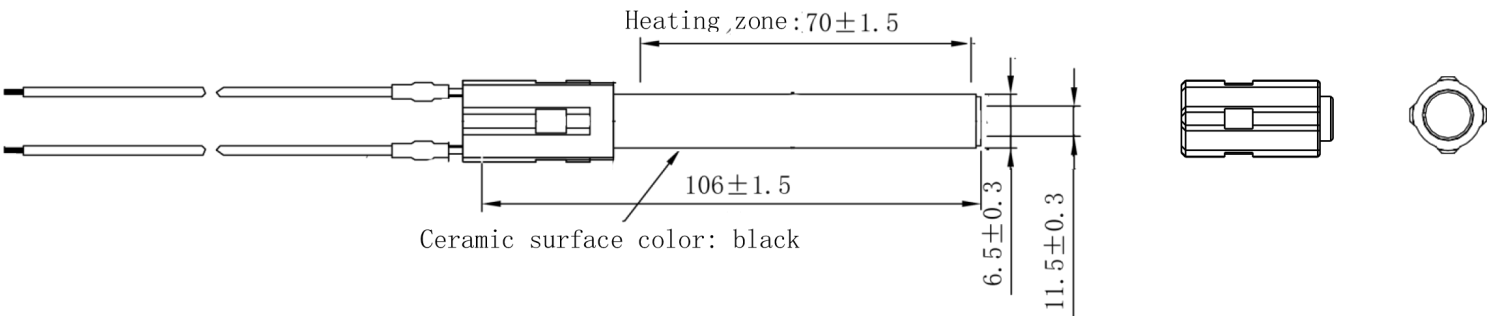
Model	Voltage /Power	Size	Ceramic Socket		Wire
			Ceramic	Remark	
INC-H5-1	230V 150W	70*Φ10.5*φ6.5mm	OD6.5*35	Pluggability	300-500mm
INC-H5-2	230V 170W	70*Φ10.5*φ6.5mm	OD6.5*35	Pluggability	300-500mm
INC-H5-3	230V 230W	70*Φ84-133*φ6.5mm	OD6.5*35	Pluggability	300-500mm
INC-H5-4	230V 150W	70*Φ10.5*φ6.5mm	OD6.5*35	Pluggability	300-500mm

INH-1-230

26mm Ceramic Flange

INH-2-230

17.7mm Ceramic Flange

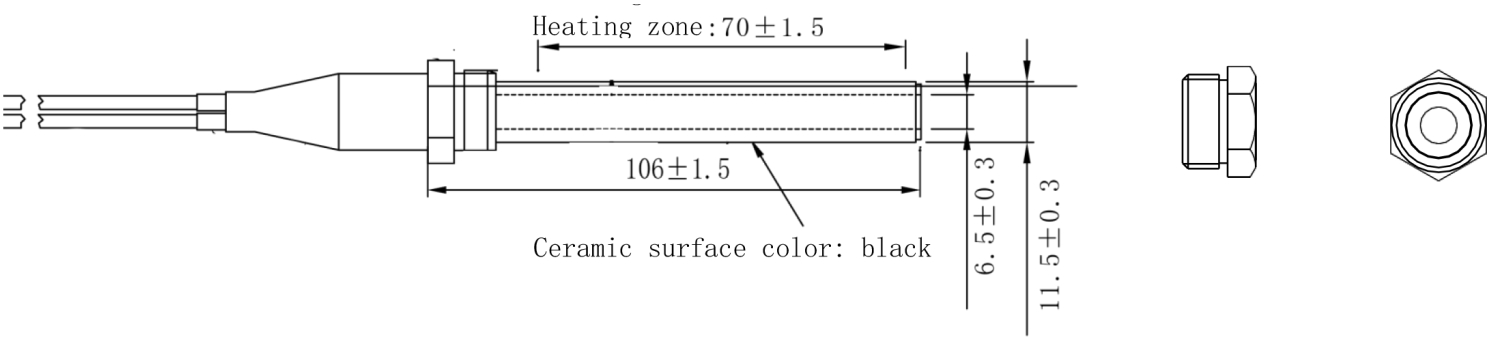


INH-3-230

No Flange

INH-4- 230

G3/8" Metal fittings



Model	Specifications	Heater Dimension	Flange	Cable	Remark
INH-1-230	230V 270W-315W	106*11.5	26.6mm Ceramic base + silicone heat shrinkable tube	50/40CM Length and line type can be customized	-
INH-2-230	230V 270W-315W	106*11.5	17.7mm Ceramic base		-
INH-3-230	230V 270W-315W	106*11.5	silicone heat shrinkable tube		-
INH-4-230	230V 270W-315W	106*11.5	G3/8 Nut		-

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