

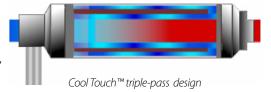
TUTCONNECT



Choosing the right process heater for your application

TUTCO Farnam's line of pre-designed process air heating solutions include the Heat Torch $^{\text{TM}}$ and the Cool Touch $^{\text{TM}}$, two similar but very different products. While both are ideal for rapidly heating compressed air or any non-combustible gas, where they will be used and how much back pressure the system can handle is usually the deciding factor as to which heater is right for a given application.

The most obvious difference is the ability of the Cool Touch™ to minimize the surface temperature of the heater. The triple-pass design allows the heater to be near sensitive electronics and protects the operators who need to work near the heater. The Heat Torch, on the other hand, is a single-pass heater so the body of the heater gets hot.



Physical size is also a factor in choosing the right heater. While each model is available in various sizes and wattages/voltages, the Cool Touch OD will be larger based on it being a triple-pass heater. Open-coil heating elements provide efficient heat transfer through direct contact with the air flow, and while there is not much back pressure (also called pressure drop), there is more in the Cool Touch. Both heaters are highly efficient overall in reducing heat losses.

Rapid heater response time enables precise output temperature control when these heaters are paired with off-the-shelf sensors and controllers. In addition, both models have a variety of inlet and exhaust fitting choices along with thermocouples. For OEMs, we can even further customize these heaters to include custom markings, fittings and brackets.

Both the Heat Torch^{IM} and the Cool Touch^{IM} are ideal for drying, curing, melting, cutting, baking, heat shrinking, de-soldering, metalization, heat staking, sterilization, air scrubbing, laminating, adhesive activation, hot air curtains, and air knives. If the application involves sensitive materials or operator safety is a concern, the Cool Touch^{IM} is worth the extra dollars.

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Open-Loop Series Heaters for spot heating applications



Series heaters are general purpose compact electric air heaters using Serpentine™ heating elements within a Quartz open-end (Style A) or nozzle (Style B) for spot heating applications. These simple open-loop heaters use a manually operated power controller to apply a fixed voltage to the heating element. This is a common and inexpensive controller often used with simple single phase standard catalog products. The air inlet is a high-temperature silicone rubber adapter with male spade power connectors and a ground. Mounting in existing or new equipment is easy using the grounding bracket. Air is typically supplied by compressed lines. The operator manually adjusts the controller to change heater temperature. To avoid heater failures, make sure air is flowing before powering the heating element and slowly regulate the ramp up time using a potentiometer to control AC voltage.

PRODUCTS



Series I Heaters

Series I heaters feature a smaller diameter and longer tube length with a maximum temperature of 1400°F (760°C)



Series II Heaters

Series II heaters feature the smaller diameter but with a shorter tube length and nominal line voltages. Maximum temp is 1400°F (760°C)



Series III Heaters

Series III heaters feature a larger diameter which allows them to reach temperatures as high as 1600°F (871°C)

Use our online product selection tool to find the right product for your application.

PRODUCT SELECTION TOOL

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Feature Video

Identifying if you have a flexible heater issue



Identifying when a flexible heater is not working correctly or up to its full potential can be more challenging than other heat solutions. This video demonstrates simple best practices you should follow during installation that will make it easier to determine if there is an issue with your heater. By checking your heater over carefully, testing its resistance, thoroughly preparing the surface, and installing the heater properly your heater should deliver the results required by your application.

WATCH THE VIDEO

