

SEPTEMBER 2022

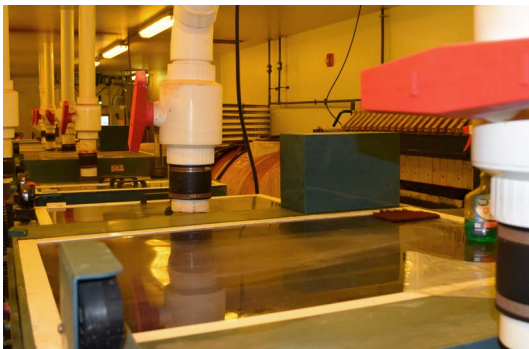
**TUTCO** Flexible Heaters  
HEATING SOLUTIONS GROUP

## Environmental Health & Safety

*A Culture of Responsibility*

### *Silicone Heater Line Focuses on Health and Safety*

The Silicone Rubber Heater production line at TUTCO Farnam is a good example of efforts to create an injury-free and environmentally responsible workplace. Environmental Health and Safety (EHS) is one of our company's core principles. The etching done in creating rubber silicone heaters is a subtractive process where metal is removed from a metal foil in a particular geometry to produce a resistive heating element. Trace metals from the etching process as well as iron from the ferric chloride etchant need to be removed from a chemical solution. Filtering is done with a water treatment system like you'd find in a municipality but on a smaller scale. The first step of the treatment is called clarification where ferric chloride and sulfuric acid work to create sulfite compounds that pull out trace metals. In the flocculation chamber, the coagulant along with some gentle mixing brings about the aggregation of suspended particles. With this equipment, we're essentially removing all of the trace metals.



With a line of wells holding 360 gallons anywhere between 90F - 130F, there are going to be some fumes. While the liquids are contained within the wells, there is still some agitation and spraying and that is going to put some chemicals in the air. TUTCO Farnam ultimately decided that overkill is the best solution to an underventilation risk. Our system uses large-diameter hard piping and provides us a wide range of control over our ability to ventilate air. The system is in a room that is contained from the rest of the building ensuring no fumes can make their way to people in other parts of the building.

TUTCO Farnam employees take pride in their commitment to achieving excellence in Environmental Health, and Safety (EHS) performance. It is part of our culture. Every employee at TUTCO Farnam as well as the entire family of Smiths Group companies has a personal responsibility and an obligation to colleagues to uphold EHS principles.

[READ THE ENTIRE EHS STORY](#)

# Heaters Used in Pneumatic Delivery Systems



Pneumatic delivery systems use heat for moisture prevention and freeze protection. One of our customers was originally using a screw flange style light bulb before evolving from that solution to a cartridge heater with an unusual bottom that allowed it to be screwed into the light socket. The cartridge heater was very expensive as was the base assembly, and the customer was frustrated with the accelerating cost.

The engineers at TUTCO Farnam designed a solution where we vulcanized a silicone rubber heater to a piece of angle and matched the mounting holes on the faceplate. The original sheathed element and the socket it fit into, which were costly, were eliminated. Using two screws, the field technician was easily able to attach the silicone rubber enclosure heater, hook up two wires using a quick connect, and the job was done. Field installation couldn't be simpler.

This pneumatic enclosure heater solution involved super simple field installation and delivered a dramatic cost savings. Because of the retrofit, the old heater and base assembly could be removed entirely. The new silicone rubber heater cost less than the base assembly alone and delivered not only a cost savings but a time savings.

[LEARN MORE](#)

## Feature Video Installing a SureHeat Max Air Heater



A.J. Nidek, TUTCO's National Sales Manager, provides step-by-step instructions on the proper installation of a SureHeat Max Air Heater. The Max heater is a compact and efficient heater solution for air temperatures up to 1400°F (760°C) that is available in a 6.0kW to 36.0kW, 240V/380V/480V 1Ø / 3Ø units. The Max offers two type "K" thermocouples with a convenient terminal block for easy wiring. To ensure safety, power and perfect control, connect with the optional Max Control Panel.

[WATCH THE VIDEO](#)

### RELATED PRODUCTS



#### Silicone Rubber Enclosure Heaters

Silicone rubber enclosure heaters are durable, thin, a breeze to install. They come with lead wires and thermal control options.



#### Custom Silicone Rubber Heaters

Highly customizable industrial heaters that offer amazing heat transfer, resist vibrations and are resistant to most chemicals.



#### Mica Enclosure Heaters

Designed for freeze prevention and condensation protection, the Mica enclosure heater features a rugged and reliable solution while being easy to install.

Not sure which heater option is right for your application, try our

[ENCLOSURE HEATER CALCULATOR](#)



# SOUTHEAST THERMAL SYSTEMS

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