

Why Are Flanged Heaters So Efficient?

Do you have a specific need to heat pressurized fluids? If so, you may wish to take a look at the many benefits that [flanged immersion heaters](#) can provide. In fact, a flanged heater is a highly efficient form of [process heating](#) and can be used for a variety of applications.

What is a Flanged Immersion Heater?

A special heating element is connected to a flange. This is done with a hairpin bent element configuration. In some cases, tubular bugle elements are used. Tubing known as a [thermowell](#) is used to protect temperature probes, thermocouples and heating elements. Temperature readings are then transmitted to a control unit that powers the heat element on and off. For overload protection, a high limit sensor keeps the liquid from scorching or overheating and also serves to protect the flange immersion heater.

Efficiency and Versatility

When you choose a flanged heater you have one of the most versatile types of process heaters available, and that is why so many engineers love these heaters. They can be used for heating water, gas, oil, and caustic chemicals. If you have the need to heat several types of fluids, you can sometimes use flange immersion heaters in all your applications.

Flange heaters can be used in industrial kitchens, [chemical processing](#), [oil refining](#), and a wide range of applications. You can buy these heaters in many different wattage and voltage ratings. They are also available in a variety of sizes and materials. In addition, you may have special needs for your immersion heaters and this is not a problem. These heaters can be custom made to fit your situation, environment, and power needs.

Ease of Installation and Use

Flanged heaters are not difficult to install. Plus, they are easy to use because their operation is controlled digitally. With digital heat control you receive precise temperature control. This is very good efficiency, you won't have too much or too little heat (which can cause all kinds of problems and increase your power usage).

Efficient Heat

A flange heater is an immersion heater and this means greater efficiency. For example, when you immerse a heater in a fluid, heat is then transferred directly to the fluid. There is no chance for heat loss, so all the heat is used

for its intended purpose. This is one of the most efficient forms of process heating on the market today. Flange immersion heaters are nearly 100 percent efficient. That is why flange heaters see a great deal of use in oil heating applications.

Exact Temperature Control

When you control the temperature of a process heating unit precisely, there is no damage or wear and tear caused by overheating. This results in less maintenance and downtime, and that makes a company more efficient.

Buying Your Flanges Heaters

Before you purchase heaters for commercial applications, do not forget to keep these things in mind:

- Voltage requirements – you may have three phase power or single phase in some applications.
- Heat capacity
- Housing
- Sheath materials
- Temperature controls

When you invest in flange process heaters you can greatly increase your efficiency. This means fewer problems and more profits, and that is a good strategy for keeping up with the competition.