

# The Benefits of Providing Live Thermowell Installation Services

## What is the purpose of a Thermowell?

Thermowells are tubular fittings used to protect temperature sensors installed in industrial processes. They are typically installed in piping systems and are subject to both hydrostatic and aerodynamic forces. The thermowell protects the instrument (thermometer, thermocouple or resistance temperature detector) from the pressure, flow-induced forces, and chemical effects of the process fluid. They are installed into pipe, sumps or tanks so they can measure the temperature of the contents of a live line.

Thermowells are manufactured so they allow the temperature in the line to be transferred through its wall so it be measured. Thermowell units come in different lengths and size based on the size of the pipe and flow. They are normally inserted into a welded on threaded thermowell fitting that seals when the thermowell is installed. Thermowells are purchased by their required application, size, and insertion length into the pipe.

## What type of fittings can be used for a live Thermowell installation?

Many companies use a Carbon Steel or Stainless Steel 2.0" x 1/2" NPT or 2.0" x 3/4" NPT Thermowell weld-on fittings for live line installation similar to the [ThermFit™ weld-on fittings](#). The 2.0" outside threads allow for the use of standard 2.0" NPT adapter from a hot tap machine for installation. The 1/2" or 3/4" internal threads allows for installation in small and large pipe applications as needed.

When doing a live installation, the most important part of the job is the Thermowell installation equipment. Thermowell units are made by many companies. To do a live installation you will need to be able to insert the Thermowell while the line is under pressure and thread it completely into the fitting so it will be permanently sealed.

Thermowell units come with different head sizes. Make sure you have socket adapters for these sizes 7/8", 15/16", 1.00", 1-1/16", 1-1/8", and 1-1/4". Your customer may purchase a wide variety of Thermowell units based on their needs for size of pipe and insertion length. Normally your customer will determine the brand, style and length of the Thermowell.

## The benefits of offering a live Thermowell installation service to you customers.

There is a good size need in many markets for live Thermowell installation services. An average cost to install a single Thermowell on a live line can run \$950.00 to 1,500.00. That is good profit for any pipe repair service. Many live Thermowell installers like the [ThermSetter 5075](#) for example that work in conjunction with the [TM-1 Pro](#) or M-80 Hot Tap machines sell for around \$700.00.

For questions on live Thermowell installation, please call us at [www.PipeManProducts.com](http://www.PipeManProducts.com) at 1-877-PIPEMAN (747-3626).

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