

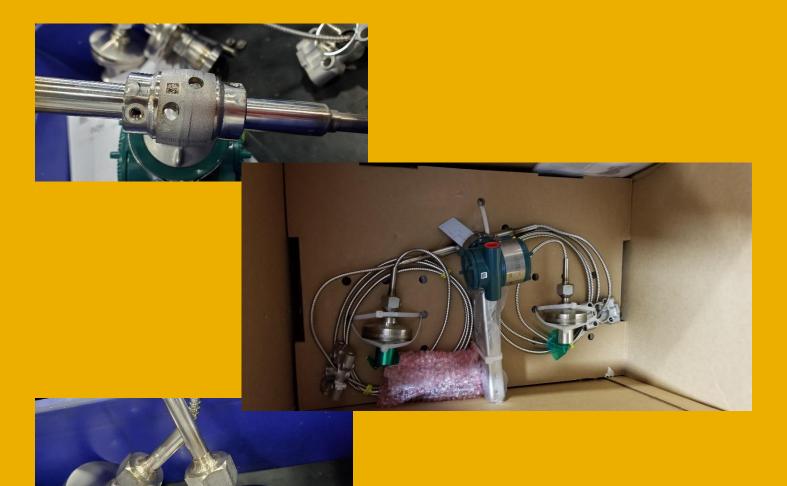
Creative Engineers, Inc.

CUSTOMER DRIVEN SOLUTIONS New Freedom, PA | Greenville, SC 15425 Elm Drive, New Freedom PA 17349 (717) 235-5469

www.creativeengineers.com info@creativeengineers.com

High-T PT & dPT

Absolute and Differential Pressure Transmitters for High-Temperature Process Applications



CEI can supply a pressure transmitter with chemical seals and capillary, filled with NaK (sodium-potassium alloy). NaK is a form of liquid metal that stays liquid at ambient temperatures while also having negligible vapor pressure at elevated temperatures. By simply moving the transmitter head farther from the process, the process temperature's impacts on the transmitter internals can be negated. Process temperatures as high as 1,500°F (815°C) can be accommodated, which far exceeds standard capillary fill fluids.

The process connection can vary by process need and can be specified by the customer. There are many choices of upper and lower housing, as well as diaphragm materials that include 316/316L stainless steel, Hastelloy C276, Duplex 2205, Inconel 600, and many more.

As all seals and connections which comprise our PTs and dPTs are welded in-house by our certified welders, you can be sure that no leaks will occur. For a fully welded closed system, clients only need to weld the process connection to their port. For this reason, our standard process connection is a weld stub. Other options include compression-style (Swagelok), Grayloc, flange, pipe thread, sanitary, etc.



Because CEI is an independent integrator of this system and is free to use whatever transmitter manufacturer is preferred by the customer. Our standard pressure transmitters are Yokogawa EJA and XJA units, but other manufacturers can be supplied if desired.

TESTING AND CALIBRATION

CEI has developed a dedicated system for the testing and calibration of a variety of alkalimetal-containing equipment (see photo to the right).





ABOUT US

Creative Engineers, Inc. (CEI) is a unique and innovative alkali metal engineering company with the capability to design, build, and operate research and pilot-scale systems to meet customer needs. Each of our alkali metal expert engineers has from 5 to 30 years of experience.

The rapid results obtainable from CEI's dedicated resources often accelerate project schedules as opposed to performing the work in-house, where the researcher's efforts are often allocated among multiple projects.

We also work with other liquid metals, such as lead, antimony, bismuth, etc. and their alloys.

Contact us today at (717) 235-5469 to find out more information about our alkali metal experience.

CEI's **High-T PTs & dPTs** are specifically designed for use with processes and the measurement of their fluids where standard absolute or differential pressure transmitters would not be viable.

They are therefore ideal for use with and are most used with molten metals – including alkali metals such as sodium, lithium, and their alloys. They are also commonly used with lead, lead alloys, and molten salts. While not dedicated to the solar thermal and nuclear power generation industry, our High-T PTs & dPTs are most frequently used by those industries.

For information on other related equipment, please refer to our other brochures for EM flow meters and EM pumps.

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