SOLON MANUFACTURING COMPANY PROVIDES CUSTOM INSTRUMENTATION FOR SUCCESSFUL FUSION PROJECT

Solon's Vacuum Switches Installed at Lawrence Livermore National Lab

Solon Manufacturing Company's custom differential vacuum switch is playing an integral part in the demonstration of nuclear fusion. Scientists at Lawrence Livermore National Laboratory (LLNL) have replicated the process of how the sun creates energy. This possibility of man-controlled nuclear fusion could change the future of how we power the world.

In 2007, Solon began working with engineers at Lawrence Livermore National Ignition Facility (or NIF), to define, design, prototype and validate the vacuum switches used to confirm that the proper atmosphere was in place inside the test chamber. "The NIF requirements were very particular and they needed a partner that was willing to work through all of the details of their project. The material specifications were revised several times during the project to ensure that the switch sensing elements could not influence their process," said Solon's President, Tim Dunn. The Solon switches, 100 in all, were mounted onto panels that are located on the exterior of the fusion test chamber. "Solon developed internal test equipment and procedures specific to this project to ensure that all of the devices performed well when they were received at Lawrence Livermore," explains Dunn. A recent follow up with NIF confirms the switches are still operating at optimal performance, protecting the atmosphere of the test chamber.

"Many people at Solon had a direct impact on our project with LLNL and NIF. Very often our products are buried inside large facilities and don't see the light of day, but their function is crucial to many industrial processes and R&D projects," said Dunn.

Founded in 1949, Solon Manufacturing Company is a global leader in the development and manufacturing of Belleville springs and washers and industrial pressure switches to suit a wide range of applications worldwide.



Connection of the Solon Differential Pressure Switch to Vacuum Source and Data Recording System.





