

FOR IMMEDIATE RELEASE**Strainsert Announces an Updated Crosstalk Correction Process for Enhanced Accuracy, Minimization of the Crosstalk Error and Resolution of Issues with the Most Demanding Force Sensor Applications**

Strainsert, a premier manufacturer of standard and custom force sensors for research, testing, weighing and control applications, is proud to announce the release of an updated Crosstalk Correction process to enhance accuracy of all angles and force magnitudes, minimize the Crosstalk error and resolve issues in force sensor applications, especially ones with the most demanding specifications.

West Conshohocken, PA – February 11, 2020 – The Strainsert Company announces the launch of its updated Crosstalk Correction process. The previous version of the Crosstalk Correction process provided an improved degree of accuracy; however, the new process provides a correction with an even higher degree of precision for all angles and force magnitudes and resolves issues that have occurred with the most demanding applications.

In addition, the new correction process significantly minimizes the Crosstalk error and provides a viable solution to applications that require measurements at an unknown load direction.

Crosstalk Error Description:

Typically, a bi-axial pin output will exhibit an error known as Crosstalk (or Transverse Sensitivity). Depending on a variety of factors, the amount of Crosstalk error will vary for each individual pin. It is essential that all bi-axial pins are tested for the effects of Crosstalk and provided a correction if necessary. Some pins can have a Crosstalk error in excess of 15-20%!

Crosstalk Correction Method:

The Crosstalk correction method is used to mathematically correct for signal error due to Crosstalk. This correction calculation provides a result that improves both magnitude and angle accuracies in the region of interest for the given bi-axial pin. Using the new process, worst case errors are typically on the order of 2-5%, however, errors below 1-2% are more common.

Ideal Case:

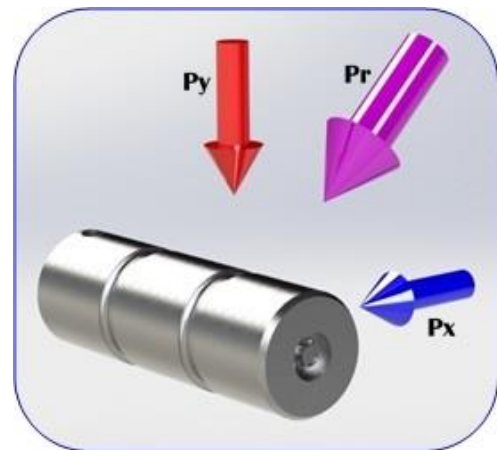
When a force is applied along either primary axis of gage installation, the instrument output will be scaled proportionately and the instrument output of the unloaded (perpendicular) axis will be zero. When a force is applied at an arbitrary angle that is not on along either axis of gage installation, the output of each instrument will be proportionate to its force component. The angle and each force component will be correctly resolved geometrically, and, in the ideal case, the output pattern forms a perfect circle around the bi-axial pin.

Non-Ideal/Typical Case:

Due to non-idealities, the outputs of the bi-axial instruments will have error. The sources of error may vary and are difficult for sensor manufacturers to eliminate completely. Observable errors may vary in both magnitude and angle. In the non-ideal/typical case, the output pattern forms a non-perfect circle around the bi-axial pin. Furthermore, the angle spacing may vary within each quadrant.

Rollout of New Process:

All new products will include the data required for the new Crosstalk Correction process. Please contact Strainsert if the old process data is preferred. For customers who desire to upgrade existing applications to the new process, contact Strainsert for assistance.



“Strainsert thrives working with our customers and the challenging programs they provide us”, Strainsert’s President Tim Foley stated, “and I’m proud we continue to offer our customers better solutions”.

About Strainsert Company

Headquartered in Conshohocken, PA and established over six decades ago, Strainsert is an industry leading designer and manufacturer of force sensors products, including load cells, load pins, tension links, force sensing bolts/studs and force measurement systems. Strainsert is a pioneer in the force sensor industry, with numerous patented designs made possible by innovative internal gaging processes and an unsurpassed dedication to engineering, customer requirements and vast industry experience in the Aerospace, Military, Marine and Automotive industries. Strainsert is AS9100 / ISO 9001:2008 certified. For more information, please visit <http://www.strainsert.com> or call 610-825-3310.

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