Procter & Chester Measurements

STRAIN GAUGED BOLTS.

APPLICATIONS

- Covers virtually all industries.
- High and low temperature ranges.
- High and Low Capacity.
- Static and dynamic measurements.
- Instrumentation can also be supplied and calibrated to make a system.
- Customer can free issue bolts for PCM to modify as necessary.

PCM strain gauge bolts in two ways :

- By turning the outside diameter of the bolt to just below the route of the thread to provide a smooth surface to install the strain gauge. There are options of 1/4, 1/2 or full bridge configurations. These usually depends on the bolt size. (Example: as above on the right hand side).
- By drilling a 2mm diameter hole down the centre of the bolt and accurately positioning the strain gauge in place prior to cable attachment and bonding / potting. (Example : as above on the left hand side).

PCM can take the service further by :

- Providing calculations to indicate the amount of material that will need machining to ensure that there is sufficient strength in the bolt before approaching yield for the application.
- Provide a force calibration on the bolt to provide linearity charts and repeatability runs.
- If there are significant temperature changes during the customers test, to carry out temperature verification runs on the wheatstone bridge.

By providing clear details of the project, environment, accuracy, expectations, Procter & Chester will provide the ideal solution and final product.

Double bridged unit, calibrated in tension and compression. Linearity on this device <0.25% FS

Size M8 bolt—Externally strain Gauged.

Doc. Rev Date: 05/05

PROCTER & CHESTER MEASUREMENTS LTD | DALEHOUSE LANE | KENILWORTH | WARWICKSHIRE | CV8 2UE | UK
TEL: +44 (0)1926 864444 | FAX: +44 (0)1926 864888 | EMAIL: SALES@PCM-UK.COM | WWW.PCM-UK.COM