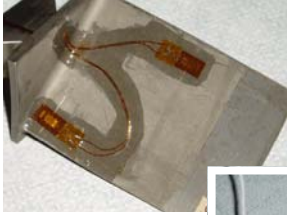




Procter & Chester Measurements

STRAIN GAUGE INSTALLATION

-40 to +250 DegC



APPLICATIONS

- Covers virtually all industries that operate within this temperature range
- Load cells.
- Structural testing
- FEA correlation predictive analysis.
- Frequency response applications.
- Static and dynamic measurements.

With temperatures increasing, strain gauges, adhesive and components choice suddenly decreases.

Particular attention is required on:

- Material thermal expansion coefficient between the material and the strain gauge.
- Expected strain limits at test temperature and number of temperature cycles.
- Modulus effects with overall performance.
- Environmental sealing is critical for a successful the installation.
- Solder melting points and use of fluxes to get quality solder joints.
- Interbridge wires and cables need to be Kapton or Pfte based materials once you exceed 180DegC.

There are three adhesives that will cover most installations. They are either: two part epoxy, epoxy-phenolic or polyimide based products. Each has there advantages which would be decided upon based on the project specification and ease for clamping during the cure process.

An installation of this nature should only be carried out by experience technicians that appreciates the detail required to provide a long term solution.

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



Strain Gauging Steel—
Epoxy-phenolic adhesive

Strain Gauging Plastic—Two
part epoxy adhesive



Strain Gauging Plastic—Two
part epoxy adhesive

Strain Gauging Steel—
Epoxy-phenolic adhesive



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