



Procter & Chester Measurements

# STRAIN GAUGE INSTALLATION

-40 to +100 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.
- Apply to virtually all materials, ie: composites, copper, glass, concrete, steels, aluminiums, titaniums, etc (dependent on specialised cleaning processes).

Installations working between  $-40$  and  $100^{\circ}\text{C}$  are the most popular of all the temperature ranges. There are a number of consumable and strain gauges can be used but experience and careful selection is critical to get the best out of performance and efficiency (which reflects in cost and delivery time).

As cost effective options there are:

- cynocrolate adhesive
- two part solids epoxy adhesive
- two part epoxy phenolic adhesive

There are many other considerations, such as solder, interbridge wire, coatings etc. All have a bearing on the long term performance of an installation.

Depending on if it is transducers, stress analysis, high elongation, vibration, etc, will direct us to which components we should use. Due to being an independent organisation, PCM can select the most appropriate components for the application and also have flexibility if stocks are not available for quick deliveries.

By providing clear details of the project, environment, accuracy, expectations, PCM will provide the ideal project solution.



Strain Gauging Steel—  
Standard Installation

Strain Gauging Plastic—High  
Elongation



Strain Gauging Plastic—High  
Elongation

Strain Gauging Steel—  
Standard Installation



Strain Gauging  
Steel—High  
Elongation

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