



Procter & Chester Measurements

STRAIN GAUGE INSTALLATION

1000 DegC—Flame Spray



APPLICATIONS

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

Flame spray ceramic cement installation should only be applied by the most experienced technicians in strain gauging and are qualified in using the specialised equipment.

The cement is sprayed onto the test specimen. The operator will initially apply a base coat thin enough to ensure that there is enough installation between the strain gauge and the test piece. It is important that the base coat is not too thick as this will lead to increased errors during testing. During the process the free element strain gauge is positioned in place and is held with thin tapes. Any areas that do not require spraying are masked off using masking tape. Stage by stage the tape holding the grid in place will be removed and spray, thus producing an installation as shown below.

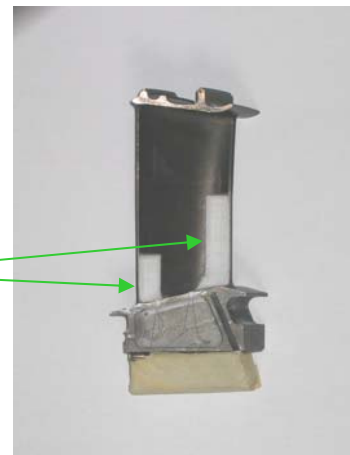
Any deviation from a near perfect installation will show during a test. The results will prove poor, or unreliable and, or delamination will occur.

The way to attach the leads to the strain gauge legs is by using a micro spot welding machine.

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

Spot weldable shims are available which does allow for customers to apply these installation themselves on-site. The shims can be preformed to suit radi on the application. These is critical information as the ceramic only has limited elongation capabilities

The white line indicates the flame spray installation. It will be hard to see the strain gauge element within the ceramic cement.



The important note is that it is important to allow for easy access to apply the Rockide cement via the nozzle.

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