

## High Temperature Weldable Strain Gages *Installation Instructions*

### A. SURFACE PREPARATION

1. Degrease in installation area.
2. Prepare a smooth, oxide-free surface with hand grinder or abrasive paper.
3. Re-clean surface.

### B. GAGE INSTALLATION

1. Establish proper weld schedule with sample carrier supplied. A power setting of 18-20 watt seconds with a probe force of 1-3 kg is a good starting point. After proper welding, the removal of the carrier will leave small weld nuggets about 1 to 1.6mm diameter on the specimen.
2. Place gage assembly on specimen and secure with a piece of tape over the terminal area if necessary.
3. Tack the gage in place with one weld at each of the side alignment marks. Carefully remove tape.
4. Continue welding gage in place with a row of welds below and above the right alignment mark. Repeat sequence at the left alignment mark; then add a row of welds across gage top and bottom.  
*Note: use extreme care when welding near wiring*
5. Complete the installation by adding a second row of tack welds on each side, 1/32" outboard of the first row. It is more critical to follow the pattern shown below, than to measure the distance between each weld. A minimum of 25 welds are required.
6. Tack weld the terminal on each side with a row of about 6 welds.
7. *Covers:* place alumina insulator pad over gage. Fit covers loosely over the gage and terminal, and tack weld in place as shown in diagram.
8. The installation is now complete. The completed installation should appear as below:

