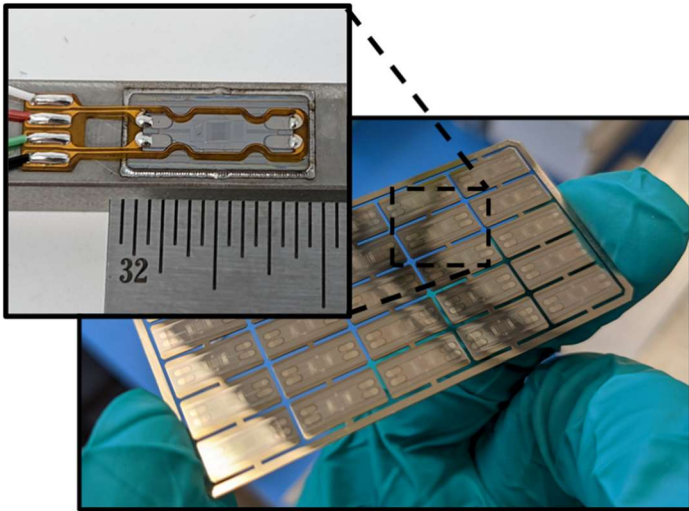


Force Sensor Technology Highlights

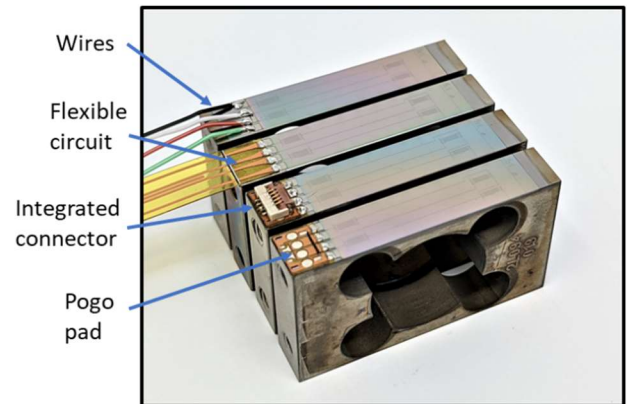
Enabling technologies at Strain Measurement Devices, Inc. pave the way for demanding innovative load cell applications without compromise to accuracy and long-term stability.

Direct Solder

- Solder directly to our thin film circuit
- Elimination of organics and wire bonds
- Enabling lead out flexibility and use in extreme environments > 200°C
- No outgassing, suitable for high vacuum applications



Example of a weld on sensor. Made from a fret with our highly controlled and repeatable thin film process



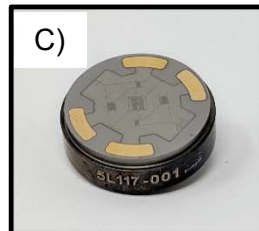
Example of different lead out technologies. Can be applied to any of our OEM and custom load cells and force sensors

Weld-on Sensors

- Cost effective instrumentation of products that are too large for thin film sputtering
- Excellence in manufacturing
- Robust and reliable
- Does not sacrifice performance (<0.05% FSO repeatability and hysteresis)
- Patent Pending

Autoclavable and High Temperature Sensors

- “Case hardened” thin film layers combined with direct solder enable > 200 autoclave cycle survivability
- Field tested for 10 years
- No complicated assemblies required i.e., glass-to-metal headers, over molding.
- No organic interlayers
- Robust and reliable
- High temperature Au pads for use > 350°C
- Patented: US10359325B2
- Redundant bridge capable



A) Autoclavable force sensor. B) Autoclavable force sensor. C) Ultra high temperature pressure sensor.

