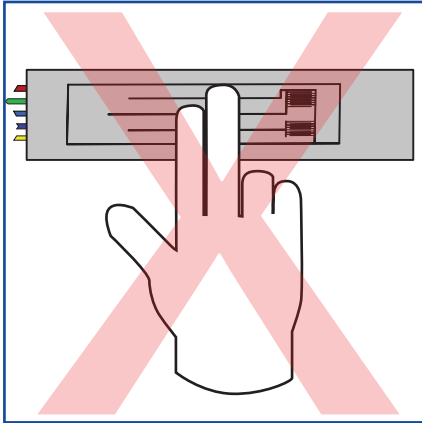




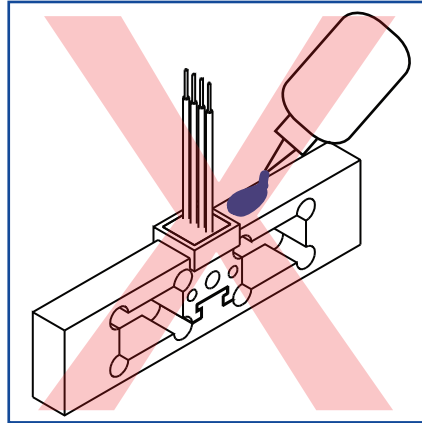
## Thin Film Strain Gauge Sensor Handling

### Scratches to the thin film surface is the largest cause of failures

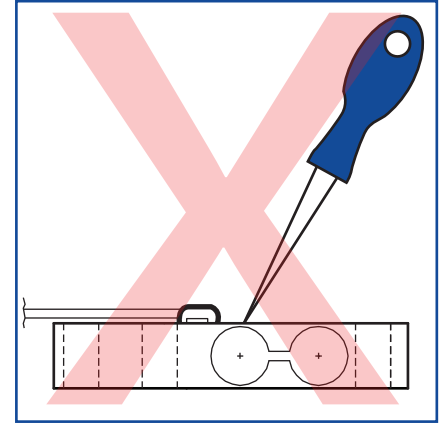
The polished surface of thin film sensors have a deposited micro thin sensing circuit, this entire surface is a sensitive electronic component.



**Do not touch the strain gauge surface with fingers!**

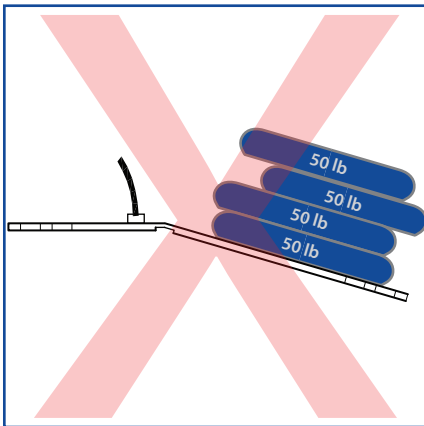


**Do not deposit foreign materials on the strain gauge!**



**Do not probe, scratch or touch with sharp object! Small scratches can degrade the strain gauge.**

### Mechanical overloading is the second largest cause of failures



**Do not exceed the elastic limit of the machined element or flexure!**

Typically strain gaged sensors are rated for 150% x their Full Scale Load Range. Do not exceed this rating or subject sensors to side loads or torques that they are not intended to measure. Many low range force sensors can be overloaded by improper handling.

**Do not transmit mounting loads through the strain gauge flexure. Ensure that extraneous side loads etc are not present**

### Additional Caution:

- Prevent the circuit on the load cell from being scratched/damaged (Avoid metal contact)
- Do not use load cells in a condensing environment (Custom load cells are required for use in condensing environments)
- Do not use the lead wires or cables to pick up the load cell
- Understand the power requirements and prevent high voltage surges
- Ensure that the correct capacity load cell was selected. Do not over load the load cell.
- Review the load cell product specification sheet to confirm the capacity rating and the wiring diagram.
- Proper installation of the load cell is important, make sure to consider the following:
  - Mounting surface: Rigid, flat and clean. (Avoid uneven surfaces and dirty environments)
  - Mounting alignment: Loads must be applied in-line with the load cell. (Avoid placing a load on the sensor at an uneven angle)
- When installing the sensor, connect it to an instrument and monitor the output to prevent possible overload.
- Using an instrument to monitor the output is important to avoid zero distortion and monitor the sensor to ensure that no dynamic overloading occurs (If you think the Load Cell was overloaded, check the zero offset)
- Do not apply excessive torque or create a torque through the sensor when attaching to the mounting surface or mating part