

Surface-Mounted Vibrating-Wire Strain Meters. One type of surface-mounted vibrating-wire strain meter, shown in Figure IV-13, is installed by welding the meter to the structure. A solid spacer bar is used to hold the mounting blocks at their correct spacing. The meter is then fixed into the end blocks and bolted in place under the correct tension. The tube is allowed to telescope so that only the wire is stretched when the meter is strained.

Another type of surface-mounted meter can be spot welded to the surface. The wire is pretensioned inside a small stainless steel tube which is welded to a stainless steel shim stock. Both tube and wire are stretched when the meter is strained.

Figure IV-13. Surface-Mounted Strain Meter

