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# 4. Maintenance

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**Caution:** To avoid hazards to personnel, ensure that all environmental isolation seals are properly maintained.



**Alert:** The flow transmitter contains electrostatic discharge (ESD) sensitive devices. Use standard ESD precautions when handling the flow transmitter. See Chapter 2, Installation for ESD details.

The FCI instrument requires little maintenance. There are no moving parts or mechanical parts subject to wear in the instrument. The sensor assembly which is exposed to the process media is all stainless steel construction.

## Maintenance

Without detailed knowledge of the environmental parameters of the application surroundings and process media, FCI cannot make specific recommendations for periodic inspection, cleaning, or testing procedures. However, some suggested general guidelines for maintenance steps are offered below. Use operating experience to establish the frequency of each type of maintenance.

### Calibration

Periodically verify the calibration of the output and recalibrate if necessary. See Chapter 5 - Troubleshooting. FCI recommends every 18 months at a minimum.

### Electrical Connections

Periodically inspect cable connections on terminal strips and terminal blocks. Verify that terminal connections are tight and physically sound with no sign of corrosion.

### Remote Enclosure

Verify that the moisture barriers and seals protecting the electronics in the local and remote enclosures are adequate and that no moisture is entering those enclosures.

### Electrical Wiring

FCI recommends occasional inspection of the system's interconnecting cable, power wiring and flow element wiring on a "common sense" basis related to the application environment. Periodically the conductors should be inspected for corrosion and the cable insulation checked for signs of deterioration.

### Flow Element Connections

Verify that all seals are performing properly and that there is no leakage of the process media. Check for deterioration of the gaskets and environmental seals used.

### Flow Element Assembly

Periodically remove the flow element for inspection based on historical evidence of debris, foreign matter, or scale build-up and appropriate plant shutdown schedules and procedures. Check for corrosion, stress cracking, and/or build-up of oxides, salts, or foreign substances. The thermowells must be free of excessive contaminants and be physically intact. Any debris or residue build-up could cause inaccurate switching. Clean the flow element, as necessary, with a soft brush and available solvents (compatible with Stainless Steel).

