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Application Note 3004

Cleaning the 7FC and 7FCS Cold Cathode Vacuum Sensors

Description

This document explains the process for cleaning the Televac 7FC and 7FCS cold cathode vacuum sensors that have been used in harsh environments or operated for extended periods in the 10^{-4} Torr or higher range.

Materials Needed

The following materials are needed to properly clean the 7FC and 7FCS cold cathode vacuum sensors:

1. 3/16" Allen Wrench

Instructions

1. Remove the sensor from the vacuum chamber.
2. Unscrew the bolts to expose the anode assembly.
3. Gently lift the anode assembly upwards to separate it from the body.
4. Remove the copper gasket from the sensor.
5. Check the knife-edge on both the anode and the body to make sure they are in good condition.
6. Gently remove any contaminants from the anode using the scouring pad. For the 7FCS, be careful not to damage the starting aid.
7. Blast the body with glass beads.
8. After cleaning, blow out any residual glass beads or dust with dry nitrogen.
9. Install a new copper gasket in body.
10. Replace the anode assembly in the body.
11. Tighten bolts gradually moving from bolt to bolt to ensure uniform compression of the gasket.
12. Reinstall in the vacuum chamber.
13. Allow several hours for tube to degas when pumped down to high vacuum.
14. If properly cleaned and assembled, the gauge tube is ready for use without re-calibration unless NIST traceable calibration is required.

Contact Us

If you have any questions, please feel free to contact us:

The Fredericks Company - Televac
2400 Philmont Avenue
Huntingdon Valley, PA 19004
Web: www.frederickscompany.com
Email: sales@frederickscompany.com
Phone: +1 215 947 2500