FAQ FOR FG CLEANROOM PRESET TORQUE SCREWDRIVERS

Q1: What fastening applications are preset screwdrivers used in?

A1: Preset torque screwdrivers are ideal for production applications where consistent torque is critical. They are commonly used in assembly lines, electronics manufacturing, and other precision fastening tasks where operators must consistently apply the same torque setting for each part. Preset torque screwdrivers offer greater consistency and repeatability, reducing the risk of operator error.

Q2: Does the FG screwdriver have an external torque scale or adjustment mechanism?

A2: No, FG preset screwdrivers do not have an external torque adjustment scale. They feature an internal torque adjustment mechanism that requires a hex key and a torque analyzer to set the torque value.

Q3. How do you set the torque for the preset screwdriver?

A3. The torque can be set using a torque analyzer, or customers can order the screwdriver pre-calibrated to their specified torque value. View manual.

Q4. Can the preset torque value be changed for a new fastening application?

A4. Yes, the preset torque value can be adjusted internally. Customers can either use a torque analyzer to recalibrate the screwdriver or send it to a calibration lab for adjustment.

Q5. What is the ISO standard for re-calibrating hand screwdrivers?

A5. ISO 6789-1:2017 standard recommends recalibration after a maximum of 5,000 cycles.

Q6. How often does the FG need to be recalibrated?

A6. The FG-8i, FG-20i, FG-40i, and FG-125i models feature a calibration life that is 4x the ISO standards, needing recalibration approximately every 20,000 cycles. The FG-25z and FG-50z models meet the ISO standards and require recalibration after 5,000 cycles.

Q7. What kind of grease is used in the cleanroom screwdrivers?

A7. The Mountz Cleanroom FG and FGA screwdrivers feature a polyurea Grease, which is utilized in all FG and FGA standard models. However, customers have the option to upgrade to a High-Vacuum PFPE Grease for an additional cost. The Ultra-High Vacuum Grease is crafted using advanced polytetrafluoroethylene. It's characterized by ultra-low outgassing and vast temperature suitability.

Q8. Do you have any specification on the particulate and VOC outgassing?

A8. No, we do not have specific particulate and VOC outgassing specifications available. Mountz does not have facilities suitable for such testing. However, Mountz welcomes customers to conduct suitability tests for their specific conditions, and are more than willing to cooperate in such tests.

Q9. Does this grease comply with US-EPA PFAS (Per- and Polyfluoroalkyl Substances) requirements?

A9. Currently, we do not offer a PFAS-free cleanroom grease. We are monitoring the market and should a suitable grease become available we will test it at the earliest opportunity. Silicone type vacuum greases have been tested and do not have appropriate lubrication properties.

Q10. How do FG cleanroom screwdrivers prevent grease leakage and contamination?

A10. FG cleanroom screwdrivers feature dynamic wear-resistant internal seals to effectively prevent grease leakage and the infiltration of contaminants into sensitive areas or components. All cleanroom screwdrivers are supplied with a polyurethane sleeve to provide extra protection.

Q11. Are there any maintenance tips for extending the life of the FG screwdriver?

A11. Regular maintenance can extend the life of your FG screwdriver. Avoid exposure to harsh environments and recalibrate as recommended.

Q12. Can FG screwdrivers be used in environments other than cleanrooms?

A12. Yes, while FG screwdrivers are designed for cleanroom use, they can also be used in other environments where precision and cleanliness are required.

Q13. What is the recommended cleaning procedure for FG cleanroom screwdrivers, and what substances can be used for cleaning?

A13. FG cleanroom screwdrivers are designed to withstand frequent wiping and are ideal for advanced cleansing regimens with water and alcohol-based solvents. However, please note that these tools are not designed to be submerged. Acetone and other strong solvents must be avoided as they can cause damage to the finish.

Q14. How do I know if my FG screwdriver needs recalibration?

A14. Signs that recalibration is needed include inconsistent torque application, the tool failing to click at the set torque, or after completing the recommended cycle limit. Regular checks with a torque analyzer can help determine if recalibration is necessary.

Q15. Can FG screwdrivers be customized for specific applications?

A15. Yes, FG screwdrivers can be customized to meet specific application requirements, including preset torque values, handle engraving, special bits and end configurations, and more. Contact our customer service for customization options.

Q16. Do you provide formal cleanroom certification?

A16. We do not currently provide a formal cleanroom certification. However, our cleanroom screwdrivers are specifically designed to meet the demanding requirements of ISO 5 / Class 100 environments.

Q17. What makes the FG screwdrivers suitable for cleanroom use?

A17. Mountz engineered these tools to minimize contamination risk and operate safely in highly controlled spaces. Key features include:

- **Contamination-Resistant Design**: A high-grade, low outgassing powder coat reduces vapor emissions and particulate shedding.
- **Leak-Free Operation**: Wear-resistant internal seals form a double barrier that prevents grease leakage during use.
- **Encapsulated Construction**: A polyurethane sleeve encloses the tool body to contain any wear particles.
- **Cleaning Compatibility**: Materials withstand frequent cleaning with alcohol and water-based solvents.
- **Performance Retention**: Tools maintain the same accuracy, repeatability, and error-proofing features as standard Mountz FG and FGA tools.
- **Optional Ultra-High Vacuum Grease**: Available for VOC-sensitive applications requiring very low vapor pressure.

Q18. Can the FG screwdrivers be used in my specific cleanroom?

A18. Cleanroom compatibility must be validated on a case-by-case basis. We have successfully supported customers in qualifying our tools for use in restricted, highly controlled environments.

Q19. What information do you need to determine if your tools are a fit for our cleanroom?

A19. To help assess compatibility, we recommend sharing the following:

- Cleaning requirements and frequency
- Solvents or sterilization methods used
- Whether autoclaving or other high-temperature processes are involved

With this information, we can better evaluate fit and support your compliance needs.