GC & GC/MS Relocation Quick Reference Guide



Relocating a Gas Chromatograph (GC) or a Gas Chromatograph-Mass Spectrometer (GC/MS) is a meticulous task that requires careful planning and execution to ensure the integrity and functionality of the instruments. These sophisticated analytical devices are sensitive to environmental changes, handling, and installation conditions. Below are the key considerations to keep in mind when undertaking such a move:

Pre-Move Planning

Evaluation and Inventory: Conduct a thorough evaluation of the current state of the instruments, including calibration status, performance metrics, and maintenance records. Then cooldown and prepare the instrument for its move. Inventory all components and accessories associated with the GC or GC/MS, ensuring nothing is overlooked during the move.



Documentation: Compile detailed documentation of the current system performance, including methods used. Ensure gas connections are labelled and sealed and all other associated cables are labelled and packed.

Preparation for Transport

Decontamination: Ensure the instrument and any associated components are properly decontaminated to prevent cross-contamination and adhere to safety regulations.

Securing the Instrument: Properly shut down the system following manufacturer guidelines. Disconnect and cap all gas lines, power sources, and any other connections. Securely pack the instrument using original packaging materials if available, or suitable alternatives that provide ample protection against shocks and vibrations.

Labeling and Documentation: Clearly label all parts and connections to facilitate reassembly at the new location. Prepare a detailed checklist to ensure all components are accounted for during packing, transport and re-installation

Transportation

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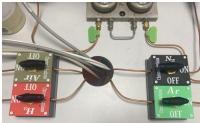
Environmental Control: Ensure that the transportation method maintains an environment within the operational temperature and humidity ranges specified by the manufacturer. If transporting the equipment a significant distance, consider using climate-controlled vehicles if necessary to protect the instrument from extreme temperatures or moisture.

Handling: Engage professional movers experienced with laboratory equipment to handle the instrument with the necessary care. Avoid excessive tilting, jarring, or vibrations during transport, as these can damage sensitive components. Fit anti tilt and anti shock devices to the side of the packaging.



Reinstallation at the New Location

Site Preparation: Verify that the new location meets the environmental requirements for the instrument, including appropriate temperature, humidity, ventilation, and clean power supply. Ensure that gas supplies, exhaust systems, and other necessary utilities are properly installed and functional. Gas supply pressures and purities, comply to manufacturers specifications. Ideally install clearly <u>identified isola-</u> tion valves for each instrument supply gas.



Personnel: Ensure re-installation personnel have relevant gas safety and electrical certificates for them and the equipment they use.

Reassembly: Carefully unpack and reassemble the instrument, following the labels and documentation prepared during disassembly. Reconnect gas lines, power sources, and other connections according to the original configuration.

Calibration and Testing: Perform the same thorough pre-move calibration and performance verification tests to ensure the instrument is operating correctly after reinstallation. Run standard samples to validate the accuracy and precision of the system, making any necessary adjustments to restore optimal performance.

Post-Move Monitoring and Maintenance

Initial Monitoring: Closely monitor the instrument during initial operation at the new location to identify any issues that may have arisen during the move. Document any changes in performance and address them promptly.

Routine Maintenance: Schedule routine maintenance and calibration checks to maintain the instrument's performance and longevity. Update all documentation to reflect the new location and any changes made during the reinstallation process.

Conclusion

Relocating a GC or GC/MS is a complex process that requires detailed planning and careful execution. By considering factors such as proper documentation, secure packaging, controlled transportation, and thorough reinstallation procedures, you can minimize the risks associated with the move and ensure the continued accuracy and reliability of your analytical instruments. Engaging experienced professionals and adhering to manufacturer guidelines will further enhance the success of the relocation.

ČhromSolutions can help customers navigate all these considerations to provide a bespoke relocation service and a cost effective and successful outcome.

ChromSolutions Ltd

What we offer at ChromSolutions is our wealth of experience in analytical instrument sales and support (over 120 years distributed through the members of our company). We can help you with a cost effective remote and a hybrid support agreement with the benefit of our partners.

For more information on instrument relocation please contact us:



Email: <u>info@chromsolutions.co.uk</u> Website: <u>http://www.chromsolutions.co.uk</u> WhatsApp: <u>Chat - ChromSolutions</u>

Chrom Solutions 92 Hobletts Road Hemel Hempstead, HP2 5LP, UK