

Ensuring Optimal Performance through Preventive Maintenance and Calibration




The importance of regular maintenance


Regular maintenance is crucial for preserving the functionality and performance of your instruments. By proactively addressing wear and tear, regular maintenance helps prevent unexpected breakdowns, minimizes downtime, and reduces otherwise avoidable repair costs. It ensures that your instruments operate at their best, providing reliable and accurate measurements.

Preventive Maintenance for CMMs


Preventive Maintenance involves regular inspections and repairs to keep your instruments functioning at their peak. For coordinate measuring machines (CMMs), Preventive Maintenance includes:




Inspecting the machine for damage




Inspecting air lines and filtration systems




Checking scales, rails, and encoders




Checking emergency stops and probing equipment



Cleaning and inspecting cable connections



Using advanced software to predict and fix potential issues




Leveraging advanced software to fine-tune your CMMs


Impact of environment on measurements

The environment in which your instruments operate can significantly impact their accuracy. Environmental factors, such as temperature changes, dust, and bad incoming air, can cause instruments to expand, contract, or become contaminated, leading to measurement errors.


To mitigate these effects, consider the following preventive measures:




Maintaining a stable temperature to prevent expansion and contraction



Ensuring clean air filters to reduce contamination



Reducing vibrations to maintain measurement stability




Protecting the bearing ways from dust and debris


Calibration for accuracy

Calibration optimizes your instruments to standardized benchmarks, ensuring they operate accurately. This process involves comparing the instrument's measurements with reference standards and correcting any errors. To enhance this process, our teams at Hexagon utilize advanced software for measuring and compensating the CMMs' internal files, enabling quicker calibration without extensive mechanical adjustments.


Regular calibration like this helps:




Prevent errors



Minimize equipment failures



Reduce repair costs



Extend equipment life




In conclusion, regular Preventive Maintenance and calibration are essential steps for sustaining the accuracy and longevity of your measuring instruments. By identifying and addressing potential issues as early as possible, these practices help ensure reliable performance and reduce the need for frequent replacements.

Why choose Hexagon service and support?

Here at Hexagon, **we are ISO 17025 accredited**, which means we are externally audited to a higher standard. Therefore, we ensure that all the services we provide are done so by exceptionally trained employees and with a standard of care that meets every level of satisfaction or industrial regulation. All of our field service engineers are factory trained through a rigorous training program with experts across industries. Our team members are frequently audited on their knowledge of these processes and must take a practical examination to make sure they continue meeting Hexagon's high standards. They are trained on the latest techniques and software to improve efficiency in the services we provide, and we have a full 360-degree view of each service person to adjust when needed to meet the specific needs of all our customers.

There is an integral support system of product experts who are here to help our customers and internal personnel with escalation processes to help solve any issues you and your teams may need assistance with. Hexagon takes pride in our service and support teams and look forward to going above and beyond to make sure your machines are functioning at their best. Please reach out to one of our team members today to learn more about our service and support offerings.

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Hexagon is a global leader in digital reality solutions, combining sensor, software and autonomous technologies. We are putting data to work to boost efficiency, productivity, quality and safety across industrial, manufacturing, infrastructure, public sector, and mobility applications.

Our technologies are shaping production and people-related ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

Hexagon's Manufacturing Intelligence division provides solutions that use data from design and engineering, production and metrology to make manufacturing smarter.

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