PC-DMIS

World-leading, cross-platform metrology

Driving smarter manufacturing

Manufacturing has entered a new era – the Industry 4.0 era

Driven by rapid advances in technology and digital transformation, the manufacturing industry is an increasingly competitive market. To keep pace, businesses are continually looking for opportunities to maximise operational efficiency.

Leading manufacturing performers are characterised by high levels of connectivity across processes and systems. The quality function plays a key role here, connecting dataflows throughout the product lifecycle to enable more data-driven decision-making. Achieving these levels of connectivity and productivity requires greater product integration, with quality embedded throughout workflows.

As the world's leading metrology software, PC-DMIS goes beyond quality assurance. As well as meeting the latest ISO and ASME standards, PC-DMIS pushes coordinate measuring machines (CMMs) and metrology systems further to support your organisation's productivity and cost-saving objectives.

PC-DMIS provides a range of functionalities to help stakeholders throughout the product lifecycle gain greater insight from data and make manufacturing smarter.

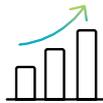# How PC-DMIS makes manufacturing smarter

Maximum accuracy

PC-DMIS helps embed quality throughout design and production, providing highly accurate measurement, positioning, inspection and analysis to continually improve processes and results.
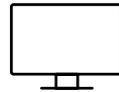
Enhanced information

PC-DMIS is part of a digital ecosystem that enables users to seamlessly move data from where it is created to where it needs to be, increasing insights and visibility into operations.
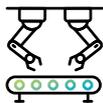
Increased autonomy

PC-DMIS can adapt to changing conditions in real-time using its flexible 'change manager' tools, thus reducing the need for manual intervention, saving users time and effort.

Expanded flexibility

The variety of features and functions available in PC-DMIS enable users to tackle a wide range of applications and inspection challenges with efficiency and confidence.
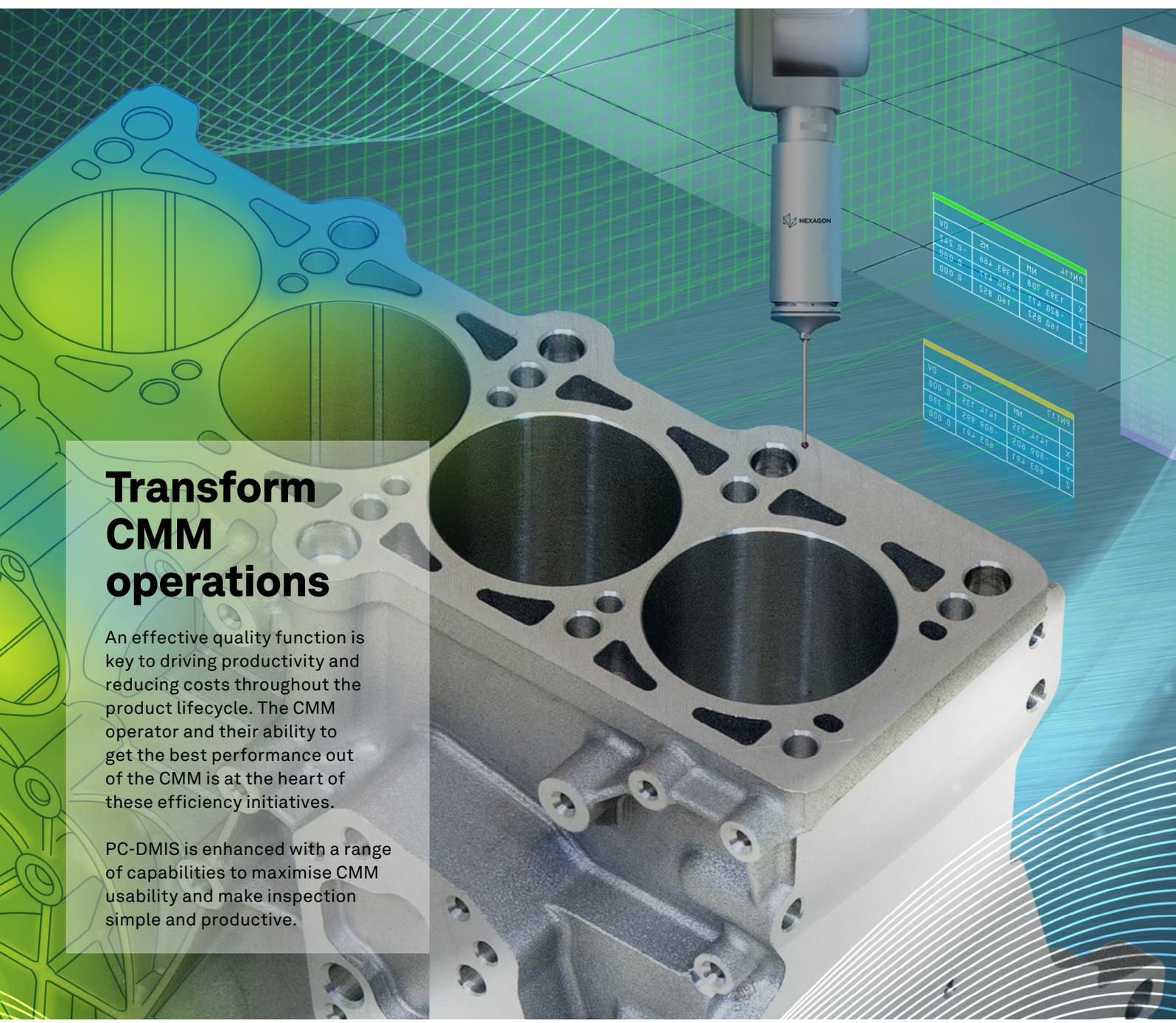
Greater productivity

As an integrated and intuitive digital solution, PC-DMIS minimises user input and increases efficiency, ensuring consistent and timely delivery of actionable results throughout design, production and inspection.

Reduced costs

The advanced capability of PC-DMIS improves process efficiency, reduces waste and cuts cycle times while ensuring reliable product delivery.

Transform CMM operations

An effective quality function is key to driving productivity and reducing costs throughout the product lifecycle. The CMM operator and their ability to get the best performance out of the CMM is at the heart of these efficiency initiatives.

PC-DMIS is enhanced with a range of capabilities to maximise CMM usability and make inspection simple and productive.

Simply point and click

PC-DMIS removes complexity from quality, enabling production-level CMM operators to run PC-DMIS measurement routines simply and easily with Inspect. Inspect is a free complement to PC-DMIS that is specially designed for ease-of-use, providing an intuitive, standard interface, optimised for the CMM operator.

Start measuring seamlessly

The PC-DMIS interface features a number of visual widgets to helps users complete the most common measurement tasks easily and quickly, streamlining execution and saving-time.

Streamlined traceability

PC-DMIS automatically archives reporting for easy access.
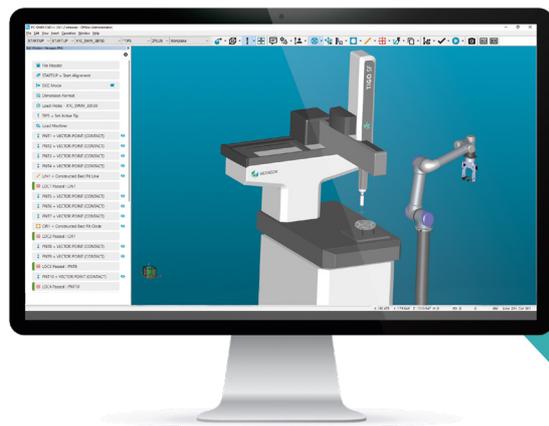
Timely information

Whether delivered via machine lighting or smartphone messages, customisable notifications ensure users always know when the machine needs attention, minimising downtime.

Drive productivity remotely

HxGN SFx | Routine tracking provides important routine execution information for all machines across the business in a single, intuitive interface. Available to users with a HxGN SFx | Asset Management subscription, the cloud based tool provides real time and historical statistics on run status, execution time, and dimensional summaries.

The standard execution interface gives metrology operators the tools they need to simply launch and track their measurement routines.

Integration with other devices such as part loading robots provides for automated system solutions.

Transform quality engineering

The effects of smarter quality engineering can be felt throughout the manufacturing process. Quality engineers play a crucial role in almost every part of the quality process, from GD&T through PMI to results analysis. Streamlining these various steps will lead to greater efficiencies throughout the product lifecycle. PC-DMIS is optimised in multiple ways to enhance various aspects of quality engineering.

Minimised downtime

By utilising the digital twin, PC-DMIS offline programming ensures productivity even while the CMM is in use.

Automatically apply GD&T from CAD models

Seamlessly import embedded GD&T directly from 3D CAD models, saving time by automatically converting models to measurements. Where embedded GD&T is not available in the 3D CAD model, users can create measurement directly from 2D drawings or blueprints using the software's OCR tools and quickly match these measurements to the CAD model with the GD&T Selection from Drawing tool.

Built-in accountability

Ensuring reliable and repeatable quality, the Protect feature enables group level protected control of inspection routine editing plus tracking of authorised modifications. This enhanced set of security capabilities helps manufacturers meet processing compliance and industry-specific accreditations or specifications such as FDA Part 11.

Extensive point cloud library

Whether analysing contoured surface shapes with informative colormaps or extracting feature shapes for dimensional analysis, PC-DMIS's rich set of tools ensures the information needed is presented in a concise and consistent manner.
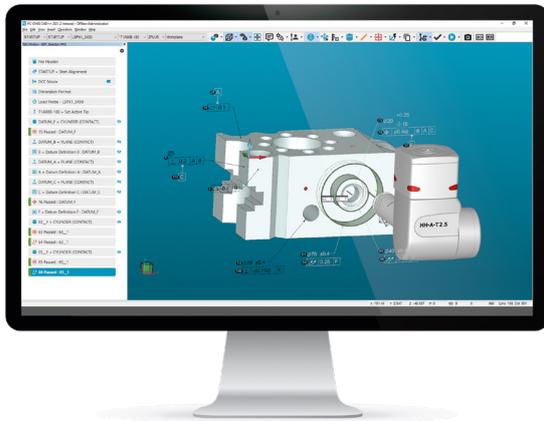
Simply repeat best practices

Users can save time by establishing pre-set measurement strategies with the Measurement Strategy Editor, applying optimal settings according to tolerance requirements and part conditions.
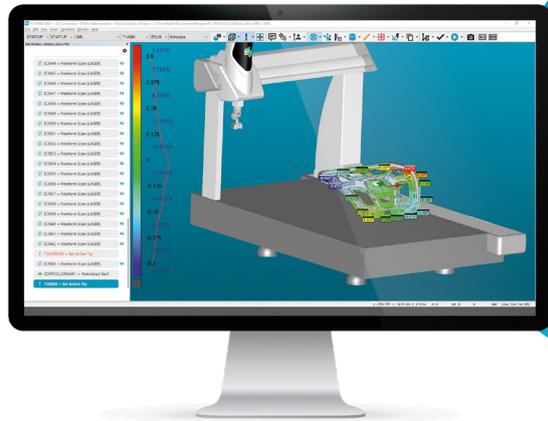
Expanded application flexibility

PC-DMIS increases inspection versatility by supporting a range of probing and scanning options, as well as enabling multisensor capabilities.

Eliminate collisions

PC-DMIS combines built-in optimisation tools to create collision-free measurement paths and automatic probing assignments.

Support for embedded PMI information from CAD streamlines measurement creation.

Visual cues like color coding makes understanding results fast and efficient.

Transform quality management

The impact of effective quality management goes far beyond quality assurance; it is essential to ensuring manufacturing objectives are met by reducing costs and maintaining production output.

Offering a range of capabilities for greater analysis and streamlined processes, PC-DMIS is designed to ensure quality managers are fully equipped to make the inspection function as efficient as possible.

Increase efficiency with automation

PC-DMIS is fully automation ready and can be easily extended to integrate with a larger automation solution. For example, PC-DMIS can be used in combination with TEMPO, Hexagon's automated part loading system, to automatically launch measurement routines once TEMPO has placed parts onto the CMM.

Plug into your Statistical Process Control (SPC) system

PC-DMIS can be connected with any statistical process control (SPC) software to maximise the efficiency of processes and reduce scrap.

Enhance production control with Q-DAS

PC-DMIS is fully integrated with Hexagon's Q-DAS SPC software, which offers a range of modules and extensions, from testing inspection process capability to 3D data analysis and process control.

PC-DMIS easily migrates data for real time SPC analysis and reporting.

Pushing productivity further with Asset Management

With the advent of Industry 4.0 technologies, it is now easier than ever to gain a greater understanding of quality systems and processes. This is crucial in today's competitive market, where timely data-driven insights are critical to maximising productivity.

As cloud-based systems become increasingly prevalent, manufacturers are no longer limited to increasing connectivity within the four walls of a single factory. Now data can be connected across multiple plants in real-time to monitor and ensure the efficiency of the quality process across your factories.

HxGN SFx | Asset Management is purpose-built to make manufacturing smarter throughout your business. This cloud-based platform pushes PC-DMIS further by enabling you to monitor and analyse the performance of multiple CMMs in a single intuitive interface. Whether monitoring systems remotely or identifying spare capacity in your quality systems, HxGN SFx | Asset Management makes your organisation more agile and productive.

Use control checks to monitor the process

More proactive maintenance

Dig deeper into data with interactive CMM reports

Drive overall equipment effectiveness (OEE)

Real-time performance data on CMM activity and utilisation

Maximise machine utilisation and identify spare capacity

Historical data for smarter analysis and identifying/rectifying recurring issues

Environmental monitoring to ensure CMM data integrity and swift root cause analysis

Timely expert service and support

To ensure you maximise the value of your software, we want you to be assured that you can get the support you need when you need it.

With Hexagon's global presence extending to over 70 Solutions Centres globally, our service and support network is strategically placed to ensure you have access to responsive technical support and experience minimal disruption to your operations. With Hexagon, you will receive assistance from metrology experts equipped with extensive experience of PC-DMIS and regularly trained on the latest software version.

In addition, your local Hexagon team will offer a range of service and support to help you push productivity further. This includes a range of hardware and software training, maintenance and repair, and Software Maintenance Agreements (SMAs) that ensure your quality operations continually benefit from access to software updates and free trials of other Hexagon software.

For more information, contact our customer services team at **HexagonMI.com/customerservices**.

HEXAGON

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

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

Hexagon's Manufacturing Intelligence division provides solutions that utilise data from design and engineering, production and metrology to make manufacturing smarter. For more information, visit hexagonmi.com.

Learn more about Hexagon (Nasdaq Stockholm: HEXA B) at hexagon.com and follow us @HexagonAB.