PRODUCT FOCUS

HMM430

COORDINATE MEASURING MACHINE

HMM430

Streamline your quality control by reducing the amount of time spent performing inspections with conventional metrology tools. Compared to similarly sized options from the big names in the CMM world, you'll find the HMM430 offers competitive accuracy at an unbeatable Haas price.

STARTING AT:

$49,995

Scan here or contact your local HFO for more details.

PRODUCT FOCUS

HMM430 COORDINATE MEASURING MACHINE

DETAILS AND SPECIFICATIONS

Measuring volume: 15.7" x 16.9" x 13.7" (400 x 430 x 350mm) (XYZ)

Granite bed area: 23.2" x 33.5" (590 x 850mm)

Probe body: Renishaw TP20 with standard force module

Standard Renishaw Probe Tips-
- Uses standard, off-the-shelf Renishaw probe tips – compatible with Renishaw's range of M2 thread probe styli.
- Four probe tips included – 1, 2, 3, & 4mm diameter, all 20mm length.

Linear scale resolution: 0.0004" (0.001mm)

Accuracy:
- Linear accuracy: 2 - 6 μm (0.00008" - 0.00024")
- Volumetric accuracy: 4 - 11 μm (0.00016" - 0.00043")

Max part weight: 265 lb (120 kg)
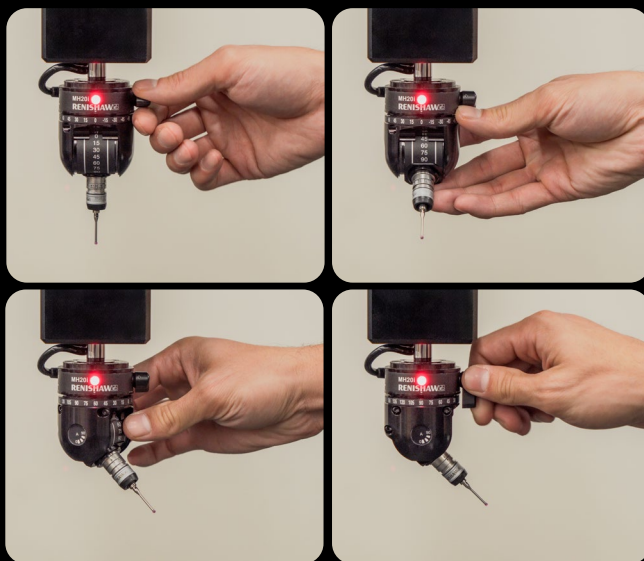
Renishaw control package:
- Main controller, motor driver, scales, and probe head package are all standard Renishaw components.

CappsDMIS GeoCAD+ measuring software:
- CappsDMIS GeoCAD+ is an intermediate measuring software package by Applied Automation Technologies, Inc. (AAT3D). An "Advanced" measuring package is available directly from AAT3D.
- A full software license is included with the purchase of the machine. The license seat does not expire.
- A 1-year Software Maintenance Agreement (SMA) with AAT3D is included with the machine. This entitles the customer to technical support and software updates from AAT3D. The SMA may be renewed after the first year directly through AAT3D, for additional cost. Renewal is not required to use the software, but is highly recommended.
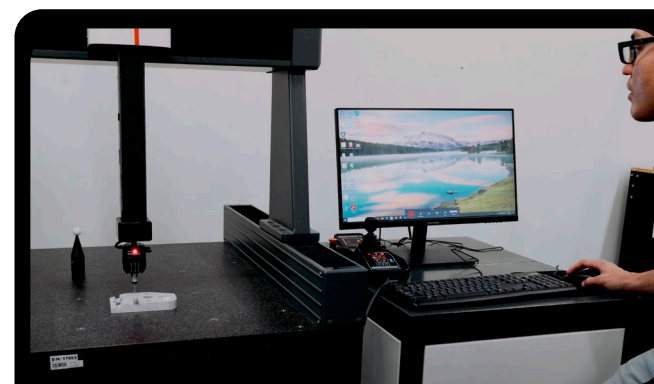
RENISHAW MH20I PROBE HEAD
- Manually indexable – machine motion is 3-axis, and the head orientation can be changed by hand, in 15° increments
- Each index position is repeatable and locks in place:
  – A axis moves from 0 to 90°
  – B axis moves from -180° to +180°

LINEAR GUIDE BEARINGS
No air needed; better for the shop-floor environment.

COMPUTER + PERIPHERALS INCLUDED
Monitor, keyboard, mouse, speakers, and uninterruptible power supply (UPS) are included with the computer.

JOYSTICK CONTROL
Quick measurements can be taken without CAD models using the joystick to hand-jog the probe.

HMM430, COORDINATE MEASURING MACHINE
Part #: 08-2002

STARTING AT:
$49,995

Full CNC inspections with CAD models
- Accepts neutral CAD file formats – STEP and IGES
  - Native file format (SOLIDWORKS, etc.) support is an option purchasable from AAT3D
- Use CAD model features to help create/direct inspection routines

Includes a 12-month warranty from ship date, supported by your local Haas Factory Outlet.

FREQUENTLY ASKED QUESTIONS

What inspection software is included, and are other options available?
- The HMM430 includes a full license to CappsDMIS GeoCAD+, a powerful software package from Applied Automation Technologies, Inc. (AAT3D) that has all the inspection features/tools you need to get started. An "advanced" software package upgrade is available to purchase directly from AAT3D. Other Renishaw-compatible software packages can also be used in place of CappsDMIS.

Why is the measuring volume smaller than the bed size? Is it possible to measure larger parts?
- The measuring volume is smaller than the volume between the bed and gantry, because extra clearance is needed for different probe-head angles and stylus configurations. Technically, you could fit a larger part on the bed, if the features of interest fit within the measuring volume, even though the rest of the part doesn't. This would be a fringe case.

Does the HMM430 require calibration?
- The HMM430 comes calibrated from the manufacturer. Your local HFO only needs to verify the accuracy at installation. If recalibration is needed, it should be performed by a certified 3rd-party CMM calibration service. Annual recalibration typically is required for ISO certification.

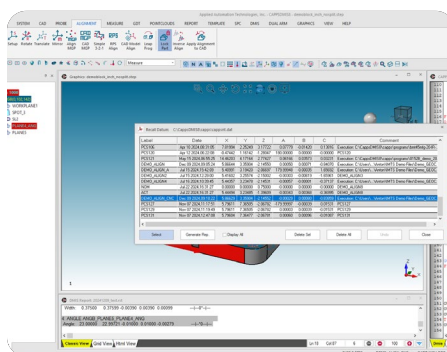*What does the 430 stand for in the model name?*
- The "430" designation represents the Y-axis travel: 430mm.

CappsDMIS is a powerful software package that has all the inspection features/tools you need to get started.
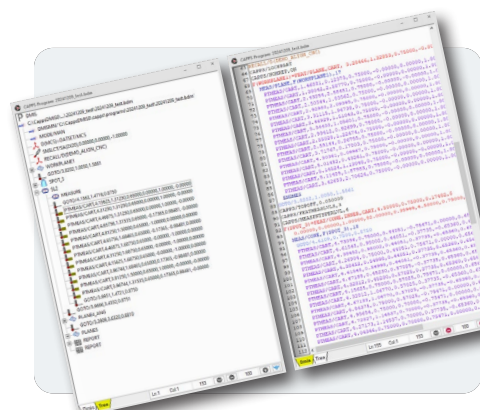

REPORTING TOOLS

- Inspection results are automatically output in report format in the Results Window.
- Generate comprehensive, easily understandable reports.
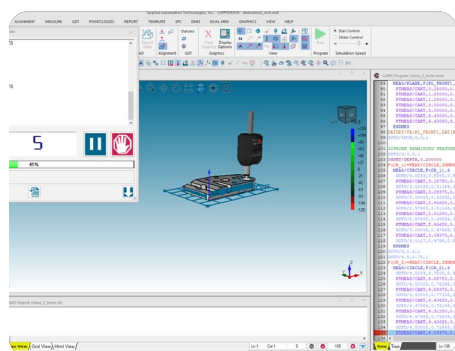- Customize report headers and formats.

GLOBALLY SAVED PROBE CALIBRATION AND ALIGNMENT DATA

- Probe tip calibration data and defined work coordinate systems can be saved to and recalled from a global database in CappsDMIS, allowing you to save time on frequently repeated setups.
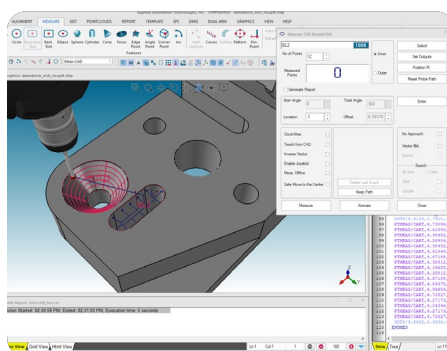
WRITES DMIS CODE FOR YOU

- Each function writes its corresponding DMIS code for you, helping you learn DMIS, and letting you look "under the hood" of your inspection program.
- Programs can also be displayed in easy-to-read treeview format, or as raw DMIS code for granular control over your programs.
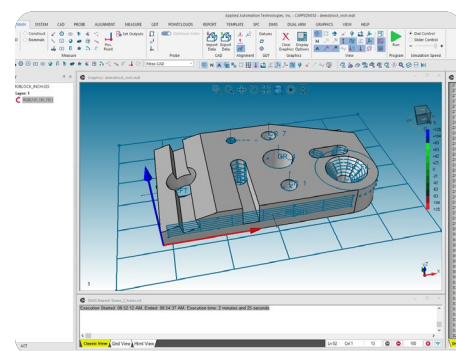
OFFLINE MODE

- CappsDMIS has full offline programming capability, with simulation.
- Useful for writing programs ahead of time, and checking for collision avoidance before running.
- Develop programs at an offline station, while the machine performs automated measurements.

EASY MEASUREMENTS IN MANUAL MODE

- The joystick controller makes it easy to hand-jog the machine to take manual measurements – essential for defining coordinate systems and reverse-engineering features, and convenient for quickly checking geometry.

WELL-ORGANIZED USER INTERFACE

- CappsDMIS has a familiar layout – toolbars along the top, and the Treeview, Results, and Program windows surrounding the central graphics window. The windows can be moved and resized to complement your preferences.
- CAD and geometry data are viewable in the Treeview window, while the Graphics window takes front and center in the screen.

www.HaasCNC.com/Automation

www.HaasTooling.com

www.HaasCNC.com/Financing

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Specifications subject to change without notice. Machines shown with optional equipment. Product appearance may differ. Not responsible for typographical errors.