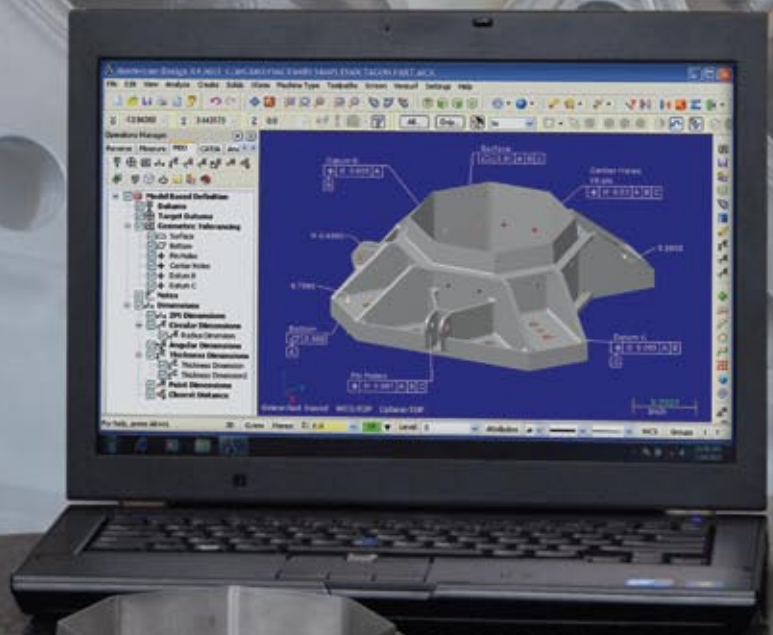


# **Master3DGage™**

**AFFORDABLE, PORTABLE CMM**

**The CMM Solution  
Machine Shops Have  
Been Waiting For**

**Rapid, fully automated  
3D inspection and reporting,  
anywhere in manufacturing**



## Digital 3D Inspections Made Easy

The new PC-based Master3DGage™ portable CMM system uses precise, 3D model-based software to quickly and accurately verify part quality—right on a CNC machine or anywhere else in the manufacturing process. There's no metrology experience needed. Just align the part, inspect it, and report it. First article inspections that used to take hours or days now take just minutes. Use the internal battery to inspect parts where you want, when you want, without being tethered to an AC outlet.

### Greater productivity for all types of inspections

Master3DGage's handy, quick-mount CMM system allows easy setup for on-demand measurement and inspections anywhere on the shop floor. Mount Master3DGage™ right to your machine and check parts quickly, without removing them. In-process verification eliminates worries associated with repositioning parts. Finish typical inspections, such as blueprint, in-process, incoming, first article and final inspections, quickly—with surprising ease and accuracy. Measurement reports are generated automatically, using industry standard formats, so you will know immediately whether parts are in or out of tolerance.

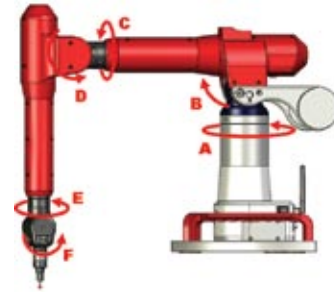
### Scrap rates drop. Profits soar.

Powered by Verisurf's world-class, model-based software, Master3DGage™ maintains precise digital workflow, from the start of your inspection to the end. The ability to precisely pinpoint and resolve quality issues in real time helps reduce scrap, improve efficiency and boost the productivity of every machine. Bottom line? With the new Master3DGage™ you'll do more work, with less rework—because both process and results are repeatable, even during high-volume production.

*Productivity-minded machine shops seeking an affordable, best-in-class CMM will find everything they need in Master3DGage™. Powered by Verisurf's industry-leading inspection software.*

### Ultra-accurate, six-axis metrology

Nearly as impressive as its software is the compact CMM it drives: an integrated Hexagon Metrology, six-axis CMM—among the world's most accurate—with a remarkable measuring volume of 1.2m (4ft). This feature provides superior dimensional control of parts, tooling, molds, castings and more. The innovative counterweight design eliminates user fatigue and assures exceptional accuracy over the full range of measurements. The ergonomic wrist and intuitive, easy-to-reach controls increase comfort and simplify use.



### Industry leading price performance value

Master3DGage™ is priced thousands under many less-robust systems, proving model-based

inspection is affordable. Master3DGage™ — the affordable CMM solution you've been waiting for.

### Quality production has never been easier

In a production environment, time is money. But historically, non-digital manual and 2D parts inspections have been very labor intensive. With Master3DGage™, simplicity and ease of use are designed right in, so that even those with little or no metrology experience can get up to speed quickly. Controls and interface are easy and straightforward, so users spend less time scrolling through screens and more time making quality parts.

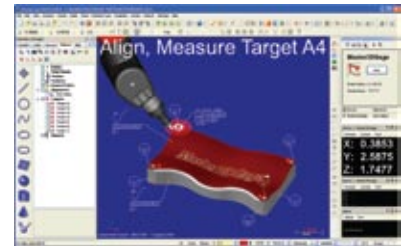


*Finish inspections quickly and easily with high precision, including in-process (shown above), blueprint, incoming, first article and final inspections.*



### Inspections in three easy steps: Align, Inspect, Report

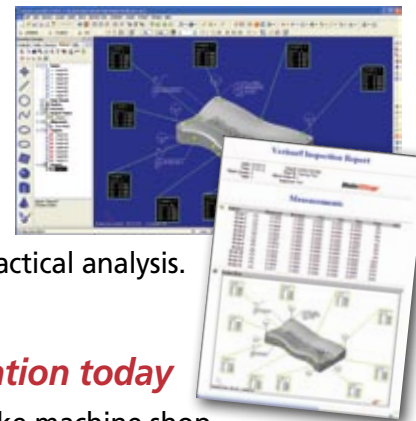
**Align:** Quickly automate alignment by picking targets on CAD features (datums). Run the routine by probing each target on the part. The Master3DGage™ software walks you through the process with simple, step-by-step instructions.



**Inspect:** Inspect and view in real time by manually probing or by following automated inspection plans. Easily measure features from precise single points to point clouds. Powerful technology displays variance between the 3D model and the part.



**Report:** Using the 3D CAD model as the nominal definition, the system quickly generates custom reports in industry standard formats, including GD&T constraints and color deviation maps for clear, practical analysis.



### Schedule a demonstration today

Rapid 3D inspections will take machine shop productivity and profits to a whole new level. Contact Master3DGage™ today to schedule a demonstration. Call toll free 866-340-5551 or visit [www.Master3DGage.com](http://www.Master3DGage.com).

## System Specifications

### Complete System Comprises

- Six-axis Hexagon Metrology portable CMM
- Tungsten carbide counterweights
- Durable, hard-sided transport case
- Master3DGage™ training part
- Master3DGage™ inspection software
- USB and power cables
- Internal lithium-ion battery
- 1-year warranty
- Certified qualification sphere  
Size +/- 0.0005mm (0.00002 in)  
Spherical within 0.0001mm (0.000005 in)
- Probe kit with 6 mm ruby sphere probe tip and 15 mm steel ball hard probes with quick disconnect and automatic probe identification

### High Accuracy and Precision

E = 5+L/40 ≤ 18 P = 8  
Per ISO 10 360-2



### Operating Temperature

0° C to 50° C (32 °F to 122 °F)

### Maximum Relative Humidity

80% for temperatures up to 31° C (87.8°F)  
Decreasing to 50% relative humidity at 40° C (104°F)

### Power Requirements

Universal worldwide voltage 110-240 V AC, 50/60 Hz

### Weight

Complete system with transport case 30 kg (67 lbs.)

### Transport Case Size

43.2 x 68.6 x 81.3 cm (17 x 27 x 32 in)

### Supported Operating Systems

- Professional or better Windows XP, Vista or Windows 7 in 32-bit or 64-bit

### Supported File Formats

- ACIS Kernel SAT Files (\*.SAT;\*.SAB)
- Alibre Design Files (\*.AD\_PRT;\*.AD\_SMP)
- ASCII Files (\*.TXT;\*.CSV;\*.DOC)
- AutoCAD Files (\*.DWG;\*.DXF;\*.DWF)
- Autodesk Inventor Files (\*.IPT;\*.IAM; \*.IDW)
- Cadkey CDL Files (\*.CDL)
- HPGL Plotter Files (\*.PLT)
- IGES Files (\*.IGS;\*.IGES)
- KeyCreator Files (\*.CKD)
- Mastercam Files (\*.MCX;\*.MC9;\*.MC8)
- Parasolid Files (\*.X\_T;\*.X\_B;\*.XMT\_TXT)
- Rhino 3D Files (\*.3DM)
- Solid Edge Files (\*.PAR;\*.PSM;\*.ASM)
- SolidWorks Drawing Files (\*.SLDDRW)
- SolidWorks Files (\*.SLDPRT;\*.SLDASM)
- SpaceClaim Files (\*.SCDOC)
- STEP Files (\*.STP;\*.STEP)
- Stereolithography Files (\*.STL)
- VDA Files (\*.VDA)
- Optional formats:
  - CATIA V4 Files (\*.MODEL;\*.EXP)
  - CATIA V5 Files (\*.CATPART;\*.CATProduct)
  - Pro/E Files (\*.PRT;\*.ASM;\*.PRT.\*;\*.ASM.\*)
  - Unigraphics NX (\*.PRT)

