

# New Compact 500 Series VisionGauge® Digital Optical Comparator - Complete Inspection & Measurement in a Small Footprint

*The new Compact configuration of the 500 Series was developed for applications requiring full inspection functionality but where floorspace is very restricted.*

MONTREAL, QUEBEC, CANADA, July 22, 2025 /EINPresswire.com/ -- The [VisionGauge® Digital Optical Comparator](#) is used by manufacturers across a

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The Compact 500 Series VisionGauge® Digital Optical Comparator is the perfect solution for space-limited applications. It provides full functionality for small parts, in a reduced 16" x 24" footprint.”

*Patrick Beauchemin*

wide range of industries to carry out the [high-accuracy inspection and measurement](#) of the parts they manufacture. The system is very intuitive and can be used directly on the shop floor. It has a number of powerful and unique technologies, including its patented CAD Auto-Align™ and CAD Auto-Pass/Fail™ tools for fully automated part-to-CAD comparison as well as its patented Tooth Checker™ tool that is perfect for checking parts with teeth, such as screws, rasps and fluted instruments. The system uses the part's CAD data directly and completely eliminates operator-to-operator variation.

The VisionGauge® Digital Optical Comparator is fast, accurate and requires virtually no programming. The system allows manufacturers to achieve significant gains in throughput. It produces demonstrated accuracy down to  $\pm 0.0001$ ", directly on the production floor. It can display deviations from nominal completely automatically and can be used to create automated inspection reports and collect complete device history.

The most general purpose and widely applicable member of the VisionGauge® Digital Optical Comparator family is the 500 Series. It is a drop-in replacement for traditional optical comparators, with a great many benefits. The 500 Series system is available in both horizontal and vertical configurations. The vertical configuration machine (where parts lay flat on the system's XY stage) has a 12" x 12" travel XY stage and 34" (wide) x 37" (deep) footprint.

However, there are a number of applications that require the functionality of the 500 Series (e.g. multiple magnifications, many different illumination options, optional LASER module for Z-axis measurement, the availability of an optional rotary stage, etc..) but where floorspace is very restricted. The new Compact configuration of the 500 Series was developed specifically for these applications. The system has a significantly reduced 16" x 24" footprint so that it can fit even in the tightest areas.

This floor-standing system has a motorized XY stage with 4" x 4" travel and 0.25-micron encoders as well as a motorized Z axis with autofocus.

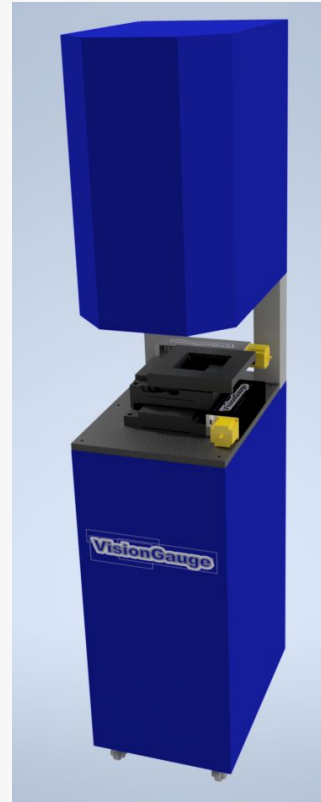
Along with its very compact footprint, some of the system's big advantages include the availability of VisionGauge®'s:

- i) very high-resolution multi-magnification optics
- ii) wide range of illumination options, to tackle even the most challenging applications and
- iii) LASER module for Z-axis / depth & height measurements.

All of the other 500 Series options are also available for the [Compact 500](#)

[Series VisionGauge® Digital Optical Comparator](#). Examples include the automation module to easily interface the system to external machinery such as robot arms and cell controllers, rotary axes, etc...

All VisionGauge® system runs the same VisionGauge® software, which means that the new Compact Configuration of the 500 Series has all of the advanced VisionGauge® software tools for CAD comparison, threaded part verification, high-accuracy measurement (both manual and



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VisionGauge® by VISIONx, Inc.

automated), pattern matching, defect detection, statistics, reporting, databasing & data exchange, etc.

The new Compact configuration of the 500 Series VisionGauge® Digital Optical Comparator is the perfect solution to allow manufacturers faced with space-constrained applications to inspect and measure the parts they produce quickly, easily and with no operator-to-operator variation. This new compact system provides the full VisionGauge® functionality in a very small 16" x 24" footprint.

To learn more about the benefits of the VisionGauge® Digital Optical Comparator, please contact us, either by visiting our web site at [www.visionxinc.com](http://www.visionxinc.com) or by emailing us at [info@visionxinc.com](mailto:info@visionxinc.com).

VISIONx INC. specializes in automated imaging, visual inspection and high accuracy measurement solutions sold worldwide and is the manufacturer of the VisionGauge® Digital Optical Comparator.

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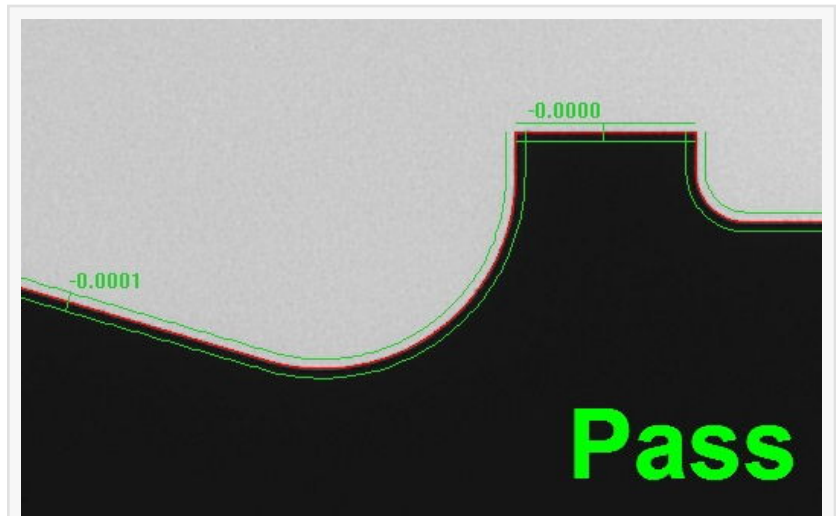
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The VisionGauge® Digital Optical Comparator's patented CAD Auto Pass/Fail™ tool accurately computes and displays, in real time, a part's deviation from nominal, to automatically determine with a Pass/Fail result if a part is within tolerance.

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