

FARO® Disrupts In-Process Guided Assembly and Verification with the Introduction of a New Class of LIDAR with High Speed Imaging (HSI) Technology

September 13, 2016

LIDAR HSI obsoletes conventional LIDAR with ultra-high speed, high-resolution 3D imaging and measurement with projection guidance for manual and automated inspection and assembly

LAKE MARY, Fla., Sept. 13, 2016 /PRNewswire/ -- FARO® (NASDAQ: FARO), the world's most trusted source for 3D measurement and imaging solutions for factory metrology, product design, construction BIM/CIM, public safety forensics and 3D solutions and services applications, announces the launch of the FARO Vector^{RI} Imaging Laser Radar, an ultra-high speed, large-volume, non-contact 3D measurement solution with high-resolution 3D imaging and projection guidance for manual and automated manufacturing processes.



"This product introduces a new class of LIDAR with High Speed Imaging (HSI) technology. HSI combines ultra-high speed 3D scanning and ranging with high-resolution 3D imaging and projection. The solution is a groundbreaking advancement in large-volume, non-contact metrology and guidance – and promises to provide industrial manufacturers with significant inspection cycle time reduction and exceptional throughput," stated Dr. Simon Raab, FARO's President and CEO. "The FARO Vector^{RI} is the world's first and only LIDAR with HSI technology delivering performance improvements over traditional LIDAR solutions, with high speed distance measurement, high speed beam steering, image-contrast functionality and projection guidance capabilities. As such, the FARO Vector^{RI} provides our customers with a powerful solution for automated laser projection guidance, high-resolution imaging and 3D measurement at less than half the cost of conventional LIDAR systems."

The FARO Vector^{RI} utilizes this fast and accurate LIDAR HSI technology to deliver a continuous stream of high-resolution surface data with scanning speed that is thousands of times faster than any currently-available technology. This industry-leading speed is enabled by the use of advanced galvo-mirror beam steering as opposed to the conventional gimbal arrangement deployed by other solutions. Not only does the solution provide unmatched speed, the FARO Vector^{RI} has proprietary 3D imaging capabilities to provide qualitative and quantitative inspection data. This large-volume, high-definition 3D imaging and recognition functionality allows the FARO Vector^{RI} to detect features within the scan, improving the ability to measure and inspect corners, fasteners, tooling balls and hole centers as well as fitting 3D shapes over very large areas. Additionally, high-resolution scanning, capable of composing an image of 400 million pixels, provides high-resolution zoom capabilities on critical features.

Dr. Raab added, "The advanced 3D imaging capabilities of the FARO Vector^{RI} are unrivaled in the market today. Extreme resolution and very dense point spacing allow the system to scan massive areas without sacrificing fine details that would be missed by any other device. Moreover, the FARO Vector^{RI} is equipped with image-contrasting functionality that allows the system to easily define features and edges, and is even powerful enough to detect the angle of each layer or ply of carbon fiber during the layup process for composite part manufacturing."

Engineered to streamline measurement workflows, the FARO Vector^{RI} has built-in functionality that allows users to easily program fully-robotic, automated measurement routines that can run without any operator interaction. Until now, this degree of automation was impossible without the use of large, costly and complex robot integration. Users can further eliminate the need for robots by installing multiple FARO Vector^{RI} systems in a

SurroundScan configuration, to be controlled from a single workstation in a shared coordinate system, creating a very large-scale, metrology-enabled area for unparalleled ability to measure parts and assemblies throughout the entire facility.

Additionally, the FARO Vector^{RI} has full-featured 3D laser projection and In-Process Verification (IPV) capabilities, providing the ability to accurately project a laser outline of parts, artifacts or areas of interest onto any surface or object. A 3D CAD model is used to provide a virtual template which operators and assemblers use to quickly and accurately position components with absolute confidence. Step-by-step assembly and guidance instructions are projected directly onto the work surface. Then, using IPV technology, the FARO Vector^{RI} scans any placed components to ensure complete conformance and precise placement. For enhanced operator efficiency, patented topographical (TOPO) software creates a visualization of errors in the form of a topographical projection onto the part or assembly being inspected for quick and easy decision-making. This robust functionality completely eliminates the need for physical templates or hard tooling and streamlines the production and quality control processes.

The FARO Vector^{RI} Imaging Laser Radar is a game-changing solution for large-volume surface inspection and measurement of parts, assemblies and tools, in-process guidance and verification, fully-automated in-line inspection or any application requiring high-resolution scan data.

Currently, the FARO Vector^{RI} is only available to the FARO Early Adopter (EA) community. FARO's EA Program provides leading edge products to qualified customers for limited product introductions. Sign up for the FARO EA Program at: http://www.faro.com/early_adopter/ for more information on how to experience this new solution yourself.

To learn more about the FARO Vector^{RI}, along with all of FARO's 3D measurement hardware and software solutions, please visit FARO at IMTS 2016 September 12 – 17 at McCormick Place in Chicago, Illinois in the East Building – Quality Assurance Hall in booth E-5825.

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties, such as statements about demand for and customer acceptance of FARO's products, and FARO's product development and product launches. Statements that are not historical facts or that describe the Company's plans, objectives, projections, expectations, assumptions, strategies, or goals are forward-looking statements. In addition, words such as "is," "will" and similar expressions or discussions of FARO's plans or other intentions identify forward-looking statements. Forward-looking statements are not guarantees of future performance and are subject to various known and unknown risks, uncertainties, and other factors that may cause actual results, performances, or achievements to differ materially from future results, performances, or achievements expressed or implied by such forward-looking statements. Consequently, undue reliance should not be placed on these forward-looking statements.

Factors that could cause actual results to differ materially from what is expressed or forecasted in such forward-looking statements include, but are not limited to:

- *development by others of new or improved products, processes or technologies that make the Company's products less competitive or obsolete;*
- *the Company's inability to maintain its technological advantage by developing new products and enhancing its existing products;*
- *declines or other adverse changes, or lack of improvement, in industries that the Company serves or the domestic and international economies in the regions of the world where the Company operates and other general economic, business, and financial conditions; and*
- *other risks detailed in Part I, Item 1A. Risk Factors in the Company's Annual Report on Form 10-K for the year ended December 31, 2015.*

Forward-looking statements in this release represent the Company's judgment as of the date of this release. The Company undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events, or otherwise, unless otherwise required by law.

About FARO

FARO is the world's most trusted source for 3D measurement, imaging and realization technology. The Company develops and markets computer-aided measurement and imaging devices and software. Technology from FARO permits high-precision 3D measurement, imaging and comparison of parts and complex structures within production and quality assurance processes. The devices are used for inspecting components and assemblies, rapid prototyping, documenting large volume spaces or structures in 3D, surveying and construction, as well as for investigation and reconstruction of accident sites or crime scenes.

FARO's global headquarters are located in Lake Mary, Florida. The Company also has a technology center and manufacturing facility consisting of approximately 90,400 square feet located in Exton, Pennsylvania containing research and development, manufacturing and service operations of its FARO Laser Tracker™ and FARO Factory Array Imager product lines. The Company's European regional headquarters is located in Stuttgart, Germany and its Asia Pacific regional headquarters is located in Singapore. FARO has other offices in the United States, Canada, Mexico, Brazil, Germany, the United Kingdom, France, Spain, Italy, Poland, Turkey, the Netherlands, Switzerland, India, China, Malaysia, Vietnam, Thailand, South Korea, and Japan.

More information is available at <http://www.faro.com>



Photo - <http://photos.prnewswire.com/prnh/20160912/406880>

Logo - <http://photos.prnewswire.com/prnh/20110415/MM84316LOGO>

To view the original version on PR Newswire, visit: <http://www.prnewswire.com/news-releases/faro-disrupts-in-process-guided-assembly-and-verification-with-the-introduction-of-a-new-class-of-lidar-with-high-speed-imaging-hsi-technology-300326728.html>

SOURCE FARO Technologies, Inc.

Nancy Setteducati, Executive Assistant to the CEO, 407-333-9911, Nancy.Setteducati@faro.com