

# PRESS RELEASE

# **Alignment for 3D Printing Made Simple**

New software for easy 3D calibration of integrated scan systems

Puchheim, Germany – November 10, 2017 – As the market-leading OEM manufacturer of scan systems, SCANLAB GmbH helps demanding users to get more precision, thanks to a software-based 3D Calibration Wizard. This calibration approach lets a scan solution's individual components be aligned step-by-step. Reflecting industry's constantly rising precision requirements of recent years – in 3D marking as well as in additive manufacturing and other applications – this static calibration is a convenient way to attain the most exacting results. Moreover, the dialog-driven software vastly simplifies laser equipment calibration for less-experienced laser machine operators, too.



Additive manufacturing is one of the fastest growing areas in a number of industries. These positive developments reflect not only the variety of products currently and potentially manufacturable via innovative 3D printing methods, but naturally also the related laser technology and deployed scan systems. Diverse system configurations can be used, typically in high-performance laser processing machines for additive manufacturing and

rapid prototyping, as well as other laser materials processing applications. Here, requirements for accurate calibration obviously increase as more components get integrated into the scan solution. This is exactly where the new 3D Calibration Wizard offers comprehensive support for the daily work of industrial laser processing in optimally setting up and calibrating scan systems.

## High accuracy alignment in multiple steps

The new 3D Calibration Wizard enables a maximally accurate individual alignment of all system components – e.g. a 2D scan head combined with an F-Theta objective or z-axis extension – via evaluation of test patterns and marked points. Calibration proceeds stepby-step under the easy-to-understand guidance of the software's dialog windows. Recommended marking parameters are included in a separate correction file. After each step, an individualized configuration file gets generated and automatically loads to take command of the alignment task before the next step is taken. This predefined approach reduces sources of error.

Upon successfully running the entire 3D Calibration Wizard, an individualized systemspecific correction file is created to secure maximum processing precision for all applications. Results of the individual steps flow into the final result, thus allowing significant improvements to precision and spot variation. Users receive quantifiable benefits –not just in terms of laser processing and product quality, along with avoidance



of rejects – but above all in terms of reduced effort and a vastly simplified calibration procedure.

**Print-quality images** can be downloaded at <a href="http://www.scanlab.de/en/news-events/image-library">http://www.scanlab.de/en/news-events/image-library</a>.

### Current tradeshow calendar:

formnext 2017 from November 14 - 17, 2017 in Frankfurt, Germany – Hall 3.1, Booth G81.

**SPIE.Photonics West 2018** from January 30 to February 1, 2018 in San Francisco, California, USA – South Hall, Booth 2025.

#### About SCANLAB:

With over 30,000 systems produced annually, SCANLAB GmbH is the world-leading and independent OEM manufacturer of scan solutions for deflecting and positioning laser beams in three dimensions. Its exceptionally fast and precise high-performance galvanometer scanners, scan heads and scan systems find application in industrial materials processing and the electronics, food and beverage industries, as well as biotech and medical technology.

For over 25 years, SCANLAB has secured its international technology leadership through pioneering developments in electronics, mechanics, optics and software, as well as the highest quality standards.

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