POSITIONING AND DIGITIZING IN 3D APPLICATIONS

Optimize your operating process with SL-LASER systems!

www.SL-LASER.com
Discover New Profits
Real-time solutions – No more time consuming and wasteful methods of measuring while setting up for production or assembly runs. In today's cost conscious production environment, speed, precision and simple easy-to-use set-ups are required along with assurance of repeatable high quality results.

Trouble-Free Operation
Our computer controlled projectors are industry proven to be rugged and durable, even when placed in hostile climates. Our exacting quality control standards ensure the SL projector keeps projecting your profits, even on high-precision ultra accurate 3D production forms & molds, ensuring efficient production. Drawings, contours, outlines or positions are projected as a laser light beam on any surface, to make your working templates visible – all fully automated and controlled directly from your computer data.

Productivity Increase at the Speed of Light
SL-Laser customizes each installation for your particular needs and production process. This allows elimination of errors, waste is reduced, parts are consistently accurate and quality is assured. Fixtures, templates and jigs become redundant, manufacturing costs drop throughout your production cycle and the operation is as easy as “printing with light” – even when combining several projectors. Overall, you will turbo charge your productivity!

High-Tech – Low Cost
We are a proven supplier of the European aerospace industry, along with race cars, speedboats and other high-tech market sectors. Our cost-effective technology continues to gain acceptance in new industries all the time.

Simple and Versatile to Use
With thousands of projectors successfully installed worldwide in various industries, our systems have even become standard equipment included by some of the world’s finest original equipment manufacturers (OEM’s). As pioneers of laser projection technology we are often regarded as the “benchmark” for offering turn-key solutions to industries such as pre-cast concrete, computer-controlled (CNC) machines for the woodworking, plastic and stone industries and the glass, rubber and leather industries. SL-Laser projectors offer you a competitive edge.

The Projector
Quality control and precision engineering ensure our projectors provide exacting applications in the aerospace industry, where a level of accuracy is required. The projector receives its information from the Computer Aided Design (CAD) program and projects the outline directly and precisely onto the production mold or tooling. The SL3D software enables further sequencing of the images to be projected for all of the necessary work steps. These can be triggered by a hand-held remote control system. SL-Laser systems use a green laser color for maximum visibility to the human eye. High-speed galvanometers are optimized to produce a very stable projection image.

3D Laser Projection Facilitates the Positioning of Prepregs
Our exacting representation of 3D outlines in the production area of composite work pieces opens limitless boundaries. At SL-Laser we follow the philosophy that our creative process is continuous and back this up with comprehensive know-how and reliable customer support. Innovation is a tradition with us.
OUR SOFTWARE MAKES THINGS EASY

From work preparation to material positioning up to productivity management you’ve got everything under control! An intuitive user interface helps you to project your drawings with the click of a button. It’s as simple as sending an email. Your workers will not waste time with manual measurements and your production moves much faster.

Importing and Preparing Data

The SL-3D software can be used on an unlimited number of offline workstations. SL-3D imports all common industry CAD/CAM data formats including Catia V4 and V5. All necessary steps for the workflow control can be prepared on an office PC away from the production environment.

Projecting

Perfectly “tailor made” according to your needs, the assembly plans are separated into logical layers and the components are precisely projected one after another. Now via remote control you can move on step by step projecting and assembling. Data from all premium CAD systems can be used for this assembly method. The projection images can be adjusted exactly to your desired working environment – you can move, rotate or mirror the data in any angle.

Multitooling

Get the most out of your assets using a single projection system to project on several tools in parallel. SL-3D offers you a powerful and flexible way to assign one or more projectors to different tools on one workstation. Control and documentation of the workflow is done individually for each tool. The wireless handheld allows a fast and efficient control of the laser projection system.

Structuring

Set up a sequence of drawings in a batch to structure your workflow efficiently. All your workers have to do is press the “next step” button to keep the productivity rolling. Levels of password protection can be assigned to implement security and operator accountability to generate a log of part verification. A permanent quality control history is recorded to a securable external database with userconfigurable reporting features.

Analyzing

Win reliable data. Which operation lasts the longest? Which team will produce the most profit? The laser driver software will help you. Our support team will be happy to show you new ways to optimize production processes.

THE NEW DIMENSION IN MEASUREMENT: ProCollector Arm

ProCollector Arm is the freehand digitizer of choice when enhanced precision is required. It is fully integrated in the SL-3D software and allows you to digitize outlines with automatic creation of normal vectors for use with multi-projector systems. Due to the easy and simple handling with the stylus you can create projection and production data simultaneously in record time.

The ProCollector Arm is the ideal tool for the manufacturer migrating from an existing pattern library and template inventory to a CAD environment.

Digital templating saves countless design hours and can quickly and accurately get you on a path to improved production efficiency and quality standards.

ProCollector Arm can be used as a stand-alone system or in combination with the laser projectors.
For helicopters, airplanes, or ships, many structural elements need to be fixed to the contoured hull. Traditional measuring and manual templating methods introduce a high potential for error. We project CAD data or digital forms directly onto the working area – at the speed of light. Our intelligent software provides automatic conversion of the complex shapes of your brackets to easy, logical, projectable symbols.

Here click bonds are placed precisely to the laser line and can be affixed quickly and fitted perfectly with glue, screws or rivets.

Due to the compact size of the ProDirector XS2 mobile and a small tripod, it can be moved quickly and easily from one setup to the next.

Several good reasons to use SL-Laser projectors:
- Simple to use, even for the unskilled worker
- Set-up times can be drastically reduced
- Machines and material are used more effectively
- No waste due to highest possible precision
- Quality can be reproduced and controlled easily
- Productivity is increased up to 100 percent
- Very fast return on investment

Precision and flawless manufacturing is essential for highly critical assemblies in the aerospace industry. SL-Laser has an outstanding reputation for quality service and support in all of the industries it serves. Your investment in SL-Laser equipment is a safe investment in your future.

There are many applications that can benefit from laser projection. Let us advise you where laser systems can improve your production processes.

Composite ply assembly is a precision operation. Drawings, contours, outlines or positions are projected as a laser light beam on any surface, to make your working templates visible – all fully automated and controlled directly from your computer data. Single ProDirector 6 and XS2 projectors can „multitask” onto multiple tools.

There are many applications that can benefit from laser projection. Let us advise you where laser systems can improve your production processes.

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GREEN LIGHT FOR YOUR SUCCESS!

MANY YEARS EXPERIENCE IN INDUSTRIAL PRODUCTION

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From the idea to custom solution

IDEA
We deliver what you need. With us you have a personal contact who will be on hand during the entire project phase. With our flexible solutions we tailor our software and other structures on your projects.

PRODUCTION
From development to Production, this all takes place in house. True to the motto:
ALL UNDER ONE ROOF – ALL FROM ONE SOURCE!
Our qualified staff ensure smooth operations and optimal execution.

MAINTENANCE
The reliable service team is our flagship product, by Remote diagnostics our service personnel can quickly and safely detect faults and ship any defective components to the site. With our various service contracts, necessary maintenance from our technicians are carried out quickly and efficiently.

SINCE 1988
EXPERIENCE & INNOVATION
Our contribution for your success story

SL Laser GmbH
Dieselstraße 2
D - 83301 Traunreut
Phone +49. 86 69. 86 38 11
Fax +49. 86 69. 789 355-6

www.SL-LASER.com

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