



Laser Systems GmbH

We put the

Light

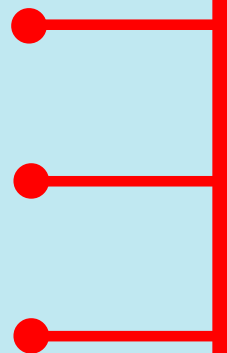
right on the point!

***Over 20 years know-how in
laser technology***

Marking

Trimming

Micro processing



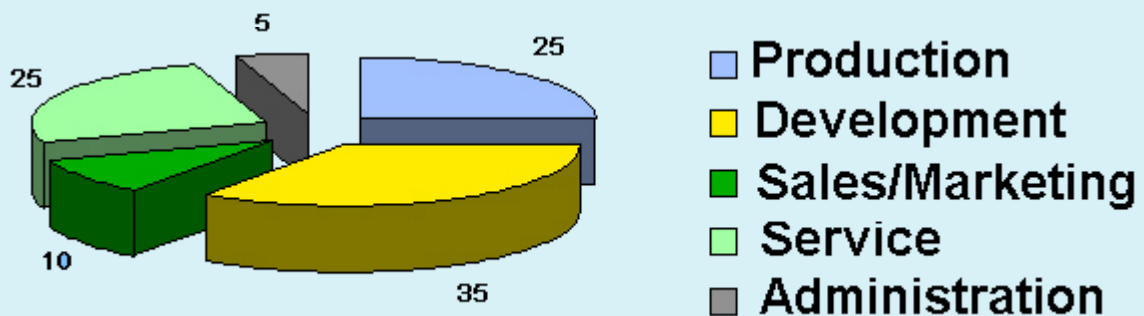
LS - Confidence through know-how

Confidence through know-how

In addition to the greater than 20 years experience LS-engineers have within laser - technology, the know-how is enhanced by the continuous, close collaboration with research and development institutes (e.g. Fraunhofer Institute)

Flexibility through development

With 35% of its employees working in development LS is able to offer a high degree of flexibility in its products. By having its own software and hardware departments, LS is able to solve the more challenging applications and fit the system to meet customer needs. Having a modular approach is highly efficient and gives the optimum relationship of performance and cost.



Reliability through excellent service

The qualified LS service division guarantees you short response times. You always speak with the right contact person who can solve your problem locally, or via remote maintenance within shortest time.

Process stability through application experience

Our application lab always has the appropriate laser available. Your application is in prime hands, because our engineers have the experience to solve even the trickiest problems.

Laser - spectrum

For each application the right wavelength

For laser applications selecting the appropriate wavelength of the laser radiation is essential. Whatever the power, the laser has no effect, if it is not absorbed by the work piece.

Therefore LS Laser Systems GmbH offers a wide range of different laser sources:

-10600 nm	sealed-off CO ₂ -laser	up to 250 W
-1064 nm	lamp-pumped Nd:YAG-laser	up to 75 W
-1064 nm	diode-pumped Nd:YAG-laser	up to 6 W
-1064 nm	diode-pumped Vanadate-laser	up to 16 W
-532 nm	diode-pumped Vanadate-laser	up to 3 W
-355 nm	diode- pumped Nd:YAG-laser	up to 15 W

Micro processing systems

LS-Systeme process your material with finest resolution. For silicon, ceramics, PCBs or foils LS Laser Systems GmbH has access to the laser with the right wavelength. Based on the LS system modules, we design your customised laser system. In co-operation with your specialists our experts construct the right solutions for your application.

Processing with flexibility

- Laser movement by galvanometer
- Laser movement by x/y-linear table
- 3D processing



Software

The **LS-software** runs under MS Windows®. You can create application programs within a flow-chart logic environment. Simple configurable interfaces allow the unproblematic integration of external systems as well as connection to networked host computers. Parameter blocks with dialogue windows simplify programming and reduce programming time.

Software features

- operation in real time and single step
- import of CAD data
- database connection via ODBC
- loops
- suboutines
- configurable monitoring function
- different I/O possibilities
- programming with variables
- case differentiations
- macros

Image processing

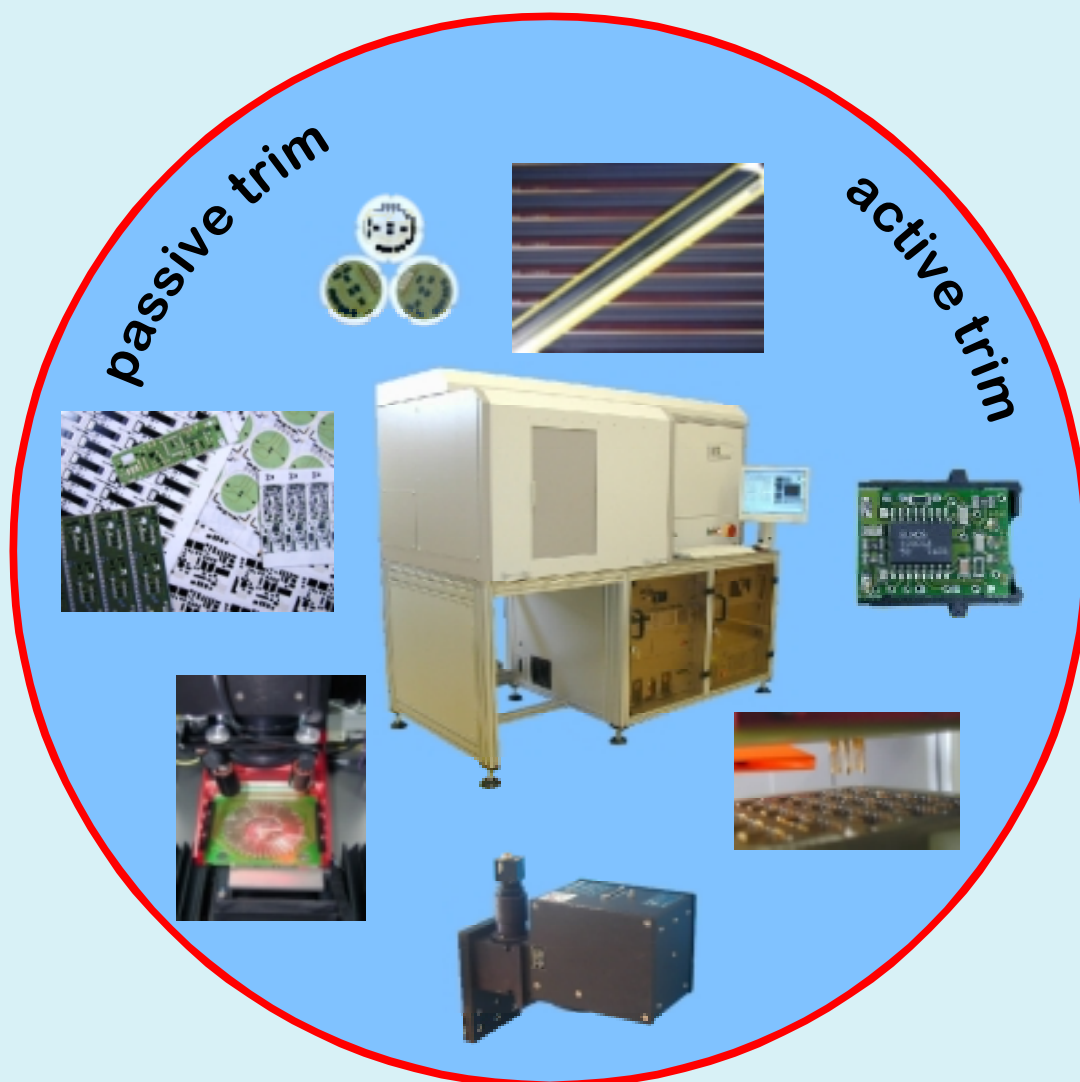
The integrated image processing includes different optimised search algorithms, which guarantee short process times. Tuneable video parameters allow a perfect exposition of your work piece. Correction for x/y-tolerances and angular errors are possible for the laser beam as well as for the handling.

Trim systems

LS-trimmers speed-up, automate and give greater accuracy to your trimming application. The customised solution with LS system modules offers the best possible flexibility for your requirements. LS supplies modules for integration into OEM systems or production lines, and complete stand-alone systems for thick-film, thin-film and PCB applications. All systems are available with automated handling.

Trimming with precision

- high trim speed
- high accuracy
- good long time stability
- high flexibility
- simple integration to process lines

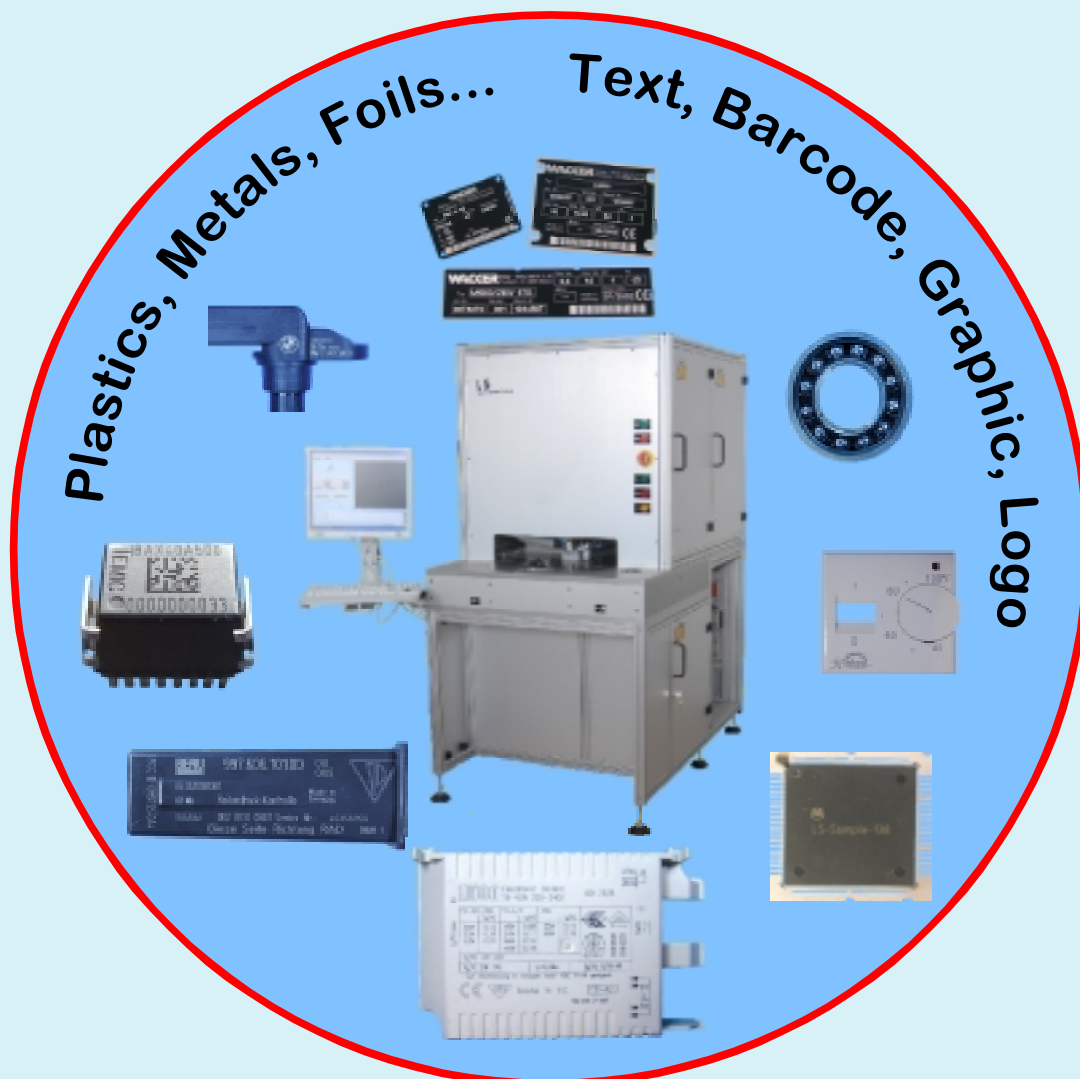


Marking systems

LS markers automate and improve your marking application. You will achieve fast, flexible, durable and economical results even for small lots. LS supplies modules for integration into OEM systems or production lines, and complete stand-alone systems e.g. with rotating table; x,y,z-table; label handling equipment. All systems are available with automated handling.

Marking with advantage

- non-contact, force-free process
- durable marking
- unforgeable
- marks in difficult-to-access places
- high flexible
- simple integration to process lines



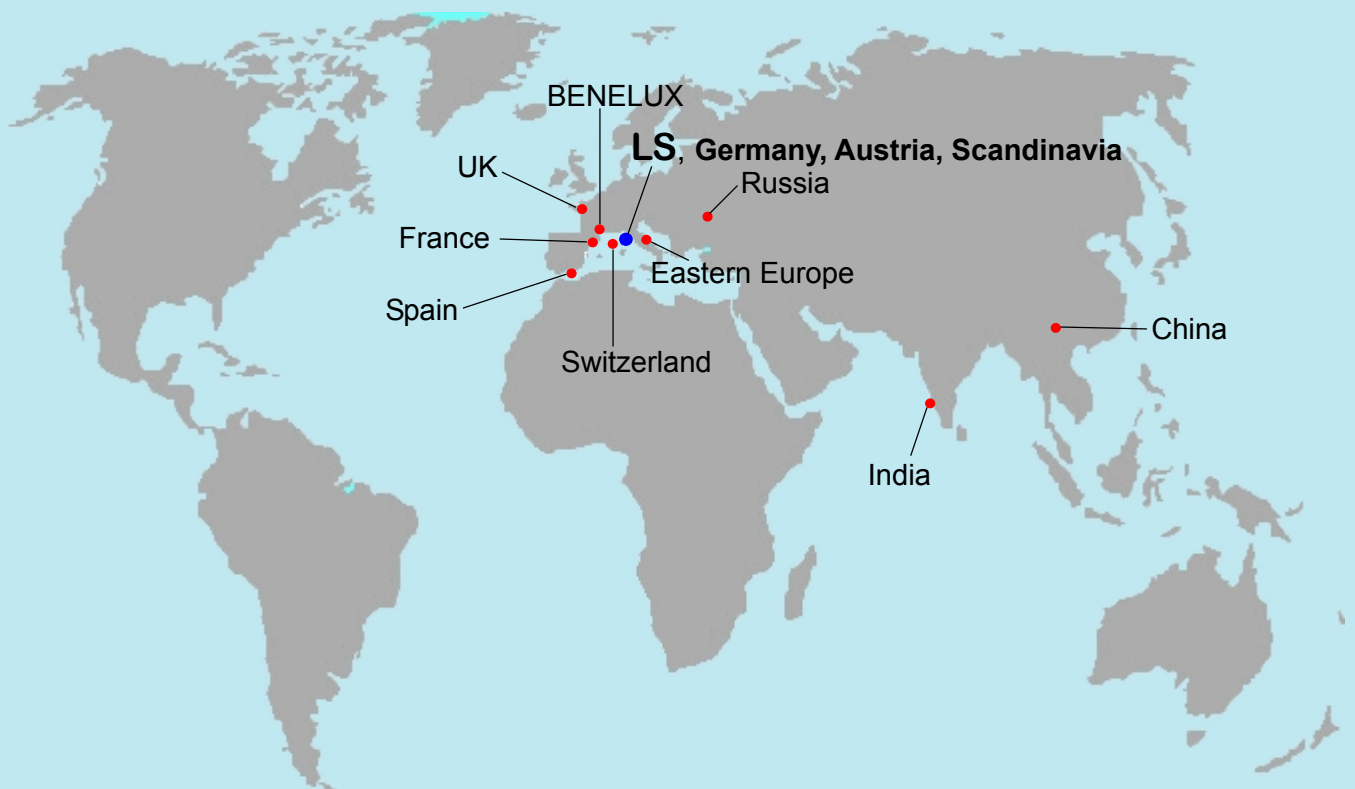
LS Laser Systems GmbH stands for:

Quality Made in Germany, research, development, production, application and service in one company, guarantee optimised support and quality.

Experience Decades of know-how in laser technology.

Advice Our application lab awaits your process studies and tests.

Presence Worldwide agencies offer fast contact to the experts.



LS

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