

Press Release

We think laser - Three core competences under one roof

Hamburg (RS), Juni 2002 – The Rofin Group which consists of the established laser companies Rofin-Sinar, Baasel Lasertech, Dilas Diodenlaser and Wegmann-Baasel Laser, is exhibiting innovative laser beam sources and laser-based system solutions for welding, marking and surface treatment applications in Hall 12, Stand D13 at METAV trade fair, June 4 - 8, 2002, in Düsseldorf/Germany.

The Laser Marking Group – The Mark of Excellence

The Laser Marking Group that unites the two leaders in the marking sector Rofin-Sinar and Baasel Lasertech, will show the **SL Manual** marking system. The most remarkable feature of the **SL Manual**, developed by the Rofin group, is its compactness. With an overall depth of 800 mm, it is no deeper than an office desk, so it has an extremely small footprint. The overall height of the system is 1400 mm, so it can be viewed comfortably. The **SL Manual** has been designed as an ergonomic, seated workplace – the emphasis being on sufficient leg-room and fatigue-free loading.

The z-position of the laser focus can be adjusted manually or under program control, as desired – basically all workpieces that are usually processed manually can be marked. Optionally, rotating equipment for workpieces up to a diameter of 125 mm can be integrated.

In addition to the StarMark series laser markers, any PowerLine marker can also be integrated, in which case the overall depth is increased by approx. 15 cm. The power range is from 10 W in basic mode up to 100 W in multi-mode. At the customer's wish, either lamp pumped or diode pumped beam sources can be used (1064 or 532 nm). The **SL Manual** is designed for both, water-cooling and air-cooling.

Furthermore the Laser Marking Group will present the newest generation of its **PowerLine E** marking laser. The E stands for a endpumped TEM₀₀ laser, which shows a high beam quality and very short pulses. The **PowerLine E** is also available as a frequency doubled model with a wavelength of 532 nm.

Due to the compact outside dimensions they can be easily mounted side by side. By doing so the marking fields overlap and bigger parts can be marked without moving. Shortening the marking times has been realised by increasing the pulse peak power. Another new feature is the so called grey scale software to control the intensity of single laser dots. With this feature it is possible to reduce the amount of required spots for a picture dramatically and consequently the marking time. The results are pictures in excellent quality in reduced marking times.

Typical applications for the **PowerLine E** are the marking of Smart Cards such as ID cards, phone cards for cellular phones and credit cards.

The Laser Micro Group - Focus on Fine Solutions

The Laser Micro division, under the strategic leadership of Baasel Lasertech, encompasses fine welding, fine cutting, micro-boring, undercutting and micro-structuring applications. For micro-material processing applications the Rofin Laser Micro Group supplies the new stand-alone system **StarWeld Universal**. This welding system is particularly well suited for fine 3D welds in volume productions for jobshoppers, i.e. for medical devices, automation and electronics.

This well-proven 3 plus 1 system with three linear axes and one optional rotary axis offers a variety of processing possibilities. Round workpieces, two-dimensional or even simple three-dimensional geometries can be welded fast and efficiently. This opens up many fields of applications for the **StarWeld Universal**, even if workpieces are frequently changed.

The **StarWeld Universal** has its strength in semi-automatic productions with manual workpiece feeding, but it can do more. With its modular housing concept the **StarWeld Universal** can be adapted to be integrated into fully-automatic systems.

A modern PC-based controller concept offers many functional possibilities for customers' requirements, such as a vision system with reticle or fast programming of laser profiles. The integrated "Teleservice" (telesupport) module (optional) with the corresponding data communication improves maintenance and reduces down time. Also, *dynamic beam welding* can be integrated with LaserCAD.

The Laser Macro Group - The Power of Light

The ROFIN Laser Macro Group focuses on laser sources and laser-based systems for industrial applications using high output power CO₂, diode and solid state lasers.

From the series of its diode lasers, the Rofin Macro Group shows a high power diode laser: the **Rofin DL 030 S** with an output power of 3,000 W. The laser beam sources of the DL-S Series are available in the power range from 750 to 3,000 W and are ideally suited for surface treatment, conduction welding and brazing applications. Diode lasers are characterized by a high efficiency of more than 30%, diode lifetimes of over 10,000 hours as well as nearly maintenance free operation and very compact dimensions.

Additional to the DL-S Series, Rofin-Sinar offers a wide range of diode lasers for a variety of applications - the whole range consists of output powers from 30 to 6,000 W.

With operational headquarters in Plymouth, Michigan, and Hamburg, Germany, Rofin-Sinar Technologies Inc. designs, develops, engineers and manufactures laser sources and laser-based system solutions for a wide range of applications. With production facilities in the US, Germany, UK, Singapore and Japan, Rofin-Sinar is one of the world's leading designers and manufacturers of industrial lasers and currently has more than 15,000 laser

units installed worldwide and serves more than 2,500 customers. Rofin-Sinar's shares trade on the NASDAQ National Market System under the symbol RSTI and are listed on the German "Neuer Markt" under the German Securities Identification Number 902757. Additional information is available on Rofin-Sinar's home page: <http://www.rofin.com>.

Kontakt:	Rofin Gruppe Rofin-Sinar Laser Laser Macro	Thorsten Frauenpreiß Rofin-Sinar Laser GmbH Berzeliusstr. 83 D-22113 Hamburg	Tel.: 040-73363-256 Fax: 040-73363-138 info@rofin.com
	Baasel Lasertech Laser Micro	Dr. Thomas Renner Carl Baasel Lasertechnik GmbH & Co. KG Petersbrunner Str. 1b D-82319 Starnberg	Tel.: 08151-776-246 Fax: 08151-776-159 marketing@baasel.de
	Laser Marking	Eduard Huber Rofin-Sinar Laser GmbH Neufeldstr. 16 D-85232 Bergkirchen	Tel.: 08131-704-234 Fax: 08131-704-100 info@rofin-muc.de

Pictures are available as download files under www.rofin.com/news/picture archive.

1. SL Manual
2. PowerLine E
3. StarWeld Universal
4. Diode Laser DL 030 S