



SELECT, SELECT FIBER

LASER WELDING AND MUCH MORE

**NOW AVAILABLE WITH  
FIBER LASER**

**NEW  
AXIS SYSTEM  
NEW  
CONTROL**

# SELECT, SELECT FIBER

– tailored to your needs

## Flexible configuration for all welding tasks

The Select is a fully integrated system: ergonomically optimized manual welding laser, joystick controlled deposit welding system or high-precision CNC system – a unique welding concept with four high-precision axes, short setup times and easy CNC programming.

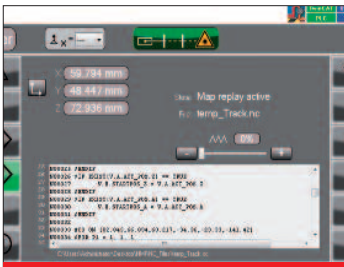
As much automation as you want, with the minimal complexity you need. All parameters can easily be adjusted without any special know-how via a multi-functional joystick and large color touch-screen.



Welding with joystick control

### Joystick

- Direct axes-control
- Easy semi-automatic laser welding
- Single pieces, small batch series and repair welding
- Process and prototype development



CNC-controlled process

### CNC

- Programming via touch screen, teach-in or data import
- Semi or full automation
- Joystick programming of CNC process



SweetSpot™

### Select SweetSpot™

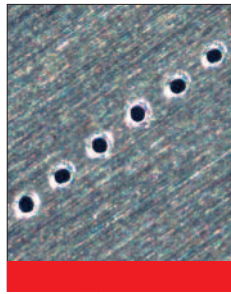
- Lamp-pumped Nd:YAG with patented SweetSpot laser resonator
- High pulse-to-pulse stability
- Very wide power range for very small and strong welds as well as for highly-reflective material



Now available with fiber laser

### Select Fiber

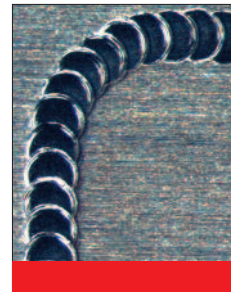
- Fiber laser for high process stability
- No maintenance
- Fine welds with extremely high quality requirements



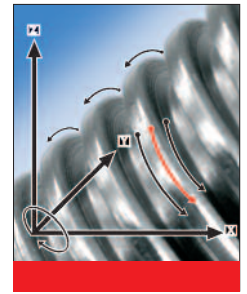
**MicroWeld™ and SweetSpot Resonator®**  
Smallest weld spot diameters of < 0.1 mm for very fine applications showing a constantly high weld quality



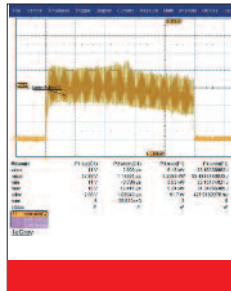
**Teach-Functions**  
Extensive library of teaching functions optimized for laser processing



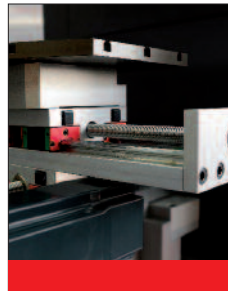
**SynchroWeld™ and Look ahead**  
Consistent pulse overlap on seam welds independent of path contour and welding speed



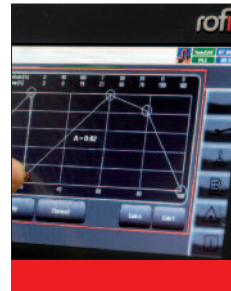
**V-Track**  
Various optimized teach modes for semi-automatic laser welding of single workpieces or small batch series.



**Intelligent Pulse Management™**  
High pulse-to-pulse-stability for fine micro welds



**Axes system**  
Servo motor-driven linear axes with positioning control for high dynamics and high precision



**Multi-touch Display**  
Easy and intuitive parameter setting, ideal even for beginners



**Joystick Box**  
Can be configured individually with 4 axes and parameter display

## Robust All-in-one solution

- Doors completely hidden inside the machine when open
- Large working chamber accessed by manual ports with leather cuffs
- Flow-controlled exhaust system with HEPA filters
- Closed-loop cooling circuit for 24/7 operation
- Generously dimensioned linear axes and additional rotary axis
- Ready to use after delivery


**Select**

## SELECT, SELECT FIBER

### Specifications

|                                       |          | Select                           |  | Select Fiber           |
|---------------------------------------|----------|----------------------------------|--|------------------------|
| <b>Laser</b>                          |          | with SweetSpot®                  |  |                        |
| Type                                  |          | pulsed Nd: YAG                   | pulsed Nd: YAG                         | fiber laser            |
| Nominal power                         | W        | 100                              | 80                                     | pulsed 150/cw 250      |
| Pulse peak power                      | kW       | 12                               | 10                                     | 1,5                    |
| Pulse energy                          | J        | 120                              | 100                                    | 15                     |
| Pulse duration                        | msec     | 0,3 - 50                         | 0,3 - 50                               | 0,2 - 50               |
| Pulse frequency                       | Hz       | single pulse up to 50            | single pulse up to 50                  | single pulse up to 500 |
| Focal diameter                        | mm       | 0,3 - 2,5                        | 0,1 - 2<br>0,05 - 2<br>with MicroWeld™ | 0,1 - 0,5              |
| <b>Positioning axes</b>               |          |                                  |  |                        |
| Travel                                | x-y-z mm | 210 - 170 - 200                  |  |                        |
| Loading                               | kg       | 50                               |  |                        |
| Resolution                            | µm       | 1,0                              |  |                        |
| Repeatability                         |          |                                  |  |                        |
| per axis                              | µm       | ± 30                             |  |                        |
| Speed                                 | mm/sec   | 60                               |  |                        |
| <b>Utilities</b>                      |          |                                  |  |                        |
| Electrical                            | V        | 230                              |  |                        |
|                                       | Hz       | 50/60                            |  |                        |
|                                       | A        | 16 (single phase)                |  |                        |
| Power consumption with nominal power  | kW       | 3,5                              | 2,0                                    |                        |
| Cooling                               |          | internal water-air-heat exchange | air cooling                            |                        |
| Shielding gas                         |          | quick coupling                   |  |                        |
| Compressed air (cooling of workpiece) |          | quick coupling                   |  |                        |
| <b>Measures</b>                       |          |                                  |  |                        |
| Weight                                | kg       | app. 250                         |  |                        |
| Dimensions W x H x D                  | mm       | 790 x 1.262 x 1.258              |  |                        |
| Ambient temperature                   | max. °C  | 35                               |  |                        |


**Ergonomic workstation**

**Interfaces**

**Loading**

**Joystick**

ROFIN-BAASEL Lasertech  
GmbH & Co. KG  
Zeppelinstraße 10 - 12  
82205 Gilching  
Germany  
Phone +49 8105-3965-0  
Fax: +49 8105-3965-4159  
E-mail: sales-micro@rofin.de

ROFIN-SINAR Laser GmbH  
Berzeliusstraße 87  
22113 Hamburg  
Germany  
Phone +49 40 733 63 0  
Fax: +49 40 733 63 4100  
E-mail: sales-macro@rofin.de

ROFIN-SINAR Laser GmbH  
Dieselstraße 15  
85232 Bergkirchen-Günding  
Germany  
Phone +49 8131 704 0  
Fax: +49 8131 704 4100  
E-mail: sales-marking@rofin.de

**WWW.ROFIN.COM**

Benelux: Phone +31 78 69310 37  
E-mail: info@rofin-baasel.nl

CA: Phone +1 905 607 0400  
E-mail: info-canada@rofin-inc.com

CH: Phone +41 32 322 1010  
E-mail: info@rofin-baasel.ch

CN: Phone +86 21 68552216  
E-mail: info@rofin-baasel.com.cn

ES/PT: Phone +34 93 4770 644  
E-mail: info@rofin-es.com

F: Phone +33 1 6911 3636  
E-mail: info@rofin.fr

IN: Phone +91 22 276125 1  
E-mail: sales.micro@rofin.in

IT: Phone +39 039 27291  
E-mail: info@rofin.it

JP: Phone +81 46 229 8655  
E-mail: info@rofin-baasel.co.jp

KR: Phone +82 2 837 1750  
E-mail: info@rofin.co.kr

SG: Phone +65 6482 1091  
E-mail: reception@rofin-baasel.com.sg

TW: Phone +886 2 2790 1300  
E-mail: sales@rofin-baasel.com.tw

UK: Phone +44 1327 701 100  
E-mail: sales@rofin-baasel.co.uk

US: Phone +1 734 455 5400  
E-mail: info@rofin-inc.com

Find further representatives and partners on [www.rofin.com/worldwide](http://www.rofin.com/worldwide)

