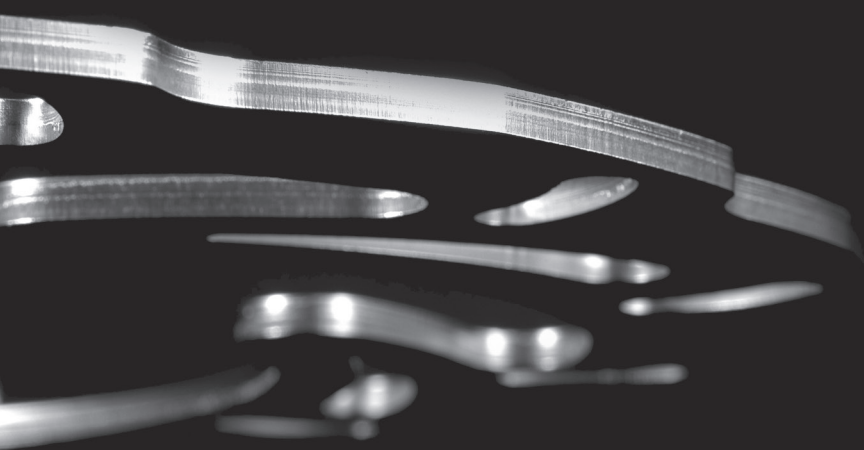


# ROFIN DC SERIES

**CO<sub>2</sub> Slab Laser with new Control and Interface.**



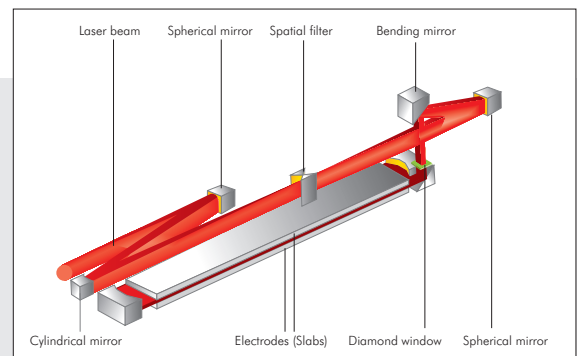
## THE PRODUCT

With a new control and user interface as well as a new control cabinet, ROFIN presents its proven CO<sub>2</sub> Slab Laser. The inclusion of the ROFIN Control Unit for the Slab Series means that now all products across the MACRO product range are equipped with the same control platform and comparable interface. As with the products of the FL and the DQ Series, extended monitoring and control functions are now included on the new CO<sub>2</sub> Slab Laser control, resulting in improved pulse-to-pulse stability, manifold control and log functions including E-Service.

The new control cabinet, which can be stood against a wall, only requires access from one side and at the same time, has a smaller physical footprint.

## THE PRINCIPLE

The secret for this technology are the two water-cooled electrodes (slabs). High frequency between these electrodes leads to stimulation of the laser gas. The optical resonator is formed by the front and rear mirrors and the two electrodes. The heat generated in the gas is dissipated by the water-cooled electrodes (diffusion cooling). Thus, the conventional gas circulation systems involving roots blowers or turbines are not required. The crucial advantage of this laser principle is that the laser gas neither needs to be circulated nor to be renewed permanently. That means that turbines and blowers susceptible to deterioration and service are eliminated. Thus, optics integrated into the resonator that are contaminated by flowing laser gas (especially the outcoupling windows) are a thing of the past.



## THE BENEFIT

- Highest electrical and optical safety levels according to EN/ISO 13849-1/2
- Configurations: compact version, integration package or head/cabinet combination
- New wall-mountable control cabinet with reduced footprint
- New control compatible for all MACRO lasers with improved pulsing capabilities, manifold control and log functions including E-Service
- 1 to 8 kW output power and excellent beam quality  
 $M^2 = 1.05$  ( $K = 0.95$ )
- Low service requirements thanks to the robust, low-maintenance design
- Minimal gas consumption due to diffusion cooling
- Energy-saving standby operation with minimal energy consumption

ROFIN-SINAR Laser GmbH  
Berzeliusstraße 87  
22113 Hamburg, Germany  
Tel.: +49-(0)-40-7 33 63 0  
Fax: +49-(0)-40-7 33 63 4100

info@rofin.com  
www.rofin.com

