

ROFIN RWSflex

High-Speed Remote Welding



THE POWER OF LIGHT

THE PRODUCT

New Standards for High-Speed Welding

The RWSflex sets new standards for remote welding: the IRC5 robot control from ABB – one of the leading companies in robot technology - with more flexible programming controls, the enhancements of the approved high-speed welding system offers new opportunities for creating laser stitched seams.

The highlights are improved system dynamics that further reduce welding non-productive times, an enlarged working area with an increased working distance and the opportunity for offline programming for more flexible process engineering.

The RWSflex operates with CO₂ Slab lasers from the patented DC Series by ROFIN. With an excellent beam quality of $K \geq 0.9$, these lasers offer high performance and efficiency. All lasers of the DC product line have a perfect mode structure for the high-speed welding with large focal lengths, making them the ideal tool for this application.



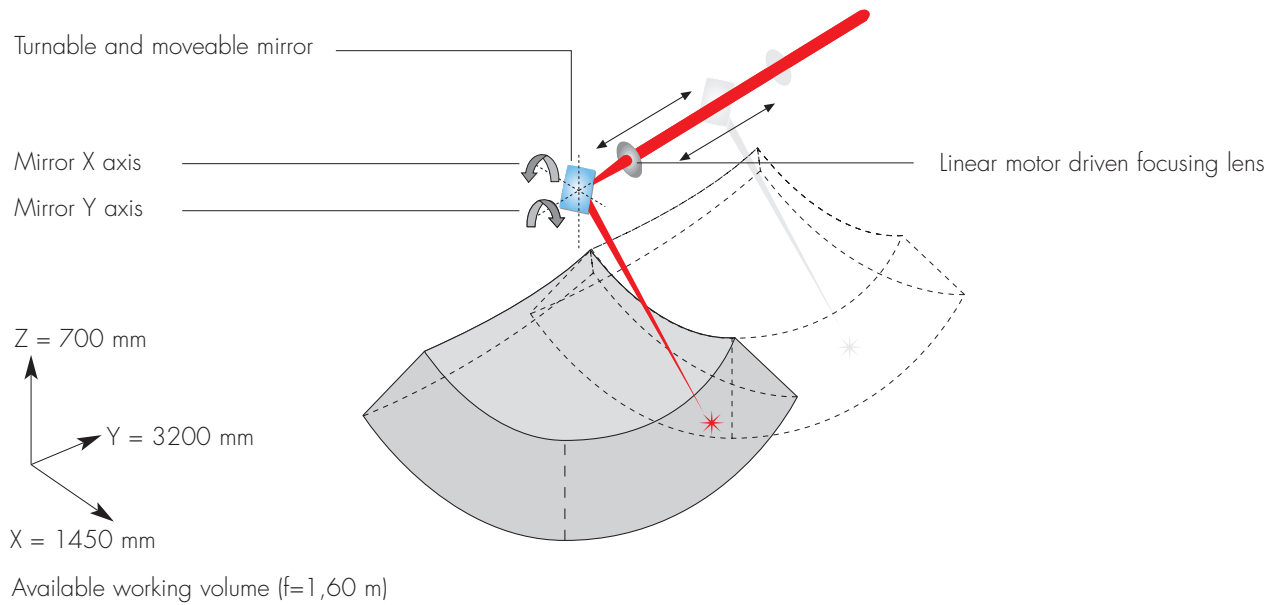
ROFIN RWSflex workstation

THE PRINCIPLE

Fast and Flexible with a Long Focal Distance

The laser beam is focused with a biaxial rotary mirror for rapid adjustment of the focal point. This rapid movement allows the RWS technology to increase the number of

welds in a given cycle time. A virtually unlimited variety of welding contours are easily created and quickly produced.



THE BENEFIT

Multi-Purpose Effective and Secure

- The value proven IRC5 robot control from ABB
- The improved system dynamics reduces downtime
- The expanded working area provides greater capacity to process a variety of different part sizes
- Offline programming with RobotStudio
- Highest reliability and productivity due to proven, low maintenance CO₂ Slab Laser
- Free position programming of the beam output window
- The new beam delivery design prevents damage by back reflection and weld spatters
- The RWSflex can operate with a solid-state laser by changing the optical configuration
- Optional teleservice provides more accessible and flexible maintenance support
- Improved mirror focusing optic available
- Marking and welding in one step



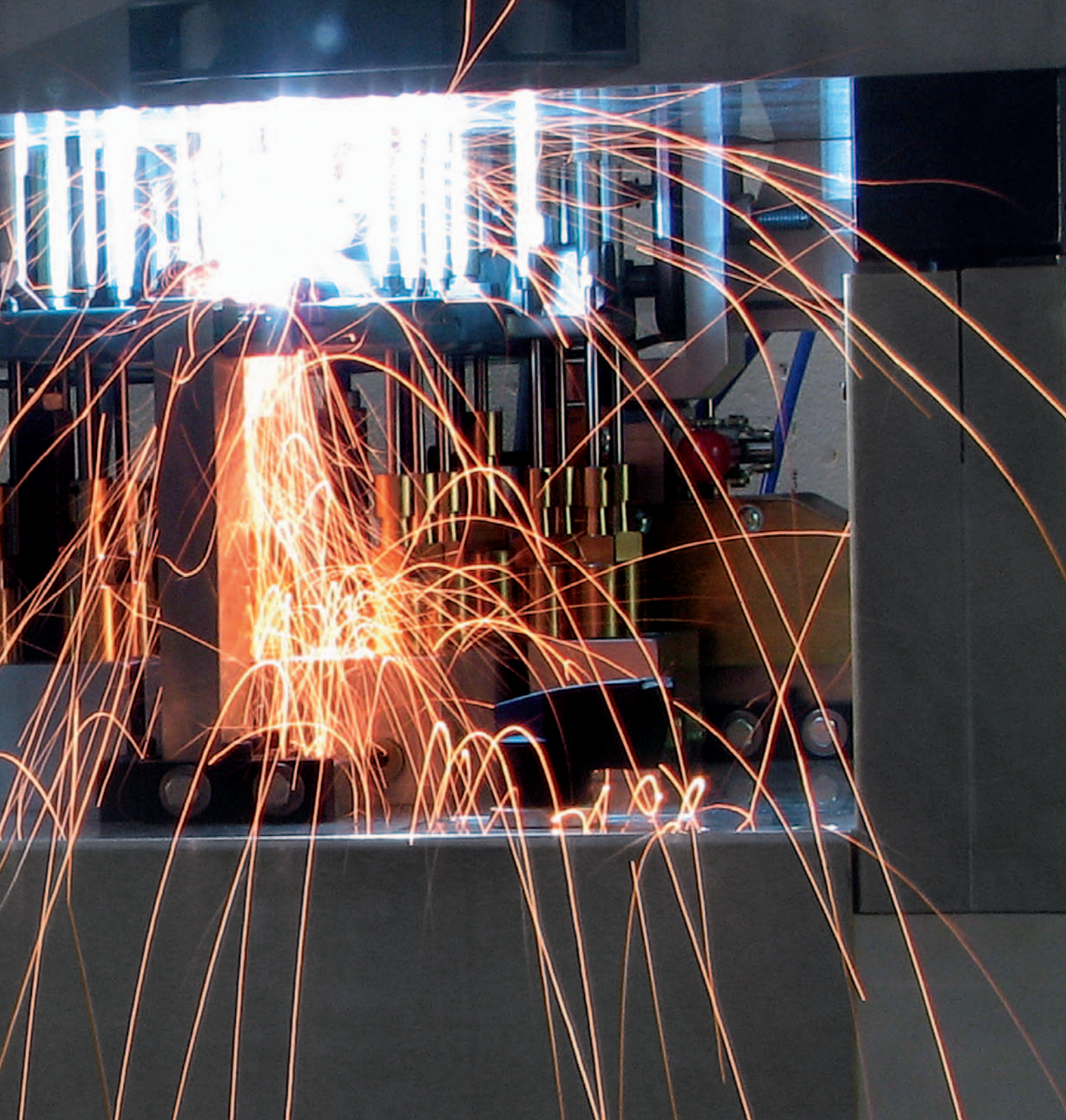
The Remote Welding System (RWS) offers new opportunities...



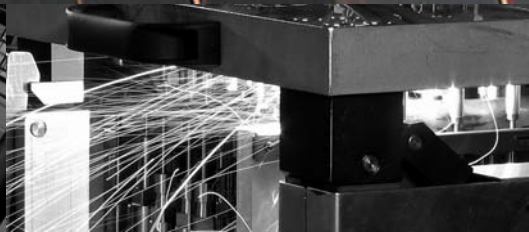
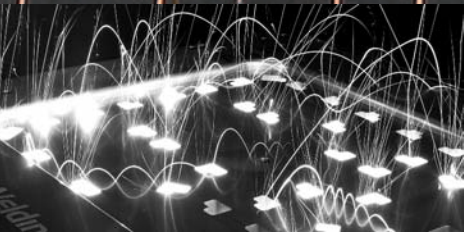
...for creating precise laser stitched seams.



Excellent system dynamic for components of any geometry.



ROFIN RWSflex system – the new standard for fast and precise welding.



ROFIN-SINAR Laser GmbH
Berzeliusstraße 87
22113 Hamburg
Germany

Tel.: +49-(0)-40-7 33 63-0
Fax.: +49-(0)-40-7 33 634100

ROFIN-SINAR, Inc.
40984 Concept Drive
Plymouth, MI 48170
USA

Tel.: +1-734-455-5400
Fax.: +1-734-455 2741

info@rofin.com
www.rofin.com