



BLUMENBECKER

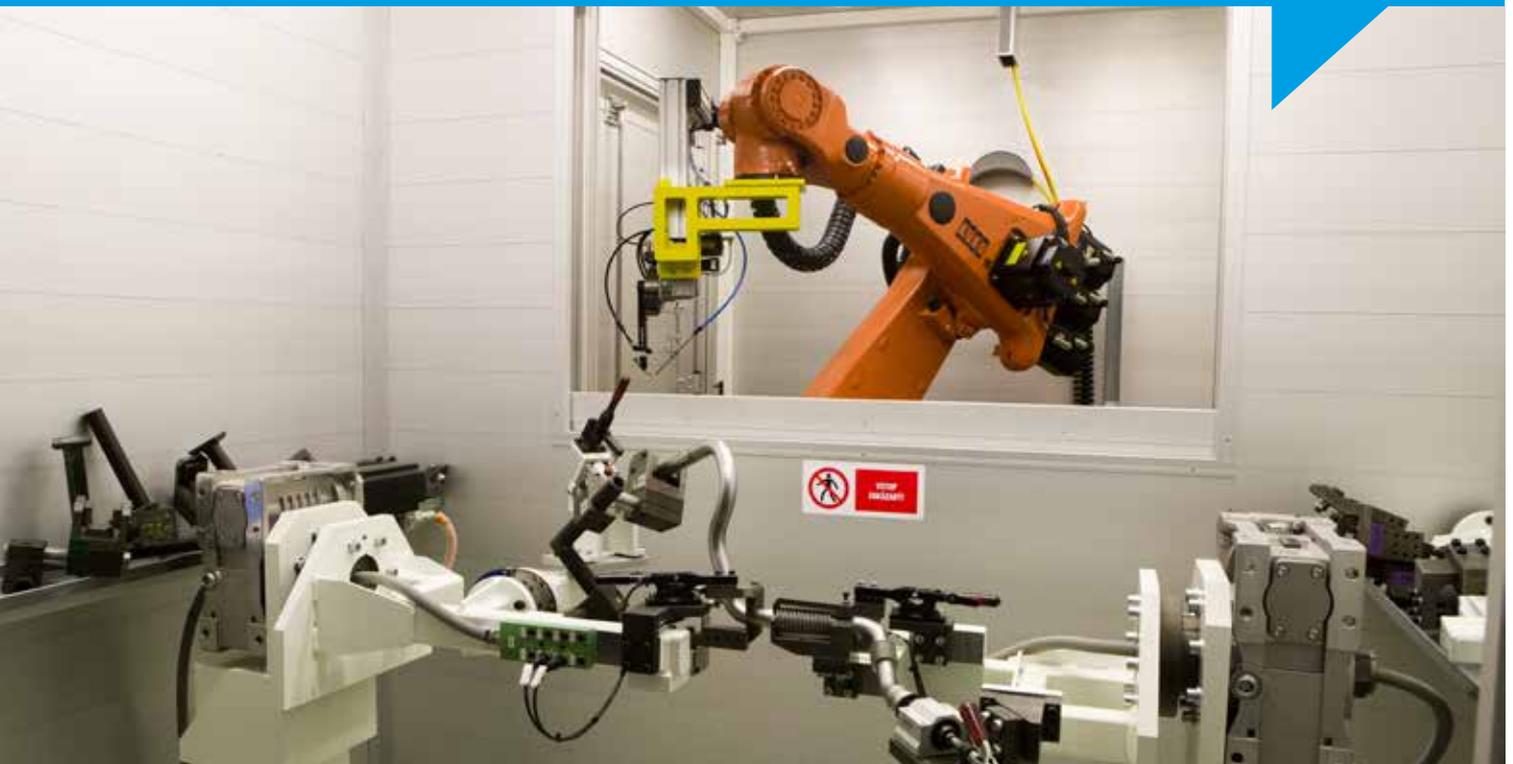
WE DELIVER SOLUTIONS

AUTOMATION TECHNOLOGY **ENGINEERING** INDUSTRIAL TRADE INDUSTRIAL SERVICE TECHNICS

REFERENCE

Industrial robotics | laser welding

Supply of robotic welders for fuel lines



CLIENT:



Martinrea Slovakia Fluid
Systems s.r.o.
Priemyselná 1
900 21 Svätý Jur

PROJECT COMPLETED BY:

Blumenbecker Slovakia s.r.o.
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COMMISSION:

Planning, supply and commissioning of two laser
welding booths for welding thin-walled stainless
steel tubes

Execution: 2014-2015

YOUR **SYSTEM INTEGRATOR** FOR COMPLEX ENGINEERING AND AUTOMATION PROJECTS

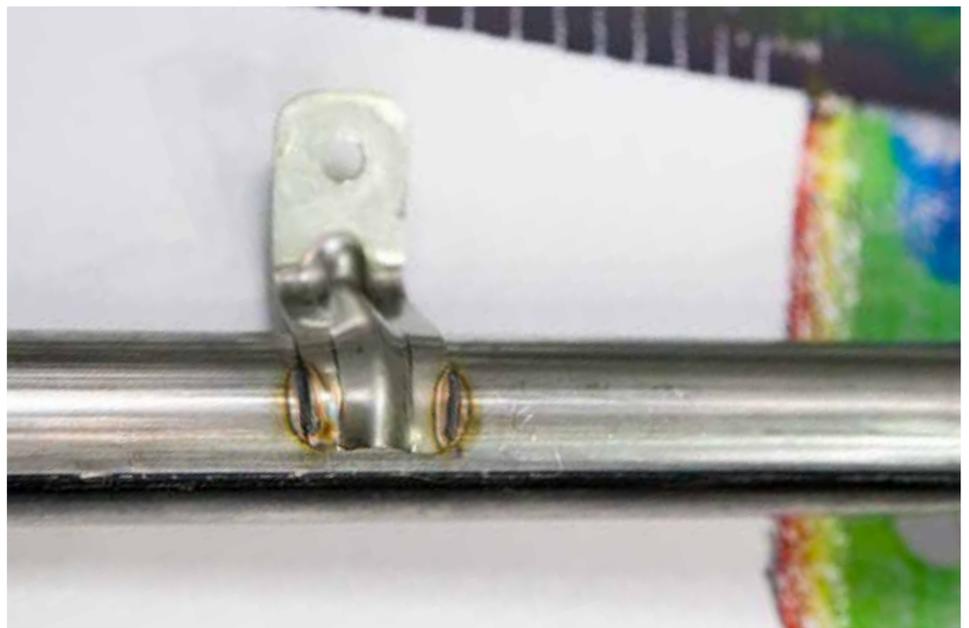
When you order engineering services from Blumenbecker you get solutions that are tailored to meet your individual needs. We can supply the full range of automation equipment on a vendor-neutral basis. The broad-based expertise of our specialist staff means that we can provide answers to practically any question you may have on the design and production of new installations and on upgrades and refits for existing systems. We will work closely with you in delivering a wide range of services, including project implementation, project management from quotation through to handover, hardware and software planning, commissioning, shift attendance and support – and all from a single source.

MARTINREA

■ Canada-based automotive supplier Martinrea International Inc. operates a number of production plants around the world manufacturing steel and aluminium mouldings and castings as well as automotive fluid systems. Martinrea Slovakia Fluid Systems s.r.o. in Bratislava specialises in fuel and braking systems and oil coolers for transmission units.

THE COMMISSION

■ Bratislava-based automotive supplier Martinrea Slovakia Fluid Systems s.r.o. was seeking solutions for welding extremely thin-walled stainless steel tubes for fuel lines. Laser welding seemed to offer the best solution because it produces very high-quality welding joints even when the material is not particularly thick or strong, and it does not generate a lot of heat.





PROJECT SCOPE

Blumenbecker Slovakia first carried out a series of tests at the company's welding laboratory in Bratislava in order to confirm that the technology would be operating with 100-percent reliability in a rigorous production environment.

The entire installation consisted of two laser welding booths, each dedicated to different tasks and equipped with laser welding heads from different manufacturers. The booths were specifically developed for welding thin metallic materials and were designed with automatic tracking.

Martinrea can therefore produce 10 different types of welded products for three different automotive manufacturers. The welding speed was increased significantly and there was also an option for welding different types of fuel lines in one pass, while the use of a stronger laser source meant that thicker materials could be welded.

After the order had been placed the client requested that a wire feed was integrated into the system, which would greatly increase the versatility of the robotic welders. The finished unit can now work in

three different ways: cold welding with or without filler material and non-contact welding using pre-programmed paths.

Martinrea first made contact in April 2014 and the finished robots were delivered in December of that year. Blumenbecker assigned a team of 12 to the project and various modifications and enhancements were undertaken to the installation leading up to May 2015.

PROJECT SERVICES IN DETAIL

- | KUKA KR 150 robots
- | Trumpf laser head
- | Scansonic AL01 laser head
- | Siemens PLC with profibus
- | Schneider Electric drives
- | Welding booths in aluminium
- | Albany roller shutters

WE LOOK FORWARD TO
HEARING FROM YOU.