

MANUAL WELDING FOR THE HIGHEST SAFETY STANDARDS

FINSTERLE RELIES ON POWER SOURCES FROM LORCH SCHWEISSTECHNIK

Finsterle GmbH has been working for customers in the special vehicle and crane construction as well as mechanical and plant engineering sectors for 35 years. Founded by Bruno Finsterle and owned by his sons Markus and Thomas Finsterle since 2017, Finsterle's core business is the manufacture of truss structures and complete assemblies, including mechanical processing and painting. The company specialises in the processing of high-strength fine-grained structural steel up to S960QL. The range of workpieces extends from small parts to the largest truss structures, which can weigh up to 25 tonnes. The lattice structures for crane construction are made up of numerous sheets of metal, which severely restricts access to the weld seams. For this reason, the company welds almost exclusively by hand. A fleet of 20 MicorMIG systems from Lorch is in use.

Both the outstanding quality of the arc and the ease of operation of the systems were convincing factors.

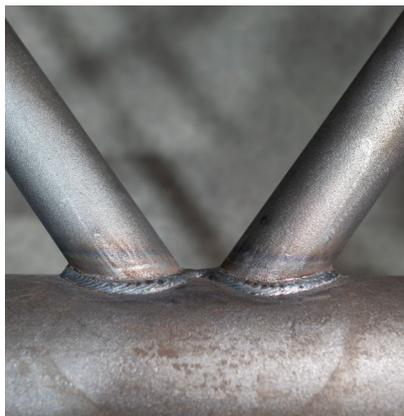
OUR CUSTOMER AT A GLANCE

FINSTERLE GMBH

- Dürmentingen, Germany
- 120 employees
- Manufacture of complete welded structures and assemblies
- www.finsterle-gmbh.de



They have to withstand extremely high loads: the lattice structures for crawler and mobile cranes.



Optimal welding positions and low-spatter weld seams thanks to MicorMIG: the intelligent control technology ensures excellent results and minimal reworking.



Cranes are subject to the highest safety requirements – every component and every weld seam is thoroughly tested.

Fine-grained steel as a challenge

OPTIMUM RESULTS WITH SPECIAL WELDING PROCESSES AND LORCH CONTROL TECHNOLOGY

With long-grain steels, precise heat input is crucial. If too little heat is applied, the steel tends to develop hydrogen cracks; if it is welded at too high a temperature, the tensile strength of the steel decreases – both of which are knockout criteria in crane construction, where safety requirements are extremely high. Thanks to the innovative and patented Micor Boost technology, the pulse arc in MicorMIG is absolutely stable and very easy to control. The numerous welding processes offered by MicorMIG are also a great advantage for Finsterle. Depending on the requirements, the company can use special welding

processes that significantly increase productivity or make welding noticeably easier. For example, the pulse process is used, which enables low-spatter welding without time-consuming reworking over the entire characteristic curve, or SpeedArc, which is characterised by a focused arc and high energy density. With optimal Lorch control technology and fine adjustment of the arc, it is also possible to weld much more cleanly and with less spatter. This significantly reduces the effort required for subsequent cleaning of the seams and saves the company valuable working time.



'We specialise in a difficult type of steel and weld complex components that are subject to very high safety standards. When it comes to components for cranes, we work in a high-security area and every weld seam must be absolutely perfect. With Lorch's MicorMIG systems, we are in good hands and can deliver the high quality that is required in this area to our customers.'

– Markus Finsterle, Technical Director

FACTS

- Stable arc thanks to Micor Boost technology
- Wide range of welding processes that significantly increase productivity
- Precise adjustment of the welding process through dynamic control
- Clean, low-spatter weld seams
- Clearly structured user interface
- Integrated language programme with twelve foreign languages

