



PLANT ENGINEERING

Seams as if welded by an automated system

Employing a staff of more than 90 employees, Michelfelder Edelstahltechnik GmbH manufactures sheet metal parts and components, assemblies and complete system from stainless steel, aluminium, steel and special materials for such industry juggernauts as Trumpf and Bizerba. Founded in 1970, the company today operates as part of a holding group (MHO) that comprises a total of five businesses and six production locations in Germany. Another branch is located in Turkey. At the heart of the group is the principal plant in Fluorn-Winzeln which, aside from stainless steel panels, also machines steel sheet assemblies. Michelfelder has devised a strategic production concept they call “Systemeering”, which offers customers a comprehensive solution from the design to the manufacture of the components.

CHALLENGE

As Michelfelder’s specialities include the manufacture of attachments for premium-grade production and metal working machines, the weld seams they require must be perfect both in strength and appearance. Since the bulk of the seams on their high-quality pipe frames and sheet metal assemblies are visible seams, the company must be able to rely on equipment that delivers immaculate results. This is why Michelfelder puts their trust solely in systems that measure up to the highest industry standards that call for operating times between 8 and 12 hours. Another key factor during the search for the perfect welding system was quick, easy and safe operation.

SMART SOLUTION PROVIDED BY LORCH: SYSTEMS OF THE MICORMIG SERIES INCLUDING SPEED PROCESSES

As it turned out, Lorch’s MicorMIG systems of the latest generation fit the requirements profile perfectly as they offer both the versatility and the suitability for a wide range of applications that Michelfelder was out to find. The systems’ high-precision arc guarantees a consistently high seam quality and reduces the amount of necessary rework to the absolute minimum. Another advantage of the MicorMIG series is its update option which makes it possible to upload such productivity-enhancing welding processes as SpeedArc even after the system has already shipped. Strictly geared towards meeting the challenges they face every day, the new operating concept of the MicorMIG furnishes the welders with a highly efficient welding management tool. As all systems share the same overall logic, welders will find

that their operation is completely intuitive and does not involve a learning curve. For instance, switching from the Basic to the BasicPlus or ControlPro version is a cinch.

Another outstanding innovation that comes with the MicorMIG and pays off every day at Michelfelder is the multi-stage rights management concept based on NFC technology. The information stored on NFC cards limits or expands the welder’s ability to adjust operating parameters affecting the welding result depending on his user type, level of training and responsibility within the company. Operation is as intuitive as can be: Simply hold the card up to the control panel. The locking feature ensures that the machine can only be operated by authorised personnel. Ideal to ensure compliance with all in-house quality requirements.

Within the limits of the settings he is approved to use, each welder can use the custom dynamic control to adapt the arc to the welding application at hand – ideal for welders who previously worked only with transformer systems. Since Michelfelder requires seams that also have to be pristine from a visual perspective, the quality feature “crater filling” ensures that every millimetre of the seams is absolutely flawless.

The beneficial effects the products included in the new MicorMIG series have had on production have also caught the attention of other companies within the Michelfelder group. Their affiliate in Spaichingen has also shown an interest in this new MIG-MAG all-rounder.

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THIS IS THE CUSTOMER'S VERDICT:

“The welding characteristics of the MicorMIG 350 are superb. Its outstanding qualities come to the fore especially when it comes to rework. The precise arc and exact adjustment of the materials eliminates the occurrence of spatter almost entirely. While not eradicated altogether, the need for rework is reduced to the absolute minimum. The time and cost savings the use of MicorMIG technology affords us are sizeable. The welder can call up

different programs and jobs at the press of a button. This saves our welders a tremendous amount of time as they can start right away without having to painstakingly set up their equipment first. This gives us a decisive edge over our competitors as we can now satisfy the requirements of our customers even faster. The control panel of the MicorMIG is clearly arranged and perfectly self-explanatory. There is no need to consult the operating manual.

Pure plug-and-play: connect the machine and start welding. A tremendous advantage in day-to-day use.”

Werner Huprich, Managing Director at Michelfelder Edelstahltechnik GmbH

The attachment parts for the company's premium-quality production and metal working machines call for utmost precision and visible seams of impeccable quality.

Quick and easy access from the side even on the compact system: the wire feeder of the MicorMIG. Aside from a compact version, the MIG-MAG all-rounder comes as a model with separate wire feeder case.



Everything in clear view: the control panel of the MicorMIG (here, the BasicPlus version). All three operating variants sport the same layout. Welding current and voltage are indicated on a digital display. End crater filling and multi-stage dynamic control can be selected directly via icons.

Would you like to learn more?

Mr. Dalmer accompanied this project and will be happy to receive your requests: bernd.dalmer@lorch.eu

