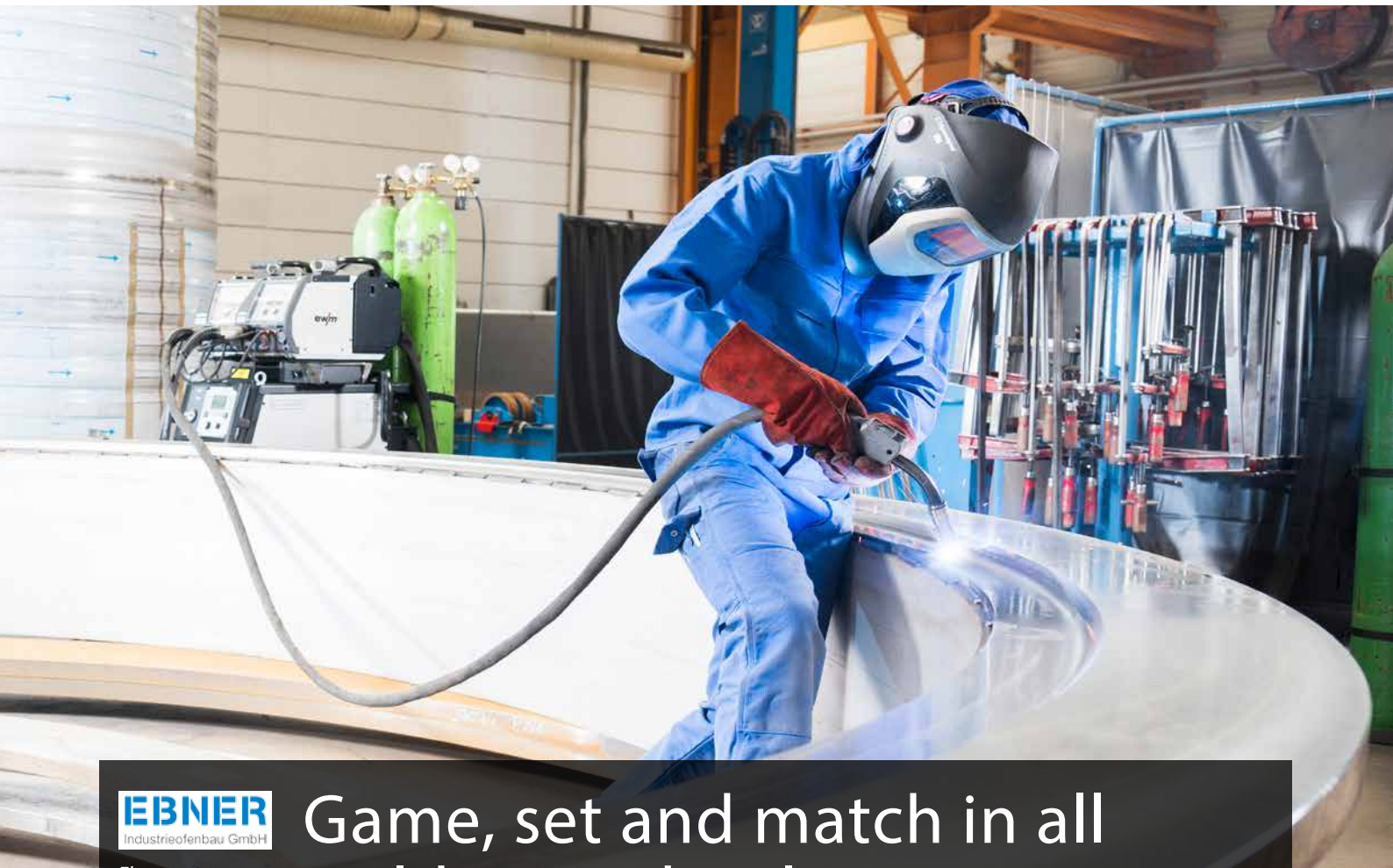


# CustomerStory



**EBNER**  
Industriefenbau GmbH

Ebner  
Industriefenbau  
GmbH

## Game, set and match in all welding technology categories

### Ebner converts welding production facilities to EWM machines

Mündersbach, Germany 01/08/2017 – EWM came out on top at Ebner. The specialist for heat treatment technologies and industrial furnace

### Modernisation of welding technology

construction based in Leonding near Linz in Austria converted their manual

welding applications to EWM machines after comparing welding machines from four renowned manufacturers. In 2014, Ebner planned to modernise their equipment and purchase new welding machines, both for MIG/MAG and TIG welding. During a test phase, welders, maintenance staff and welding coordinators scrutinised and thoroughly tested products from a total of four welding machine providers. "The most important factor to me was that the welders were satisfied, because they're the ones that work

with the machines”, said Franz Haubner, Head of Mechanical Production, concerning his approach to selecting a current total of 45 welding machines. They tested machines from the alpha Q puls and Phoenix puls series for MIG/MAG welding and machines from the Tetrax series for TIG welding. All machines were delivered complete and ready for work including torches and the appropriate accessories.

The criteria for evaluating the machines included welding machine handling, options for using various welding procedures, manageability of the welding torches and the services provided. EWM won this comparison hands down as the company proved to give the best value for money and the maintenance was rated most highly.

The components that Ebner manufactures for industrial furnaces can be the size of a standard detached house. Franz Haubner says with certainty, “If the component won’t come to the welder, the welder must go to the component”. For this reason, the

## Winners of the welding technology category

machines themselves must be light and easy to push or pull along. However, the proviso that the welders must be able to complete their entire range of welding tasks using only one machine was even more significant. Meeting this demanding requirement was the pièce de résistance for EWM and gave our machines a clear competitive edge: As all innovative welding procedures are saved in our machines, a single device can weld especially thick materials, such as steel rings for load transfer, using forceArc and use coldArc to weld particularly thin CrNi steels, such as those used in nozzle casings.

Welding a double V-butt weld on a steel ring using forceArc







Reduction of the included angle from 60° to 40° uses less weld bead in forceArc® welding. This minimises the duration of welding and saves money.

coldArc and forceArc welding procedures are extremely different in application as are the parameters required for welding using the two procedures. forceArc welds are mainly used on thick structural steel welded using steel wire. CrNi steels, on the other hand, are welded using suitable welding consumables. The composition of the shielding gas used for the two procedures is also different.

## Winners of the integrated welding procedures category

Despite these differing requirements, welders using EWM machines can switch between the procedures at the touch of a button – much easier than when using the other welding machines tested.

The EWM double wire feeder is the reason for this flexibility. The device is equipped with two wire rolls, two welding torches and two gas cylinders. If requirements change, the welder simply switches to the alternative welding torch and the machine takes care of the rest at the touch of a button. This makes changing between completely different applications as easy as pie.

The most immediate tool used by welders is the welding torch. These must sit comfortably in the hand, be light and work without interference. EWM welding torches met and indeed exceeded all these criteria. The interference-free wire feed reduced the number of weld seam errors. In addition, EWM MT torches formed weld seams with minimal spatter.



MAG-welded fillet weld in PB position is virtually spatter-free.

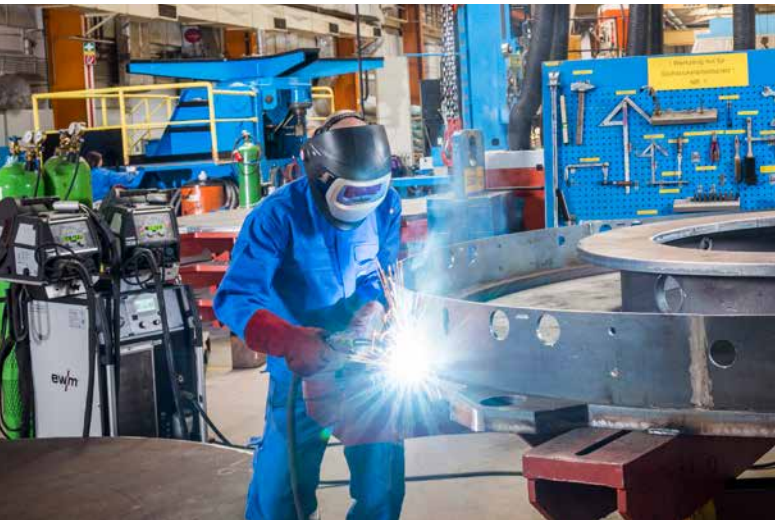
But the greatest advantage was the reduction of preproduction costs. The service life of contact tips and gas nozzles is increased by up to 50% meaning that the welding procedure must be interrupted

## Winners of the welding torch category

much less frequently to change nozzles. This results in significant savings. From steel to CrNi and Ni-based alloys to aluminium – at first this sounds like the processing range of a typical specialist welding shop. But this range is much larger than normal at Ebner. Usually, one characteristic curve is sufficient for CrNi steels. In contrast, Ebner uses more than ten different CrNi welding consumables. Each of these has its own characteristic curve. Each of these characteristic curves was adjusted for Ebner by EWM and saved as a JOB in the EWM machines. In this way, the entire range of applications was covered. Welders can quickly

Virtually spatter-free welding of edge welds, fillet welds and butt welds on a nozzle casing of an annealing furnace. The low-heat coldArc procedure minimises distortion when joining the 2-mm-thick stainless sheet steel.





Tack welding and welding fillet and single-V butt welds on the workbase of a bell furnace system in PA and PF welding positions. Steel/steel and steel/CrNi joints require different welding consumables that are both available from the welding machine at the same time.

find the JOBS and easily select them. Aside from the welders, the opinions of maintenance staff were also of importance during the selection procedure. The maintenance staff focussed particularly on the easy accessibility of all components and the ease with

Service and Sales departments of the EWM Austria branch also contributed to Ebner's final decision. At the end of the day, both the welders and maintenance staff were in complete agreement that EWM should be their new welding machine supplier.

Handing over the machines to Ebner. Currently, the stock of machines amounts to 24 alpha Q 351 Expert 2.0 puls, 4 alpha Q Expert 2.0 puls in the double wire feeder version, 11 Tetrax 230 Comfort, 3 Tetrax 351 AC/DC Synergic, 2 Phoenix 355 puls and 1 Phoenix 1002 as a SAW power source.

## Winner in the service category

which the machines can be serviced. The outstanding and prompt support from the Application Technology,



Satisfied with the new welding machines, Christoph Eidenberger, welder at Ebner, Heinz Stephan, Managing Director of EWM Austria, Franz Haubner, Head of Ebner Mechanical Production, Christian Gruber, Ebner Welding Shop Technical Group Leader.

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