



TUBE BENDING, THE CORNERSTONE OF INTEGRATION

Meiko - DE

When we integrated a high-performance tube bending machine into our production process, we expanded our core competence and opened up a wide range of optimization potential in the production of our machines. With this goal in mind, leading industrial dishwasher manufacturer MEIKO opted for an E-TURN40 tube bending machine from the BLM GROUP.

“Since the commissioning of the E-TURN40, we have been able to produce many of our parts significantly easier, faster and more cost-effectively,” said Eberhard Kopf, Production Manager in MEIKO’s Warewashing Technology and Plant Assembly department in Offenburg, Germany. The company now produces nearly 450 different workpieces with the E-TURN40.

In the production of the latest conveyor dishwashing machines of the M-iQ family, assemblies are used whose design could be greatly simplified with the BLM GROUP’s bending machine. “Today, we manufacture the steam and heating coils from a single piece,” says Mike Wittmann, team leader for installations. In the past, this component consisted of several individual parts welded together. In other components, such as manifolds for heating components, pipe sections with lengths of just a few millimeters had to be welded in. The production of such workpieces was extremely time-consuming and cost-intensive.

Significantly shorter lead times

“Beyond the higher quality of the workpieces, the process optimizations made possible by the E-TURN40 are enormous. The new bending machine makes an important contribution to shortening the production times of our machines,” says Jonas Huber, MEIKO’s Head of Installation and Assembly, emphasizing the importance of productivity gains. “Especially for smaller machines, short delivery times are an important decision criterion for customers today.”

MEIKO is one of the market leaders in large dishwashing machines and systems for, among others, the foodservice industry, hotels, hospitals, cruise ships and airport catering. These machines are individually manufactured and equipped.

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In addition to the superior quality of the parts, E-TURN40 contributed to greatly optimize the production process.
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Tube bending became a core competence

The E-TURN40 replaced an old hydraulic bending machine the increasingly limited technical possibilities forcing MEIKO to purchase many tube parts from external suppliers. “Requests to suppliers take too much time and fit less than ever into today’s world. That’s why we wanted to acquire our expertise in tube bending, in particular, to be able to manufacture more complex components and assemblies ourselves,” says Wittmann.

Given the current tense situation in global supply chains, this aspect has taken on additional significance. “We are now independent. For new bent parts, we can quickly go into production and have full control over their quality,” Wittmann summarizes. From wash arms, hood handles and heating coils to supply pipes and drain lines, washing systems and countless other components made of high-quality stainless steel, the company’s engineering and production departments work more closely than ever before in the development of innovative solutions.

The tube bending step with the E-TURN40 at MEIKO fits seamlessly into the company’s strategy of securing its technically innovative position in the long term. MEIKO is a company of the Oskar and Rosel Meier Foundation tasked with maintaining jobs at the Offenburg headquarters and reinvesting profits. “This allows us to invest in state-of-the-art technology that gives us long-term competitive advantages,” Kopf explains. “The E-TURN40 has given our machine operators interesting new tasks that make their jobs much more attractive. In light of the shortage of skilled workers in the industry, this was also important to us.”

Software as a key measure of productivity

BLM Group's easy-to-use and integrated software played a key role in the company's investment decision. "We wanted to have software that did not require any programming knowledge to operate. When working with the BLMelements software suite, all you need is a little imagination," Wittmann attests to the intuitive usability of these solutions.

With the VGP3D programming software, employees can design new parts in a few simple steps. Realistic 3D representations allow them to simulate all the details of the workpieces and the production process in advance, and to adjust every position and movement.

B-TOOLS in particular are also seen as a highlight at MEIKO. "If we enter 900 as the bending angle, the machine bends exactly at this angle. With the E-Turn, the first parts are good parts," says Wittmann, explaining the advantage, which is reflected in both higher productivity and higher profitability of the process.

Finally, the company uses Tool Designer to manufacture the bending tools. This smart application can generate the drawings for the required tools online starting from the numerical model of the bent tube.

Guaranteed sustainability

The design optimizations made possible with the E-TURN40 also benefit the sustainability of MEIKO's products and processes. "We offer our customers resource-saving machines. For example, our M-iQ conveyor dishwashing machines are characterized by low energy, water and chemical consumption. This reduces operating costs

Nearly **450** different workpieces

enormously for our customers. The technical possibilities of the E-Turn 40 support us in achieving such improvements," Wittmann states.

All the options for Industry 4.0

In the age of Industry 4.0, MEIKO has also thought about the future in the course of this investment decision Wittmann explains. "We took a look at the BLM GROUP's plant in Cantù in Northern Italy and, in discussions with the highly qualified experts, received confirmation that we are relying on the right partner here. This also applies in particular to the unique integration of this company's machine technology. It offers us extraordinarily interesting future options for our production process like the end-forming of the tube head and tube laser cutting." As a result, MEIKO will be able to further expand its range of manufacturing, in cooperation with the BLM GROUP, in tube processing for the benefit of its current and future customers.



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