Success Story

Berger Gruppe + KEBA Industrial Automation
May 2024

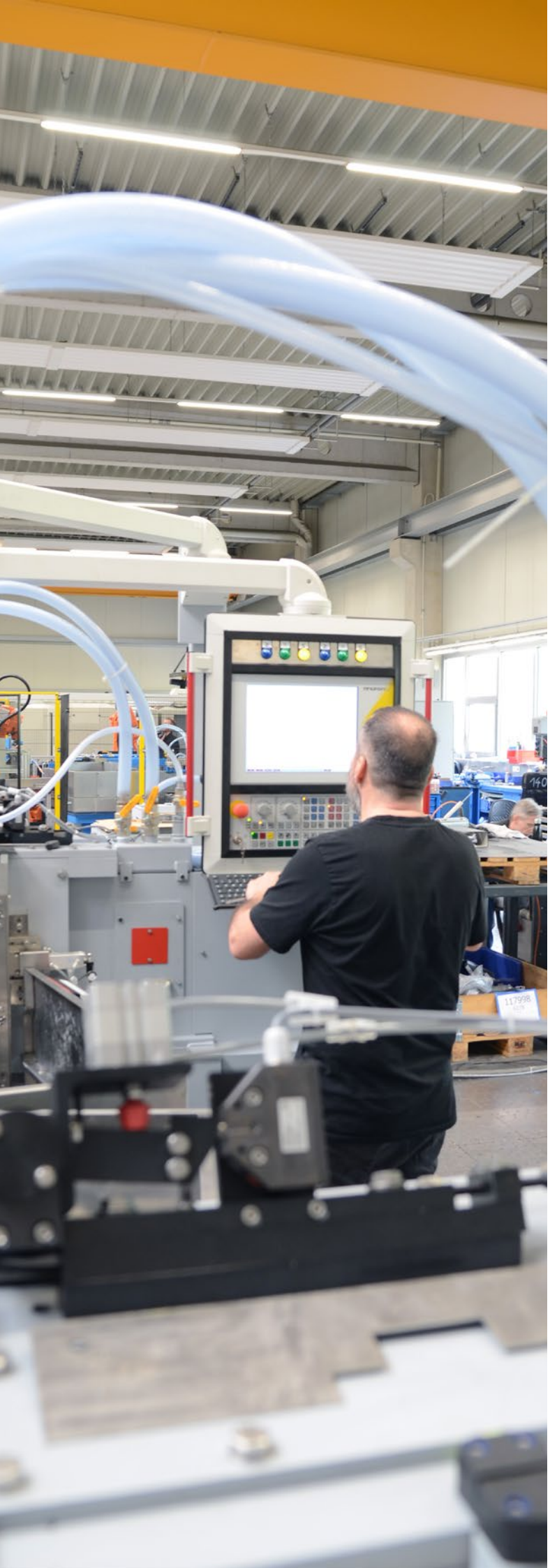
Special purpose machinery as an understatement

The premises of Berger Gruppe are almost hidden from view at the Kohlfurther Bridge between Solingen and Wuppertal in the west of Germany. The group's holding company Heinz Berger Maschinenfabrik GmbH & Co. KG was founded in 1957 in Berghausen by Heinz Berger. Today, 185 employees develop and build Berger special-purpose machines, achieving a revenue of 28 million euros (2023).

Berger Gruppe has a broad base - the company is a supplier to customers in many diverse industry sectors, which allows it to compensate market-related fluctuations in individual areas. Berger's product portfolio ranges from grinding machines to robot cells and robot automation to steel strip grinding machines and profile generating centers. The spectrum of workpieces processed on these machines has similarly become highly diverse in recent years, from knives, scissors, machine blades and hand tools to surgical instruments and cast parts. Their end customers include well-known companies like Leatherman, Trumpf, Faber Castell, Stanley, Gardena, and Zwilling.

Berger Gruppe's business model goes way beyond just building machines.

Says Dr.-Ing. Andreas Groß, one of the two managing directors of Berger Gruppe: "We frequently receive workpieces or end products paired with the request for a proposal for how to produce this specific item in a particular quantity with a previously fixed unit price." In such cases, Berger supplies the complete package including processes, workflows, cycle time optimization, details on the materials to be used, as well as individual machine components or end-to-end systems. Says Mr. Groß: "Basically, it is a know-how business."



The vertical integration of Berger‘s product portfolio is about 35%. “We manufacture all of our core components in-house. Other mechanical components are sourced from suppliers,” says Groß. All of Berger Gruppe’s suppliers and contract manufacturers are located within a radius of about ten kilometers - the group is very committed to local manufacturing and value creation. And Berger Gruppe is doing very well: The order books are full all the way through the end of 2025, and the first orders for 2026 have already been received.

The smallest blade manufactured on Berger machines is about 2 mm long, a so-called lancet used for eye surgery; the largest blades can be up to eight meters long, such as long blades for the textile industry. Machine solutions of this type can be quite complex. For example, Berger Gruppe developed a 27-axis CNC machine that outputs a scalpel every 1.85 seconds.

When it comes to automation, Berger Gruppe uses solutions by Siemens and KEBA, staying true to a multiple-supplier strategy for greater independence.

Until 2012, KEBA was the sole supplier (at the time supplying controller solutions of the Andronic series by LTI-Motion*). Berger Gruppe used the Andronic controller solutions as a basis for developing automation solutions. The first Berger NC machine (1992) was based on Windows XT. Says Mr. Groß: “I remember it well: You used ‘unlock C’ to start and compile - and then you had plenty of time to grab a cup of coffee, that’s how long it took.” Bernd Deiß, application engineer at Andron, now KEBA, was involved in the development of a PC-based CNC control system that was used for the first time in a 5-axis machine for Walter Maschinenbau. Says Mr. Groß: “This was exactly the control system that we needed - it came with a user-friendly human-machine interface. Andronic had the massive advantage of having recognized early on that PC control systems were the way to go.”

Now, KEBA's Kemro X is taking over from the Andronic series. Comprising hardware and software, Kemro X is the automation platform developed by the industrial automation expert from Austria. Starting in 2025, Kemro X will be installed in CNC grinding machines as standard. The switch is going according to plan. Says Mr. Groß: "Kemro X enables us to carry over most of the features we have developed ourselves, such as control concepts, database systems, etc., while customers keep their familiar user interfaces - nothing is lost."

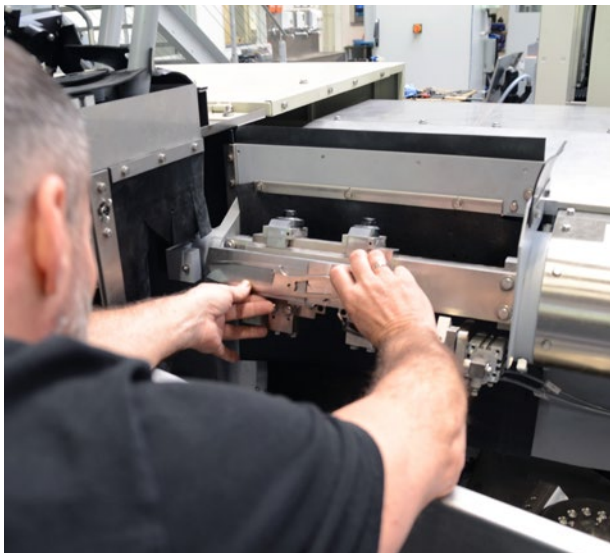
On the whole, Berger Gruppe is very happy with the KEBA solution. Compared to other manufacturers, it provides several advantages. "Kemro X makes it easier to plan", says Groß. "While planning a machine, I know exactly which modules I need and how much the whole thing will cost. In the project stage, the final licensing costs per system can also be assessed and planned. Given that we build special-purpose machines, we cannot start a new costing cycle each time we add an axis."

Automation is a strong business driver for Berger Gruppe.

Many customers in certain branches of industry - such as surgical or cutlery - have shifted to Asia. Barely any manufacturing happens in Europe anymore. In Germany, for example, there is only one manufacturer left of cutlery pieces - and Berger is their supplier. Says Mr. Groß: "The cost pressure coming from Asia forces all manufacturers in the west to move towards 'smart production.' This means that there is a trend toward networked machines that act as smart agents and interact with humans." As of today, Berger Gruppe has implemented more than 1,000 robot integration projects.

Facts about Kemro X licensing

KEBA offers a flexible licensing model for Kemro X that allows customers to pay only for what they really need. The runtime licenses include a basic license plus additional options that depend on each customer's requirements. Typically, customer-specific products called "sets" are created in which the customer is provided with a purchase order number and receives as delivery the required hardware (e.g. controller) with the associated licenses (typically combined in a ticket code).



* KEBA acquired LTI Motion in 2019 and integrated it into KEBA Industrial Automation GmbH