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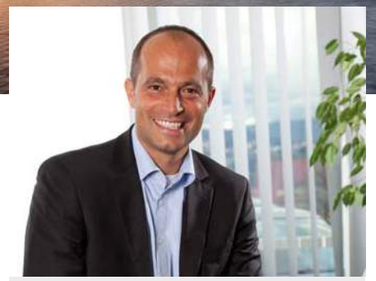
QUALITY "MADE IN GERMANY" HAS A NEW HOME



In these open and bright spaces, the working conditions for our employees and also for our machines are excellent.
Managing Director
Markus Müller

It is a milestone in the history of ALMÜ and a clear commitment to a sustainable strategy of growth. Even for a proven visionary such as Managing Director Markus Müller, the new premises are a dream that has come true at the beginning of this year, after a construction period of around one year. The building was inaugurated officially in May.

Employees and management alike already feel at home. This may be due to the atmosphere of the new building, which fits in perfectly with the company's philosophy: transparency and openness are very important. Customers describe the creators as progressive and innovative.

In the past, ALMÜ had primarily invested in machinery. Now, it was time to make room for new ideas and expansion. On the ground floor, there are machines for the production of PCD tools. Ideal conditions have been created for their production. The entire building is tempered by concrete core thermal activation so that the strictest production tolerances can be observed reliably.

SPACE FOR INTELLIGENT SOLUTIONS

The "head" of the company resides on the first floor. This is where the management, the administration, and the construction department have bright and open offices at their disposal.

Plenty of space to adapt to future challenges. As Markus Müller points out: "In addition to precision tools and customized solutions, engineering services are increasingly in demand."
This also includes the "all-in-one" principle with which ALMÜ has successfully established itself on the market. It ranges from individual tool production, application technology, and programming to the development and manufacturing of appropriate clamping devices. Quality assurance, documentation, as well as process control are included. In the future, more manpower will be provided for all this.

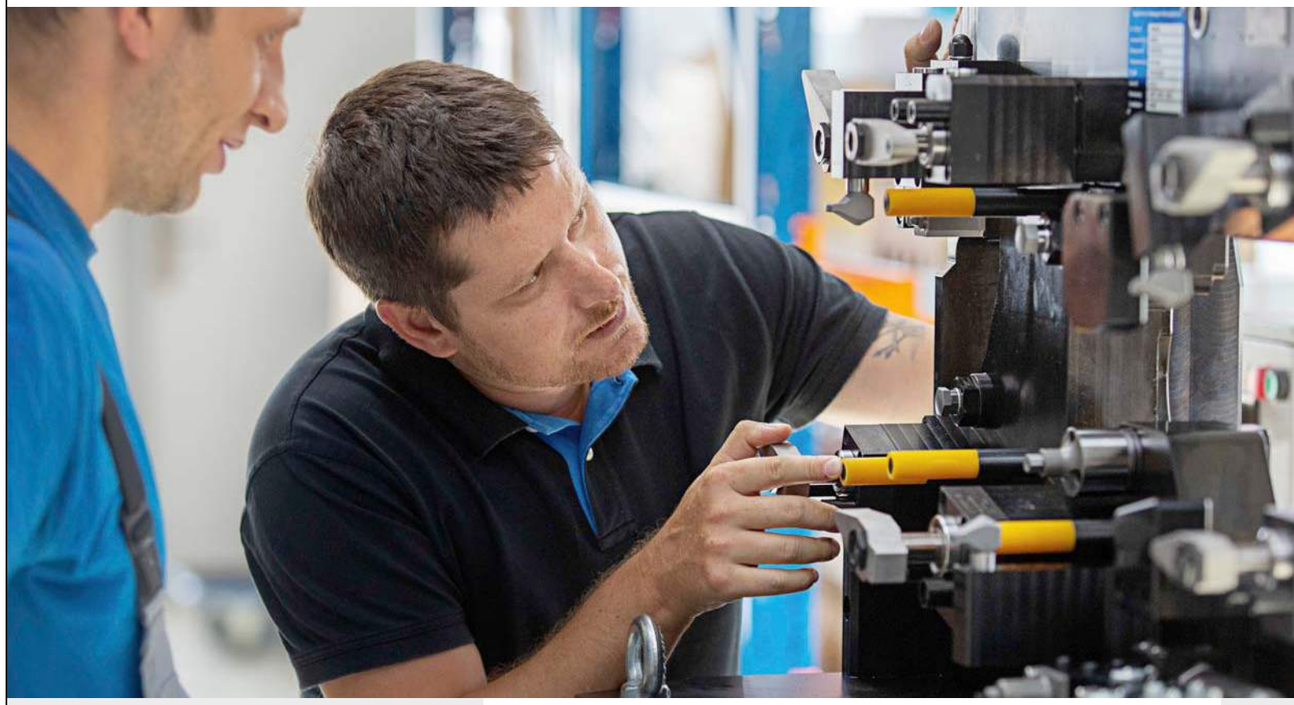
BEST CONDITIONS FOR EXPANSION

Müller is optimistic on the subject of skilled employees: "Word has spread in the region about our good working and training conditions." The new building with its pleasant atmosphere should do its part to further increase the attractiveness of ALMÜ.

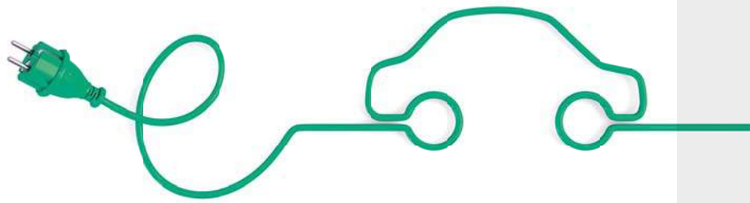
BUILT ACCORDING TO THE LATEST ECOLOGICAL STANDARDS

A heat recovery system, an oil treatment system, and a photovoltaic system had already paid off in every respect in the old building. As for the new building, ALMÜ was guided by the latest ecological standards, fulfilling, as a result, far more than what the German KfW efficiency standards (KFW70) require.

WITH ALMÜ INTO THE FUTURE: SOLUTIONS FOR E-MOBILITY



Technologies in the automotive industry are developing rapidly. ALMÜ knows the challenges of its customers, and supports them with individual tools and complete solutions. Also and particularly when it comes to e-mobility. The latest example proves this: an automobile manufacturer has ordered not only the appropriate tools, but also a clamping device for the production of a crossbeam. The special task: the fixture had to be flexible enough to fit both the existing machine – a HELLER MC25 – and a potential new investment.



The race has started. Today, every carmaker has to face the challenges of e-mobility. This does not only concern the carmakers themselves, but the entire supply chain. Frame and structural components of electric vehicles, for example, require special processing due to their lightweight construction. The ALMÜ team is perfectly prepared for the future of electric mobility, living up to its reputation as a problem solver. This project demonstrates that in an impressive way.

Do you have any questions or a special challenge?
Our expert for clamping devices is ready for a personal conversation with you:

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DOUBLE PRECISION IN ONE GO: TOOLS PLUS HYDRAULIC CLAMPING DEVICE

What is the advantage if everything comes from one source? The customer can be sure that the components are precisely coordinated with each other.
This was one of the reasons why one of Germany's largest car manufacturers asked ALMÜ for this service. Highest precision and flexibility at the lowest possible investment were the decisive criteria for winning the contract – and meeting the "sporty" delivery time of less than three months!
The requested fixture was to clamp a crossbeam for an electric vehicle in order to enable cost-efficient complete machining in only one clamping procedure.

FLEXIBILITY AS REQUIRED: ONE DEVICE FOR TWO MACHINES

Initially, the workpieces were to be machined on a HELLER MC25, a CNC machining center of older make.
However, it was important for the customer to be able to use the hydraulic clamping device on a new machine as well, if necessary. Georg Deuschle-Grammenos, product manager at ALMÜ and responsible for this project, saw this as a creative and exciting challenge. For him, this is like the icing on the cake: developing and implementing solutions that are so sophisticated that they run productively right from the start.

"In this case, we designed the adapter plate in such a way that the basic structure fits both machines. If required, our customer can order an adapter plate kit for the new machine", explains Deuschle-Grammenos.

THE COOPERATION WITH ALMÜ AT A GLANCE:

- Close, appreciative cooperation
- Reliability and individual support
- One central contact
- All components are perfectly matched to each other
- Quality and safety for serial production

FIRST-CLASS ALSO IN (AFTER-SALES) SERVICE

After testing and measuring, the hydraulic clamping device was preserved as a complete assembly to protect it from corrosion, packed in a VCI bag, and subsequently transported in an individually adapted wooden box. The customer received the tool plans in advance, which served as the basis for the CNC programming. The documentation, consisting of a measuring protocol of the device, the hydraulic test protocol of the test bench, the safety instructions, 3D data, drawings, and all other documents relevant to the customer, was also included.
"Depending on the customer's requirements, we are on site during assembly and production startup to build trust. Also to answer any questions or to provide support while optimizing the processes", assures Deuschle-Grammenos. As a result, this customer was also able to start preproduction immediately. One of the many good reasons for cooperating with ALMÜ!

CONCLUSION OF THE COOPERATION

It was particularly pleasant for the project managers to have only one contact person for all matters at all times. This simplified the cooperation, shortening the communication channels. The precise implementation of all customer requests as well as the exceptionally comprehensive services were very well received.

HYDR. CLAMPING DEVICE

- Size: 860 × 500 × 562 mm, weight: 433 kg
- Swarf "birds' nests": 1
- Input pressure: 60 bar
- Flow rate: 10 l/min
- Pressure booster: factor 3.2
- Flow rate: 10 l/min
- Working pressure: 192 bar
- Ultra-fine filter 10 µm for the pressure booster
- 6 swing clamps with 3 fixed support points and 3 hydraulic supports
- Adjustable clamping pressure and timing for hydraulic elements to minimize elastic deformation
- All components in contact with the workpiece are hardened
- Incl. pre-guide / poka-yoke and fall safety device
- Sequence valves, throttle valves, pressure control valves, hydraulic unlockable check valves
- All cables drilled internally, no swarf "bird's nests"
- Incl. rotary feedthrough and tubing

TOOLS USED

- The tools for the tapping drill holes of the threads are made of VHM on customer request.
- The threading tools are made of VHM and feature an internal coolant supply.
- The multi-bladed spindle tool used for the mounting holes (Ø 95 mm) is designed as an adjustable tool including the ALMÜ Flex system.

  Its advantage: all standard ISO plates of type CCGW09T304 can be used. This permits a high degree of flexibility in cutting edge geometries, as well as the use of the customer's old stock.

  The highlight: as the component is hollow inside to save weight, the tool was equipped with four adjustable spray nozzles. These flush the cavities free of chips when the tool is at its final drilling depth. A time-consuming manual cleaning of the cavities is almost completely unnecessary.
- The milling operations are carried out both with PCD monobloc tools and with VHM end mill cutters.