

DRIVEN BY INNOVATION

JAKOB
Antriebstechnik
JAKOB

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A large industrial factory floor with various machines and a worker walking. The scene is brightly lit with overhead fluorescent lights. In the foreground, a large grey machine is partially visible. In the background, a worker in a dark blue shirt and dark trousers is walking towards the right, holding a white folder or document. The floor is polished and reflects the lights. The overall atmosphere is one of a busy, modern manufacturing environment.

**FLEXIBILITY, RELIABILITY, INNOVATION
IS OUR FOCUS.**
TODAY AND FOR THE FUTURE.

WELCOME
TO JAKOB ANTRIEBSTECHNIK!

With more than 40 years experience, we are one of the leading suppliers of mechanical components for the servo drive industry. First, our couplings for drive technology and clamping elements for workpiece clamping set new standards in the market. Now, we developed a Motor-Safety System for spindle protection which emphasizes our high innovative capabilities.

We see ourselves as a driver of innovation for new technologies, using all product synergies of the JAKOB group.



**ONE COMPANY, THREE PRODUCT AREAS,
ONE GOAL:
LEADING TECHNOLOGIES.**

Flexibility, reliability and innovation

- What that means for us:

- ▲ Flexibility - Our modular construction systems and special components allow us to quickly configure a customized coupling solution for your unique requirements.
- ▲ Reliability - From our consultative design process to our commitment to on time delivery and our high quality standards, customers can rely on JAKOB.
- ▲ Innovation - We develop innovative technologies and new marketable products, through intense research and development as well as cooperations with the best engineering universities.

STANDARD SOLUTIONS AS EXPECTED.
SPECIAL SOLUTIONS WHEN NECESSARY.





**IF IT'S ABOUT COUPLINGS,
WE THINK EXTREMELY FLEXIBLE.**

We invented the metal bellows coupling over 40 years ago and expanded it into a wide range of solutions for different types of applications. Today, we are the respected leader for metal bellow couplings, elastomer, miniature, distance and safety couplings.

Thanks to our flexible, modular construction system today we can offer standard stock components as well as customer specific coupling solutions.

**METAL BELLOWS COUPLINGS FOR STANDARD
SERIES AND SPECIAL SOLUTIONS.**

Our metal bellow couplings are characterized by variety and variability in bellow lengths as well as bellow shapes or clamping. At high rotational speeds and torque ranges from 0.4 up to 50,000 Nm all shaft displacements get compensated. The all-metal design ensures a high torsional stiffness.

Furthermore these couplings are wear and maintenance free up to 350°C.

WHEN CLAMPING 500 TONS, RELIABILITY AND ROBUSTNESS ARE ESSENTIAL.





WE LEVERAGE OUR MECHANICAL EXPERTISE IN OUR POWER CLAMPING ELEMENTS.

All our mechanical clamping elements offer an internal force amplifier for the highest clamping forces at the lowest tightening torques. This is important for tool tensioning in presses, workpiece clamping in general manufacturing as well as on test benches. Whether mechanical power clamping nuts, power clamping screws or hydromechanical spring clamping systems - JAKOB Antriebstechnik always offers the right product solution for your application with the highest quality and appropriate robustness.

Furthermore we offer technical competence in consultation for special solutions.

HIGH CLAMPING FORCES AT LOW TIGHTENING TORQUES: MECHANICAL POWER CLAMPING SCREW MSP / MSPD.

If it's about clamping workpieces up to 500 tons safely and precisely, you need more than the right technology, but the appropriate experience. Like all JAKOB clamping elements, the MSP and MSPD series allow for very high clamping forces at extremely low tightening torques. Due to the high stiffness and clamping stroke control they offer a maximum in operational safety.

Furthermore our mechanical power clamping screws are easy to install and operate with low maintenance.



NEW IDEAS FOR NEW APPLICATIONS: THE MOTOR-SPINDLE SAFETY SYSTEM MS³.

The newly developed Motor-Spindle Safety System offers optimal safety solutions for collision protection of the spindle in milling machines. The unique mechanical safety principle works faster and more reliable in comparison to usual software-based solutions. Therefore, it is a significantly better collision protection system for the heart of the machine tool.

The JAKOB MS³ systems are developed in close cooperation with our customers and produced in our own facility in Germany.

AN INNOVATIVE FUNCTIONAL PRINCIPLE PROVIDES MAXIMUM SAFETY.

When exceeding the allowed maximum holding forces, the Motor-Spindle Safety System MS³ disconnects the power transmission between the machine and the motor spindle. The disengagement of the spindle occurs depending from the collision direction - either axially or radially. Thereby the system absorbs the impact force most effectively.

Sensors detect the disengagement movement, send a signal to the control to move the axis away from the collision. Therefore it has a significant advantage over electronic monitoring systems.

OUR INNOVATIONS ARE NO COINCIDENCE.
THEY ARE THE RESULT OF INTENSE
DEVELOPMENT WORK.



A FIXED SIZE IN THE BACKGROUND: THE JAKOB GROUP.

SEVEN COMPANIES, ONE GROUP, ONE SUCCESS STORY.

The JAKOB group continuously developed since the founding by Ludwig Jakob in 1971. Today, the group of seven companies with six locations in Germany and an international distribution network in over 20 countries on 4 continents stands for highest quality, reliability and technical competence in various areas:

- ▲ OTT-JAKOB Spanntechnik, Lengenwang
- ▲ Multitec-JAKOB Werkzeugwechselsysteme, Pfronten
- ▲ ALLMATIC-JAKOB Spannsysteme, Unterthingau
- ▲ JAKOB Antriebstechnik, Kleinwallstadt
- ▲ GPA-JAKOB Pressenautomation, Karlsruhe
- ▲ OPTIMA Spanntechnik, Scheuerfeld
- ▲ JAKOB Vakuumtechnik, Kleinwallstadt

AN APPEALING EMPLOYER WITH FUTURE: JAKOB ANTRIEBSTECHNIK.

With 45 employees in total JAKOB Antriebstechnik, located in Kleinwallstadt, is said to be an appealing, reliable and innovative employer in the region. A constant number of employees and the low fluctuation speak for themselves and the good working conditions, no matter if in the technical area, the manufacturing or the commercial field.

As training enterprise we take responsibility for the next generation and offer a perfect training environment with the JAKOB group in the background. We are looking forward to your job application!



1971

Founding of JAKOB GmbH as side job.

1973

Production of resolver feedback units and simple bellow couplings with keyways.

1974

Development and patenting of the KSS coupling. The principle of a frictional connection was used world-wide for the first time. Even today this principle is widely used for reliable and long lasting connections.

1989

Move of the production to the new and substantially larger plant at Daimler Ring 42.

1993

Acquisition of OTT Maschinentechnik GmbH, Lengenwang.

1995

Acquisition of GPA Pressenautomation GmbH, Karlsruhe. Founding of JAKOB Vakuumtechnik.

1999

Move of JAKOB Antriebstechnik, JAKOB Vakuumtechnik, IPT Ionen und Plasmatechnik, and ENEMAC to the new administration building at Daimler Ring 42.

2001

Acquisition of ALLMATIC Spannsysteme, Kempten.



Rupert Hohm, Director

Ludwig Jakob, Director

1977 ▲

Development of the first safety coupling, which compensates shaft misalignments (Type SKA). Presentation of the SKA safety coupling at the EMO 77 in Hannover with great success.

1983 ▲

Moved to the new administration building at Dieselstrasse 8.

1988 ▲

Acquisition of a controlling interest in Optima Spanntechnik GmbH, Scheuerfeld.

2005 ▲

Move of ALLMATIC-JAKOB to the new property in Unterthingau.

2006 ▲

Acquisition of Trenkle und Schneider, Pfronten.

2012 ▲

Acquisition of Multitec, Nesselwang. New construction Multitec-JAKOB.

2013 ▲

Fusion of T+S JAKOB and Multitec to Multitec-JAKOB.

2015 ▲

New construction OPTIMA-JAKOB.



JAKOB Antriebstechnik GmbH

Daimler Ring 42

D-63839 Kleinwallstadt // Germany

☎ (+49) 6022 2208 0 // 🌐 -22

✉ info@jakobantriebstechnik.de



JAKOB, a company of the
JAKOB group



FLEXIBILITY, RELIABILITY, INNOVATION
TODAY AND TOMORROW.