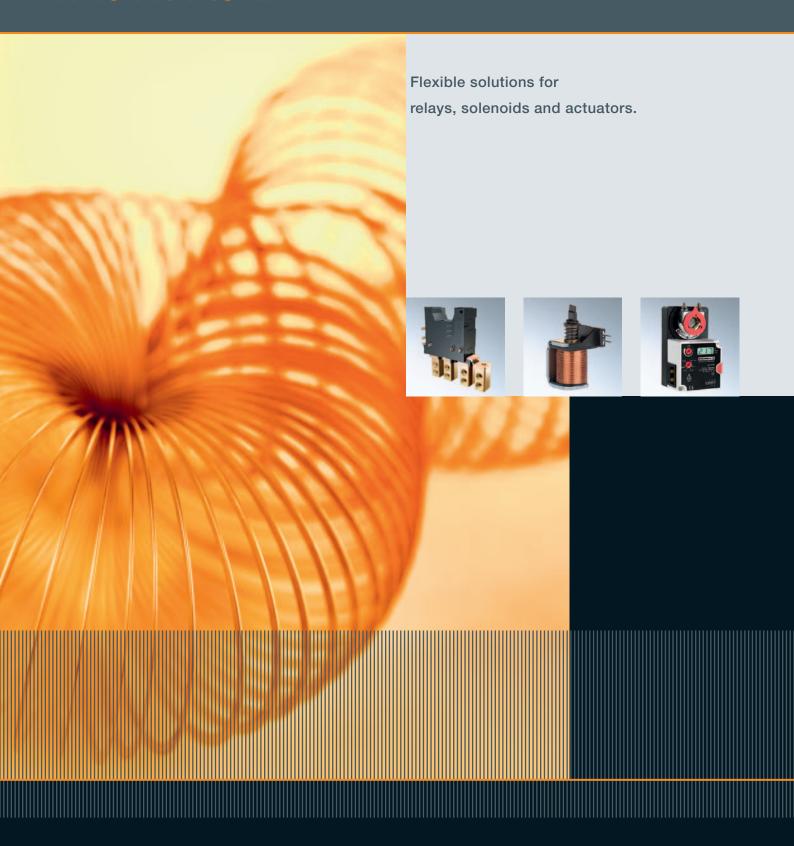
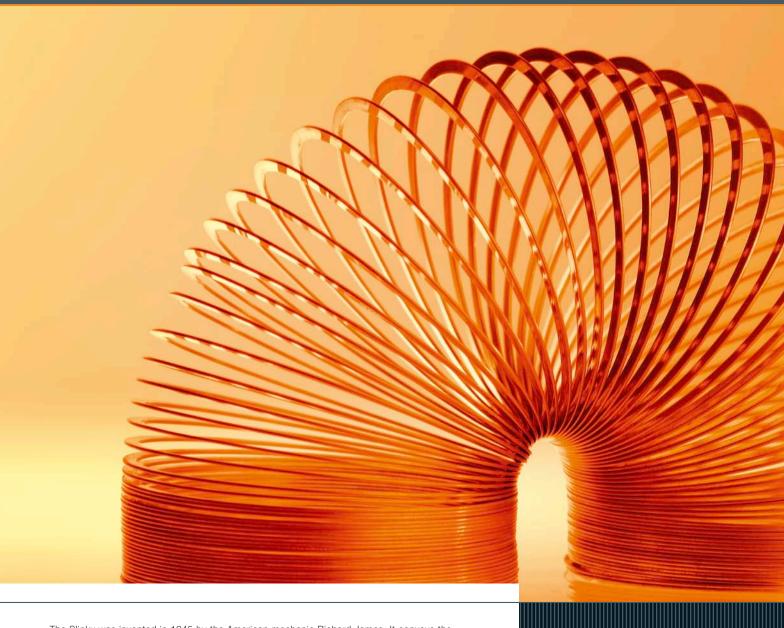
When it fits ...





When special requests become standard ones...



The Slinky was invented in 1945 by the American mechanic Richard James. It conveys the full fascination of physics – and symbolizes pure flexibility. This symbolism also stands for the core values of Gruner AG.



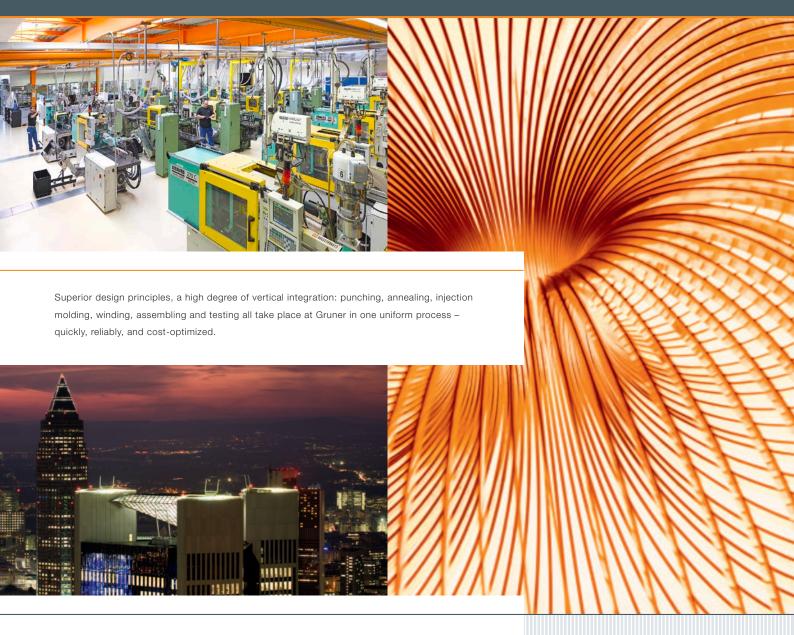
Flexibility, innovation and openness are key.



Electromechanical applications in the sectors of energy management, building management, drive technology and automotive are distinctive for their high dynamics and ever faster innovation cycles. What creates the basis here for meeting the requirements of target markets and precisely fulfilling customer needs?

First is flexibility to be prepared for innovations and improvements, with no room for false pride. Second is the goal to continuously improve technologies to transform them into ever more efficient products. And last but not least are the company's values as a partner for relays, solenoids and actuators. Values that the company lives by and breathes every day, internationally, intelligently and in very respect. Welcome to Gruner AG.

When strategy and technology enhance each other flexibly ...



Products from Gruner play a role in many areas of daily life, one example being applications in the building and energy management sector.



Gruner has the focus, the brief and the technologies.

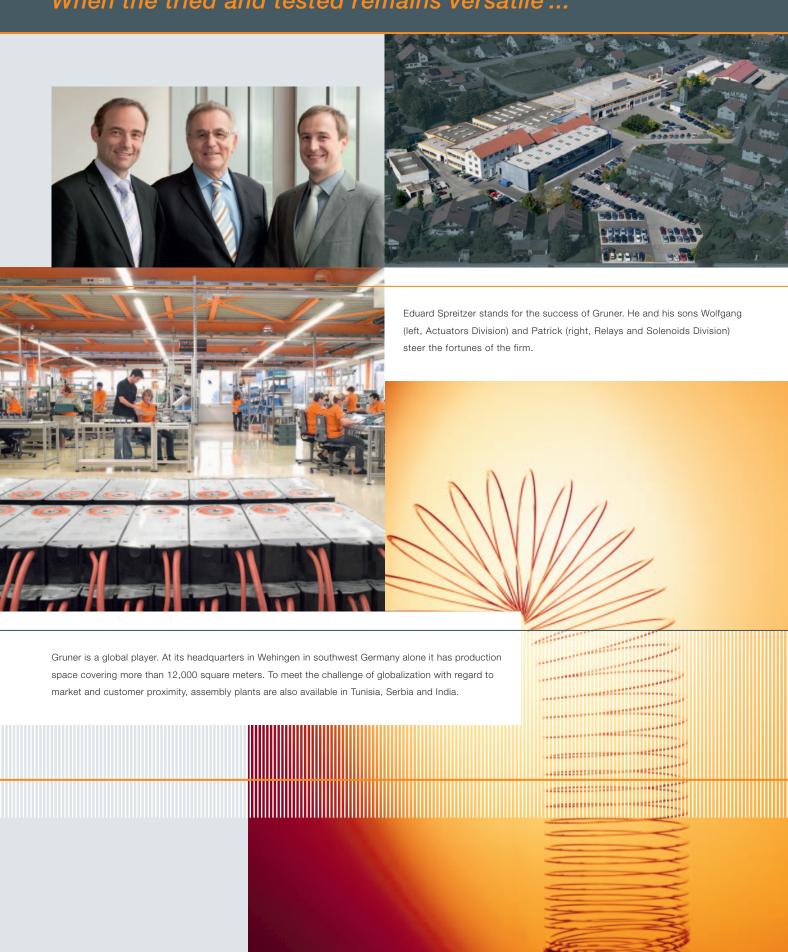
Alongside its flexibility, Gruner also has a clear strategic orientation. Leading products and solutions for the most diverse target sectors are bundled together under the claim "Innovative Switching and Actuating". A large number of users benefit here from the superior design principles and the decades-long experience of an acclaimed specialist. Whether it's HVAC, automotive, smart metering or building management plus fire protection, Gruner always solves individual challenges with customized modifications and adaptations.

The best prerequisites for flexibility down to the smallest detail already exist – thanks to vertical integration. Gruner realizes all quality-relevant production stages at its headquarters in Wehingen, Germany. To ensure that the especially high quality standards are always retained, many of the machines, systems and testing devices used are modified or developed by the company's own toolmaking shop. This approach is enhanced and rounded off from the very start by permanent investments in the very latest production and quality assurance technologies, as well as by simultaneous engineering. In many application sectors, this has made Gruner the world market leader.





When the tried and tested remains versatile ...





Maria and Wolfgang Gruner

Gruner past and present.

The figures speak for themselves. Ever since the firm was founded in Wehingen in 1953 by Wolfgang Gruner, it has successfully reached a peak position in fiercely competitive markets. An assembly plant in Tunisia was built as long ago as 1977, and the year 1982 marked the start of a new era. When Eduard Spreitzer joined the company the product range was realigned and streamlined. The company's unique know-how with regard to relays, solenoids and actuators again became the basis for successful penetration of promising market niches.

In 1985 the first latching relay was presented, in 1996 the company was certified to ISO 9001 and, ten years later, to ISO/TS 16949. Parallel to this, a subsidiary was founded in Serbia. Milestones at this stage included rollout of the battery disconnect relay 750H, as well as the development of a volumetric flow sensor for actuators which was awarded an important innovation prize. In 2009 Gruner's third overseas plant began operations in India. Today the company has around 900 employees worldwide. The course is therefore set for further growth – through sustainably high investments in technologies, buildings and employees. Following customers and markets both technologically and geographically remains an important objective, now and in the future.



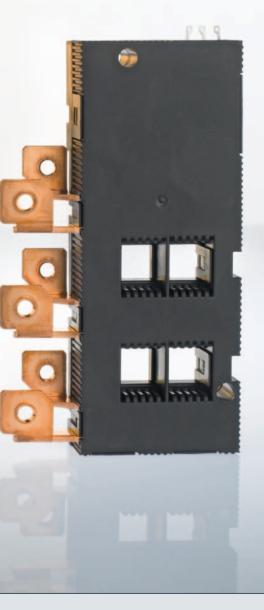




When the market leader comes into play with agility ...



In all kinds of different applications, relays from Gruner help to combine safety and performance. They are always based on state-of-the-art technology.



Leading relay solutions from Gruner.

With a long and successful tradition, Gruner today is one of the leading and independent producers of relays. Numerous product features are expressly prescribed today by the industry. This fact confirms and justifies the company's claim – innovation instead of imitation – in the market. In the area of latching relays for smart metering, the company is the undisputed technology leader and world market leader.

Thanks to outstanding performance features and numerous standardized components, latching relays from Gruner are ideally suited to a broad spectrum of applications. They are needed in ripple control receivers and soft-starters, for instance, in load management, in the prepayment sector or also in automobile battery management. Their impressive benefits include high switching power with simultaneously reduced power consumption, maximum switching safety accompanied by long service life, and absolute reliability combined with a minimum of mechanical components. Like all solutions from Gruner, they are a perfect synthesis of functionality and economic efficiency.







When demand-conformant know-how is required ...



The automotive sector is one of many where Gruner solenoids are used. Compact structure and design, noise optimization and the highest reliability are all key factors here.





Solenoids by Gruner are way ahead of the rest. Developed to fit specific customer requirements, they fulfill the complex requirements placed on them by demanding users. In short, wherever actuating solenoids are used to realize linear push or pull actions, solid and specialized know-how becomes a decisive advantage. Positioning, holding, diverting. Ejecting or locking. All that and more is provided by products from Gruner.

The company's portfolio of monostable and latching solenoids is correspondingly broad and varied. In addition to lifting solenoids, thrust solenoids, holding solenoids and hinged-armature solenoids there are all kinds of other designs. Since the requirements of target sectors – automotive, HVAC and security technology – differ in their details, a special focus is naturally placed on developing customized solutions. The product range thus spans such seemingly different technological sectors as engine management and gear control, hot-water and industrial-water control, and also access-authorization and card-reading systems. Gruner keeps on enriching its solutions all the time by means of custom-built developments.







When a suitable alternative is needed ...



Actuators from Gruner operate dampers in ventilation plants, canteen kitchen appliances, ovens, heat pumps, pellet stoves and many other applications.



High-quality actuators from Gruner, from classic to customized.

Since 1954, actuators have been an important part of the company's product range. Here too, Gruner has succeeded in creating a perfect portfolio that is continually winning new market segments. All models thus represent a combination of cost efficiency and the highest possible flexibility in building management. From classic to volumetric flow control, from quick running actuators to spindle drives, there is a product to suit every single requirement. Consistently oriented toward the customer, Gruner also provides a series of OEM-specific rotary and linear actuator models. Made to measure – and always "competent, flexible and friendly".

Typical applications include the switching and actuating of dampers and valves, air mixing boxes, roller blind dampers, smoke dampers, exhaust dampers and also engine valves. Here, all the actuators conform to DIN VDE standards and CE guidelines. UL designs can also be supplied. In general, actuators from Gruner contain motors (BDC, BLDC) so they can be safely switched off in case of overload, and they can also be optionally equipped with synchronous or step motors. With regard to actuation, supply, options and accessories, too, Gruner provides the greatest possible freedom of choice. The company also develops the complete mechatronics (mechanism, switching technology, software) in-house.







When it comes to future potential ...



Human Resources, targets and the future at Gruner.

Electronics and electrotechnology will continue to move the markets of tomorrow. It is quite certain that entirely new technologies will be developed and new areas of application will be tapped, and Gruner's position is every bit as certain: as a provider of ideas, as a pioneer and as an innovator. Gruner thus remains on course for growth – enhancing its profound expertise in relays, solenoids and actuators ever further, and constantly enlarging its worldwide base of satisfied customers. To do this, spatial, technological and personnel-related parameters are continually adjusted. Currently the company is seeking competent employees who have the qualifications required to work with one of the best companies in the business. Because if you build superior products, your people have to be superior too. And they are the people Gruner needs, now and in the future, for demand-conformant relays, solenoids and actuators.





Gruner AG \cdot Wehingen, Germany Headquarters, administration, marketing and sales, development, design, production \cdot 12,000 sq m



Gruner Tunisie S.a.r.l. · Tunis, Tunisia Production plant · 3,000 sq m



Gruner Serbian d.o.o. ⋅ Vlasotince, Serbia Production plant ⋅ 4,000 sq m



Gruner India Pvt. Ltd. · Haridwar, India Production plant · 2,500 sq m



