



#### Dear readers,

we consciously highlight our values at R+W as "our asset". That is because applied values are what we as a company, our employees and you as our customers and partners benefit from. They are the foundation for successful, trust-based working relationships at various levels. You can find out what this looks like in practice in our report on Mittelmann Sicherheitstechnik GmbH & Co KG, which has developed a pioneering altitude-rescue innovation using our safety couplings.

A major asset both for people and the environment are our sustainability activities, which we have been continuously upscaling for years. For example, R+W was able to meet the requirements for participating in the "Bavarian Environment + Climate Pact" for the second time in a row – a major success and confirmation that we are on the right track with the action we are taking.

If you are heading into your precision/industrial couplings and sensor technology future with us as experts to support you, this will be even easier with the brand-new relaunch of our website. Modern design and streamlined navigation mean you can explore the entire product world of R+W in an even more targeted manner. Featuring a CAD product configurator that enables you to find the specific product you require and obtain the relevant design engineering data quickly. Why not try it out right away!

The current issue of DRIVE also features a fresh, new layout for the topics we are presenting to you. I wish you an enjoyable read.

Jörg Stang Head of Sales

# CONTENTS

PRODUCTS & INNOVATIONS Applied values at R+W

PRODUCTS & INNOVATIONS Reaching your goal in just a few clicks

PRODUCTS & INNOVATIONS Smart metal bellows couplings from R+W

**COMPANY** Altitude rescue innovation Team Shipping: Every coupling in the best hands

13

THE GREEN WORLD OF R+W Sustainability at R+W



#### NEWS

Bavarian Environment + Climate Pact New production facility Trade Fairs in 2023







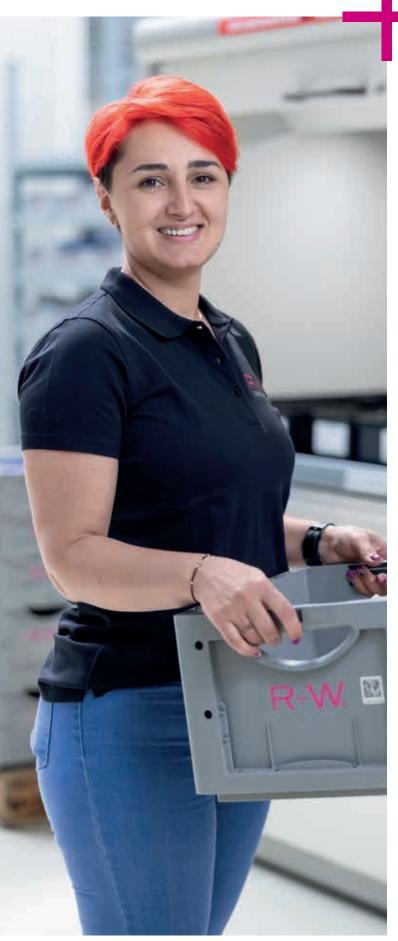
#### + IMPRINT

PUBLISHER: R+W Antriebselemente GmbH Hattsteinstraße 4 63939 Wörth am Main, Germany www.rw-kupplungen.de

EDITORIAL TEAM: Nadine Distl-Paulus/Nicole Stich distl-paulus@rw-kupplungen.de stich@rw-kupplungen.de

LAYOUT AND EXECUTION: C&G: Strategische Kommunikation GmbH www.wir-verstehen-technik.de





# APPLIED VALUES AT R+W

### A foundation for success

Values that are not just written down but also applied in practice are a real asset. Built on the foundation of its corporate values, R+W represents a high degree of consultancy and product quality, it creates reliable structures and is committed to the sustainable use of resources. Not only the company's employees and partners, but also its customers in particular benefit. That is because they too are a major asset for the company.

#### Partnership

Close contact on equal terms is the basis for a successful, trust-based partnership. At R+W, the plus symbol in the corporate logo represents not only the connecting role played by our products, but also an asset in terms of the working relationships with customers and partners – because R+W can only be successful in partnership with them. In concrete terms that means that as a global provider of precision and industrial coupling solutions, R+W specializes in custom components, perfectly tailored to the needs of our customers, so that their plants and machinery can function as effectively as possible. That requires a deep understanding of the status quo and of specific challenges. Although couplings may be inconspicuous, they are often essential components that determine the functionality of high value equipment. This is why R+W's product development services and technical advise are also real assets for our customers.

### Quality delivered by modern processes and structures

"Getting stuck in and doing, using state-of-the-art processes and technologies – that is our DNA", says Frank Kronmüller, Managing Director at R+W, about the company's self-image. Over the course of more than 30 years, R+W has grown from a small business based in Wörth into an industrial enterprise that is represented in more than 60 countries. An evolution that

RESPONSIBILITY

has only become reality through change and the implementation of new structures, processes, and methods. Nowadays, R+W relies on lean management methods, among others, to improve processes and to meet increasing order intake by delivering high quality. The company's original craft DNA helps it to "get stuck in" and systematically take on projects. To enable the know-how within the company to be used even more efficiently, R+W reorganized its Sales function to be no longer tied to specific regions, but instead to operate in comprehensive teams. This way, skills, knowledge, and experiences are harnessed even more effectively.

#### **Environmental responsibility**

Handling resources sustainably is the greatest challenge of our time. That is why R+W has defined clear objectives to reduce its own carbon footprint and to protect the environment. However, R+W's sustainability activities are not only a very important part of its own self-image of living up to its environmental responsibility as an industrial company. They are also a deciding factor for potential customers when selecting their partners. That is because, as a supplier, R+W plays a role in their supply chains and is therefore part of their sustainability strategies. You can obtain further information about R+W's sustainability goals in the "Green World" section on page 13.



#### Showing employee appreciation

R+W regards sustainability not just as an environmental concept, but as a social one too. "Our approximately 300 employees worldwide get the trust and support they need to enjoy doing what is an important part of their lives: their work", Managing Director Maximilian Crößmann explains. R+W's customers also benefit from that. That is because enjoyment is the basis for a high level of motivation and therefore a prerequisite for the supreme quality that R+W is renowned for in the industry. Each of us helps to create an environment in which it is a pleasure to work.

#### **Continuous growth**

"We will not stop evolving, because we want to continue to grow", Frank Kronmüller emphasises. This is reflected in the latest product innovations that R+W showcased at the Hannover Messe 2023, in its first post-pandemic appearance at a major trade fair. •

# **REACHING YOUR GOAL** IN JUST A FEW CLICKS

Successful relaunch of the R+W website

Clearer, faster, more user-friendly: in relaunching its website, R+W has made navigating your way through its multifaceted product world even easier. The particular focus is on the CAD product configurator. The company and career sections have also been completely modernized.

Since April 2023, R+W has been showcasing what it does best with a new, completely modernized. website, thus increasing its visibility as a global solutions provider for mechanical drive components. Managing Director Frank Kronmüller is delighted with the result. "The new website reflects our self-image: R+W acts in a reliable, customerfocused way and is a global technology and market leader in mechanical drive components that is driven by the passion for technology, experience and skills of an innovative team."

### Modern design with streamlined navigation

The website appeals with its distinct, modern design. Its new key visual is the plus symbol, which was adopted from the corporate logo. "It symbolises the role our products play as connectors – but also represents the extra mile we go in communicating with our customers", Frank Kronmüller explains. The division of the product portfolio into precision couplings and industrial couplings, and now sensor technology, has been retained, as has the previous color scheme for the different product areas: white for precision couplings, black for industrial couplings, and a new petrol blue for sensor technology.

### Content and products easier to find

A high degree of user-friendliness is provided by the restructured layout and the modernized appearance of the responsive-design



website. The focus is on making it easy to find content and products. "Everything that is important to our customers has now been brought into focus on the homepage," says Frank Kronmüller. "This means that almost all relevant sections can be reached in three clicks."

#### TAKE A LOOK!

The R+W website featuring a new design, intuitive navigation, and structured content. See for yourself – with just one click!



### CAD product configurator: finding the right product faster

The practical CAD configurator has taken center stage. As a key component of the site, finding it is now an intuitive process. The login procedure has also been simplified. Whether standard or customized products, design engineers looking for the right coupling will find the

**PRODUCTS & INNOVATIONS** 



The new website: streamlined navigation, modern design, easy-to-find content and products

latest data embedded directly in the site and benefit from the simple configuration and design of the product they require.

Data sheets, detailed product information and specifications can be accessed quickly and conveniently. Users can choose between output in 2D, 3D or dimensional prints, and can select the CAD format themselves. The drawings and models generated in the configurator can be accessed in the download center and transferred directly into the user's own CAD system.

All in all, a successful relaunch of the website, Frank Kronmüller believes, and summarizes as follows: "The new website helps us with our core task, which is enabling our customers to solve their problems, by providing excellent technical consultancy and product development services starting at batch sizes of 1."

#### Major benefit for job applicants

When designing the new website, it was particularly important that the various visitor target audiences benefit equally from extensive information about products, solutions, and contacts, as well as from good user guidance. Interested parties and job applicants therefore gain a comprehensive insight into the company via the newly designed company and career site. "The company continues to grow and we need new qualified employees, whom we reach out to specifically via the career portal. Here we showcase what we are: a modern, versatile company and an attractive employer," says Frank Kronmüller.



IIoT – four letters that conceal something immense: the Industrial Internet of Things, i.e. interconnected machinery, sensors, instruments and other devices, offers companies new opportunities to manufacture even more efficiently. Data collected by smart components during operations is of key importance. Engineers and others with specific responsibilities can access it conveniently via an application or digital platform. This makes it easier to identify irregularities and plan maintenance and service work in advance. Component failures and other interruptions to operations are reduced, and productivity increases.

#### Wireless data logging using smart sensors

To date, logging mechanical drive line performance data has been difficult, since rotating components cannot be connected by cables. Instead, R+W offers a wireless solution which can be applied to disc pack and safety couplings, as well as line shafts and rigid flange connections. This is now also feasible in metal bellows couplings. Smart sensors are incorporated directly into the couplings and log performance data including torque, speed, temperature and acceleration, as well as tensile, compressive and shear forces within the drive line. The data is analyzed by the internal electronic system and is conveniently transferred via Bluetooth to a smartphone, tablet, computer, or directly into a programmable logic controller (PLC).

### Data monitoring now an option on metal bellows couplings

The benefits provided by these smart aids are enormous. "Conclusions can be drawn straightaway about the condition of machinery and systems. In terms of a predictive maintenance strategy, it is possible to determine expected wear and tear and proactively plan and perform the necessary servicing and maintenance work at an early stage", Marcel Flicker, Product Manager Sales at R+W, explains. Downtime, which usually comes at a very high cost, can be avoided. Product quality also increases, as data provides information on operational stress at certain points in time. Adapted feed and cycle rates, for example, can then be used to enhance quality. The product development

## SMART METAL BELLOWS COUPLINGS FROM R+W

#### The new era in drive technology

Smart, networked machines are changing industrial production processes. Companies can also gain drive technology benefits from this trend. R+W now provides an appropriately extended product range: smart sensor technology that is also compatible with metal bellows couplings.

process also benefits – data enables digital twins to be created, which can be used to compare the model with the real process. In short, the permanent logging and monitoring of a wide range of data raises drive technology productivity to a new level. All of this can now be leveraged in R+W metal bellows couplings, making the technology accessible to a much larger portion of the existing customer base.

#### Inductive power supply instead of batteries

A key factor for companies that want to switch to a smart drive line solution is that R+W's sensor technology requires little installation space and no auxiliary structures. "We have succeeded in extending our solution to use on metal bellows couplings. This makes our coupling with integrated sensor technology even more compact", Marcel Flicker explains. Important point: power supply from a rechargeable battery is not sufficient to ensure permanent data logging, which is why R+W offers the bellows coupling with an inductive power supply. The non-contact system uses a small box mounted a few millimeters below the coupling to provide integrated coils with the power needed to run continuously.

#### Power supply through energy harvesting

Another power supply option for many R+W couplings is energy harvesting. With the aid of miniaturized energy converters, this method converts mechanical energy into electrical energy and therefore enables autonomous power supply.

#### WE ARE HERE TO HELP YOU.

Do you have any questions? Get in touch with us.

#### Lukas Dominik

Technical Sales & Projects at R+W Phone: +49 9372 9864-46 E-mail: dominik@rw-kupplungen.de

# ALTITUDE RESCUE INNOVATION

Mittelmann Sicherheitstechnik relies on R+W safety couplings

Anyone who is required to work at altitude when doing their assembly, cleaning or maintenance jobs entrusts their life to safety technology. Employers, professional associations, and standardisation bodies set correspondingly stringent standards. Velbert-based Mittelmann Sicherheitstechnik GmbH & Co. KG is well-known for its high-quality, "Made in Germany" safety products. Using safety couplings from R+W, it has succeeded in developing a pioneering altitude-rescue innovation.

Imagine you and a colleague are on a wind turbine at a height of 140 m and are carrying out maintenance work. You secure your colleague on top of the plateau. Suddenly, he faints while hanging from the rope below you. How do you rescue him? Abseiling to the ground is not an option – you need to pull him up first!

#### Risk of injury posed by motor drives

Rescue hoists are available for such emergencies, but the lifting ratchet makes them time consuming and difficult to operate. Motor drives have not been permitted until now, because as an uncontrolled source of power they can dramatically worsen the emergency situation in which the accident victim finds themselves. This preyed on Guido Rogge, Managing Director at Mittelmann Sicherheitstechnik, and his development team's minds. Every minute counts during a rescue at high altitude. A powerful cordless screwdriver, which every assembly team carries with them nowadays, would be ideal as a drive for the winch – if only there were a controlled disconnect between them.

#### Not all couplings are the same

This gave rise to the idea of integrating a torque limiter into the rescue hoist. "In principle, this corresponds to an overload coupling", Guido Rogge explains. "Until now, we had a device that only functioned on the basis of friction between two cones one inserted into the other. The disadvantage here is that this happens quietly. In the event of overload, the cones slip through very slowly and unnoticed by the user. In our search for a solution, we came across the ideal safety coupling at R+W, which immediately sends out acoustic and visual warning signals in the event of an overload. This paved the way for certification and a patent application."

#### **Ball-detent principle**

Christopher Monka, Senior Account Manager at R+W, explains the functional principle of the R+W coupling: "Our ESL safety coupling is precision-acting, robust and functions on a purely mechanical basis. The snap-through detent ball principle applies here: two tracks with hardened steel balls are positioned one above the other. They are pressed into each other by disc springs with a defined force. If this force is exceeded, the balls engage and vibrate and make a loud clattering noise. The higher the speed, the more violent the vibration – until the cordless screwdriver is finally ejected. These are precisely the effects that Mittelmann wanted, which is why the elastomer ring normally used for this coupling model was dispensed with."

#### Three key advantages

"R+W's ESL safety coupling provides three key advantages for our rescue hoist", says Guido Rogge. "The first is the background noise that occurs in the event of an overload and equates to a loud alarm. The second advantage is the coupling's digital switching function. It either conveys or disengages. No-noise failure is impossible. The third advantage is vibration, which ejects the drive in an emergency."

#### **DID YOU KNOW?**

#### **ESL** safety coupling

- precision-acting
- robust
- functions on purely mechanical basis
- vibration and noise indicate overload



#### **Absolute innovation**

The special couplings used in the "MaxDrive" and "UniDrive" brand products, and based on the ESL series, represent a true innovation. It is smaller than the standard model, has no elastomer insert for damping and misalignment compensation, and has been specially adapted to the requirements of the rescue hoist as overload protection for the human carrying winch. It functions as a descender as well as a rescue hoist and working device. Using the R+W safety coupling, Mittelmann Sicherheitstechnik has implemented a real innovation that is extremely practical and reliable when conducting emergency rescues at altitude.

#### **DID YOU KNOW?**

#### Mittelmann Sicherheitstechnik

- Manufacturer of safety harnesses, fall arresters, safety ropes, rescue equipment and complete personal safety systems
- Founded in: 1981
- Location: Velbert, Germany





UniDrive and MaxDrive from Mittelmann Sicherheitstechnik

# TEAM SHIPPING: EVERY COUPLING IN THE BEST HANDS

### Reliably and on time from R+W to the world

R+W is synonymous with being highly reliable – from smooth and stable production to delivery of its high quality precision and industrial couplings. An experienced shipping team ultimately ensures that R+W's premium products reach the customer reliably and on time.

Precision and industrial couplings are essential connectors, ensuring that plants and machinery are able to function and manufacture properly. If spares or new couplings are required, it is all the more important that these components are available immediately. At R+W, this is handled by an experienced team, which masters a wide range of shipping challenges collectively. What packaging regulations need to be complied with? What import regulations apply? What are the shipping guidelines for each specific country? This is essential because as a company operating internationally with locations and representation in more than 60 countries, R+W ships its products all over the world.



F.I.t.r.: Willi Lebert, Maciej Komorowski, Jozsef Szücs, Sabrina Speth, Pawel Jurczynski, Theo Ebert



Ahmet Batu



## The interface between production and customer

Efficient processes form the basis of a high rate of adherence to delivery commitments and short lead times. That is why the R+W shipping team works closely with the other teams that are directly involved in the product delivery process: Assembly, Warehousing, Production, Sales and Purchasing. Once all preparations have been made and shipping specifications met, what matters most is what's inside the package – and that is specific to every order. The shipping team arranges the deliveries as required, featuring couplings in a wide range of sizes, from very small to very large, and in various quantities, and finds the right packaging solution for each coupling setup. Conclusion: The R+W shipping team does its best every day to ensure that products reach customers safely and on time.





THE GREEN WORLD OF R+W



# SUSTAINABILITY AT R+W

### Environmental, social, and commercial

Companies bear responsibility for their employees, the environment, and the future. That is why R+W pursues a broad sustainability strategy in all its divisions.

"The great challenge of our time is protecting the environment and resources. That is why we at R+W have planned and already implemented a series of measures to gradually get closer to the goal of zero emissions", explains Managing Director Holger Vogt. Among other things, the company's own 180 kWp photovoltaic system supplies clean energy. Purchased energy is derived 100% from hydrogen. Consumption values are constantly monitored, and the top priority for new and replacement purchases is maximum energy efficiency. Our vehicle fleet is gradually being converted to hybrid and electric vehicles, in order to reduce mobility-related greenhouse gas emissions.

#### **Environmental measures**

Water consumption is also being reduced by using targeted ultra-fine filtration and cascading. R+W is focusing on sustainable product development and research in order to be able to manufacture reliable, durable, efficient products. This also requires a modern infrastructure and cooperation with sustainable suppliers and service providers. To preserve biodiversity, ecological compensation areas for insect protection form a part of R+W's Green World.

#### Social sustainability

Sustainability at R+W is also social. The focus here is on those who work in the company and those who benefit from the products it manufactures, namely employees and customers. A high level of process reliability ensures the high quality of the products and increases customer benefits. Because employees' occupational health and safety have top priority, R+W continuously invests in a comprehensive occupational health and safety management system. Incentive systems increase employee satisfaction, which in turn translates into high-quality products and benefits customers.

#### **Commercial initiative**

To ensure that business success is long-term, a commercially sustainable approach needs to be taken. That is why R+W focuses on healthy growth. Continuously enhanced processes along the value chain reduce costs, while resource-saving energy sources create long-term value.

# BAVARIAN ENVIRONMENT + CLIMATE PACT



### R+W meets the requirements for the second time in a row

With its commitment to sustainability, R+W has met the requirements for participation in the "Bavarian Environment + Climate Pact" for the second time in a row, and has been awarded a certificate to this effect. R+W is therefore being accoladed for its recent implementation of numerous projects focusing on sustainable resource use. The Bavarian Environment + Climate Pact brings together the state government and industry to create reliable, voluntary partnerships that contribute to protecting natural resources.

Among other things, R+W installed a photovoltaic system on the roof, which achieves a peak output of 180 kilowatts and 75 percent of its energy is used to generate electricity. Furthermore, the heat resulting



from compressed air generation is diverted into the heating system. "This allows us to operate an underfloor heating system, which we use to cool spaces in summer by feeding in cold water, and we can do so without air conditioning", Managing Director Holger Vogt explains. To reduce energy consumption, R+W relies entirely on LED lighting, and e-charging stations for cars and e-bikes have been built for the staff.

All these measures contribute to achieving zero emissions. Our renewed successful participation in the Bavarian Environment + Climate Pact shows that R+W is making good progress in achieving this major goal. "We are very happy that we as a company have fulfilled the requirements for participation in the Bavarian Environment + Climate Pact for the second time. At the same time, it is great motivation for us to continue down our chosen path and implement further measures for even more sustainability", says Vogt.

As a participant in the Bavarian Environment + Climate Pact, R+W is entitled to use the logo "Umwelt + Klimapakt Bayern" logo for its public relations activities and advertising to customers, thus drawing additional attention to this vital work.



Presentation of the certificate to R+W's Managing Directors. F.I.t.r. Holger Vogt, District Chief Executive Marco Scherf, Frank Kronmüller





# NEW PRODUCTION FACILITY

R+W expands activities in the USA

R+W is stepping up its activities in the US market and has just opened a completely new production facility in West Chicago, just a few kilometers away from its existing sales and logistics center in Carol Stream, Illinois. By adding considerably to its footprint, R+W is continuing to expand its business unit and to consolidate its position as a global technology and market leader in mechanical drive components. "As a global solutions provider for mechanical drive components, the new production facility in the USA enables us to serve our customers faster and in a more targeted way. This expansion represents a milestone in our global activities and is a key investment in the future of R+W", Maximilian Crößmann, Managing Director of R+W Antriebselemente GmbH, explains. R+W is represented in more than 60 countries, including subsidiaries in China, Italy, Slovakia and the USA.

# TRADE FAIRS

R+W, as an expert in precision and industrial couplings, is once again represented at key industrial trade fairs this year



#### HMI – HANNOVER MESSE 2023

As the world's leading industrial trade fair, HANNOVER MESSE is an annual showcase for groundbreaking innovations and products that are driving industrial transformation forward.



#### 17 –21 April 2023

Hannover, Germany Hall 5 Booth A48

#### YOU CAN ALSO VISIT US HERE!

#### AUTOMATE 2023

22 – 25 May 2023 Detroit, Michigan 48226, USA

**WIN Eurasia** 07 – 10 June 2023 Istanbul, Turkey

#### AAA – ALL ABOUT AUTOMATION DÜSSELDORF 2023 18 – 19 October 2023

Düsseldorf, Germany

#### ITAP

18 – 20 October 2023 Singapore

#### SPS

14 – 16 November 2023 Nuremberg, Germany Hall 3 A, Booth 121 R+W CUSTOMER MAGAZINE 01123



R+W Antriebselemente GmbH Hattsteinstraße 4 63939 Wörth am Main, Germany www.rw-kupplungen.de



