“Powerful Driver”

Dear Readers,

“Hannover Messe is a powerful driver of investments in technology and automation.” It says so on the trade fair website. This quote explains why we were in Hanover from April 8th through 12th. We see ourselves as one of these drivers for users of our products.

We know that our products are always just one part of the machine set-up. But users know just as well as we do that couplings play an important role in this set-up. Therefore, we are constantly working to make existing products better and to carefully develop new products for an increasing range of requirements – not because of a mere will to innovate, but to make the lives of the customers easier. Specifically this means that your products should be more reliable and more efficient, thus ultimately increasing your profitability. We are therefore happy to be in the driver’s seat.

Read more on pages 3 to 5 about our trade fair highlights – gear couplings, steel disc couplings and, last but not least, the new premium line. We thank everyone who visited us at our booth and made this trade fair a huge success.

Frank Kronmüller
Highlights in Hanover

Eleven leading international trade fairs in one location – key representatives of various industries gathered at Hannover Messe for a few days to discuss and make decisions about investments in technology and automation. R+W, like last year, had its finger on the industry’s pulse and showcased three highlights to users.

Gear couplings: robust and reliable
The BZ 1 gear coupling is a robust and reliable solution that compensates for lateral, angular and axial misalignment. Misalignment compensation is achieved by the high precision gear mesh between the coupling hub and flange. “This type of gearing minimizes edge pressures in the case of radial or angular misalignment and transmits torques ranging from 1,300 to 348,000 Nm with low backlash and torsional rigidity. Precise, spherical geometry of the low-maintenance gearing ensures a long service life, without misalignment loads,” is how Jörg Stang, Head of Sales at R+W, summarizes the coupling’s features.

R+W manufactures the service-friendly BZ 1 using high-strength steel in a burnished finish. It has good thermal stability and high rigidity. The hubs are connected by keyway and shrink fit to the cylindrical shafting; optionally a DIN 916 set screw can be used to help secure the hub-shaft connection. For ease of handling the coupling set is shipped unassembled. The additional, optional seal plays an important role in this product’s service life by ensuring lubrication over a long period.

Steel disc couplings: cost-effective, compact and safe
R+W also showcased steel disc couplings at Hannover Messe – used for printing machinery, conveyor systems or in steel mill equipment, for example.
The LP series couplings were developed for torques between 350 Nm and 20,000 Nm – torsionally rigid, heat resistant, with high power density and an almost unlimited service life. Hardly any other type of shaft coupling achieves a comparable combination of temperature stability and performance density.

Steel disc couplings from R+W are generally smaller than comparable products. This smaller size brings advantages from the start. Among other things, design engineers require less space when designing machines and systems. In addition, the use of high strength bolts to clamp the disc packs into the assembly offers functional benefits over the use of traditional fitted shoulder bolts. It guarantees a high surface pressure and tension force, which contributes significantly to the safety and the exact positioning of the system.

Since the LPs are delivered fully mounted, the user does not need to worry about assembly. This saves time, minimizes sources of error and, thereby contributes to increased efficiency. Their special design allows for quick and easy installation by users, for example in paper and printing machinery, conveyor systems, steel mill equipment, generators, mill drives and other demanding power transmission applications.

For special customers:
R+W Black Label
“Our MK 2 is not just any coupling. It is a mini-masterpiece,” is how Jörg Stang describes one of the R+W Black Label couplings. The entire label is synonymous with custom manufacturing, first-class service and complete configuration with all the extras. This includes, for example, labeling the tightening torque of screws directly on the product. Moreover, the couplings are delivered featuring a disassembly system, precision balancing up to quality level 6.3, documents like the test protocol and the COC certificate as well as a full quality test.

Proven reliability, high-end technology and superior quality are standard for R+W. Attractive high-quality design, premium quality surface finishing and comprehensive features, including a lifetime warranty, characterize R+W Black Label couplings. “Each R+W Black Label coupling is exclusively produced in line with our customers' requirements”, Frank Kronmüller, R+W Vice President, explains.
Gear couplings

- High torque transmission
- Very low backlash
- Inexpensive
- Low maintenance due to special toothing

Steel disc couplings

- Precise torque transmission
- Compensation for high misalignment
- Simple and fast assembly
- Torsionally rigid, backlash- and maintenance-free

R+W Black Label

- Exclusive production in line with customer requirements
- Fully equipped with all the extras
- Lifetime warranty
- Refined surface
Managing Quality Reliably

The consistently high quality of materials and products in turn enable the reliability and efficiency of the user. At R+W quality assurance forms the basis for optimum functionality.

Quality assurance is generally nothing exceptional – at least not at R+W. Rather, it is an absolute necessity and an integral part of the organizational culture – focusing on products, customers, service and advice. Therefore R+W’s quality management system is Dekra-certified in line with ISO 9001. Regular internal and external audits validate high standards in all areas.

The staff members of R+W’s quality assurance department ensure that processes operate reliably and that the products are delivered and function with zero defects, as ordered by the customer. It begins with incoming goods inspection, continues with production monitoring through outgoing goods inspection – and does not stop there.

Quality assurance also includes support and advice as well as rapid assistance in cases of complaint. Frank Kronmüller, R+W Vice President, summarizes the quality philosophy of the company as follows. “We are aware of the responsibility inherent in our products. Customers rely on our quality as a component of their machines. We go that extra mile to meet or even exceed expectations.”

“Controlling quality from end to end”

<table>
<thead>
<tr>
<th>Quality assurance process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incoming goods inspection</strong></td>
</tr>
<tr>
<td>Testing the components (hubs, bellows, screws) for compliance with prescribed technical specifications</td>
</tr>
<tr>
<td><strong>Production monitoring</strong></td>
</tr>
<tr>
<td>Continuous quality control during the manufacturing of components</td>
</tr>
<tr>
<td><strong>Outgoing goods inspection</strong></td>
</tr>
<tr>
<td>Inspection of manufactured parts, matching with customers’ specifications</td>
</tr>
</tbody>
</table>
Partnership with a Bright Future

R+W has been part of the Poppe + Potthoff Group since last year. This edition highlights the corporation and its business segments.

“No matter how different our products may be in the details – they have something very significant in common; they are based on our innovative spirit, skills, precision and flexibility,” emphasizes Dr. Christian Potthoff-Sewing, President/CFO of Poppe + Potthoff GmbH. “The technology center at our headquarters in Werther is our bedrock for ensuring and promoting innovation”, CEO Rüdiger Faustmann adds.

Poppe + Potthoff customers include big-name companies, particularly in the automotive sector. This specialist in high-pressure tubes and precision components, especially for common rail systems and related high-pressure lines, is based in the German town of Werther and works with both OEMs and suppliers.

For example, the company supplies the common rail subsystem used in the engine of the new Scania V8 / 730 PS, one of the world’s most powerful mass-production trucks.

“Users in the marine industry and general engineering also benefit from our products,” Rüdiger Faustmann emphasizes.

This family-owned company has a global presence at 14 locations in 9 countries. It also has a global network of agencies. “R+W precision couplings and line shafts complement the range of products provided by the Poppe + Potthoff Group and our strategy of diversification and long-term growth. R+W was integrated into the Poppe + Potthoff Group last year as an independent company,” says Dr. Christian Potthoff-Sewing.

Quality in focus

Poppe + Potthoff’s technology center at the headquarters in Werther (Germany)

Rüdiger Faustmann, CEO (left) and Dr. Christian Potthoff-Sewing, CFO/President

Product Groups

<table>
<thead>
<tr>
<th>Common Rail, HD cables and tubing components</th>
<th>Precision components</th>
<th>Special machinery and testing facilities</th>
<th>Seamless precision steel tubes</th>
<th>Backlash-free couplings and line shafts</th>
</tr>
</thead>
<tbody>
<tr>
<td>for automobiles and commercial vehicles (on/off highway), marine</td>
<td>for automotive, hydraulics and aeronautics applications</td>
<td>for high-pressure technology, automation and machining processes</td>
<td>for various automotive and industrial applications</td>
<td></td>
</tr>
</tbody>
</table>