

Many new possibilities for quality assurance

With the commissioning of a new test bench just a few days ago, RINGSPANN RCS has considerably expanded the possibilities for further development and quality assurance of its push-pull cable systems. The facility is equipped with a digital control system, two synchronously operating hydraulic cylinders and a mobile terminal. It offers numerous options for different test scenarios and comprehensive evaluations. The German remote control specialist is thus gaining a considerable competitive advantage internationally.

RINGSPANN RCS's new digital test bench is a powerful and intelligent system that provides the company's engineers with a large arsenal of options for the quality assurance and further development of their remote control systems. "All test benches for push-pull cables and Bowden cables known to us to date possess neither the high performance nor the flexibility of control that our new duplex system offers. In addition, this is a system solution designed exclusively for our company, and numerous quite demanding test scenarios that go far beyond the conventional have been taken into account in its realisation. This was a real challenge in the technical implementation of the test bench, but the result speaks for itself", emphasises Christian Kny, managing director of RINGSPANN RCS. The new test bench from the Oberursel-based manufacturer of remote control systems has a large working plat-

form with two parallel test lines. Two precisely controllable hydraulic cylinders ensure the desired kinematics and dynamics within the test scenarios. These two cylinders are equipped with 20kN load cells and draw their power from the test bench's own 150 bar unit.

Wide range of test scenarios

The new remote control test bench from RINGSPANN RCS is easy to operate using a mobile terminal with a colour monitor. The digital control system offers both the company's quality managers and development engineers a great deal of freedom in the execution of numerous different test scenarios, as well as partially and fully autonomous test sequences. It can be used not only for standard tests, but also

Intrinsically safe and maintenance free

RINGSPANN RCS mechanical cable systems are high-quality products. They are designed for a long service life and boast optimal gliding properties. As intrinsically safe and maintenance-free machine elements, they are proven wherever forces have to be transmitted between locally separated and stationary components, but where it must always be possible to separate the connection between input and output force by means of a flexible system. Thanks in particular to their length-preserving properties, they prove to be precise and reliable operating elements even in applications with winding installation paths.

for special force tests, friction measurements, cycle tests and backlash measurements, as well as routines for evaluating elastic elongation and much more. "In addition to testing individual kinematic and dynamic performance parameters, we can also use the new facility to carry out demanding long-term test series and complex multiple-factor analyses in which several different requirements are alternately tested. It can also be used for benchmarking projects", says managing director Christian Kny. For RINGSPANN RCS, the new test bench is therefore not only a valuable tool for internal quality audits, but also an important source of inspiration for the further technical development of push-pull cable systems. In

order to ensure that no results are lost in all this, that all test scenarios are fully documented and that the data can flow directly into the evaluations, the test bench control system stores all results securely on network servers and records them in protocols.

Test bench creates a competitive advantage

With the new duplex test bench, which RINGSPANN RCS' engineering department actively helped to implement, the company based in Oberursel should have a clear competitive advantage within its industry. That is because the verifiable testing of cable systems and verification of the performance data is playing an increasingly important role today, both in the development of new high-quality push-pull cables and in the implementation of specific customer requirements, as well as in the qualitative improvement processes. Taking into account the highest quality requirements, the new system is also available for project-oriented test orders from customers and interested parties – including the evaluation and documentation of all parameters. Last but not least, the company's product developers can use the duplex test bench to demonstrate – and prove – technical correlations and quality features that were previously difficult to communicate to users. Managing director Christian Kny is therefore certain "that the results and findings that we achieve with the help of our duplex test bench will prove to be a strong argument in the decision-making processes of our customers in the future." <<

