



EloWheel RPT17 in series production

## **Rohmann “EloWheel” wheel rim inspection system for non-destructive testing**

### **Eddy current testing systems used in MRO all over the world**

Eddy current test instruments and systems manufactured by Rohmann are used in most varied branches of industry world-wide. Test instruments can be used for all types of industries, but test systems are usually designed for the inspection of a specific test piece.

EloWheel, developed by Rohmann for the inspection of aircraft wheel rims, has been used in the wheel shops of renowned MRO companies all over the world for almost four decades now. A success story, which continues up to the present day and which Rohmann wishes to pursue with the latest version of the inspection system. High quality components, a solid steel frame structure and the newest Rohmann test instrument – ELOTEST PL600 – are applied. In the design of the system, we have attached great importance to the safety of the user.

The rim inspection system used by MRO companies – Maintenance Repair and Overhaul – is complex, but easy to operate. There is a new function for positioning the turntable on defects, which is set with the aid of a servo drive and an axial positioning laser. The rim halves can be inspected with a velocity of up to 120 rpm. An exact linear guiding system with a high-quality motor control of the axis moves the probes without vibrations. With the application of low and high frequencies, surface and subsurface defects can be detected in a single work cycle in a dual frequency inspection with a double probe.

EloWheel inspects rim halves with diameters of up to 800 mm. Rohmann has also developed the corresponding “ScanAnalyzer” software. This software makes it possible to record, print out and archive the test results including the C-Scans in data base format. Every rim thus has its own history that can be tracked and retrieved at any moment. The design of the inspection mechanics makes it possible to inspect with maximum performance and guarantees the required inspection resolution at the same time.

Even though the aviation industry is suffering badly from the Corona crisis at the moment, maintenance continues to be an important topic in the industry and the sustained demand for the Rohmann EloWheel is proof of this. Three new systems have already been delivered to clients in Germany and abroad in the first six months of this year.