

A New Generation of High Precision Testing Machines, used for VHCF Investigations and Experimental Characterization of Connectors in Control Devices

Abstract

The Presentation describes Investigations on the Very High Cycle Fatigue behavior of different materials and Investigations to characterise connectors in control devices, using a novel high dynamic test machine based on piezoceramic actuators.

The new test concept was invented at the Fraunhofer LBF in Darmstadt and further developed to a commercially available test machine by the ISYS adaptive solutions.

The machine allows high frequency tests up to 1000 Hz without limitations in the variability of the usable test signals. The obtained results of the investigations show an outstanding precision and reproducibility compared to other test machines on the market.