

German Robotic Arm's Helping Hand For Motor Industry

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German based Weiss Umwelttechnik and Battenburg Robotic have joined forces to produce the world's first climatic test chamber with an integrated robot arm.

The WK BM 1000 chamber allows companies who produce interior components for the automotive industry e.g. Sat Nav systems, to discover how well these components actually operate in extreme temperature and humidity conditions and fluctuations. See

<http://www.weiss-gallenkamp.com/news/2011-05/worlds-first-robotic-test-chamber/>

“Human Arms Simulated”

The chamber can simulate virtually any climatic conditions ranging from -40 to +85 °C, and the robot arm is used to simulate how a human arm would use the component being tested. The whole test is programmed, performed, and the results measured using specially developed Roboflow® software (Battenburg).

Weiss spokesman James Walton says “this ‘world first’ complete solution in climatic components testing means that component companies can actually know in reality how well their products will work in any climatic condition. This could save them a fortune by being able to control quality and reduce rejection early in the development process”.

The robot arm is protected from the climatic extremes in the chamber by an air-conditioned protective cover. The sensors image processors grippers and tactile tools which are built into the robotic system help to measure all manner of component qualities including haptic, visual, acoustic and force displacement.

Automotive Industry Set To Reap Rewards

Thought to be of particular importance to the automotive industry, the WK BM 1000 will provide flexibility in use, reproducible, transparent and comparable measuring results. This climatic chamber makes standardisation of test and quality features possible, and can be used anytime virtually anywhere.

The test results produced via the Roboflow® software are logged into standard PC programs so they are made easily available for statistical purposes. Other monitoring and control options can be integrated into the climate chamber e.g. a webcam.

For more information call James Walton on 01509 631590, email james.walton@weiss-gallenkamp.com or visit <http://www.weiss-gallenkamp.com/news/2011-05/worlds-first-robotic-test-chamber/>

