

Abstract:

Simply See More: ZwickRoell 2D DIC

ZwickRoell GmbH & Co. KG, Dr. Erhard Reimann

Without the need for additional hardware, the ZwickRoell videoXtens can be expanded with a valuable function: the ZwickRoell 2D DIC. This function allows for live strain measurement with a single extensometer, followed by 2D DIC analysis.

On the basis of various applications, the presentation will cover the many possibilities that the 2D DIC function offers. Different applications on metals, composites and other materials are used to introduce the wide range of analysis tools, including the virtual strain gauge used on V-notch specimens. We will also address specimens with cut-outs, as well as the benefits of the high resolution achieved by testing with videoXtens array systems.

Special attention will be given to the analysis via testXpert III. Through integration of the 2D DIC functionality, strain values from the 2D DIC analysis can be directly displayed in the stress-strain curve and further evaluated. All measured values, test results and images are stored, managed, and analyzed together in testXpert.

The examples will confirm the following: the ZwickRoell 2D DIC function is a powerful analysis tool.