

Abstract:

***Optical Strain Measurement for Mechanical Testing of Composites***

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Optical strain measurement techniques for mechanical testing of composites has steadily gained importance and with advancing technology in the past decades, optical non-contact strain measurement methods are now a valuable alternative for more traditional contacting strain measurement techniques. This presentation will introduce the typical composite test methods for which optical strain measurement is suitable. We will introduce the outstanding features of the videoXtens biax 2-150 HP, and show examples for testing with this video extensometer in “Live-Mode” and for testing with the “2D-DIC Software Option”. It will also be shown how a 3D-DIC strain measurement system from an external supplier can be connected to a ZwickRoell materials testing machine.

(109 Worte, 763 Zeichen)