Abstract:

Compression testing of fiber-reinforced polymer matrix composites

ZwickRoell GmbH & Co. KG, Dr. Hannes Körber

Different international, European and American Standards are available today to describe methods for compression testing of long fiber reinforced composites. These standards can be distinguished by their different methods of load transmission into the specimen, which are end-loading, shear-loading and combined loading. Each of these methods include typical advantages and disadvantages, which can significantly influence the reliability of the obtained test results. Different types of test fixtures commonly in use, which comply with the described load introduction methods, will be shown. The presentation explains the test methods and their field of application, available fixtures and examples of test curves.