

NASA 1092 TESTING FIXTURE

NASA COMPRESSION AFTER IMPACT

This type of NASA compression after impact (CAI) of compression of the test device is an alternative to the more popular Boeing compression after the compression of the device of the impact test. The NASA devices are 10 " long and 5" in width. As in Boeing method, a quasi-isotropic laminate is typically tested. The NASA device version includes four separate groups, each locking on an edge of the sample. These assemblies stabilize the champion against deformation. The lower group rests on the base of the testing machine, and the compression load is applied to the test specimen through the top assembly using a flat compression plate in the cross-head of the testing machine. Before being tested to compression failure, the sample is subjected to a load of impact, typically by means of a weight impact test device.

Sources of Additional Information:

NASA Reference Publication 1092, "Standard Tests for Toughened Resin Composites ;" NASA-Langley Research Center, Hampton, Virginia, Revised Edition, July 1983.

Boeing Specification Support Standard BSS 7260, "Advanced Composite Compression Tests," The Boeing Company, Seattle, Washington, 1988.