

Die and package shear testing

Die/package shear testing is a high force shear test to measure the adhesion between the die and the substrate. It is an ideal method for measuring glue, solder and sintered silver bonded areas. The test is easy to implement and can be used on thin and larger die. Test forces can be up to 1000 kg.

Self-aligning

Aligning the tool to the die is critical during these test. This ensures the load is evenly distributed along the face of the die. To avoid operator error from manual alignment of the tool/workholder, DAGE have a range of self-aligning shear tools.

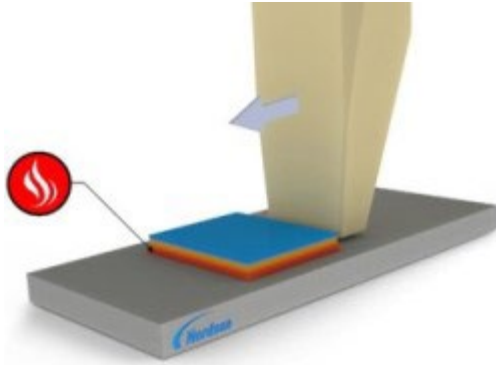
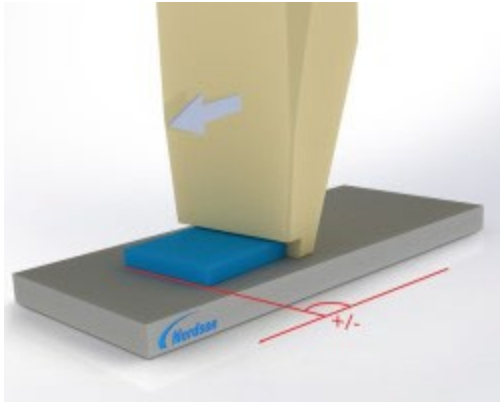
High force heated shear

In general, adhesion of bonds degrades with increasing temperature. Therefore, it is essential to qualify bond strength as a function of temperature.

Conformal coating tools

Testing is similar to standard ball shear tests and is performed in accordance with:

- MIL STD 883



Low profile die shear testing is required when the die under test are very thin and their height profile is low relative to the surface that they are bonded to. A relatively high force die shear load cartridge combined with high precision shear height accuracy and a self-aligning load tool are critical.

<https://youtu.be/yf9Q9bOZcsM>