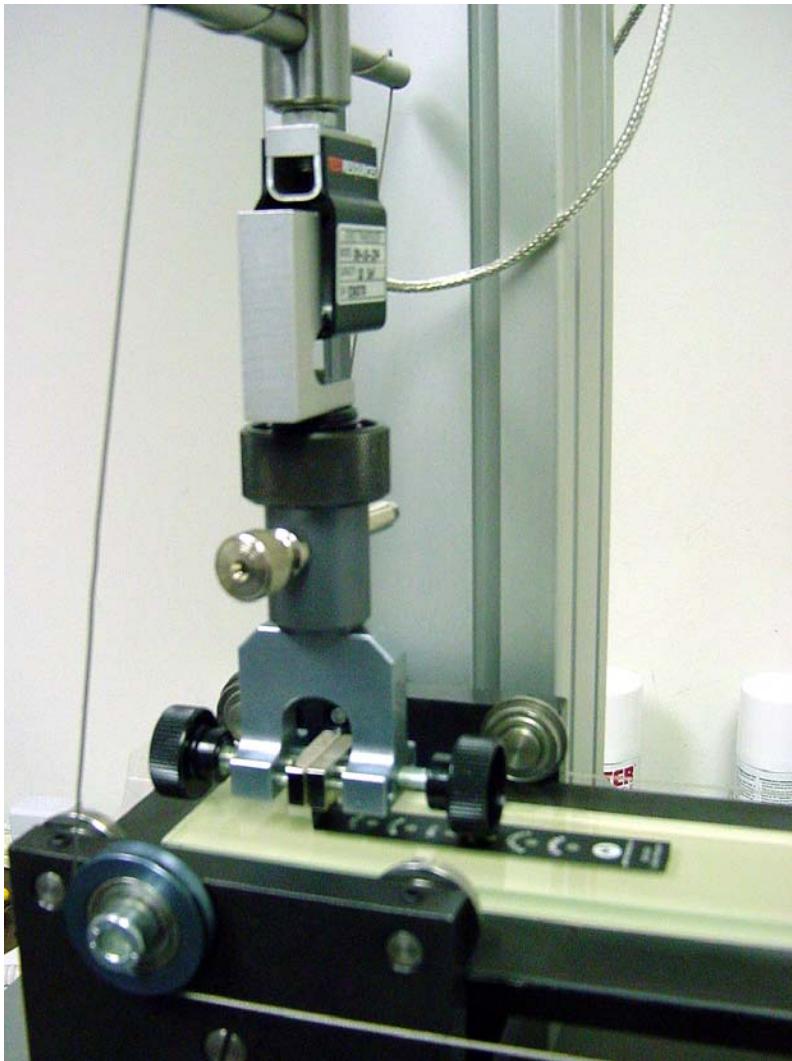


90 Degree Angle Peel Fixture

The G50 test fixture tests less flexible adherends for which a 180 ° peel test is not suitable because of the cracking, breaking or delamination of the adherend. It also applies to higher strength adhesives and is rated to handle loads to 10 kN (2250 pounds).

A bonded assembly is prepared and the two adherends are pulled apart at a steady rate, starting at the open end of the bond. Separation occurs progressively along the length of the bonded adherends. The fixture moves synchronously as the machine crosshead pulls, and the sample peel is maintained at the 90° angle established at the test start.

Force is normal to the plane of the bond through the separated part of the flexible adherend. An upper mechanical grip is required for the flexible adherend. A machine adapter is also needed to interface it to the test machine.



Some Test Methods – G50 Fixture

ASTM D6862 Standard Test Method for 90° Angle Resistance of Adhesives to measure the resistance-to-peel strength of an adhesive bond between one rigid adherend and one flexible adherend when tested at an angle of approximately 90 degrees under specified conditions of preparation and testing.

ASTM D6252 Peel Adhesion of Pressure-Sensitive Label Stocks at a 90° Angle covers the measurement of peel adhesion of pressure-sensitive label stocks. The test measures adherence to a standard steel substrate or other surfaces of interest for a pressure-sensitive label stock.

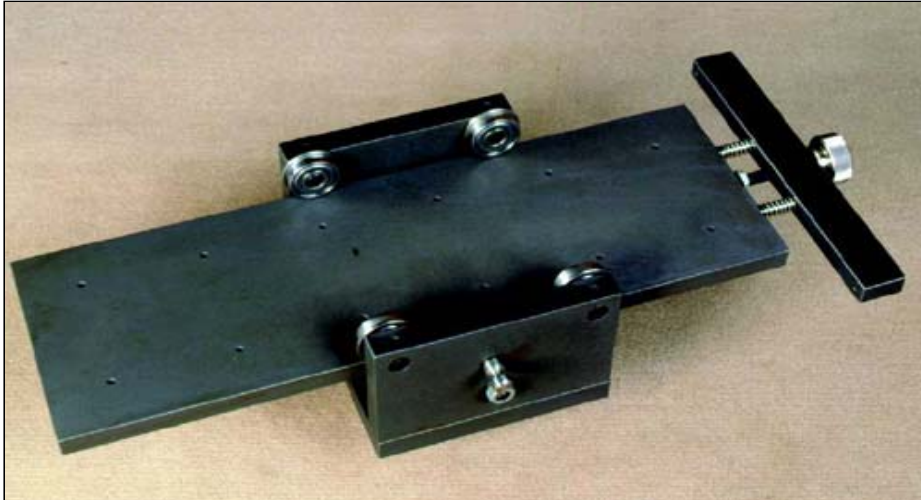
ASTM D2861 Flexible Composites of Copper Foil with Dielectric Film or Treated Fabrics covers procedures for peel testing flexible copper foil combined with dielectric film or treated / impregnated fabric to form flexible composites used in the manufacture of flexible or multilayer circuitry.

PHOTO: 90 degree Test Setup

Glass mounting plate with pressure sensitive label being pulled by G229 lightweight upper jaws.

Load cell is a 2.2 pound full scale cell mounted in a 100 Series test machine.

Photo also shows G50 90 Degree Peel Test Table Fixture with pull-up test wire that moves table laterally as test proceeds.



For testing:

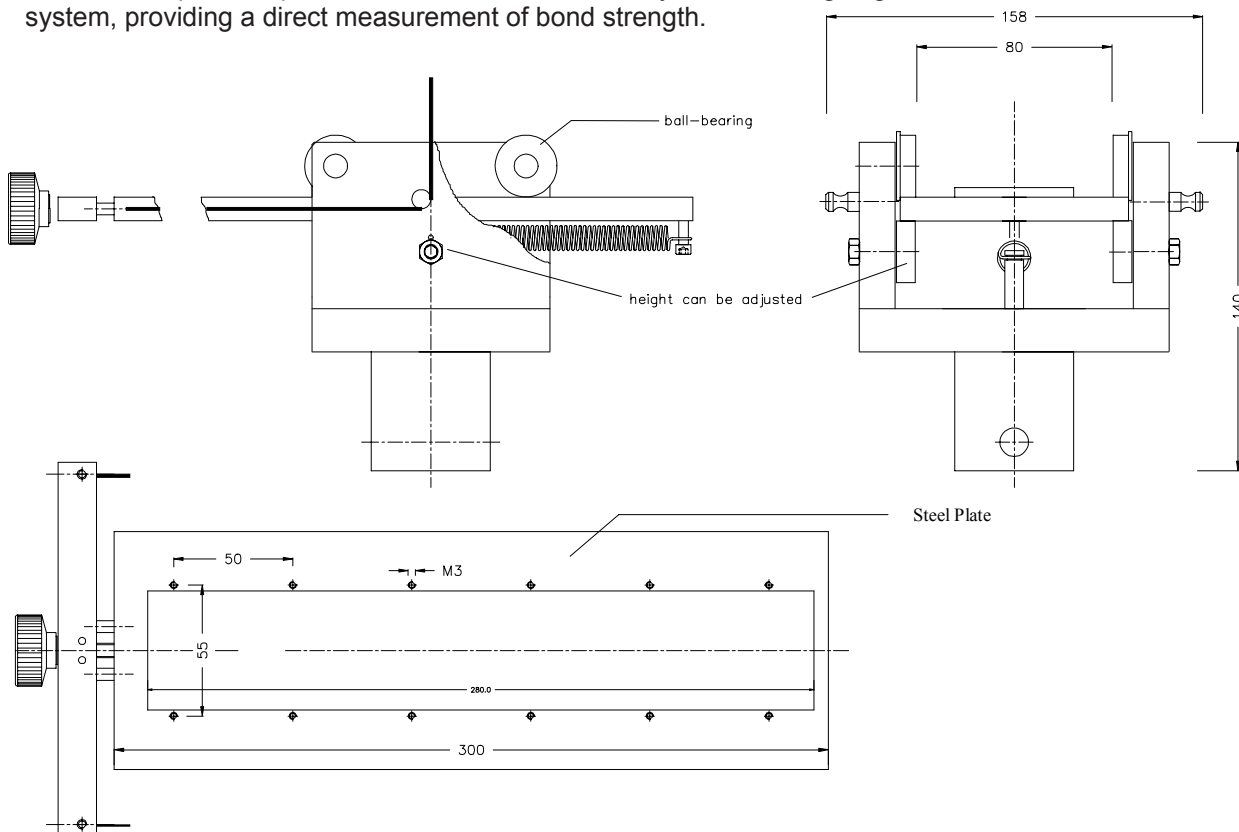
- laminated surface coatings
- films
- packaging and rigid backings

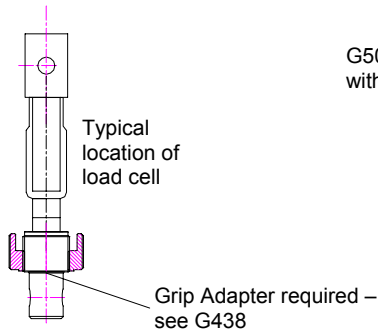
Description

The G50 fixture consists of a table mounted in bearings, and linked to the test system using a wire and pulley. As the crosshead pulls up, the cable pulls the table laterally to maintain a constant 90° angle peel.

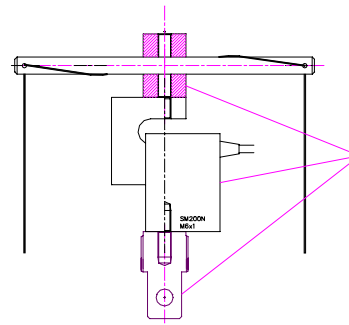
The 90° angle peel fixture measures the bond strength between laminated surface coatings, films, packaging, and their rigid backings, as well as other bonded structures.

The force required to peel the laminate is monitored by the load weighing system, providing a direct measurement of bond strength.

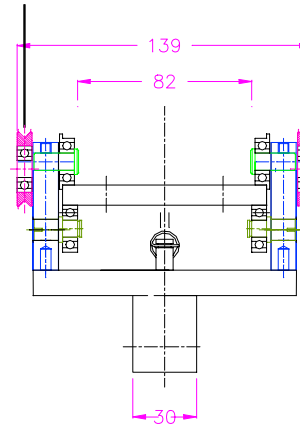




G50 wire and pin included with each G50 supply



G50 does not include adapters nor load cell



Ordering Information

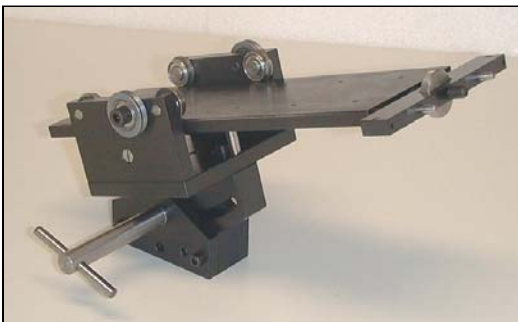
G50 – Full fixture with 55 mm wide base

G50-100 – 100 mm wide base

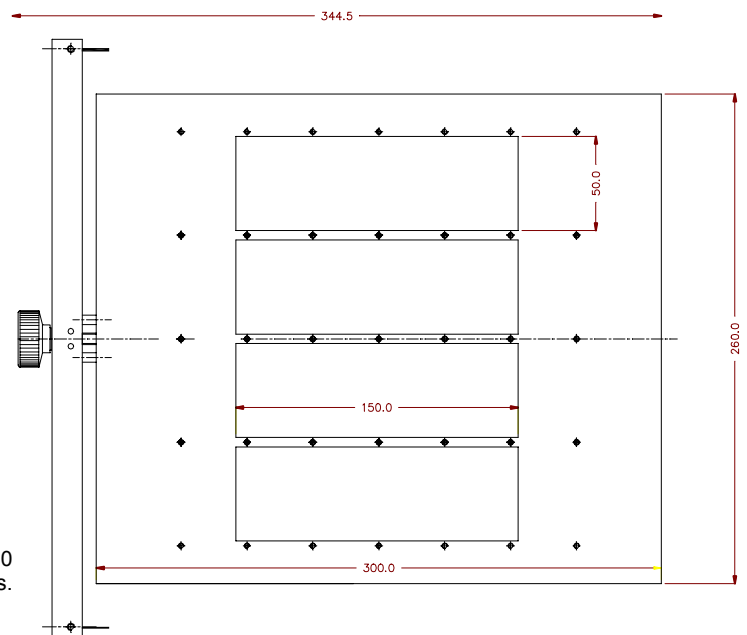
G50-ADJ – 55 mm wide base with adjustable angle

Select Coupler to machine

Select Upper Grip

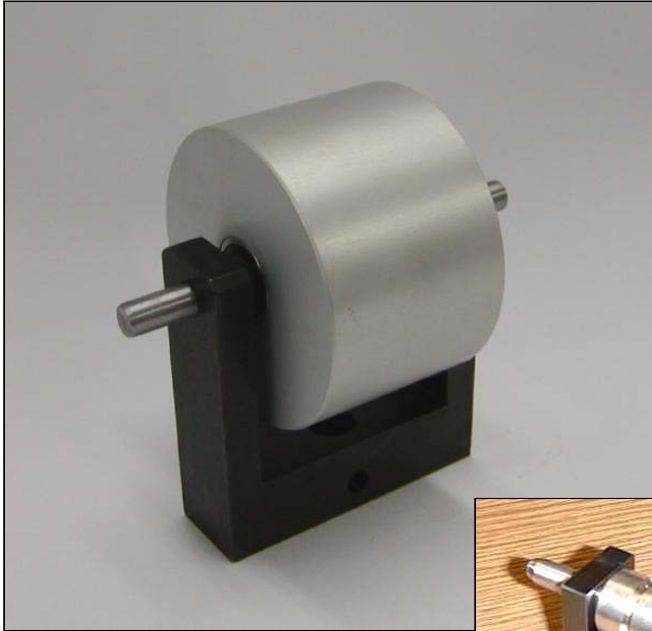


G50-ADJ with Adjustable Angle

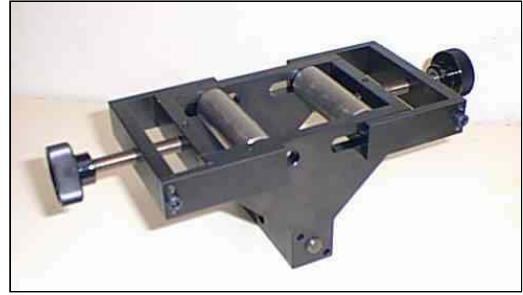


Wide Width G50B260L300 for large samples.

Other 90 Degree Fixtures



Model G3 -- Free spinning German wheel for flexible adherends. Several sizes – also built to order.



Model G192 -- 90 degree pull for flexible adherends pulled from flat rigid samples such as PC boards.