

PAT™ ASTM C633 Tensile Testing Jig



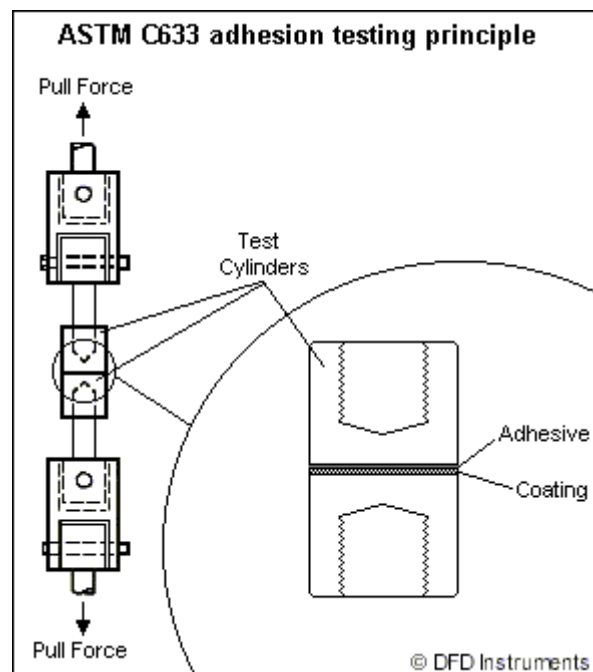
The PAT tensile testing jig is designed for pull off testing of thermally applied coatings in accordance with ASTM-C633 using the PAT adhesion tester.

ASTM-C633 TESTING STANDARD

The testing standard originated from adhesion testing by means of a stationary tensile testing rig. Two cylinders, one of which is coated, are glued together and then pulled apart in order to measure the force (N) required to fracture the coating. Through two universal link joints the cylinder assembly is pulled apart until fracture occurs. The test result is normally measured in N/mm^2 (MPa) or p.s.i.

TENSILE ADHESION TESTING APPLICATIONS

- Flame/Arc/HVOF/Plasma sprayed coatings
- CVD/PVD films
- Polymer coatings





DFD[®] TECHNOLOGY - ELIMINATING TESTING UNCERTAINTY

With the DFD[®] (Dynamic Force Distribution™) pull technology premature fracture (i.e. low test values) is eliminated.

- The pull force is dynamically balanced across the test specimen continually between four hydraulic legs as the force increases until fracture occurs.
- No other method (not even advanced tensile testing machines) is able to distribute the tensile pull stress as evenly as the DFD[®] test method.

COMBINE ASTM-C633 TESTING WITH THE DFD[®] TECHNOLOGY

- Instead of using expensive tensile testing machines with all its complex mechanics and procedures a portable PAT testing machine with the ASTM-jig can be used more successfully. This way, both accuracy and repeatability are improved as well as simplified procedures and flexibility.
- The accuracy and reproducibility make this method invaluable in connection with extended scientific research into materials, coatings and other films under various conditions like temperature, curing, application methods, surface preparation, etc.

TESTING RANGE

Testing Model	Full scale testing Range	Certified max. testing range
AT 101E/40kN	0 - 80 N/mm ²	0 – 68 N/mm ²
AT 101E/80kN	0 -160 N/mm ²	0 – 136 N/mm ²

REQUIRED TEST EQUIPMENT

- PAT model AT 101E/80kN or AT 101E/40kN
- Digital Test Logger (optional)
- Test Cylinders Ø25mm



DFD[®] INSTRUMENTS

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