# **Tuft Bind Fixture**

## Universal Testing System

The Thwing-Albert Vantage Series tensile testers are used for a variety of custom testing applications. The tuft bind fixture is used to measure tuft bind. (i.e. the force required to pull a cut pile or loop pile tuft completely out of a pile yarn floor covering specimen). Created to meet ASTM D 1335 for Pile Yarn Floor Coverings.

The grip consists of a cylindrical metal sample holder mounted in a U-shaped bracket, upper crossbar, forceps for use with cut pile and a hook arrangement for use with loop pile.

### **Sample Preparation**

A cut pile floor covering sample is looped completely around the sample holder and both ends are held in place by a clamping bar tightened by two thumbscrews.

#### **Testing Cut Pile**

To perform the test, a tuft, approximately at the centre of the sample, should be selected and gripped with forceps using the first clamp setting since overtightening may damage the tuft. The moving crosshead on the test machine is driven down until the handles of the forceps can be engaged on the crossbar. The test can now be performed.

#### **Testing Loop Pile**

Instead of the forceps, a double-ended stainless steel wire loop hook is used. The hook is passed through a selected loop at approximately the centre of the sample. The crosshead is driven down until the other eye of the hook can be attached to the center connection of the upper adapter.





