

TA-BPS – Blister Pack Support

The Blister Pack Support Fixture is a device designed to measure the force required to push a tablet or capsule out through the foil side of a blister pack. The blister pack, containing the tablet, is placed foil side down on the BPS base. Then the ½ inch radius probe, simulating a finger, is driven down onto the tablet, forcing it out through the foil. This process mimics a human extracting a tablet from the blister pack.

Fixture Base Table (TA-BT-KIT)

The Blister Pack Support Fixture replaces the insert in the fixture base table. For the most convenient use, the base table should be adjusted so that the length of the extension legs totals no more than 3 ½” (8.9 cm). Turn the base table upside down, remove the four Phillips head screws, and install the proper combination of extension legs to achieve the desired height. Place the fixture base table back onto the CT3, but leave the locking T-bolts loose until alignment is complete.

Install the Blister Pack Support Fixture

The Blister Pack Support probe attaches directly to the M6 thread in the probe shaft. Insert the BPS fixture base in place of the insert in the base table. There are two thumbscrews on adjacent sides of the perimeter of the fixture base table. Alternately tighten both of them to lock the fixture insert into the base table.

Alignment of the Base Tables in Stand-Alone Mode

The easiest way to align the BPS base under the BPS probe in standalone mode is by using the Tension test. Rotate the select scroll knob until Tension test appears on display. After depressing the start button two times, the select scroll knob can be used to lower the probe onto the BPS base. Depressing and holding the Select/Scroll knob will continuously lower the probe, and rotating the Select/Scroll



Installation Instructions for Texture Accessory Part Number: TA-BPS

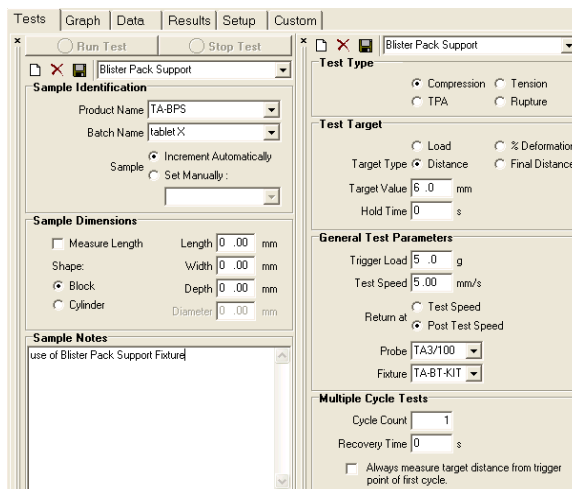
knob will lower the probe 1 mm for each click of the knob. Bring the probe down gradually so that the probe is centered over the oval hole in the BPS base, alternately adjusting the position of the base table and lowering the probe. The position of the probe shaft is shown on the CT3 display. The BPS probe should be lowered about 20 mm without making contact to the BPS base. Lock the base table by tightening the T-bolts. Alignment is now complete.

Use of the Blister Pack Support Fixture

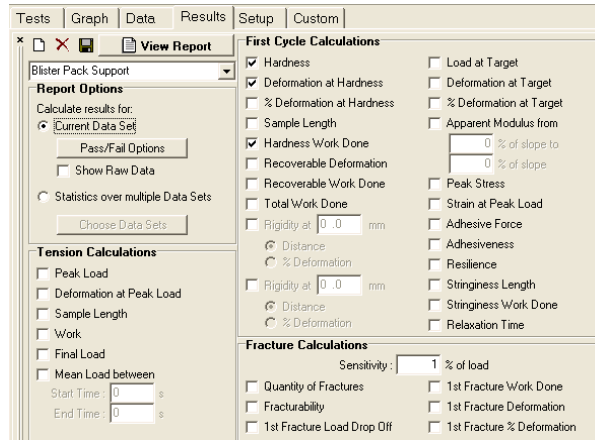
The Blister Pack Support Fixture consists of a cylindrical base with an opening larger than most tablets in blister packages. The tablet is placed foil side down centered over the hole in the base cylinder.

When running tests with the Blister Pack Support Fixture in standalone mode, choose the Normal compression test. Select the trigger value appropriate for your load cell; in most cases, 5 or 10 grams is appropriate. Select a deformation distance equal to the height of the tablet in the pack. For example, if the height of the tablet is 6 mm, program the deformation distance to be 6 mm. The test speed is arbitrary and may be selected as high as 10 mm/sec. Since this is a simulation test, imitating a person pushing the tablet out through the blister pack, the speed should be on the higher side, between 5 and 10 mm/sec. Since the probe used with the Blister Pack Support Fixture is a radius probe, it may be necessary to hold down the foil on top of the BPS base to prevent the tablet from sliding off while the probe is exerting force on it. The end of a test will show peak load, the maximum force during the probe descent. The deformation at peak will be the distance the probe traveled after the trigger load was detected until the peak load occurred. The third and important statistic on the standalone display is the work value, which is the work in millijoules exerted by the instrument extracting the tablet from the blister pack.

Using the Texture Pro CT Software, the same test can be set up as follows; the following screen shows the test parameters; the second screen shows the measured and calculated values.



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The Post Test Speed can be set to 10 mm/sec.

For further information, please see the application study of Blister Pack Testing on our website.