GPD’s Peel Back Force Tester with FORCEWare™ software is being used to set peel back standards for the entire industry.
Supplying consistent SMT carrier packaging is critical for customers using SMT pick-and-place machines. Nothing will stop a production line faster than carrier cover tape that doesn't peel back properly. The problem is difficult because tape cover adhesive varies widely from supplier to supplier.

In short, correctly measuring, setting up, recording, and then analyzing carrier tape peel back force is a critical production step. That's why you need GPD's Peel Back Force Tester (PBFT) with FORCEWare™ software. This is the equipment judged so good it was used to set the peel back force standard for the entire industry.

When you manage adhesive peel back force properly...

...you automatically take a big step toward improving customer satisfaction

Installation and Set Up
Configuration of the PBFT is quick and easy using the PBFT calibration dial and the strain gauge calibration screen.

Strain Gauge Verification Kit
This optional kit makes it easy to verify strain gauge calibration and meet ISO requirements for calibrated equipment.
- Kit PBT-107 includes 50, 100, & 200 g weights
- Kit PBT-123 includes 20, 50, 100, & 200 g weights

FORCEWare™ Software
FORCEWare™ software allows the user to see, analyze, and record minimums, maximums, and average peel back force and speed, as well as standard deviation. GPD Global’s FORCEWare™ Software with comprehensive SPC Software Package makes testing and evaluation quick, easy, and accurate.

SPC Analysis
When sufficient SPC data has accumulated, it can be analyzed with any of the various window interfaces shown in the samples here. All you have to do is select the file to be analyzed, a data range, and the type of graph desired. Then simply print out or display the output. (see next page)

PBFT Control Center Window
The PBFT Control Center Window is used to define test parameters and unit of measure, run a test, and view, print, and save results. This window is also used to view and compare prior test results.

SPC User Creation Window
In addition to generating SPC data reports, the operator can also create separate log-in accounts, as well as implementing vendor defaults. Security features prevent unauthorized tampering.
• Control • Information • More Efficient Production

Test Graph
When a peel back force test begins, its progress displays on the test graph. Upon test completion, specific and summary data are displayed in a Test Results window. Many different graph forms can then be generated.

Current Results Chart
Displays complete results of test. Results can be saved and reviewed.

SPC Reports and Labels
SPC test results can be printed in SPC data, line graph, and label formats. The user can control the overall dimensions for all of these formats. User-defined print can also be added at the bottom of the SPC data and line graphs reports.

FORCEWare™ Software with SPC Software Package Runs on Windows 10 Pro/8 Pro/7 Pro
Now the most accurate method of testing is also the easiest and fastest. With easy to use, point-and-click windows, initial set up is a breeze, and calibration routines for both speed and force are practically automatic. SPC analysis allows the operator to select the files to be analyzed, and pick the appropriate analysis tools. Analysis, and all management results can be printed out for further study or distribution.
• Simplified calibration routine for speed and force
• Selectable sampling rate
• Bright, clear, easy-to-read screens
• Large storage capability for test data, test graphics, and SPC data

Previews Results Chart
This display is used to load previous results and past tests, in addition to generating additional results output.

S-Chart, X-Bar Chart, R Chart, and Cpk
Displays trends in spread of standard deviation, mean, range, and Cpk.
Specifications

- Peel Back ............. Force Measuring Range .... 0 - 250 grams
  Speed .................... 100 - 600 ± 5 mm/minute in 50 mm increments
  Angle .................... 160 - 180 degrees
  Accuracy after Calibration .... ± 1.0% of Full Scale (equals 2.5 grams)

- Tape ................. Widths Accepted (mm) .... 8, 12, 16, 24, 32, 44, & 56 (optional 8 to 120 mm)
  Materials Accepted .... Plastic, Paper, Metal
  Configurations ........ Single or Dual Sprocket

- Power ............ AC Input Voltage ........ 100 VAC - 240 VAC
  AC Frequency .......... 50/60 Hz
  Consumption ........... 60 watts maximum
  Fuses, Input power module . 1 amp, 250 volts
  Fuse, Power supply ........ 2 amperes, 250 volts

- Physical ........... Dimensions ............. 31.8 cm H x 73.7 cm W x 36.8 cm D (12.5" H x 29.0" D x 14.5" W)
  Weight .................. 30 kg (66 lbs)

- Strain Gauge .......... Accuracy ............ ± 0.25% of full scale
  Data Sampling Rate ...... Up to 20 samples per second, selectable from FORCEWare™ Software
  Battery life (approximate) ........... 30 hours, continuous use (strain gauge is normally plugged into the PBFT)
  Certification ............ Calibration norms comply with ISO 10012 and ANSI Z540-1

- FORCEWare™ Software , Test Range-SPC Analysis ........ User-defined range
  Test Range-Data Collection ........ Uses minimum/maximum limits of first file in selected data set
  Print Options ............... SPC data, Label format, Line Graph format

Customer-Provided Computer Requirements

- Computer ............... Desktop or Notebook (minimum requirements are dictated by the operating system in use)
  with 1 available USB 2.0 compatible port.

- Operating System ...... Microsoft Windows 10 Pro/8 Pro/7 Pro, 32-bit or 64-bit

- Memory ................. 1 GB recommended for 32-bit. 2 GB recommended for 64-bit.

- Printer ................. Any printer supported by the operating system in use.

Applicable Standards:

IEC 61010-1:2010+AMD1:2016 CSV
Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements.

Built in Compliance with:

Model PBFTVS.USB700 includes a Tape Peel Back Force Tester with GPD Global's FORCEWare™ software and SPC for Windows 10 Pro/8 Pro/7 Pro for use on a desktop or notebook computer utilizing USB specification 2.0.