Dynamic Shear

Quickly measure shear resistance by force rather than time and get a clearer understanding of your adhesive’s chemistry. Dynamic shear testing offers a faster, more accurate representation of an adhesives ability to resist polymer disentanglement. Using the Chem Instruments Dynamic Shear, you can graph the actual holding power with one simple test instead of running multiple hang tests and plotting their statistical time-to-fail. The time to collect the data and the integrity of that collected data is considerably better using this device as compared to typical shear testing methods. The Dynamic Shear meets the standards specified in ASTM and FINAT test methods. The included EZ Lab software makes data acquisition and data management easier and provides more powerful analysis capabilities.

- Rugged construction, capable of withstanding the abuse of the production environment
- Digital speed control with encoder feedback
- Selectable speed range from 0.05 to 2 ipm (2 - 50 mipmap)
- Selectable test lengths from 0.25” to 1.5” (6mm - 38mm)
- Additional features include: automatic test return, tension relief, and percent break
- 100 pound load cell is included with the machine
- Operating temperature range 32° - 150° F (0° - 70° C)
- EZ-Lab data management software is included with this machine
- Data can be downloaded to EZ-Lab software for complete data management
- Accurate to ± 0.1% of load cell range
- Capable of pulling up to 100 pounds (45 Kg)
- Standard input voltage - 120 VAC (50/60hz)
**Tape Specimen Cutter:** A double razor blade sample cutter cuts samples to a precise 1 inch width. Other sizes available.

**Test Panels:** Standard size for all ChemInstruments Shear Testers. Test Panels manufactured to PSTC specifications.

**Hand Roller:** Used to laminate samples to test panels.

**Cutoff Fixture:** Used to quickly and consistently create 1” x 1” sample for testing. Other sizes available.

**Data Acquisition System**

The ChemInstruments electronic data acquisition system is a state-of-the-art microprocessor controlled force measurement package that combines accuracy with ease of use. This system simultaneously controls test motion, reads the force of a test from a load cell, stores that data in its memory and interfaces with EZ-Lab data management software to show the results graphically.

- Records 400 data points per second during a test interval based on selected test speed
- Displays the average, high and low measured force results immediately upon completion of a test
- Export data by RS-232 connection to a local PC with our EZ-Lab software
- Displays test values in grams, kilograms, ounces, pounds or Newtons