

## Application Information

### Package Rupture Strength

Test amount of force required to rupture a package of solution

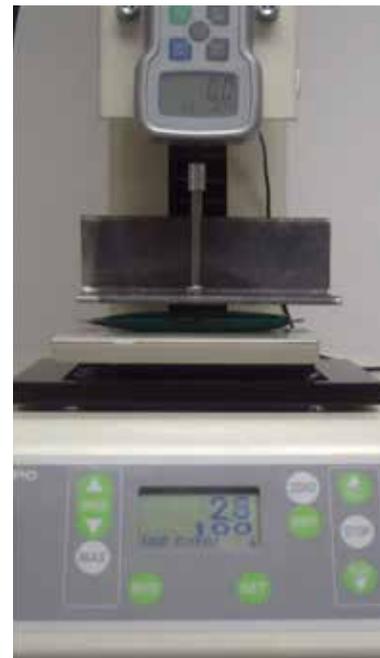
A common use of force measuring equipment is to test the compressive strength of a package to ensure that it can withstand the various forces encountered during handling and transportation. A recent customer was looking for a method to measure the amount of force that their flexible packet could handle to ensure it wouldn't rupture during shipping where the packets would be exposed to a lot of weight from all the stacked packets in storage crates. The customer required that the equipment could measure force as well as output the force vs. distance data to a computer for archiving and further analysis. The FGS-220VC Force Test Stand and FGV-200XY Digital Force Gauge was the suggested solution. Being that this was a new testing procedure and they had only a guess to maximum force their packets could withstand, they wanted to see their packet under test before purchasing the equipment. In an effort to save time and shipping costs, the customer sent samples in to Shimpo's lab for testing. We developed a temporary fixture and performed a simple compression test on the packet. We provided the customer with a video of the test and also the resultant data that was acquired. After evaluating the data and video, it was determined that our test stand and force gauge optimally fit their needs. One of our local distributors designed and manufactured a permanent fixture for testing their product off the production line for on-going QC analysis. The new testing equipment has become an integral part of their quality program. It eliminates the potential for damaged product during transportation and ensures they do not short-ship their customer's orders.

### Equipment Used

- *FGS-220VC Motorized Force Test Stand with Data Output & FGV-200XY Digital Force Gauge*



Data Acquisition of Packet Rupture Strength Test



Compression Fixture Testing Rupture Strength of Packet