

Application Information

Cement Viscosity Test

Shimpo test equipment has a wide variety of uses in a multitude of quality control testing applications. Uniformity is especially critical in manufacturing materials for products in the construction industry due to the numerous quality standards.

Recently, a cement manufacturing company wanted a streamlined process to spot check their ingredients along the production line in one of their facilities. It was found that compression tests were a more reliable method of determining the quality of the cement ingredients over conventional viscosity tests. Chosen were a FGS-100EH Motorized Force Test Stand combined with a FGV-50XY Digital Force Gauge with 50 lb (20 kg) capacity. The manufacturer created a custom machined ball to connect to the force gauge which would create the proper forces when positioned into the sample material. To initiate the test, a sample cup of their cement mixture was placed on the force test stand base. Using the complimentary Shimpo software, the peak measurements were collected and measured against their pre-determined standards to determine a pass or fail status.

Implementing this testing process which utilizes the repetitive control of the Shimpo test stand with the precision of the digital force gauge and its associated data acquisition software, they have been able to evaluate the quality of their ingredients prior to final mixing. This ability to more efficiently and accurately check their product has allowed their operators to make adjustments in real time to their mixtures resulting in a significant decrease in defective product, saving the company time and reducing costs while eliminating the potential for customer complaints.

Equipment Used

- *FGS-100EH Motorized Force Test Stands*
- *FGV-50XY Digital Force gauge 50 lb (20 kg)*



**FGS-100EH Force Test Stand
with FGV-50XY Digital Force Gauge**