

Superpave Gyrotory Compactors (ASTM D6925 and AASHTO T312)

Superpave Gyrotory Compactors meet ASTM and AASHTO requirements for compacting hot-mix asphalt specimens for Superpave mix design procedures. Cylindrical molds are filled with asphalt samples and gyrated at a fixed angle and pressure. The Superpave mix design procedure features the Superpave gyrotory compactor (SGC) for compacting specimens of hot mix asphalt. The primary operating parameters for the SGC include the pressure applied to the specimen during compaction; the speed of gyration/rotation; the number of gyrations applied to the specimen; and the angle of gyration. Values for these parameters were established during the development of the Superpave system under the Strategic Highway Research Program. It is correctly and commonly assumed that gyrotory compactors in which the gyration angle, speed of gyration, and applied pressure are properly calibrated will produce hot mix asphalt specimens having similar volumetric properties.