

Superpave Information

Superpave History

From October 1987 through March 1993, the Strategic Highway Research Program (SHRP) conducted a \$50 million research effort to develop new ways to specify, test, and design asphalt materials. The final product of the SHRP asphalt research program is a new system referred to as Superpave, which stands for SUperior PERforming asphalt PAVements. It represents an improved system for specifying the asphalt binders, aggregates, mixture design methods, and analyses that go into building longer lasting pavements.

Superpave Gyrotory Compactor

One of the main goals of the Strategic Highway Research Program (SHRP) with respect to asphalt mix design was developing a new laboratory compaction method. This new compaction method had to provide compaction that more closely mirrors that which is done in the field. By kneading mixes to simulate construction and traffic loads, the Superpave Gyrotory Compactor (SGC) provides specimens that are much more representative of actual in-service pavements.

The specimens fabricated with the Superpave Gyrotory Compactor (SGC) are used to determine the volumetric properties -- air voids, voids in the mineral aggregate, and voids filled with asphalt -- of Superpave mixes. Those properties, measured in the laboratory, indicate how well the mix will perform in the field. The SGC is also well-suited for quality control / quality assurance, as it can be set up at the job site to verify that the delivered asphalt mix meets the job mix volumetric specifications.

Approved Superpave Gyrotory Compactors

Brand	Model Number	Web Site
Pine Instrument Company	AFGC125X	http://www.pineinst.com
Pine Instrument Company	AFG1	http://www.pineinst.com
Pine Instrument Company	AFGB1	http://www.pineinst.com
Troxler Electronic Laboratories, Inc.	4140	http://www.troxlerlabs.com
Troxler Electronic Laboratories, Inc.	4141	http://www.troxlerlabs.com
Interlaken Technology Corp.	ITC Gyrotory Compactor	http://www.interlaken.com
US Army Corp of Engineers	Gyrotory Compactor	

Superpave Regional Centers

To bring the Superpave system and equipment closer to the users, five Superpave Regional Centers have been established by FHWA. The Centers, operated jointly by universities and state departments of transportation, provide technical assistance and training on a regional basis. The centers also evaluate Superpave equipment and procedures and work with agencies and industry to put them into practice.

REGION	UNIVERSITY	STATE DOT	CONTACT PERSON	PHONE NUMBER
Western	University of Nevada-Reno	Nevada	Peter E. Sebaaly, P.E., Ph.D	775-784-6565
South Central	Texas A&M University	Texas	Joe Button, P.E.	979-845-9965
Southeastern	Auburn University	Alabama	Don Watson, P.E.	334-844-6240
North Central	Purdue University	Indiana	Rebecca McDaniel, P.E.	765-463-2317
Northeast	Pennsylvania State University	Pennsylvania	Mansour Solaimanian, P.E., Ph.D.	814-863-1903