

Frank M. Drake



The career of Frank M. Drake, inventor and expert in asphalt technology, is best remembered for his major contributions to the design of paving equipment.

While a construction engineer with the Kansas Highway Commission, Mr. Drake developed a mechanism for cross-slope control of asphalt paving machine screeds. His attachments, which were adaptable to the major models of pavers in use in the late 1950's, enabled contractors to improve the riding quality of their pavements, using existing machinery, while at the same time increasing productivity. The

“Drake Device” became the basis for the linkage of the automatic, electronic screed controls now incorporated into all modern pavers.

Mr. Drake also developed and published articles on grade-line control techniques. He developed the mobile stringline, which traces the roadway's profile, senses changes in elevation and transmits the information to the Paver controls.

His revolutionary methods reduced and, in some cases, eliminated the need for skin patching and made it possible to place true-to-grade pavement courses directly by the paving machine.

Frank Drake graduated from the University of Kansas in 1938 with a Bachelor of Science Degree in Civil Engineering. After his long career with the Kansas Highway Commission, he joined the Asphalt Institute in 1963 as District Engineer in Kansas City, Missouri. He was promoted to Regional and Assistant Division Managing Engineer for the Northern Division in 1969. Mr. Drake retired from the Institute in 1977.

The innovative engineer was active in many national engineering organizations, including the Transportation Research Board, the National Society of Professional Engineers, the American Society of Civil Engineers, the Association of Asphalt Paving Technologists and the American Road and Transportation Builders Association.

Mr. Drake passed away in 2006.

Elected: 1977