

The Regenhardt machine

The earliest known modern, self-propelled slipform paver for highway applications as developed in the winter of 1953 by Regenhardt Construction Company of Cape Girardeau, Missouri. Frankie Merritt, the firm's master mechanic; his assistant, Leonard Church; and Tom Regenhardt were its primary designers.

Less known than the other early slipform pavers, the Regenhardt paver (figure 4) travelled on eight-foot crawlers, and used forms thirty feet long. Two transverse box screeds spread the concrete; the first carried a six to twelve inch roll of concrete and struck it off to near final elevation, and the second screed finished it to final elevation. The screeds were eight feet apart, and the transverse vibrator of two 2x 10 foot boards mounted vertically midway between the screeds.

The machine made its debut on August 3, 1953, laying a nine inch concrete base course for asphalt pavement on a section of Illinois Route 37 south of Whittington in Franklin County. As was typical in a concrete paving operation, the only limitation on its performance was the supply of concrete, in this case the output of a single 34E dual-batch paver, and the outfit paved up to 1,044 feet of nine-inch slab in one day. It was used on two projects, and met the specifications for smoothness and rideability for primary routes such as Route 37; however, it was unable to keep up with tighter specs that were developed as the Interstate program was launched, and the idea was abandoned.

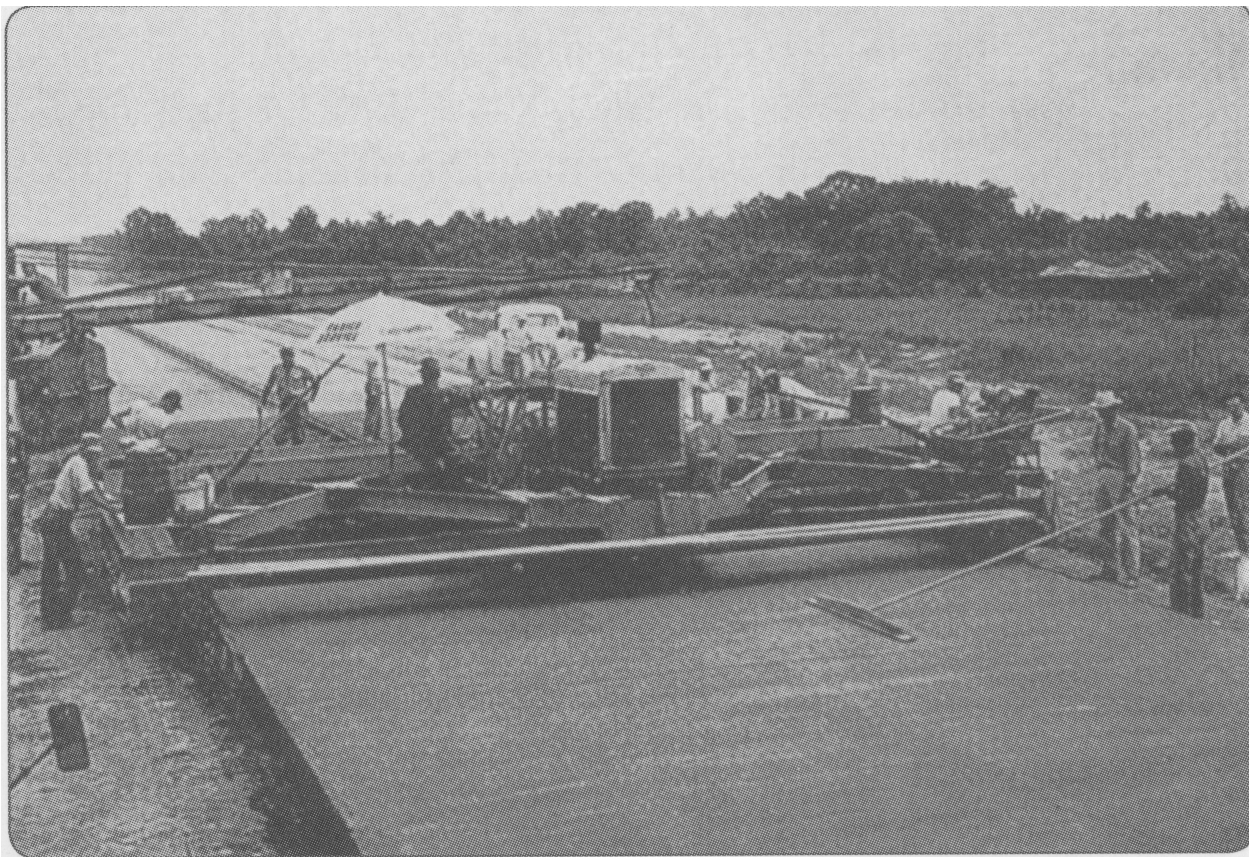


Figure 4: The Regenhardt paver at work. Photograph courtesy of Bill Regenhardt