

# Firestone NEWS

GASTONIA

The finest art, the most difficult to learn, is the art of living.

—John Macy

He who knows others is clever, but he who knows himself is enlightened.

—Lao-Tsze

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## Revolutionary Cord-Treating Equipment Unveiled Here

Open house at Firestone Textiles on December 29 and 30 gave newspaper editors and trade paper writers opportunity to inspect the new Firestone Tire & Rubber Co. operation in Gastonia, which makes tire cord of rayon and nylon, and which will result in Firestone's turning out stronger, longer-wearing, and safer tires for trucks and automobiles.

The new electronic tire cord safety tension and gum-dipping equipment, now in operation here, is housed in a new unit at the rear of the main plant. The equipment gum dips the tire cord, stretches it, and tempers it in one continuous electrically controlled operation. Specially designed and built by Firestone, it is the first cord-treating factory of its kind in the world.

At open house, December 29 and 30, when the new equipment was turned over for inspection to more than a dozen newspaper editors and trade paper writers, General Manager Harold Mercer presided over the program for visitors, in the absence of William A. Karl, President of Firestone Textiles.

The representatives of the press attended a news conference at 10 a. m., and saw a news film giving highlights of the new plastic dip operation here. Then the visitors toured the building, first to the twisting and weaving departments, then to the special processing unit.

They were entertained at a luncheon in the Elks Club at noon. Unfavorable weather cancelled most of the inbound flights at Charlotte airport on December 29. In addition to Mr. Karl, several other important visitors were lost to the bad weather.

However, on the following day, clearing skies allowed the Firestone party to fly from Akron. Members of the party went on another inspection tour, similar to the one taken the day before by other writers and editors and several officials of the plant here.

After allowing the press to have the first inspection, the Firestone

Company showed off its new gum-dipping operation to the general public over 150 television stations on December 30.

A camera crew visited the plant several weeks ago and made pictures for the television newsreel. With stories and pictures appearing at the same time in newspapers across the country, the Firestone Company obtained blanket coverage of one of its most significant news stories.

Only a portion of the nylon woven in the plant here is gum dipped at present. Mr. Mercer has announced that Firestone expects to begin treating the rayon cord at a later date.

Firestone officials say that the gum-dipping plant will enable the Company to capture more than its present 20 per cent of the tire market.

Explaining the operations here, President Lee R. Jackson of the Firestone Company says:

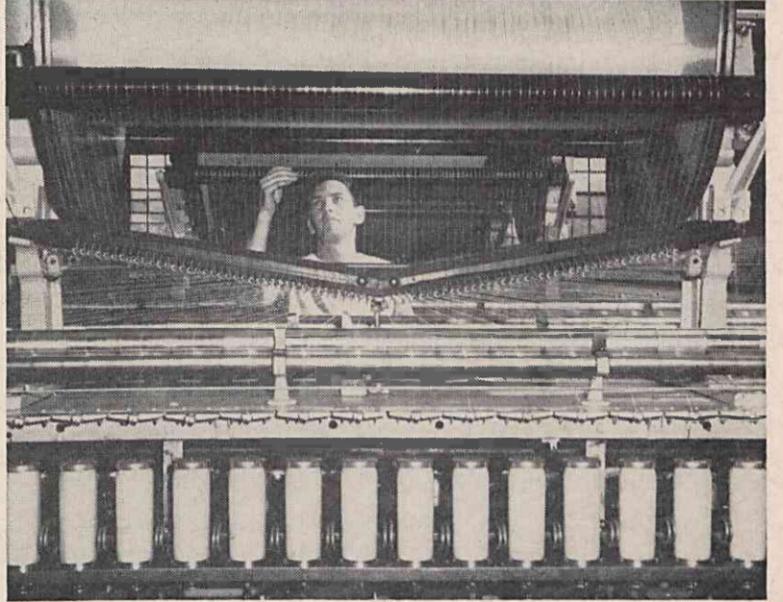
"The new tire cord, either of rayon or nylon, which we are now producing in our textile plant at Gastonia, and using in all of our tire factories, enables us to make tires that are safer, stronger and will run longer." The new process

is considered by tire engineers to be the most important advancement in tire-cord engineering since the introduction of the original gum-dipping process by our company many years ago.

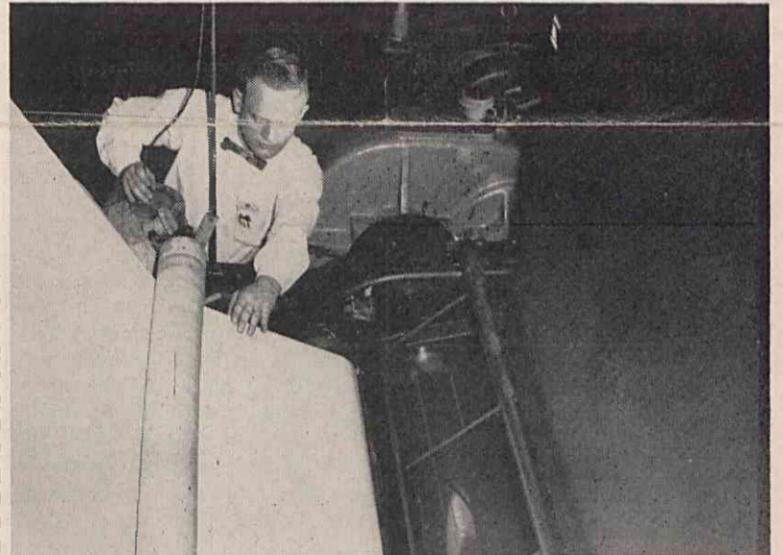
"The great improvement this new process cord has on tire performance was proved in the 500-mile Indianapolis Race last May when the nation's top drivers used it and gave these tires major credit for the safety and new speed records established. This new equipment now enables us to mass produce this cord for use in our complete line of rayon and nylon tires."

The gum-dipping process, impregnating the filaments of the tire cord with chemicals and liquid rubber, giving firm adhesion between the plies and the tread, was introduced as an exclusive process by Firestone in 1920 when only cotton cords were used. The introduction of the synthetic fiber cords, rayon and nylon presented a new problem for the Company's engineers because the cords expanded or "grew" when they became hot from fast driving. They developed a way to take the stretch

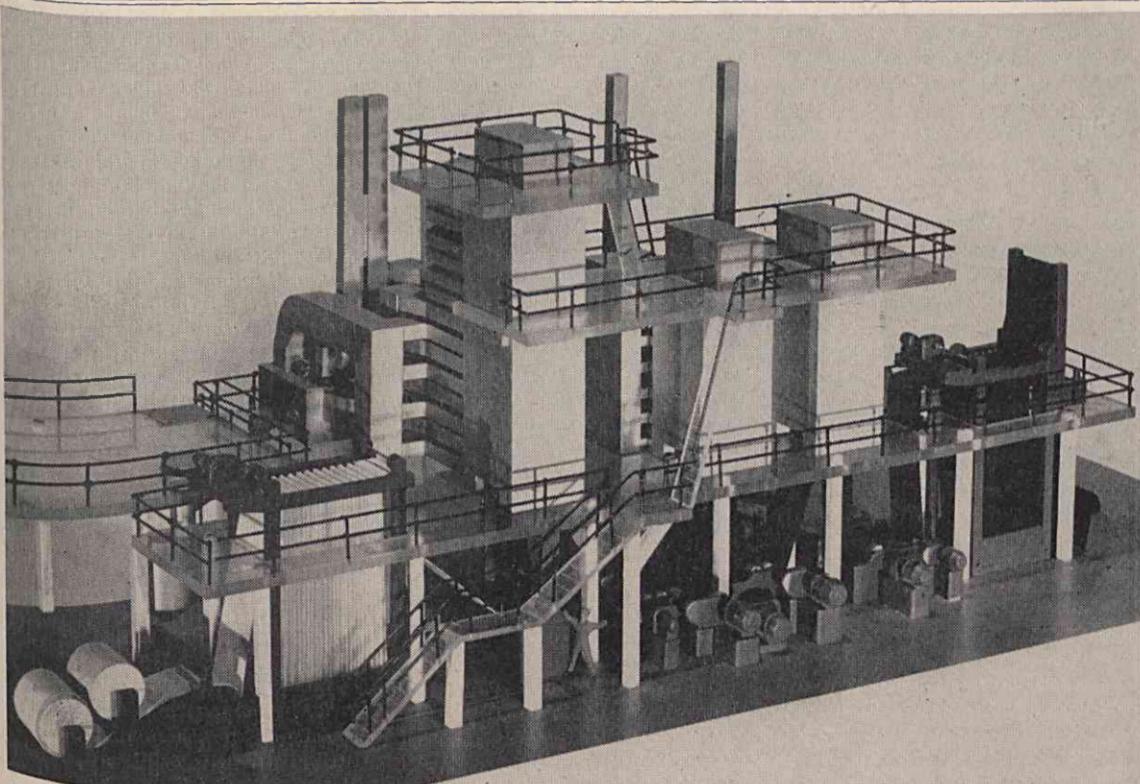
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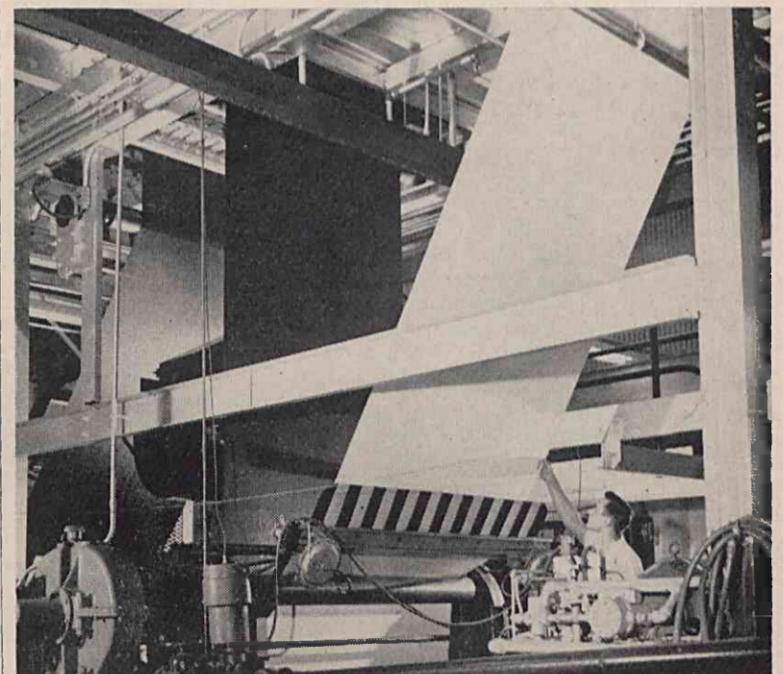
Charles Tanner checks the ply twisting operation, an early step in the preparation of tire fabric for the new gum-dipping and tensioning unit. Huge "beams" usually containing 160 ends of nylon or rayon filaments, are received from suppliers and twisted automatically into yarns, or cords. The cords are then woven on textile looms into sheets of fabric.



Operator Delbert Heafka checks the fabric as it passes through the gum-dipping section of the unit, before going through the high-temperature heat-treating towers and series of tension rolls.



This is a model of the new electronically controlled safety tension gum-dipping unit at Firestone Textiles, which represents the most important advancement in tire cord engineering. A factory in itself, the unit at Gastonia contains a chemical mixing section, a giant gas-fired, multiple heat-treating towers, and bank after bank of huge, individually powered tension rolls. Specially designed and built by Firestone, it is the first cord-treating factory of its kind in the world.



In another scene in the gum-dipping operation, Harold Hovis inspects the fabric as it enters the gum-dipping unit, later to be passed through high-temperature heat-treating towers and several series of tension rolls.