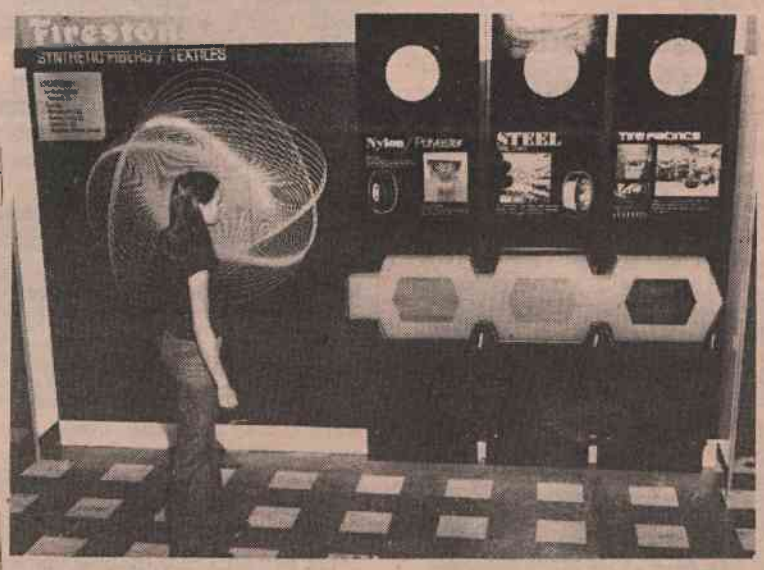
Firestone
Fibers & Textiles Company

NEWS

June, 1982

Gastonia, North Carolina
Bennettsville, South Carolina • Bowling Green, Kentucky • Hopewell, Virginia



Jane Lynn, respooler operator in TC Twisting, with the fibers/ textiles display.

Firestone Continues To Supply Films

For the 9th consecutive year, Firestone's Gastonia plant has supplied monthly educational films during the school year to area junior/senior public and private high schools.

Films during the year just ended dealt with robotics, new developments in medicine, the Federal Reserve System, China, presidential power and communication, drought and world hunger, and the information revolution.

"We're glad to have brought another year of these instructional films to the local schools, and we hope they gave students a wider view of the world and help them in their studies," said Ronald E. Noble, Fibers/Textiles division president.

Each year the films-when not in use by schools-may be borrowed from the local school system for showing to community groups. The new (1982-83) series will begin in September.

Tire Reinforcements On Display

"Tire reinforcements developed by Firestone" is theme of a display in the Gastonia plant main entrance, in place since April. The 8 x 10 foot panel was produced in Akron and exhibited several months in the corporate headquarters. D.N. Lewis, manager of Gastonia Process & Product Development, arranged to bring the display to Gastonia, where it will remain indefinitely.

Energy And Tires

It takes 20 percent less energy through use of oil to make a typical steel-belted radial tire today than what was needed to do the same thing in 1976.

Firestone engineers who develop tires say it takes 10 gallons of oil today to make the average-size P 185/75R14 steel-belted radial passenger-car tire. It took 12½ gallons to make an FR78-14 radial 6 years ago.

The company attributes the cut in energy use to the automotive downsizing requirements in recent years: to continuing efforts of the tire companies to reduce use of oil-derived materials and to consume less energy in manufacturing processes.

Oil is needed to make raw materials for tire components such as fibers, synthetic rubber, carbon black and chemicals. Oil is also the main energy source for suppliers who make the products furnished to tire plants, and the energy which tire plants use to put the materials together in building the tires.

•Comparative reducation of oil usage to make typical steel-belted radial passenger-car-tires, 1976-1981:

	1976	1981
Steel Wire	2 qts. for 3 lbs.	1½ qts. for 2½ lbs.
Tire Cord	3 qts. for 1 lb.	2½ qts. for ¾ lb.
Carbon Black	2½ gals. for 7½ lbs.	2 gals. for 6 lbs.
Rubber	4½ gals. for 14½ lbs.	3½ gals. for 11½ lbs.
Chemicals, Oil	3 qts. for 4½ lbs.	2 qts. for 3½ lbs.
Energy to Make Tire	3½ gals.	3 gals.
Total Oil Usage	12½ gals.	10 gals.

Firestone 721 Metrix Employee Ownership Plan

All active and retired employees of the Firestone Fibers and Textiles Company are eligible to participate in a Firestone 721 Metrix Employee Ownership Plan. Through July 31, 1982, employees receiving certificates may purchase one (1) set of four or five 721 Metrix tires for their personal use. The tires are to be balanced and mounted with new valves by the delivering store. The certificate will show the employee's name and social security number.

Conditions under which employees may purchase these tires are stated on the certificate, and must be followed.

If you purchase tires under the ownership plan, you are entitled to the $10.00 per tire rebate. Just bring your sales slip to the personnel office so it can be processed.

Did You?

Did you have to do someone else's work today? Did someone have to do yours? Or did it simply go undone? When a person takes an unexcused day off, he or she:

•Cuts down on productivity, thus creating extra costs of operation and causing other losses to employee and company.

•Threatens job security in different ways. One of these: Causing the company to be at an unfair advantage in competition with other manufacturers of the same products.

New Suspension System Product Of Firestone

A new type of suspension system that promises to improve the ride of small cars, vans and light trucks, is a Firestone development. The suspension is a rubber spring which Firestone engineer Gerald L. Marsh invented. Because it provides a smooth, comfortable ride no matter what the load conditions, the company named the spring the "Marsh Mellow."

The variable-rate spring is a black, rubber cylinder with a hollow center. The core of the spring is solid rubber wrapped with and bonded to multiple plies of nylon tire cord.

The nylon fabric is being produced at the Gastonia plant, treated at Bowling Green and shipped to Noblesville for building into the Marsh Mellow.

Like bias-ply construction, the cord is placed in bias angles to produce specific ride characteristics. A bonded cover layer of abrasion and weather-resistant rubber protects the cords.

Sixty Two Years Ago-Process Began

•More than 62 years ago the Firestone company perfected a method of insulating tire cords against internal heat build-up of rolling tires. It was called a "Gum-Dipping" process. In the 1920s and into the 1930s, the cord was cotton-the "upland" kind considered of highest quality.

The technique and method of insulating tire cord and fabric has evolved into what we know today as "treating"; occasionally by an older term "plastic-dipping."

Since the mid-1950s, the operation has been done in electronically-controlled, heat-setting equipment. Firestone was a pioneer in treating, a great advance in the tire industry.

Fabric-treating not only insulates against heat in tire use, but imparts other qualities to tires. It improves strength, controls stretch, adds flexibility, helps toward smoother travel and easier driving.

Firestone and its Gastonia plant was the "world's first" when the original electronically-operated, gas-fired "dip" unit began service in 1955. In ensuing years, two more units went into service at the same location. Newest is No. 8 unit on the site of the old open pond of "years ago." Firestone also has fabric-treating facilities at Bowling Green, Ky. (2 units), at Hamilton, Ontario, Canada; and others outside North America.

Use And Service

Use and service usually bring wear and tear–a fact to be reckoned with in so many areas of life. An example–auto tires. In their manufacture, the best materials and finest workmanship are basic ingredients toward a tire's good performance, safety and extended service. It's all in the customer's "money's worth."

But a tire's extended life and safe, satisfactory performance rest greatly upon sensible care. One good practice: Frequent, careful inspection, maintenance and tire rotation, especially with radials.

Firestone tires engineers say that uneven tread wear could be caused by one or more of several things, such as amount of air in the tires, condition of the vehicle's brakes and shock absorbers, wheel alignment and vehicle load.