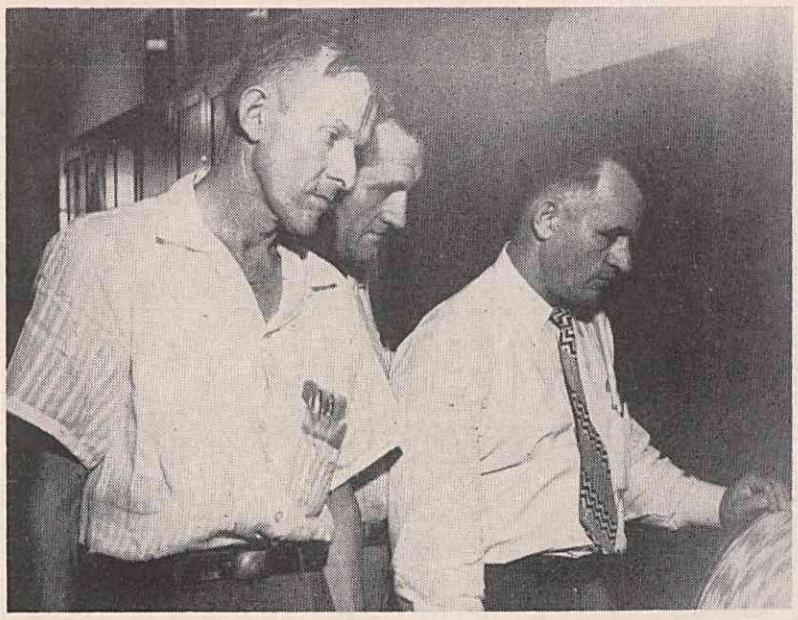
Machine Operator Vital To Quality Control

People who buy manufactured products have the privilege of choice. And people demand top quality. This is true of the textile industry, and as an example, today's demand for greater uniformity in cotton yarns makes it necessary that manufacturers have exact methods of testing their products at each step in processing.

IT IS EASY to understand the importance of testing in its influence on yarn uniformity. But testing is naturally limited because it is physically impossible to check every pound of yarn that is made. We must depend more and more on the performance of machinery, the efficiency of the operators, the consistency of the materials used, in order to insure the production of yarns and fabrics of highest quality.

Here at Firestone the finest and most efficient tools obtainable are used in the laboratory. With this testing equipment we can determine just what qualities there are in the product of any given operation. Most important, we can detect any irregularities or flaws in the product.

WE KEEP a close control on quality, all the way from the bale of cotton as it enters the manufacturing process, to the finished yarn or fabric. Raw cotton stock is tested for color, characteristic, content of moisture, length of fiber, and amount of foreign matter. If cotton fails to meet the standard, we reject it; if it is approved, we process it and keep a rigid control on the weight and evenness of the picker laps, card and drawing sliver and roving.



OBSERVE YARN DEFECT—Spinning Overseer Sam Guffey points out to Card Department Supervisor A. A. Gaddis and Quality Control Inspector Claude Stewart a very pronounced pattern unevenness in cotton yarn. This defect was made on a spinning frame in which a crooked roll was intentionally placed to create this pattern effect. While defects of this nature are normally caused by mechanical failures, they can be more readily detected by the machine operator than by routine laboratory testing of this product.

The amount of waste removed, cleanliness of cotton, and the general appearance of the product are all closely checked.

In the spinning operation the finished yarn is tested for strength, twist and evenness. Our electronic testing equipment such as the Varimeter and the Uster tester has partially eliminated the human element method of testing.

TESTING MACHINES are good, but we must not forget that employees on the job contribute much toward quality control. In our cotton spinning room during a one-hour period there are approximately 1500 ends down to be pieced up, 12,500 bobbins of yarn to be doffed, 1200 doffing ends to be pieced up, 1800 bobbins of roving to be creeled. These and numerous other tasks which, if performed carelessly, can contribute to poor quality of yarn. For this reason, much of the responsibility for making a good product lies in the hands of the machine operator.

HOW DOES the operator come into the picture of a quality product? He can take care in performing his tasks, and beyond that, can point out to the supervisor all deficiencies in the machine. These may, for example, take the form of worn travelers, bent rollers, worn guides, off-center spindles, too much vibration in the frame, and lack of moisture in the air.

Boehler With Company 15 Years

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William Boehler, Weaving Overseer at Firestone Textiles during 1950 - 1951, was recently honored in New York, upon his completion of 15 years service with the Company.

He is now Textile Sales Engineer in the Velon Yarn Division of the Firestone Plastics Company, and is with the New York Sales Office.

Here Stuart G. Keiller, (left) manager of the Velon Yarn Division of the Firestone Plastics Company, hands Boehler a 15-year gold pin.

Rubber Industry

(Begins on page 1)

facilities which it purchased recently from the Government, he pointed out. "Through research in the synthetic field, new types of rubber will be created and new uses will be found for those already in existence.

"The era of the tubeless tire has arrived. It has been adopted as standard equipment for new cars and can be applied for replacement to present wheels and rims to cars now in service. During the year the adoption of tubeless truck tires for general use is regarded as highly possible."

Company Leads In Rubber Production

The Firestone Company has become the world's largest producer of rubber. This fact was revealed recently by Harvey S. Firestone, Jr., Company Chairman.

"Record-high production at two synthetic rubber plants, purchased recently by Firestone from the Government, and at the Company's extensive natural rubber plantations in Liberia, West Africa, amounts to more than 1,000,000 pounds a day," Mr. Firestone stated.

"With the purchase of the synthetic rubber plants at Lake Charles, La., and Akron, Ohio, our Company took a significant step toward realization of the policy advocated by my father thirty years ago, that 'Americans Should Produce Their Own Rubber.' Our Company now is producing rubber at a rate almost equal to the requirements of our factories throughout the world. In addition, we are supplying 286 small businesses and manufacturers with rubber."

AMERICAN INDUSTRY now controls about 40 per cent of the world's rubber producing capacity. Mr. Firestone pointed out that this fact has special meaning when one remembers that at the time of the Pearl Harbor incident, 95 per cent of the rubber used in the United States had to be imported from the Far East.

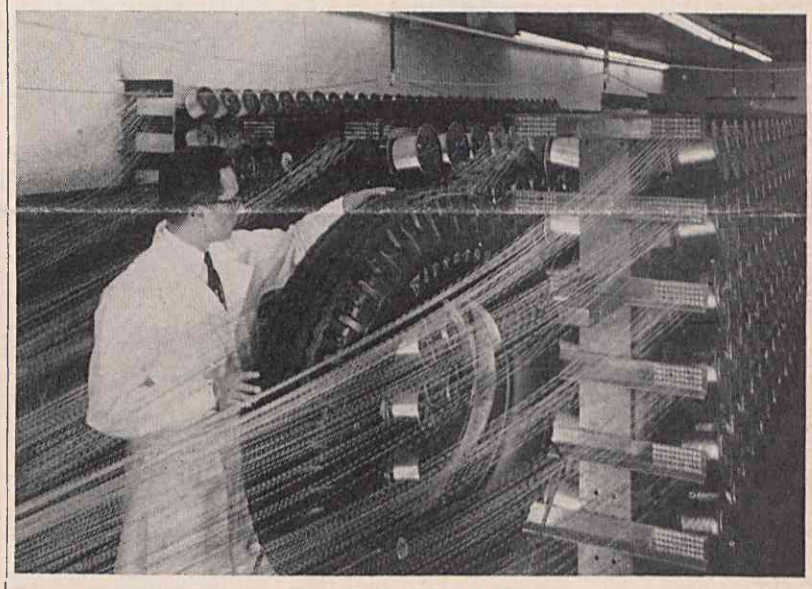
The Company is spending $1,200,000 to increase production facilities at Firestone's two synthetic rubber plants. During the next few years further expansion will be made.

Producing areas of Firestone's plantations in Liberia are being increased each year with new plantings and older sections are being replanted with higher yielding trees.

"As the world's largest producer of rubber, and with our intensive research program, we will be able to supply our own factories with constantly improved types of rubber. As a result, Firestone will provide even better quality tires and other rubber products for its customers," said Mr. Firestone.

TINY STRANDS OF STEEL

Wire Cord Bus, Truck Tires Add To Highway Safety



CORDS OF HIGH-TENSILE STEEL WIRE, only slightly thicker than human hairs, are reeled off these spools, then precisely spaced before entering a calendering machine which coats them with rubber. Each of the four plies in a Firestone wire cord tire contains 728 cords. The wire is coated with brass so that rubber will stick to it.

Thirteen years' work in engineering and producing truck and bus tires that are built with steel wire cords, instead of the rayon or nylon cords used in most tires, has resulted in one of the rubber industry's greatest contributions to highway safety, Raymond C. Firestone, Executive Vice-President, has announced.

HIGH-SPEED bus and truck tires that are manufactured with thousands of tiny strands of steel wire embedded in rubber have proved to be the safest and strongest pneumatic tires ever built. Some users have reported as high as 300,000 miles of service the original treads, Mr. Firestone said.

Firestone, the first company in the United States to make tires of this type, manufactured its 100,000th wire cord tire during May. In billions of miles of service not one ever has had a blowout, Mr. Firestone revealed.

THE COMPANY, he said, has invested well over a million dollars in research since 1943 on development work to make the wire cord tire the safest tire that can be used for truck and bus transportation.

"The achievement we have made with wire cord tires is incalculable because it is measured in lives of men, women and children that have been saved," Mr. Firestone said.

Sudden tire failures on high-speed, intercity buses and trucks frequently result in serious accidents. The hazard from such mishaps is increasing with the larger buses and trucks and greater highway speeds. Danger from such accidents is minimized by the use of wire cord tires.

"Our Company and major bus lines have 13 years' experience to prove that there is no danger of a wire cord tire blowing out," Mr. Firestone said.

He noted that bus and truck operators especially favor wire cord tires for use particularly on the front wheels of their vehicles and that in hot weather areas many

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OF INTEREST TO WOMEN

Correct Use Of Color Works Magic In Home

You will be pleasantly surprised at the change the skilful use of color in the home will make. Often using color well in the home means using it boldly. Try the bright shades in materials and finishes that can be replaced easily. Make use of lemon yellow, kelly green, violet, bright blue, orange or another strong shade for the pillows, lamp shades, or on a small wall area of a room.

It is advisable to use plenty of one shade of color. To use about equal proportions of two or three colors in a room many produce an unpleasing effect. Instead, have a lot of the basic share, less of the second and hold down the third to 10 or 15 per cent

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Let your color choice in the living room depend on the mood you want in that room. Warm, lively shades are suitable for an active family. But the couple that uses the room mostly for relaxation will be happier with quiet, restful shades.

For bath and kitchens, choose clear colors in such materials as the tile, where enduring finishes are required.

It is wise to let each member of the family express his own preferences in his bedroom. A soft color encourages sleep. Children might want some bright shade, but this should not be overdone.

The bathroom is a small place and lends itself to only one color or shade. With many home makers, gray and white for tilework are favorite colors, since almost all colors combine well with either of these.

The entrance hall and hallway of your house give opportunity for bold use of color. Since no one stays long in such spaces, a bright color or a lively pattern will not become tiring.