the better way

From items as little as thread guides for twister frames to projects as big as a new design of a fabric-treating unit. And in between, a shuttleless loom and investigations on an in-line computer.

More than 50 separate projects. That's the current scope of the Process & Product Development Department for Firestone Textiles Company, with headquarters at Gastonia.

P & PD is one of the newer departments of the textiles division. A manager, six engineers, five technicians and a secretary comprise the P & PD work force.

David N. Lewis, who came to Gastonia in 1970 from the Firestone Hopewell, Va., operation, is manager of the department. Engineers are E. H. (Chip) Hurst, Bernie Farmer, Beryl Parks, Roy Bird, Hal Hayes and Dennis Johnson.

Engineers hold educational degrees that cover the diverse fields of textile engineering, chemical engineering and engineering physics.

Technicians are Earl Cunningham, Ray Kaylor, William Bradshaw, Robert Metcalf and Bill Calhoun. The department office secretary is Nova (Mrs. Randy)

People in the P & PD department are charged with responsibility of finding ways to make our current products better at lower costs, and developing new products that will add to our profits and increase our production requirements.

The current more than 50 separate projects range from standard tire-cord fabrics with new dips and treatments for use in vehicle fuel cells, to new passenger restraint fabrics for automobiles, using new yarns and looms.

In the twisting area, projects cover new types of rings and spindles for our present frames, also testing and evaluation of new experimental frames from nine different suppliers, with an eye to replacing the existing frames.

P & PD is developing steelcord fabric, a product of potentially high volume. A lowhumidity weaving room was constructed near the cotton opening area at Gastonia. Here steel cord is woven in an atmosphere which has "licked" the rust problem.

A recent display in the Gastonia plant main entrance featured spools of steel cord, finished fabric and tire sections showing the metal belting in combination with body plies of polyester.

STEEL FABRIC, such as woven at Gastonia, goes into the Firestone Steel Belt 500 which Firestone recently introduced as available in sizes to fit most standard-size passenger cars.

The company was the first U. S. tiremaker to announce use of steel belts in passenger-car



tires (Steel Belt 60), brought out a year ago for high-performance cars. Now, the tire in general production is the Firestone Steel Belt 500.

P & PD projects in tire cord and chafer weaving seek to improve fabric quality through changes of existing equipment and procedures, and evaluation of new equipment.

These projects are dealing with modification of existing compressor roll stands, evaluation of new looms, design of an air-thrown shuttle, and doing away with painting splicing headers in TC Weaving.

A shuttleless loom is being evaluated for weaving tire cord and chafer fabrics.

PROJECTS in fabric treating deal with quality improvements.

SHINING TUNNEL &
SWINGING ON A WIRE

• Fabric of steel cord (here a closeup of warp spools) is being produced in a specially-designed weaveroom at Gastonia. Strength of finely-drawn wire in New Firestone Steel Belt 500 is demonstrated (right) by Betty Mittiga, Secretary in

Ways to refine and advance heat and tension control and improve the rollup of finished fabric are under study.

Also "in the works" is the design of a radically-new dip application system.

the company's Akron offices.

The wire, about size of 842-ply nylon cord here supports 144 pounds (119 for Betty and 25 for tire). Each of the Steel Belt 500 tires has 805 feet of the wire, composing the belts which encircle tire under tread, giving strength and resistance to punctures

The department is investigating how an in-line computer could be installed "to advantage."

Process & Product Development is searching for The Better Way

BOWLING King VP Of UGF

The 1972 vice president of United Givers Fund of Bowling Green and Warren County (Ky.) is Ralph King, plant manager of Firestone Textiles Company. King, who in December was also re-elected to a three-year term on the UGF board of directors, will automatically become UGF president for 1973.

On the board of directors, King had completed the unfinished three-year term of Francis B. Galligan, who as plant manager transferred from Bowling Green to Gastonia where he is division factories manager.

IN THE 1971 UGF funding campaign, King and Richard Webber (Firestone manager of industrial relations) served in the corporate division. That division, reporting almost \$97,000 in contributions from industry

and employees, was especially commended for its part toward the drive's success—reporting pledges of more than \$3,000 beyond the goal of \$150,000.

Firestone was the first major business to report in the campaign. Final total was \$16,064.56.

United Givers Fund of Bowling Green and Warren County allocates financial help toward operation of 11 health, social service and character-building agencies in the city and county.

On Toward 2,000,000

Firestone's Bowling Green plant is well along toward the second million-manhours record of operation without a lost-time injury.

Division Factories Manager Francis B. Galligan presented an achievement award certificate to representative group of employees in late December.

Commemorating the safety milestone of 1,000,000 manhours, employees each received a ballpoint pen along with paychecks, Dec. 31.

DR. MCKNIGHT At Howard

Dr. Arnold Woodrow Mc-Knight is coordinator of Professional Theory Courses and director of research in the Department of Physical Education at Howard University, Washington, D. C. For the past five years he served as head baseball coach and assistant football coach at Howard.

McKnight, son of Mr. and Mrs. Woodrow McKnight of Gastonia, was awarded the doctorate degree in higher education from American University of Washington in late 1971.

Besides his duties on the Howard faculty, Dr. McKnight is part-time professor of psychology at Washington Technical Institute, and lecturer at American University.

He has written a book, "The Psychology of Weight Training Programs", to be published in May.

Dr. McKnight's father works in TC Twisting at Firestone, Gastonia.

The educator is a graduate of Highland High School of Gastonia, where he starred in football and received a full athletic scholarship to North Carolina A & T University. He was named most valuable player in the first East-West Shrine Bowl Game in Durham in 1956.

ATTENDING Winston-Salem State University, he was named to "Who's Who in American



Colleges and Universities," received the NCAA All-American 'Scholarship award while playing football and recording a 3.3 academic grade-point average.

Graduated from Winston-Salem State U in 1964 with a B.S. degree in physical education, he went on to earn a master's degree in physical education at North Carolina Central University, 1965. At NCCU Mc-Knight was named the top graduate student.

Dr. McKnight is married to the former Willie Mae Johnson of Washington, D. C. They have a daughter, Paula.

Courses From page 1

Speed Reading • Barbara Galloway, Christine Clark, Delores Fritton, Martha Kendrick, Betty Sawyer, Marguerite Styers, Robert Taylor, Main Office; Donald Hedges, Traffic; Nova Lowe, Process-Development; Jeanette Brock, Freida Price, Production (office).

Motivating People • Cecil Heffner, TC Twisting.

Zero Plus Two (Management & Personnel) • George Jackson, Arthur Gordon, Warehouse.

Those who studied Employee Interviewing & Evaluating took the course at Belmont Abbey College in five weekly evening sessions, for 10-hour credit. The other courses, in weekly evening sessions for five weeks, were completed at Gaston College. They, too, earned 10-hour credit.

• Gastonia's First Baptist Church Child Development Center offers educational day care for ages 3-5 years. For details, contact Miss Aileen Shifflett, director. Telephone 865-9419.

Firestone NEWS

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GASTONIA

Claude C. Callaway, Editor

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Plant Offices REPORTERS Warehouses

Industrial Relations—Dale Callahan Main Office—Bea McCarter Mechanical Dept.—Rosie Francum Quality Control—Louella Queen, Lelia

Twisting (synthetics) — Elease Cole, Katie Elkins Warp Preparation—Elmina Bradshaw, Nell Bolick Warehouse—Harold Robinson, Israel Good

Weaving (cotton)—Ruth Veitch

BENNETTSVILLE PLANT Faye Shankle, Mary H. Oliver, Sylvia Lockamy, Louise S. Preston—Report-

BOWLING GREEN
Dorothy Kingrey, Mary Snell, Mary
Bryant, Brenda Loafman, Teresa
Leonard