MONTHLY HIGHLIGHT REPORT - AUGUST 1970 SECRET - COMPANY CONFIDENTIAL
RESEARCH & DEVELOPMENT DEPARTMENT
INDUSTRIAL PRODUCTS DIVISION

PLAINTIFF'S
EXHIBIT
GF-1572

I. INDUSTRIAL PRODUCTS (South Bound Brook)

A. Felts and Papers

The first production run of asbestos flooring felt using GAF carboxylated latex during the entire run was made at Erie. Continual reuse of all white water was attempted but a minor drop in hot tensile strength after many hours operation led production personnel to purge the water system. The hot tensile strength improved after this but at the same time the production speed was lowered. The rate of speed prior to this was faster than ever before and there is some question about whether the speed of formation rather than the water was more influential on the hot tensile strength of the sheet. This will be resolved in the next run.

A priority program is underway to develop an improved 10# asbestos saturating paper for Bird & Son. Laboratory analysis to date has not shown any significant difference between the Nicolet sheet, which they are now purchasing, and the regular Erie 10# saturating paper. Bird, however, claims they get higher production speeds with the competitive product and additional analysis is required to verify whether the Nicolet paper has special characteristics.

B. Thermal Insulation

A second plant batch of asbestos-free Calsilite was successfully made and physical properties duplicated the previous run. Specific sizes of pipe covering and block were produced to fit test installations for evaluation of high temperature, field performance. Additional laboratory work has shown that a number of cellulosic fibers are as effective as bleached sulfate. Interesting results have also been obtained with an alkali-resistant glass and rock wool fiber.

C. Automotive

Molded Mastic Sound-Deadening Membrane

Ford has expressed a renewed interest to work with us on molded dash liners. Samples of flat sheet stock of a moldable formulation have been submitted to their laboratory for preliminary sound testing. The vacuum-forming mold for the Chevrolet dash should be completed in time for trial runs planned during the first half of September.

Very encouraging molding results have been obtained using slush molding techniques for sound-deadening composites. Laboratory-produced slush molded samples of a speaker housing were shown to Ford engineers and they were very impressed with the quality of the formation. R&D and Engineering are also continuing to pursue alternate forming methods and favorable initial results were obtained by compression molding of certain low profile shapes.

Non-Staining Mastic

Because of conflicting laboratory results between GAF and Chrysler laboratories, an earlier lower-cost, non-staining formulation has been resubmitted for their evaluation. Samples of the accepted competitive product have been extracted and the components sent to the Easton laboratory for analysis. Formulations employing the anti-stain additive claimed to be in the Globe product did not perform satisfactorily.

II. MINERAL PRODUCTS (Hagerstown)

A. Raw Materials and New Formulations

G-115 and K-116 grey-green and K-210 pastel red coatings were reformulated to improve processing uniformity. Lower costs were also achieved amounting to $ .30 per ton for G-115 and $1.00 per ton for K-210. Weathering data on the plant trial material will be completed before releasing these formulations to production.

A plant test of Finntitan RD titanium dioxide showed this lower-cost pigment was equivalent to the Cabot standard. A 4% savings is involved.

B. New Products

Fire Retardant Filler

Lower-cost fire retardant prill formulations were used for fabrication of 250# per square strip shingles on the South Bound Brook pilot unit. Twenty pounds of prill per 100 square feet were distributed as an interlayer between a double application of asphalt face coating. Fire tests on the shingles approached the passing criteria for the Underwriters' Laboratories Class "A" flame spread rating. Slight modifications have been made to the formulation and additional shingles will be produced and tested early in September. The prill cost per square of shingles is in the neighborhood of $1.65. The advantages of this type system are that "overlay" or double coating pan roofing lines may be able to produce Class "A" shingles without high capital expenditure. Lower weight fire resistant products can also be made more practically than by current systems employed.

Oil Scavenger Silicate Foam

Small scale trials conducted at Charmian's settling pond have confirmed that organophilic, hydrophobic silicate foam particles can initiate burning of crude oil spills on water. A larger slick test, employing approximately five to ten gallons of crude oil, is scheduled for September 1. 75% coverage of the oil surface is adequate to achieve ignition and consumption of the crude.