

MONTHLY HIGHLIGHT REPORT - OCTOBER 1970
RESEARCH & DEVELOPMENT DEPARTMENT
INDUSTRIAL PRODUCTS DIVISION

SECRET - COMPANY CONFIDENTIAL

PLAINTIFF'S
EXHIBIT
GF-1574

I. INDUSTRIAL PRODUCTS (South Bound Brook)

A. Felts and Papers

Saturating Paper

Several rolls of 10# asbestos saturating paper were run at the Bird, Perth Amboy plant. They ran faster than the competitive Nicolet felt and were satisfactory in all respects. Marketing will now attempt to regain this 10# paper business.

A plant trial of an improved asbestos paper for use in the production of #35 coated-asbestos base sheet was not entirely successful. Porosity was low and made adequate saturation difficult. A repeat run with a modified furnish to overcome the difficulty is scheduled.

Flooring Felt

Flooring felt trim and dry scrap were processed at suppliers' facilities by dry grinding and an attrition pulper. Both appear capable of producing material that is reuseable in the furnish and test runs of each are planned during a flooring felt run at Erie.

Gasketing

Victor Gasket's evaluation of the latest trial run of acrylonitrile sheet (GN-706) reported the need for improvement in "stress relaxation" characteristics. This is a new property which has not been mentioned previously and they have suggested that an R&D representative visit them to discuss the results of their tests.

B. AUTOMOTIVE

A very favorable report was received from Ford project engineers responsible for Lincoln and T-Bird car lines after their tests on GAF molded mastic wheelhouse covers. Sound improvement over the current system was greatly improved and more than expected. These parts were produced by slush casting in silicone rubber molds. Sample pieces were 12" x 36" and consist of mastic only. Additional test units have been sent to Ford which consist of mastic and pre-cut flat Amberlite which is formed to the mastic shape prior to cooling. Ford has asked if GAF will be prepared to furnish these molded insulation parts for their 1972 Lincoln and T-Bird cars. The total units (right and left sides) is about 140,000 per year. This presents an excellent opportunity to learn more about molding techniques and development of the process. A preliminary layout and cost for a semi-commercial or pilot line to slush mold parts in Teflon-coated aluminum molds was procured.

MICH08500

Type 13 Asphalt

Because of a potential shortage of catalytically-blown asphalt required for automotive mastic, an investigation of other asphalts and additives to regular bitumens which would provide the required properties was started. It appears now, however, that Purchasing has been able to obtain sufficient commitments for Type 13 asphalt to meet 1971 requirements.

II. MINERAL PRODUCTS (Hagerstown)A. RAW MATERIALS AND NEW FORMULATIONS

The reformulated 202 red coating was successfully run at the Charmian plant and a savings of \$1.00 per ton is projected. This confirms a similar test at Kremlin and trials at Annapolis and Bound Brook are now scheduled.

Test runs of B-340 black, made by the high rather than the low temperature process at Bound Brook, yielded a satisfactory product. While more expensive, this should minimize quality and color fluctuation. Similar work with the B-552 brown did not achieve the proper color match and a second test is planned after laboratory pigment reformulation work. Test shingles surfaced with the new high temperature B-340 that had been treated with the experimental stearic acid in oil mixture did not have as good wet adhesion to asphalt properties as the controls with silicone aftertreatment. Further work with this lower-cost modification is planned.

Kremlin runs of K-701 white using Hi-Sil 404 in the coating formulation were successful and this will achieve a slight cost savings.

Chemetron has been unable to produce the ultramarine blue standard and has offered an alternate which, fortunately, had been tested previously and undergone four years of weathering. The substitute is actually superior in color retention and it is planned to convert all plants to the new pigment as the current inventory is depleted by the end of this year.

B. NEW PRODUCTSInorganic Silicate Foam

Modification of the laboratory standard microwave oven has been completed to permit continuous processing of silicate foam. Previous work was done under static conditions and studies will now be made on processing with the thin multi-layer approach to build up to final thickness on a conveyor belt.

Oil Scavenger - Pollution Control

Pittsburgh Corning Corporation has offered cellulated borosilicate beads, approximately 1/8" - 1/4" in diameter, as an oil scavenger media. The "Sea Beads" sell for \$.80 per pound and require 100% coverage of the oil slick to achieve ignition. In laboratory tests