

PHILIP MORRIS
U.S.A.
INTER-OFFICE CORRESPONDENCE
RICHMOND, VIRGINIA

RECEIVED

JUN 2 1975

H. WAKEHAM

To: Mr. F. E. Resnik Date: June 3, 1975
From: T. S. Lazzlo
Subject: Visit to Benson & Hedges - Canada

On May 27, the writer visited the Brampton, Ontario plant of Benson & Hedges, Canada for technical discussions. A quick tour through the plant in the morning brought to the fore two interesting points. Due to the shortage of silo volume, the cut filler was stored in wooden boxes, somewhat smaller than the Richmond saratogas. At the suggestion of Mr. Jacques Mainville, large plastic bags, each holding 500 lbs. of tobacco and held on a metal tube frame, have been applied for storage. These units can be easily moved on their casters. In a later discussion with Louis Suwana, Quality Control Manager, it was learned, that contrary to expectations, the C.V. of the thus stored tobacco does not show a significant difference when compared with the pre-storage C.V. The RTD of cigarettes made from the bag stored tobacco, however, is significantly higher than the control suggesting greater bulk density. In reviewing the C.V. data, it was noted, that while there was no significant difference between the pre- and after-storage values, the differences were all unidirectional the plastic bag stored values being lower. It was suggested, therefore, to Mr. Suwana to increase the number of tests used in the statistical analysis.

The other item was the storage and shipping of lamina in cardboard boxes. It was suggested to Mr. Mainville to consider the use of polypropylene extruded corrugated sheets, put on the market recently in the United States. While these sheets are somewhat more expensive than paper, they are much

1000283848

Mr. F. E. Resnik

-2-

June 3, 1975

more sturdy and completely water, mildew, and insect proof. The lighter weight and possibility of multiple use are likely to compensate for the higher price. Source information and a sample will be forwarded to Mr. Mainville.

A technical meeting was held from 10:00 a.m. to 5:30 p.m. with the following participants:

John Pritchard - Vice President
Jacques Mainville - Manager, Industrial Engineering
Ralph Gile - Manager, R&D
R. D. South - Plant Manager
Keith Prosser - Assistant Plant Manager
Mark Kramer - Tool Designer
Tony Hama - Project Engineer
Ivan Kundler - Plant Engineer
Dick Raha - Plant Industrial Engineer
Louis Suwarna - Manager, Quality Control
Stan Winkle - Leaf Processing Foreman
Tibor Laszlo

A detailed presentation was made on the principle of microwave radiation and its interaction with tobacco constituents. The history of the filling power increase exploratory and pilot plant project with microwave at R&D was discussed and some of the preliminary results indicated, together with the expected economic significance of the process. The principle of the new microwave applicator was explained with its novel technique of feeding and removing particulate matter in a microwave cavity.

1000283849

June 3, 1975

without any energy loss. Photographs of a feeder system, capable of delivering 70% O.V. tobacco through a narrow chute, were shown.

During the lively discussions, it was stated by Messrs. Pritchard and Mainville, that the Montreal plant is short in drying capacity. New equipment will have to be installed in the near future. If by the use of microwave drying, a filling power increase can also be obtained, the likely higher capital cost may be justified. It was requested, therefore, that R&D use Canadian tobacco in the process development work on the new microwave applicator. The writer replied, that if Mr. Lloyd approves it, there would be no difficulty in using both United States and Canadian tobacco in the development work.

In the afternoon session of the meeting with the same participants, the moisture determination methods in general and the microwave "on the fly" (Acurex) and batch (oven) in particular were presented. The latter generated considerable interest: their need appears to be similar to that of all plants in this respect.

During all discussions, it was emphasized and mentioned repeatedly that none of the discussed analytical and processing methods have been fully developed and far less accepted as standards. Much more work remains to be done at R&D, to be submitted to Manufacturing for their review and evaluation before any of these can be considered for routine operations.

In a late meeting with Louis Suwarna, some fundamental visco-elastic properties of tobacco were discussed. It turned out

1000283850

Mr. F. E. Resnik

-4-

June 3, 1975

that they use their Instron in a locally developed firmness testing, not being familiar with the possibility of using a standard 15 cigarette holder on the Instron. Mr. Suwana was advised to contact Frank Lowman for obtaining the cigarette holder. (The writer informed Frank on his return to Richmond.)

During discussions on cutting technology, Keith Prosser told of tests carried out some time ago. Lamina at 13% moisture, without any additives (humectants or lubricants) was cut at 148° F with excellent results. At this temperature, the tobacco was sufficiently soft to prevent breakage but not tacky to cause "cheese" formation. The sample he showed appeared to be excellent. The implication of this finding is very wide: reduction in drying load, prevention of humectant loss in drying and filling power loss due to cheese formation and breakage.

Mr. Pritchard expressed his appreciation and great satisfaction with these discussions and requested more frequent visits. He was told, that with Mr. Lloyd's approval the writer would be very glad to repeat such a visit any time he desires.

cc: Dr. H. Wakeham ✓
Mr. W. Lloyd
Dr. W. Gannon
Mr. K. Burns
Mr. J. Osmaiov
Mr. T. Newman

Y.S. Janke

1000283851