

PROJECT TITLE : Reconstituted Tobacco II
PERIOD COVERED : January 24th - February 29th, 1980
WRITTEN BY : A. Robbiani

MONIQUE / RCB
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Production

During this month 39'400 kg of sheet were produced : a production record. With respect to the overall working hours this represents an increase of 16.7% on the January production of 31'400 kg. The increase of production was mainly due to :

- reduction of cleaning time
- reduction of start-up time on Monday due to storage of solution over the week-end
- better overall efficiency.

Slitter cutter (Ref. 1)

The results of the comparative test (COMAS cutter vs FTR prototype cutter) showed no significant differences in performance of the two machines. As the COMAS cutter needs more maintenance and generates more noise it will be replaced. The FTR Engineering department is in charge of the study (drawings, price, etc...).

LUWA Ventilation System (HVAC)

The exhaust air duct was modified by LUWA on January 26th. The reason for this modification was to dislocate the air outlet from the air intake duct. An additional suction system was installed underneath the Sandvik steel belt (return strand) on February 4th and 5th. As a result the conditions of the ambient air with respect to the ammonia content are in general acceptable, but there are still certain areas where ventilation should be increased. A suction hood on the transfer belt will be added between the two dryers.

Roll coater

After having changed the rubber roll of the roll coater on January 11th we noticed a substantial improvement of slurry application and of sheet aspect.

After dryer

Some heating elements in the after dryer "BAFAG" have already been replaced several times. These problems were discussed with engineers from BAFAG. They proposed to install improved elements which are able to support higher ambient air temperatures.

Pumps

We finally decided to replace the membrane pumps by Moyno pumps. This will eliminate the problems with pulsating flows and frequent pump maintenance. One Moyno pump has been running from November 9th, 1979, to our entire satisfaction.

Sandvik dryer

The FTR Engineering department (M. Regard) is carrying out different trials during production to better understand the overall performance of the Sandvik dryer (heat transfer, evaporation + air flow rates, etc...). The final objective of these studies is to try to increase the dryer capacity.

Dust stock situation, dust sieving

See monthly report, February 1980, Unit Operations II, N. Lüthi.

3.4% MONIQUE/RCB in MLF blend

The decision to use 3.4% MONIQUE/RCB in the FTR Marlboro blends as from January 23rd was made.

Project situation (Ref. 2)

A complete situation report was established by the project leader, F. Boichat, on January 18th. The project organization was redefined. The tasks were clearly distributed to different people.

Cost situation (Ref. 3)

A detailed product cost analysis was finished on January 28th. The objective was to compare projected product costs (8/77) with present costs. These are 25.6% higher than projected two years ago.

Application of NINO-products in MONIQUE/RCB
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Trial NINO/RCB 2

In this trial the stem part, representing 44% of the total feedstock blend, was replaced with washed NINO stems (Lot No. 7999) and the corresponding denitrated extract was added. Here is the summary of the analytical results (Ref. 4) :

a) Sheet

We notice an average thickness of 0.233 mm and a sheet weight of 149.6 g/m² at 13.2% O.V. (=129.9 g/m² dry weight). The current November production showed 0.186 mm resp. 138.4 g/m² at 13.5% O.V. (=119.7 g/m² dry weight). This difference is due to casting roll adjustments.

The free burning rate is 8.8%, the one of the November production was 12.8%.

This was expected due to the phosphate content of the denitrated, concentrated (33.5% TS) extract that contains approx. 110 g/l of PO₄.

The only objective of this trial was to determine the feasibility of the application of NINO products in Monique/RCB. Therefore no adjustments in additives to compensate for the phosphate were considered.

Phosphate in sheet NINO/RCB 2 : 7.3%

Phosphate in sheet of current production : 3.8%

b) Cigarettes (100% sheet)

A relatively low DPM value was noticed (12.9 mg/g versus 18.9 mg/g on normal production).

This was unexpected and we are trying to find an explanation. As some difficulties with the machine smoking of the cigarettes occurred due to poor combustion the results are doubtful. For the reasons mentioned above CO, NO and puff numbers could not be obtained.

Nitrate-nitrogen was 0.18% in the test sheet (0.25% in current production).

QC Onnens

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Lab installation

Some lab equipment was ordered : scales, ovens and alu boxes for tobacco samples.

Offers for the lab installation (furniture) were received from two different firms and are being studied.

Personnel

Two lab-technicians are foreseen. One is already working in the Monique/RCB lab, the second has still to be found.

References

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- 1) Memo from A. Robbiani : Rapport sur l'essai comparatif coupeuse pour feuille Monique/RCB entre la coupeuse COMAS et la coupeuse FTR prototype, February 20th, 1980.
- 2) Presentation Monique/RCB by F. Boichat, January 18th, 1980.
- 3) Projet Monique/RCB, coûts by F. Boichat, January 28th, 1980.
- 4) Résultats analytiques de l'essai RCB-NIMO No. 2 from L. Joseph to A. Robbiani, February 25th, 1980.

PROCESS DEVELOPMENT



A. Robbiani

March 4th, 1980
ARO/sde