FOSECO, INC.

INTER-COMPANY AND INTER-DEPARTMENTAL CORRESPONDENCE



TO: J. Williams
F.I.L.

FROM: D. J. Anderson

DATE: February 13, 1974

SUBJECT:

Dear John,

The general position over here has been influenced, of late, by the truck strike. Because of this, it has been impossible to ship finished products and the receipt of RM's at one point fell to zero. This necessitated a shutdown which came into force last Thursday.

The trucker's situation has since eased and it is expected that full production will commence in the next couple of days.

As a result of this, it is expected that a total of three or four day's production will be lost, which comes at a most inopportune time since the company's order book is currently running $600,000. ahead of last month. Obviously, the availability of 177A, Wollastonite and other RMs will be effected as outlined later.

Topics of interest discussed at the technical/production meeting were as follows:

MANUFACTURING CAPACITY

I outlined the position in my last letter and pointed out that pulping capacity was the limiting factor. There are, however, plans in the embryo stage which it is hoped will enable full advantage to be taken, of the 25% increase in oven throughput.

Currently pulping times are often set on paper containing recipes which are of the order of 17 to 20 minutes. The locked timers are located independently from the machines.

Arsen's EP-5465 requires only 4 minutes pulping time, but because of the foregoing, it is often pulped for 17 minutes. It is hoped that a system can be installed which will safeguard against unnecessary pulping times and enable production to be increased.

STANDARD RECIPES

It is hoped that the adoption of standard recipes will also markedly assist in a rise in productivity at the pulping stage. Arsen's ideas are as follows:

It is proposed that a standard powder mix recipe should be prepared, which will be the only material fed to the pulping platform.

The pulpers will alter only Seal-On, the X2782 and 177A to produce Profax 31 and Proflex recipes and it is hoped that the formulation will be suitable for Mt. Braddock.

DRYING RACKS

If pulping capacity were sufficient, it is likely that insufficient cool trays would be available. The idea of providing a cooler is to be investigated.

HOLDING TANK MODIFICATIONS

These are currently being incorporated to assist suspension and reduce precipitation.

P.F. RESIN 177A

Opinions have changed somewhat since February 1st; as a result of the large order book, and the consequent increase in production, there is likely to be an insufficient supply of 177A.

A crash program has, therefore, been initiated with the idea of reducing resin usage by 20%. Arsen, however, is of the opinion that because of plant wastage this figure, in reality, must approach 50%. He intends, therefore, to work on the EP-5452A recipe (I enclosed a copy two weeks ago). This recipe contains 1.2% of 177A, and he hopes to fully replace the starch with PVA X3578.

SEAL-ON RINGS, CONVENTIONAL

Arsen and Don hope to complete the development of a suitable asbestos-free Seal-On system for the K-4 machine, and at the same time increase throughput by 25%. Funnily enough the only asbestos free Seal-On recipe is DR-1580, which they will doubtless try if all else fails.

CONVERSION TO UF LIQUID

All recipes which demanded powdered UF have now been converted.

WOLLASTONITE

Currently 24% of production is operating with Wollastonite and as I previously mentioned, the mine will be unable to satisfy demand until April. However, Mike Wood informed me that he intends to send Arsen samples of a more granular material which is available in larger quantities.

ASBESTOS FREE

It has been shown that all MK III's will operate satisfactorily on asbestos free recipes. Three machines still need to be changed, e.g. MK IV's.

RECIPE MACHINE CONVERSION

Arsen Santighian, Geoff Fenton and Bill Fletcher will be putting their heads together to formulate a program for the conversion of machines to new recipes.

Other topics of interest aside from the meeting:

FERRUXES

XS1569 has been successfully field trialed.

SCRAP PROFAX

As I mentioned over the phone, some economies could be made if all scrap material was reclaimed. Currently, the position is as follows:

Stoved Scrap 2.5 to 7.5 U.S. Tons/day Total

Some of this material is removed from the site. Inc. pays for its removal.

Wet scrap is normally reclaimed if the quantity does not exceed 0.25 U.S. Tons/day. If this figure is exceeded, the material may be scrapped.

Arsen Santighian's scrap recipes work well and are as follows:

RM	%	
74C	4.63	
131D	55.53	
177A	1.20	
X1790	4.63	
X3562	27.77	
X3579	3.51	
X3580	0.14	
X3584	1.85	
X3588	0.74	
Green Scrap	11.20	when available
Dry ground Scrap	11.10	when available

Arsen has a complete scrap recipe which he complains is higher in volatiles and gives a dark brown product after stoving.

TRISKETT ROAD

It now seems unlikely that the R & D Department will be moving to Triskett Road because of the cost.

HOT BOX

In spite of the Italian report, I am still optimistic that we can have a fair crack at this process.

PROFAX 2000 SEAL-ON GASKETS

We have completed our initial 'system' work which was directed at determining such parameters as filler types, foam stability, fiber content, etc. During this process, we found that it is preferable to have a fully gauzed tool. This assists in the formation of strong tiles in the green state, especially at fiber levels above 2%. The use of this system has enabled us to reduce expansion problems and retain dimensions. Currently, we are using 2 to 4 percent of X2782 and 3 to 4 percent of mixed or single binders.

This week's work has been directed towards the incorporation of flexible binders or mixtures of rigid and flexible binders, in the light of last week's fairly successful work with the rigid system.

The work indicates that binder levels of around 4 percent are required and that rigid binders can, in some cases, be incorporated with advantage. It is noticeable that the flexible binder confers a degree of toughness to the rigid types.

We are obtaining suitable compressibility and hope to reduce the thickness to 3/4 inch by incorporating chicken wire. Our initial tests show that this gives a very strong product.

If we have a suitable flexible system by next weekend, we hope to scale things up a little and try producing a small full size ring. I don't know how long it will take to get the tooling but to date we have had everything very quickly.

ALTERNATIVE BINDERS

While talking to Mike Wood, I learned that core binders have conducted an extensive survey into starches worldwide. They have a wealth of information and test reports. Apparently J. Cox is the man to contact. I've come across a number of alternatives to P.F. which might be of interest, we can discuss these on your arrival.

LOW ENERGY CURE

I've unearthed some useful information which I intend to forward to David. I'll copy this letter to you.

All the best. I'll see you on the 24th.

D. J. Anderson

DJA/cel