

The RUBEROID Co.
NEW YORK 36, N. Y.

For Attention Messrs. O'Leary - Van Akin -

Date March 31, 1960
(Dict. March 30, 1960)
Reference

Copy to Messrs. Bettoli - Danaher - D. Davis -
Gutzwiller - Popovich - Robinson -

Subject CALSILITE FILTER PRESS PROGRESS MEETING

The subject meeting was held on March 28th and was attended by Messrs. Bettoli, Davis, Dent, Gutzwiller, Robinson and Popovich for the purpose of reviewing present status and planning future action from this point.

The patent question was covered. It was revealed that Mr. Laist feels that on the basis of prior patents supplied to him by "Research," we do not have a 100% chance of throwing out the Binkley Patent (J.M.) since our exhibits of prior art are lodged in three prior patents. It is normal in patent law to negate existing patents on the basis of a maximum of two prior patents. Mr. Bettoli is to discuss this further with Mr. Laist because the three patents cited are so specifically applicable to Calcium Silicate insulation and were not cited by the Patent Office relative to the Binkley Patent. Meanwhile, Mr. Laist feels we would have a much more defensible position if we could base our production on some minor change from the Binkley Patent particularly in the prereactive stage. He suggested eliminating the quiescent period which is a part of all Binkley claims. The possibility of using a lower water-solids ratio than "at least approximately 15 to 1" cited on all Binkley plans was raised. Mr. Popovich felt that he could use as low as a 10 to 1 ratio, but that the resultant slurry would be too viscous for ease in handling. Mr. Popovich therefore is to try a 12 to 1 slurry and also a 10 to 1 slurry in the prereaction cycle to be diluted to some higher ratio such as 15 to 1 with hot water after gel.

The question of the semi-commercial filter press unit was then discussed extensively. Mr. Popovich described how he had put a motor on the drive of the pilot press for the actual present operation. It was decided that this motor drive should be speeded up to about twice its present speed so that he could, with a stop watch, get a press cycle of about 16 seconds. This will help in determining the feasibility of a 1 minute mold cycle on the new semi-commercial machine. Mr. Gutzwiller showed a partially completed design of a semi-commercial block filter press which looked to all to be very well thought out and economical. It was suggested that the side plates and entry nozzles be movable vertically so that precision molded blocks can be made by passing the piston by the entry orifices during the press cycle. It was determined that the machine could best be used for 1" and 2" blocks which comprise 50% to 60% of all block production based on 1957 figures which was the maximum year. Two reasons determined this usage:

- 1 - The total of 1" and 2" blocks is only slightly more than the total of the 1-1/2" blocks made, thus we would be making the combination of two blocks with the greatest versatility in scheduling.
- 2 - In the present process, when 2" blocks are made, we have fall-offs producing 1" blocks. By changing molds, we could eliminate 1" fall-offs whereas if we make 1-1/2" blocks in the filter press, we could not eliminate 1" fall-offs in the present process, yet would have to make some 1" blocks in the filter press to utilize its capacity. We decided we did not want to produce two different products for any one size block. We also determined that we could make 3-1/2" blocks on the semi-commercial press which could be used for profiling to make small sizes of Calsilite provided experiments with profiling, which are to be continued, are successful.

01-0213957

GAF 22781

The RUBEROID Co.
NEW YORK 34, N. Y.

For Attention Messrs. O'Leary - Van Akin -

Date March 31, 1960

Copy to Messrs. Bettoli - Danaher - D. Davis - Gutzwiller - Reference
Popovich - Robinson -

Subject CALSILITE FILTER PRESS PROGRESS MEETING

- 2 -

It was decided that if we arrange all equipment so that it can be operated by one man per shift, this would be the most satisfactory and economical way to conduct the semi-commercial experiment. This would mean that the man would spend 2-1/2 to 3 hours in the mixing and prereaction phase and 5 to 5-1/2 hours in molding during each shift. This would be sufficient to produce all our present requirements of 1" and 2" blocks plus profile on a 3-shift basis with a one minute molding cycle. If the molding cycle should be longer, we could go two more days in the week and eliminate production of one of the aforementioned blocks.

Based on this thinking, it was decided that one mixing tank would be required, size to later be determined on the basis of the above. The tank would have a minimum batch of not less than half full. It was also decided that the two present surplus lime tanks could be used for white water. The question of the need for pre-mixed lime was to be resolved by Messrs. Popovich and Davis. It was also decided that a small constant level tank could easily be designed to maintain a constant fluid level head for molding. The semi-commercial press design has already been started and this is to continue along with necessary lay-outs so that we will be in a position to submit an I.A. (approximately \$50,000) when the new I.A. #391 for pipe covering mold on the present pilot unit (approved March 29th) is determined to be successful. This means in about 5 months.

The step after the semi-commercial unit will be to design a fully-commercial unit for all sizes of pipe covering. The design of this will have to be expedited as soon as the semi-commercial unit is approved. Once we go beyond the semi-commercial unit, we must completely convert to the filter press method since to do otherwise would mean a dual operation with extra labor. This means that along with the design of the fully-commercial unit, we would have to make full lay-outs for the new process. It is conceivable that we would be in this phase in approximately 6 months. It appeared probable to all that the best plan would be to convert the present plant, with minimum interruption to production, to a filter press plant with a capacity of 1-3/4 to 2 million dollars annual list. A general discussion was conducted as to how this could be done and the consensus was that such a plan is feasible. It seemed to the writer that after this the next logical step, should business exceed the plant's volume, would be to build a second plant in the Mid-West or South West.

The foregoing synopsis amounts to the following approximate schedule:

- a. Determining feasibility of the 3 x 1 mold on the pilot filter press in about 5 months.
- b. Continued design of a semi-commercial unit for block so that an I.A. may be presented in about 5 months.
- c. As soon as "b" is completed, design a fully-commercial unit and complete lay-outs to convert the present plant to filter press. This should take about another 6 months.

01-0213958

GAF 22782

NEW YORK 36, N. Y.

For Attention Messrs. O'Leary - Van Akin -

Date March 31, 1960

Copy to Messrs. Bettoli - Danaher - D. Davis -
Gutzwiller - Popovich - Robinson -

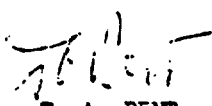
Reference

Subject CALSIITE FILTER PRESS PROGRESS MEETING

- 3 -

- d . Convert the present plant, which should take approximately 11 to 12 months. It might be advisable to extend this somewhat in order to try a single commercial filter press on the mixing and handling equipment to be installed for the semi-commercial unit. This could delay overall completion by 6 to 8 months.

With this schedule, we would be in filter press production in a minimum of 1-1/2 years and a maximum of approximately 2 years.


T. A. DENT

TAD:aal

01-0213959

GAF 22783

The RUBEROID Co.
NEW YORK 36, N. Y.

H.A. 478 - 1-60

APR -1 0'60

For Attention Mr. E. J. O'Leary - New York

Date March 31, 1960
(Dict. March 30, 1960)
Reference

Copy to

Subject CALSILITE FILTER PRESS PROGRESS MEETING

Since the attached report is detailed and lengthy, I suggest you read the last paragraph as a brief synopsis to cover our present plans which evolved from our meeting with the Research Department on March 28th.

T. A. DENT

Handwritten:
J. M. H. ...
6.4.11.2 2/10/60

TAD:aal

Attch.

1. Rent sample link good
 2. P. 2 Substituted - need stronger small size
 3. Estimate Profit
 4. Filter Press Product - would increase our sales at least \$300,000
- Handwritten:* - \$114,000 increase

01-0213956

GAF 22780