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Art, I have attempted to prepare the brief summary report you requested on the product called Multi Temp. It is my understanding you wanted me to specifically cover three areas of interest to Manufacturing: (1) cost projections prepared several years ago on the entire Multi Temp product line, (2) a brief review of the product itself, including its advantages, disadvantages, problems in processing and the like, and (3) my own personal thoughts on the product especially as to how it relates to the total high temperature insulation market.

Multi Temp is completely free of asbestos. If we were selling Multi Temp today, we would have the only asbestos-free, rigid high temperature product on the market. As you know, it is our hope and plans to have an asbestos-free calcium silicate (Kaylo) product on the market in about a year. The activities of Selikoff, the adverse public reaction to the use of insulating products containing asbestos and the presence of asbestos-free Kaylo and Multi Temp in our product line would without doubt all contribute to OCF's regaining its rightful position of leadership in the high temperature insulation market. Once we regain this position of leadership we can expect it to have a positive effect on sales of related glass fiber products such as pipe, roofing, 1½ board, duct insulation and the like.

When MultiTemp was dropped several years ago, two reasons were given; one was the refusal on the part of our distributer to inventory and handle two lines of high temperature insulations for the same market; the second was the relatively low gross margins being achieved as well as projected for Multi Temp pipe insulation.

Recent discussions with Marketing indicate the real reason for dropping Multi Temp was low gross margins. A feasibility report prepared and issued by Justin Becker's group back in 1965 projected a gross margin level of 24% for Multi Temp pipe. This same report projected a gross margin level of 33% for Multi Temp block. (It should be noted a projected gross margin of 33% for Multi Temp block is actually higher than the gross margins we expect to achieve on Kayle block during the next several year period.)

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EXHIBIT 122

EXHIBIT ff

ant to caution you in drawing too many conclusions from Booker's 1965
st projection. Conclusions reached in 1965 are no longer valid since many
the process and market parameters have also changed. When Booker prepared
e 1965 cost projection for Pfiefer, apparently everyone was thinking big..
y were projecting a multimillion dollar market for Multi Temp and a similar
e market for R-2 fire-rated acoustical products. They envisioned a multi
turator, multi oven, multi molding press (for Multi Temp pipe) operation
quiring an investment of substantially more than a million dollars. It's
rther complication in interpreting data from this cost projection was the
t the facility was designed to process R-2 fire-rated tile, R-2 fire-rated
iling board, Multi Temp pipe, Multi Temp Block, and Multi Temp fittings
f economical) all on the same facility.

. is my understanding you are considering restarting the production of Multi Temp
look and wanted my thoughts on the subject. Although I do not have cost data to
ck up my position, I am convinced we could produce all of the Multi Temp block
rketing could sell during the next several years and we could do it in on a
cility similar in size to the R-2 facility at Newark. Furthermore, I believe we
n produce Multi Temp block with a gross margin level over 30% level, we will
ve to come up with a new one-step process (not yet invented).

he R-2 facility at Newark was torn down recently and most of the mixing, pumping,
nd suction equipment transferred to other areas for use in other operations.
, two of the more expensive process items, namely the R-2 oven and ware
ntral, remain and could serve as the nucleus for rebuilding the operation at
inimal cost.

t this point, I would like to get in my two cents worth. If the decision is
ide to again produce and market Multi Temp block and pipe, we have no choice but
o locate the facility at Newark where the pipe molding presses are located.
owever, if production is to be limited to Multi Temp block, I would recommend
he facility be moved out of Newark. There is nothing personal in this recommendation.
just believe we would have a more efficient and more profitable operation if
ocated elsewhere. My choice for facility location would be Berlin. I have a
umber of reasons for this recommendation and would like to elaborate on these
n greater detail in the following paragraphs.

he R-2/Multi Temp saturating facility was considered as one of the dirtiest
perations by the Newark Plant hourly employees. It was dusty and the employees
sually ended up covered with wet clay slurry on their clothes. Most of the newly
ired help at the Newark Plant were assigned to this area. Our problem was they
ransferred out to cleaner jobs faster than we could train them. I am not kidding
hen I say you would see almost all new faces each week. The R-2 facility was
perated not only with minimum supervision but also with unskilled, untrained and
uite often undesirable help. All of these factors combined to lower product
uality levels and job efficiencies. A further complication was our inability
o control labor costs. This was due to our inability to transfer the workers to
ther jobs during the long drying cycles. A five-man crew could saturate in 2-3
/2 hours sufficient material to fill up the drying oven. The operation was then shut
for 3-6-1/2 hours (depending on thickness of the ware being processed) while
the ware was being dried. For Union reasons, these men could not be temporarily

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l to other jobs outside the R-2 area. Except when the walnut shell d tile and ceiling board line (also located in the R-2 area in 1965) was , the R-2 crew had nothing to do for hours at a time. Because of this on, labor costs were very high. Throughputs per man hour and product gross were extremely low.

case of Multi Temp block production, the base wool was produced at ton, packaged and shipped to Newark, unpacked, processed through the ler and drying oven, repacked and shipped to customers, many of whom were l on the East Coast. All of this handling tended to reduce product quality efficiencies. Also, the 1965 cost projection indicated the cost of ng base wool from Barrington to Newark was projected at $30,000 per year projected sales level of $1,200,000 for Multi Temp block.

tioned above, I recommend we give serious consideration to moving the R-2 nd setting up a Multi Temp manufacturing facility at Berlin, provided, of , we limit production to block (and eventually to fittings). If we do, convinced we can produce a quality product yielding a 30% plus gross margin. s point, I would like to enumerate several of the main reasons for such a endation. First, the Newark Plant never did want the R-2 facility. It them in their side—difficult to run and difficult to control. Second, on the type of operation currently at Berlin, my guess is the hourly employees Berlin Plant would classify the Multi Temp facility as a clean operation. , transportation costs of basic wool from Barrington would be minimized. Fourth, robably the most important reason for locating the facility at Berlin, is the er flexibility and utilization of labor. For example, we are now operating hird pouring line on a two-shift basis. We could operate line 3 around the but shut it down at intervals so the crew could run the Multi Temp line enough to saturate oven loads of ware. When the oven was reloaded with ulti Temp block, the third line pouring crew could again resume the pouring yle. The addition of five or six people would make it possible for Berlin intain current pouring levels on line 3 and still operate the Multi Temp ity around the clock. Labor costs charged to Multi Temp under such a plan l be exceedingly low and the dollar throughput of Multi Temp block high.

many pieces of Multi Temp block could we process through the R-2 oven if located erlin and operated around the clock on a five-day week? It would all depend he thickness of the block being processed and the mix of goods. Assuming we only one thickness of block for 24 hours per day, five-day week, we could uce the following quantities of Multi Temp Block:

k Thickness ches)	Oven Load/ 5-Day Wk.	Bd. Ft./ Oven Load	Production Capacity/5-Day Week		
			Bd. Ft.	Sq. Ft.	Pieces of 2 x 4 Block
1	40	4,900	196,000	196,000	24,500
1-1/2	22	7,350	161,700	107,800	13,475
2	14	9,800	137,200	68,600	8,575

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re the major advantages of Multi Temp block when compared with other types of
operature insulation?

1. Proprietary to OCF - Patents applied for
2. Completely free of asbestos
3. Water and rain repellent
4. Easy to cut, good fabrication characteristics
5. Breakage due to rough handling is nominal
6. Lightweight, easy to handle
7. Can be applied over metal
8. Potential 30%+ gross margin product

i Temp block also has its disadvantages. They include:

1. Maximum temperature recommended for Multi Temp block is 1000°F. (Probability of increasing this to 1200°F is 75/25)
2. Dusty when cut, especially with power saw
3. Ends and edges are susceptible to in-transit and handling damage
4. Softer than calcium silicate and bonded aggregate products. (May not be a disadvantage to some customers for certain applications.)
5. Creates problem of double inventories for distributors.

e up this report and my feelings, I am of the opinion Multi Temp overall is
od product and should find a place in the marketplace (especially not with the
h on asbestos), and if we limit production to Multi Temp block and locate the
ility where the product is not penalized by poor workmanship and/or excessive
or costs, a good gross margin product will result.

stions I feel must be resolved with Marketing before we take any positive action
a Multi Temp facility include the following: Do they really want Multi Temp?
they want only block or the entire line including pipe fittings? At
els do they expect to sell Multi Temp? What is the projected sales
1970 and beyond?

Marketing says they want not only Multi Temp block but also pipe and pipe fittings.
must recognize the fact we have a problem in facility location and also have a need
do considerable experimental work before pipe gross margins can be raised to an
ceptable level. We must also recognize the fact no work has been done to-date
Multi Temp pipe fittings. This program is still in the planning stage
porary hold so manpower could be shifted to the Replacement of Asbesto
gram). At the present we have not even prepared a cost projection to
ther this is a business we should get into,

R. F. Shannon

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