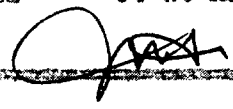


CERTAIN-TEED PRODUCTS CORPORATION

FOR Ardmore DATE January 5, 1956 FROM Pryor OFFICE
ATTENTION OF Mr. O. F. Grieco SUBJECT AGENDA 1956
ANSWERING YOURS 12/12/55 GYPSUM PLANT MANAGERS MEETING
DICTATED BY J. W. Hart - eg



cc: Mr. P. E. Fischer, V.P. - Ardmore
Mr. H. J. Zelms - Akron
Mr. H. F. Debo - Akron
Mr. E. W. Brown - Blue Rapids, Kansas
Mr. Myron Read - Fort Dodge
Mr. A. H. TenElshof - Grand Rapids
Mr. E. L. Flinn - Sigurd
Mr. M. H. Powers - Akron
Mr. P. W. Codwise - Thorold
Mr. H. C. Johnson - Paoli Eng.
Mr. W. G. Will - Paoli
Mr. H. C. Fackott - Fort Dodge
Mr. G. A. Hoggatt - Paoli
Mr. H. F. Fink - Ardmore
Mr. C. C. Shuttleworth - Paoli Lab.

Attached hereto is our report on the Topic which was assigned, with a copy to each of the addressed in accordance with your instructions. They are being sent in "Confidential" envelopes.

C O N F I D E N T I A L

GYPSUM PLANT MANAGERS MEETING

SALT LAKE CITY, UTAH

JANUARY 16 TO 19

1956

T O P I C #11

PAPER COST REDUCTIONS

Pryor, Oklahoma

SGP 0021460

INTRODUCTION

The evaluation of cost reduction accomplishments in the manufacture of Gypsum Board Papers is complicated by the varieties of raw materials, their varying costs, changing ranges of grades of papers produced, and the many other factors affecting conversion costs. Over-simplification does not present the complete story, yet too much detail tends to confuse it. We will attempt to avoid both extremes.

In most cases, periods of 11 months have been used to base estimated yearly figures. In some instances, averages of averages have been used, but only when the units averaged were essentially uniform quantities, such as average monthly costs of raw materials purchased in fairly regular quantities. Rounded figures have been used in instances where the method of calculation did not provide greater accuracy, nor was greater accuracy of material significance.

2. PAPER COST REDUCTIONS

(a) Savings Attained - 1955

(1) Furnish

Gross savings were effected through reduction of usage of higher cost materials, reductions obtained in prices of materials, holding down the amounts of price increases of materials, and through substitution of lower cost materials. Net savings, however, were not realized, for price increases and usage requirement increases, more than offset the gross savings effected.

Furnish costs per ton by grades for 1954 and 1955 were as follows:

	<u>IVORY</u>	<u>CHATELAIN</u>	<u>LATH</u>	<u>BLACK SEMENTINE</u>
1954	\$ 65.57	\$ 57.50	\$ 32.42	\$ 50.69
1955	69.27	59.71	32.56	59.21
Net Increase	\$ 3.70	\$ 2.21	\$ 0.14	\$ 8.52
1955 % Increase	5.64	3.86	0.43	16.83

Total cost of materials furnished for 1955 was \$46,500.

Significant raw materials at 1955 prices represented changes from 1954 delivered costs in the following approximate amounts:

<u>Raw Material</u>	<u>1955 Difference in Cost</u>	
Mixed Paper	\$ 7,600	Increase
No. 1 News	19,000	"
Old Corrugated	29,000	"
New D L Kraft	3,000	"
White Newsblank	29,000	"
Sulphite Pulp	2,800	"
Dirie Cup Cuttings	2,700	"
Groundwood Pulp	7,600	"
Resin Size	11,000	Decrease
Liquid Alum	1,500	"
Starch	1,200	"
Net Increase:	\$ 31,000	
Actual Furnish Increase:	46,500	
1955 Furnish Savings:	37,500	

The \$37,500 savings is only theoretical, for it represents the additional amount over actual increase that would have been expended for 1955 furnish if no savings measures were realized.

The more significant items that contributed to gross furnish savings were:

1. ~~Recycling~~ used to reduce Top Liner consumption for Ivory approximately 30%, started the 2nd quarter of 1955.
2. Increased use of lower cost papers, particularly Mixed Paper in Lath and Grayback.
3. Competitive prices obtained for Resin Size through Grosby Chemical Company.
4. The obtaining of Mixed Paper at under the market prices, the latter part of 1955. This, of course, would not be reflected in savings records, in that it refers to dollars that would have been spent if the more favorable price had not been obtained.

In addition to material price increases, other significant factors contributed to gross furnish increased costs as follows:

1. Increased production of light weight face papers, which increases cost through reduction of percentage of lowest cost filler furnish.

2. Increased production of Light Weight Face Papers, which increases cost through reduction of percentage of lowest cost Filler furnish.

(2) MACHINING

Significant savings were effected through increased production and production rates, substantially reduced costs for repair labor and materials, and reduction of steel and felt costs. Overhead cost was also reduced, due to production increases, with an assist from proration of some of these costs to Felt Mill operation.

Net savings were realized in spite of wage increases of 3% plus in July of 1954, and 5% plus in July of 1955, increased cost of services and supplies, and increased steam and electric power costs.

Direct and overhead costs, per ton by grades, for 1954 and 1955, were approximately as follows:

	<u>IVORY</u>		<u>GRAYBACK</u>		<u>LATE</u>		<u>BLACK SHEATHING</u>	
	<u>Direct</u>	<u>O/Hd</u>	<u>Direct</u>	<u>O/Hd</u>	<u>Direct</u>	<u>O/Hd</u>	<u>Direct</u>	<u>O/Hd</u>
1954	19.99	10.93	19.61	10.75	20.84	11.49	18.89	10.69
1955	17.99	9.43	18.13	9.54	18.87	9.95	17.38	9.30
Net Decrease	2.00	1.50	1.48	1.21	1.97	1.54	1.51	1.39
1955 \$ Decrease	29,200	21,900	18,780	15,350	15,640	12,230	364	335

Conversion costs, including overhead, for 1955 production, represented a savings of \$113,800 over 1954.

The more significant items that contributed to these savings were (approximates):

	<u>1954</u>	<u>1955</u>	<u>1955 & Savings</u>
Production - Tons	30,900	35,500	"
Production - Tons/Day	98.9	100.2	"
<u>Per Ton Costs</u>			
Direct Labor	6.00	5.50	17,775
Repair - Labor	1.20	0.75	15,575
Repair - Material	1.05	0.70	12,425
Steel - Parts	2.80	1.90	31,950
Overhead	11.00	9.60	49,700
Water	0.95	0.82	4,615
		Gross Savings	\$132,440

Here is cost \$ lines of increased cost for 1955, compared with 1954, on a per ton basis, were as follows:

	<u>1954</u>	<u>1955</u>	<u>1955 \$ Increase</u>
Overtime	0.90	0.95	1,775
Service and Supplies	0.87	1.10	8,165
Steam	2.40	2.70	10,650
Electric Power	2.90	2.96	2,130
		Gross Increase	\$23,220

(c) LOADING

Warehousing and Loading costs for 1954 and 1955 were as follows:

	<u>1954</u>	<u>1955</u>
Total dollars	21,590	17,790
Cost per ton	70¢	50¢

The 28% decrease amounted to a savings of \$7,100 for 1955. Reduction was realized from greater volume, faster loading through better operator experience, and pressure of greater tonnages of Pelt as well as Paper, producing a faster pace of work.

(d) Benefits to Cypsum Paper Costs From Payer production.

Cost per ton of paper for 1954 and 1955, together with % of decrease, and dollars saved, were as follows:

<u>PAPER</u>	<u>COST PER TON</u>		<u>%</u>
<u>GRADE</u>	<u>1954</u>	<u>1955</u>	<u>DECREASE</u>
IVORY	97.49	96.69	0.82
GRAYBACK	68.35	66.81	2.25
LATE	65.06	61.62	5.29
BLACK SHEETING	69.25	66.62	3.81

The total net decrease in cost of all papers produced at Payer for 1955 was:

\$ 18,000.00

Had Pryor paper been purchased FOB Pryor, at Central Fibre prices, it would have cost a premium over Pryor costs of:

\$ 1,160,000

(C) Ways and means of obtaining further cost reductions:

1. Increase production

This may be achieved economically, we believe, on a limited basis, by adding dryers, a dryer sheet carrier, vat exhaust system, vat approaches, and increased Jordan capacity, for upwards of 10 tons per day. Neither the estimated cost nor savings that could be derived are available at this time.

2. Reclaim as usable paper Grayback Side Roll trim. This is under investigation, and although it is not promising, if a Web Welder could produce usable paper, a net appreciation in value of product upwards of \$35,000 annually might be realized.

3. Develop an acceptable "lath" top Grayback, which could be Board-plant treated for scuff resistance. Elimination of Top Liner treatments, including pulper chemicals, could amount to \$50,000 annually.

4. Continue the search for lower cost materials, such as groundwood shavings for Newsblanks, Dixie Cups for sulphite, etc.

5. Continue to obtain information from Central Fibre experience with Mixed Paper through a Defibrator, to determine if furnish savings can be made with this equipment.

6. Be alert to developments of equipment, materials, and methods, which might improve product, or reduce cost.

7. Other areas of expected improvement involve reduced costs for utilities, and reduction of water usage and shrinkage losses.

J. W. Hart