



[Alvin W. Boese Papers.](#)

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REQUEST FOR ADVANCE AND TRAVEL AUTHORIZATION

FORM 354-H

DATE 1-4-60

DATE OF DEPARTURE _____ DATE OF RETURN _____

REASON FOR TRIP AND/OR TRAVEL ADVANCE _____

ITINERARY - IN GENERAL TERMS

DATE	FROM	TO	MODE OF TRAVEL
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

ADVANCE FUNDS REQUESTED ☐ TEMPORARY ☒ PERMANENT . . . \$ 750

AMOUNT OF OUTSTANDING FUNDS
 TEMPORARY \$ none
 PERMANENT \$ none

TRAVEL EXPENSES NOT REIMBURSED \$ _____

DO YOU WANT CASH ☒ CHECK ☐

IN ST. PAUL, OBTAIN CASH FROM CASHIER, BLDG. 42-4W. IF YOU PREFER A CHECK, INDICATE BELOW THE ADDRESS TO WHICH IT SHOULD BE SENT.

PERMANENT ADVANCES ARE PAYABLE ON DEMAND. TEMPORARY ADVANCES ARE PAYABLE UPON COMPLETION OF TRAVEL.

REQUESTED BY Alvin W. Boese EMPLOYEE NUMBER 44059

DEPARTMENT Gift Wrap and Fabric Administration TELEPHONE 6182

REQUESTOR SHOULD NOT FILL IN INFORMATION BELOW THIS LINE

REQUEST APPROVED

DEPARTMENT HEAD OR SALES MANAGER _____	DATE _____	DIVISION HEAD _____	DATE _____
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RECEIVED CASH IN THE AMOUNT OF \$ _____

AUTHORIZED BY TREASURER _____

* _____ SIGNATURE	_____ DATE	_____	_____ DATE
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VENDOR NO. 2-7

VOUCHER NO. 10-15

BRANCH USE ONLY

REMARKS:

MO.	CON- TROL	MAIN ACCT.	SUB A/C	CLASS CODE PROJECT OR JOB NO	AMOUNT

WORKING FUND
 CHECK NO. _____
 DATE _____

* TO BE SIGNED ONLY IN THE PRESENCE OF THE CASHIER.

READ INSTRUCTIONS ON REVERSE

USE OF FORM

This form should be used for requesting authorization to travel at company expense and for requesting travel advance funds, either permanent or temporary.

INSTRUCTIONS

ADVANCE FUNDS REQUESTED

Permanent: Issued to employees whose basic job requires traveling. Payable on demand.

Temporary: Issued to an employee for a specific trip. Payable upon completion of that trip.

The requestor should complete all spaces above the first set of double lines. Do not complete Date of Departure, Date of Return or Itinerary for a permanent advance.

OUTSTANDING FUNDS

Indicate the amount of other permanent and/or temporary advances outstanding as of the date of this request.

TRAVEL EXPENSES NOT REIMBURSED

Indicate total travel expenses of a previous trip which have not been reimbursed.

CASH OR CHECK

St. Paul:	See instruction on form
Other	Give detailed instructions.

REQUESTED BY

Indicate the name of the person who will receive and be held responsible for the funds.

APPROVALS & DISTRIBUTION

Obtain approval of the Department Head and/or Division Head.

If to be paid from St. Paul, forward original to Cash Control Department, 42-4W. They will obtain the Treasurer's approval.

If to be paid by the branch, forward original and duplicate to the Branch Office Manager.

NOTE:

Sign the cash receipt ONLY at the time you actually receive the cash. (The use of the promissary note has been discontinued.)

Scotchgard, Ribbons Typify 3M's Ideas, Research, Luck

By STEPHEN ALNES

Staff Writer

(Last of a Series)

Two fairly recent products of Minnesota Mining & Manufacturing Co., Scotchgard stain repellers and 3M decorative ribbons, provide good case histories of how 3M's research and product development programs work.

In a large measure these stories can be said to be typical of the many successful research developments which have catapulted 3M into national prominence and kept it there.

Involved in these and most other 3M success stories are the elements of a management with vision willing to provide "patient money," of imaginative technical people who are given a chance to develop their own ideas, and of the art of finding something you aren't looking for and benefiting from it.

At the outset, 3M had no intention of entering the ribbon field. The research which eventually led to Sasheen, Lacelon and Decorette started in 1940 in the tape division laboratory. The company was hunting for an improved backing for electrical insulating tape and synthetic fibers seemed a likely approach.

A lab worker named Alvin W. Boese was given free rein, couldn't come up with a better tape backing, but did get interested in non-woven fibers. The lab began experimenting with carded synthetic fibers

and succeeded in finding a way they could be bonded with heat.

This led to the development of a continuous synthetic fiber batting called Mistlon.

In 1943, Boese and the project were transferred to the products fabrication laboratory, an unusual laboratory set up to give men like him a chance to work their ideas into products.

While looking at a department store window display, Boese got the idea the batting might be suitable for display material. Back in the laboratory, the material was dyed and colored flecks were sprinkled on it to brighten it up.

Then Boese thought of slitting the material into ribbons. Using a pattern cut from an old inner tube he printed a holly design on the strips. He went to a St. Paul department store with 100 rolls of his ribbon and asked it to try to sell them. All 100 were bought.

The company put a limited quantity on the market for the 1945 Christmas season. It was successful enough to merit a slightly expanded program in 1946. But the product lacked strength and eye appeal.

Then lab worker Howard Hoover, experimenting with non-woven fibers, accidentally developed a process for forming the fibers into a lace-like pattern. Leaving work one night, he put a sheet of paper under a fiber-spinning machine.

In the morning Hoover found

the fibers had fallen on the paper in a lace-like pattern. This new product, dubbed Lacelon, lacked strength, just like Mistlon. At first it had to be produced in rolls nearly a yard wide to get sufficient strength so it could be tied into a bow.

As the ribbon project continued to run in the red, Boese realized in 1949 that he and his associates must find a way to make the product stronger and more attractive or management would drop it.

He decided to take a long shot, trying an idea he had suggested several years earlier but hadn't attempted. His idea was to bond yarn lengthwise on Mistlon.

The experiment was a complete success. The new process gave birth to Sasheen, a stronger and more attractive ribbon than Mistlon. The same process was used on Lacelon and resulted in a product called Decorette.

"It is typical of 3M research philosophy that this sort of experimentation was allowed to continue," one 3M official said. "Other companies might have stopped it."

Scotchgard's research history at 3M dates back to about 1944 when the company acquired rights to a process for manufacture of fluorochemicals. The fluorochemical compounds, considered a new class of chemicals, are unusual in that they will not mix with other liquids and thus repel both oil and water.

The Scotchgard drama doesn't have one standout hero. It appears to have developed as a team project, with a number of technical persons exchanging ideas in the laboratory, in staff sessions and during coffee breaks.

After years of experimenting and eliminating possible uses and producing a few, limited-use products, 3M was taking a hard look at the value of continuing to invest in fluorochemical research.

About that time, a laboratory worker spilled the chemical on her shoes. It was difficult to remove and thus was born the idea of a leather protector.

Looking for a wider application, where the commercial value of fluorochemical properties would offset the cost, officials ordered a concentrated laboratory program to determine whether fluorochemicals could be applied as a stain repeller for textiles. Less than a year after that, a workable product was ready and commercial development was begun.

Textile Scotchgard was introduced in 1956 and the leather protector came out in 1957. Since then, the chemical division has developed Scotchgard for cottons and wash and wear fabrics.

These are the processes that are going on every day in 3M's laboratories. Only a few produce commercially successful ideas. When they do they're worth it.

YOU HAVE A COPY TO SCAN WHEN YOU TALK VIA TELEGRAM

CALL LETTERS	CM	11/28/61	CHARGE TO	R.T. & G.W.	1500
<p>DR. ANDREW MASON 175 GARDNER STREET HINGHAM, MASSACHUSETTS</p> <p>WILL ARRIVE BOSTON 8:55 P.M. FROM CHICAGO ON AMERICAN FLIGHT #48. WILL LEAVE IMMEDIATELY FOR THE PARKERHOUSE AND SHOULD BE THERE BY 10:00 P.M. HOPE THIS TIME IS NOT TOO INCONVENIENT. APPRE- CIATE YOUR COURTESIES.</p> <p>A. W. BOESE 42-2E</p>					

SENDING BLANK TO BE USED ON DESK-FAX EQUIPMENT

PLEASE TYPE OR PRINT PLAINLY WITHIN BORDER-DO NOT FOLD

cc: L. H. Anderson 53-1
✓ A. W. Boese 42-2E
F. K. Hartle Omaha
C. A. Parsons 42-2E

December 11, 1961

TO: H. R. COURTNEY : RT&GW LABORATORY : 27-1 : ST. PAUL

FROM: P. A. BARD : RT&GW DIVISION : 42-2E : ST. PAUL

Dear Hank:

I received the following note dated 11/20/61 which was written by Frank Hartle, salesman in Omaha, to his manager, Lloyd Anderson in the St. Paul Branch.

"I'm constantly getting complaints about our White "SASHEEN" - "It's too thin." It does caliper thinner (?) than our other colors and often feels flimsy compared to other colors.

J. C. Penney of South Omaha recently returned 30 rolls of White to Carpenter Paper to exchange and today J. M. McDonald Company brought up the same complaint.

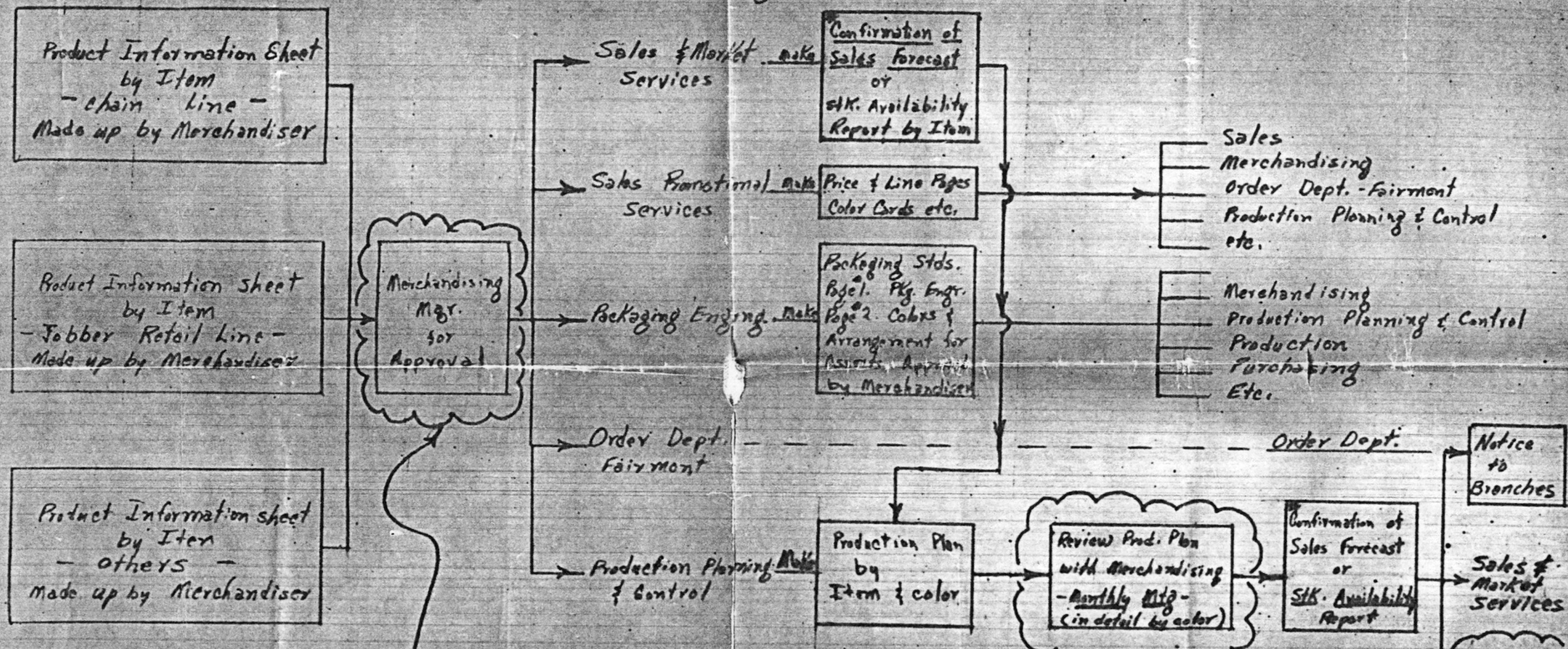
P.S. How about using opaque yarns for our White such as we use on our stripes? Our present stripe is too translucent! Looks Cheap."

PAB:mm

[illegible]

Flow Chart for Sales Line Information from Merchandising - to - Production

3-24-62
3-26-62
L



New!

* Confirmation of Sales Forecast
or Stk. Availability Report

New Items: Issued in triplicate to Planning

Change In Estimate: One copy to Planning.

One to Merchandising

New!

3/27/62

Every day mix 245

4 day pack

3 day

Shadow stripes	8	✓
White	13	✓
Red	7	✓
P. Pink	15	✓
P. Blue	10	✓
Yellow	10	✓
P. Green	4	✓
Gold	4	✓
	<u>72</u>	

~~18~~

12

3

9

3

3

3

3

18

4

22

23.5 300

235 6.50

470

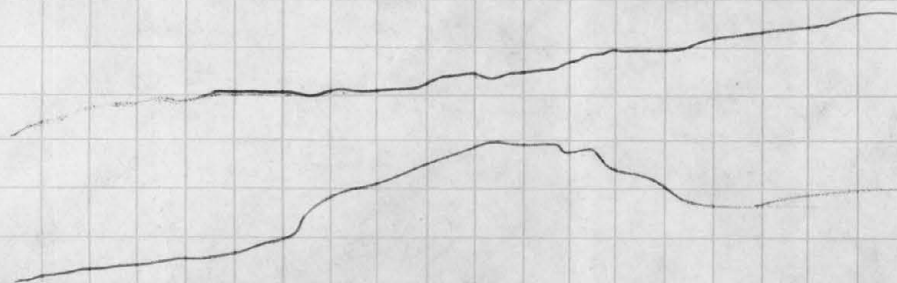
1800

1880

2870

250 machine, phylant. for common core for chains ?

I love ribbon sales down





Tylon

MFG. CORP.

645 REGAL ROW P. O. Box 10861
DALLAS 7, TEXAS • ME 1-3565

July 9, 1962

TO: The Buyer of Gift Wrap Ribbons and Pressure Sensitive Tapes

The Tylon Mfg. Corp. is proud to present you with a complete set of catalog sheets on Tylon Ribbons, Bows, Accessory Items and Tylon Tapes

Our special syndicate store Tylon program allows you to purchase all Tylon products at the regular Distributor net price in the regular discount quantity you select. Check these terrific advantages:

1. You save up to 40% on you ribbon and tape costs.
2. The minimum order is only \$ 25.00 with transportation charges Prepaid
3. You can have dating terms (2% Dec. 10th) on all orders of \$ 100.00 or more when placed between April 1st and October 1st.
4. You may purchase in single rolls of a size and color.
5. Tylon offers you the best value and selection of Prefab and Star Bows.
6. The T-1 Tylon Star Bow Machine will make 11 sizes of bows from a 3 inch diameter to 8 inches, using widths # 3, # 5, and # 9.
7. The Tylon Resale Line is designed to allow you to compete with Discount operations without giving up your needed profits.
8. You may purchase Tylon Resale Items on a FULL GUARANTEE as outlined on the enclosed Resale Cost Sheet.
9. The new Tylon No. 1 Vinyl Tape will give you superior performance over cellophane tape at a greatly reduced cost to you.
10. Tylon has complete national sales coverage to serve your needs.

Please send us your future Ribbon and Tape Requirements as soon as possible so we will be able to give you the best possible service

*Maybe of interest to you,
Harry.*

Very truly yours,

TYLON MFG. CORPORATION

W. G. Van Brunt

W. G. Van Brunt
Vice President-Sales

WGVB/mfk
encls.

m c



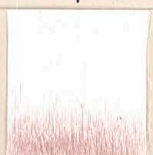
Tylon® GIFT WRAP RIBBON

DELUXE DESIGN

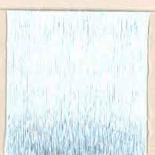
100
white



101
pink



102
blue



103
yellow



104
nile



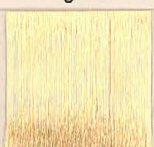
105
orchid



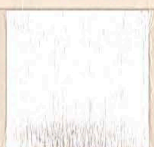
106
better times



107
gold



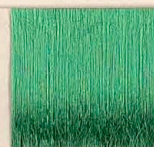
108
silver



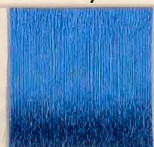
109
red



110
emerald



111
royal



112
brown



113
aqua



114
copper



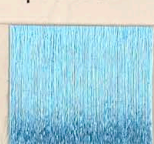
115
black



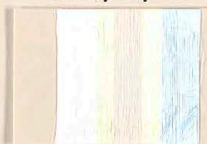
116
rose



117
peacock



118
everyday



119
white & gold



120
green border



121
green & gold



122
candy



123
gold multi

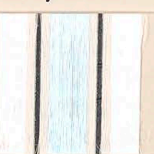


TINSEL DESIGN

124
white tinsel



125
baby tinsel



126
gold tinsel



127
red tinsel



128
green tinsel



129
xmas tinsel



AVAILABLE WIDTHS

No. 3	No. 5	No. 9
1/2"	3/4"	1-1/8"

NOTE: • Tinsel Patterns are available in Nos. 5 and 9 widths – 200 yd. & 600 yd. Rolls only.
• All other Patterns are available in Nos. 3–5–9 widths – 100 yd. – 200 yd. & 600 yd. Rolls.

TYLON MFG. CORP.

645 Regal Row Dallas 7, Texas
P.O. Box 10861



Tylon[®] GIFT WRAP RIBBON

SHADOW DESIGN



AVAILABLE SHADOW DESIGN

NOTE: 3-5-9 widths available in 200 yd. and 600 yd. Rolls.

No. 3	No. 5	No. 9
1/2"	3/4"	1-1/8"

CURLING DESIGN

No. 1 (3/16") X 1000 yds.



NARROW TINSEL DESIGN

No. 1 (3/16") X 600 yds.



TYLON MFG. CORP. - 645 Regal Row - Dallas 7, Texas - P.O. Box 10861

FORM #300





Tylon[®]

GIFT WRAP RIBBON

TYLON MFG. CORP.

645 REGAL ROW

DALLAS 7, TEXAS

P. O. BOX 10861

"AVAILABLE 3 SIZES"



5½" Dia.
100 Yd. Roll



7¼" Dia.
200 Yd. Roll
Saves 15%
(Compared to 100 Yd. Roll)



12½" Dia.
600 Yd. Roll
Saves 25%
(Compared to 100 Yd. Roll)

STORE-USE ITEMS

DELUXE DESIGN		PER ROLL NET PRICE TO ALL RETAILERS					
		1 to 9 Rolls	10 Rolls 10%	25 Rolls 15%	50 Rolls 20%	75 Rolls 25%	100 Rolls Contract
100 Yd. Rolls	No. 3 x 100 Yds. (½")	\$ 1.45	\$ 1.31	\$ 1.24	\$ 1.16	\$ 1.09	\$.95
	No. 5 x 100 Yds. (¾")	2.15	1.94	1.83	1.72	1.62	1.40
	No. 9 x 100 Yds. (1-1/8")	2.95	2.66	2.51	2.36	2.22	1.92
200 Yd. Rolls	No. 3 x 200 Yds. (½")	2.60	2.34	2.21	2.08	1.95	1.69
	No. 5 x 200 Yds. (¾")	3.65	3.29	3.11	2.92	2.74	2.38
	No. 9 x 200 Yds. (1-1/8")	5.35	4.82	4.55	4.28	4.02	3.48
600 Yd. Rolls	No. 3 x 600 Yds. (½")	6.50	5.85	5.53	5.20	4.89	4.23
	No. 5 x 600 Yds. (¾")	9.70	8.73	8.25	7.76	7.27	5.94
	No. 9 x 600 Yds. (1-1/8")	14.40	12.96	12.24	11.52	10.80	9.36
TINSEL DESIGN - AVAILABLE IN NOS. 1 - 5 - 9 WIDTHS - 200 YD. & 600 YD. ROLLS ONLY							
200 Yd. Rolls	No. 5 x 200 Yds. (¾")	4.50	4.05	3.82	3.60	3.37	2.93
	No. 9 x 200 Yds. (1-1/8")	6.60	5.94	5.61	5.28	4.95	4.29
600 Yd. Rolls	No. 1 x 600 Yds (3/16" Traverse)	3.75	3.38	3.19	3.00	2.80	2.44
	No. 5 x 600 Yds. (¾")	12.35	11.12	10.50	9.88	9.26	8.03
	No. 9 x 600 Yds. (1-1/8")	17.95	16.16	15.26	14.36	13.47	11.67
SHADOW DESIGN - AVAILABLE ALL WIDTHS - 200 YD. & 600 YD. ROLLS ONLY							
200 Yd. Rolls	No. 3 x 200 Yds. (½")	1.95	1.76	1.66	1.56	1.47	1.27
	No. 5 x 200 Yds. (¾")	2.90	2.61	2.47	2.32	2.18	1.89
	No. 9 x 200 Yds. (1-1/8")	4.25	3.83	3.62	3.40	3.19	2.77
600 Yd. Rolls	No. 3 x 600 Yds. (½")	5.05	4.55	4.30	4.04	3.79	3.29
	No. 5 x 600 Yds. (¾")	7.80	7.02	6.63	6.24	5.85	4.95
	No. 9 x 600 Yds. (1-1/8")	11.40	10.26	9.69	9.12	8.55	7.41
CURLING DESIGN - AVAILABLE IN NO. 1 WIDTH (3/16") - 1000 YD. ROLLS ONLY							
1000 Yd. Rolls	No. 1 x 1000 Yds. (3/16" Traverse)	3.40	3.06	2.89	2.72	2.55	2.24
CONTRACT SALES: Contract price applies when Customer agrees to purchase 100 of 100 Yd. - 200 Yd. - 600 Yd. - 1000 Yd. Rolls within a one (1) year period. Minimum Contract Order: 25 Rolls, assorted sizes.							
QUANTITY DISCOUNTS: 100 Yd. - 200 Yd. - 600 Yd. and 1000 Yd. Rolls may be assorted to make quantity - All sizes count as one (1) Roll against quantity requirements.							
COLORS: See color chart - Special colors or designs - Write factory.							

SEE REVERSE SIDE FOR ACCESSORY ITEMS



Tylon® ACCESSORY ITEMS

STORE-USE

Automatic

T-1 STAR BOW MACHINE

- MAKES 11 DIFFERENT SIZE BOWS!
- MAKES BOWS FROM 3" TO 8" IN DIAMETER!
- USES 3 WIDTHS — NOS. 3-5-9!
- WORKS WITH 100-YD., 200-YD. AND 600-YD. ROLLS!
- TROUBLE FREE, SIMPLE TO OPERATE!



RETAILERS COST: \$89.50 each

SPECIAL: WITH 25 ROLLS OR MORE: \$79.50 each

T-2 BOW BUTTONS (Plastic) \$1.75 per M 10M — \$1.50 per M

T-3 BOW TABS
(Pressure Sensitive) \$2.00 per M 10M — \$1.75 per M



T-4 RIBBON RACK — \$2.50 EA. (For 100-Yd. and 200-Yd. Rolls) T-5 RIBBON RACK — \$.25 EA. (For Traverse Rolls) T-6 RIBBON RACK — \$3.50 EA. (For 600-Yd. Rolls)



T-7 RIBBON SHEARS — \$2.50 EA.

TYLON MFG. CORP.

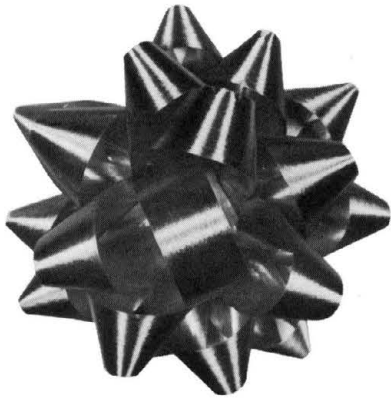
645 Regal Row • Dallas 7, Texas

TELEPHONE: 521-1064

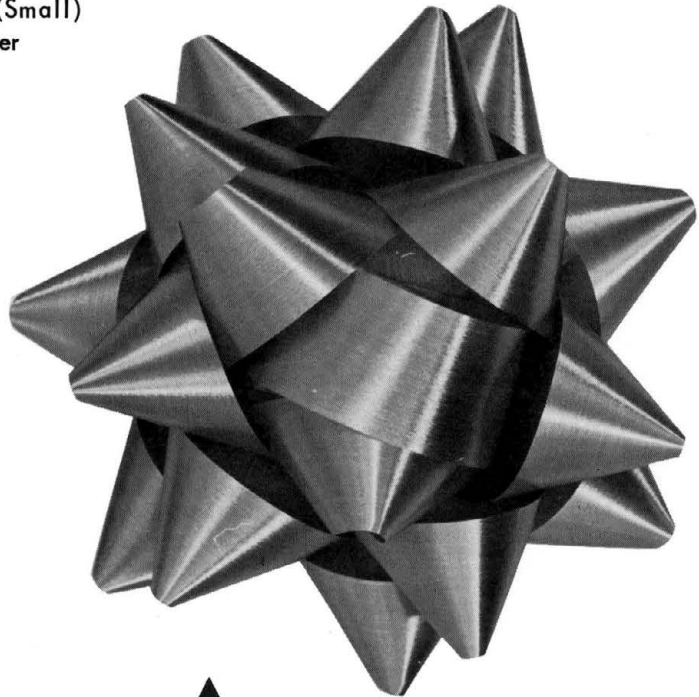
Tylon[®] STAR BOWS

BULK PACK - STORE-USE

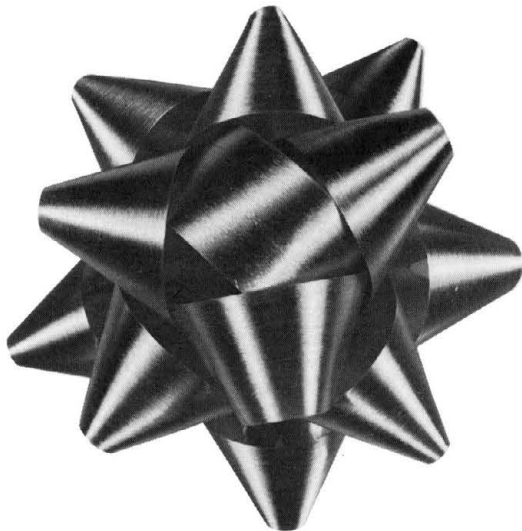
(or Resale)



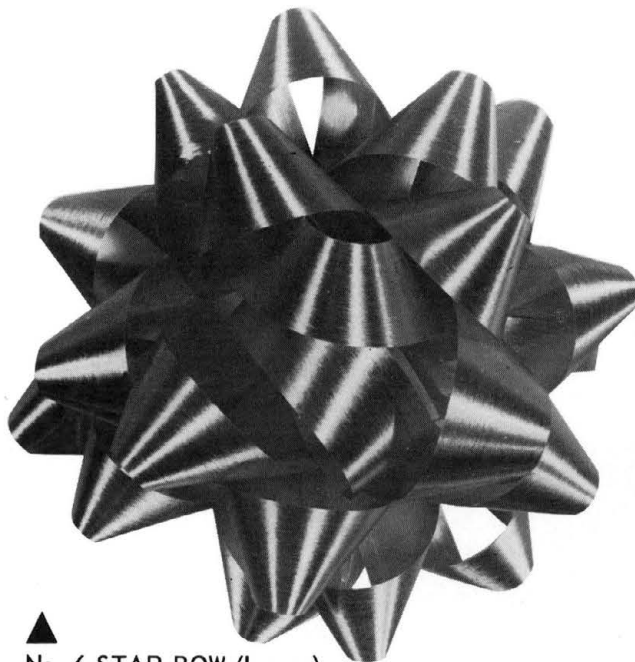
No. 4 STAR BOW (Small)
15 Loops 3" Diameter



No. 7 STAR BOW (Extra Large)
19 Loops - 6" Diameter



No. 5 STAR BOW (Med.)
12 Loops 3½" Diameter



No. 6 STAR BOW (Large)
17 Loops 4½" Diameter

AVAILABLE IN:

- EVERYDAY ASSORTMENT
- CHRISTMAS ASSORTMENT
- SOLID PACK

SUGGESTED RESALE BOW PRICES

SMALL BOW	\$.05 ea.
MEDIUM BOW10 ea.
LARGE BOW15 ea.
EXTRA LARGE BOW19 ea.

SEE REVERSE SIDE FOR PRICES

TYLON

BOWS

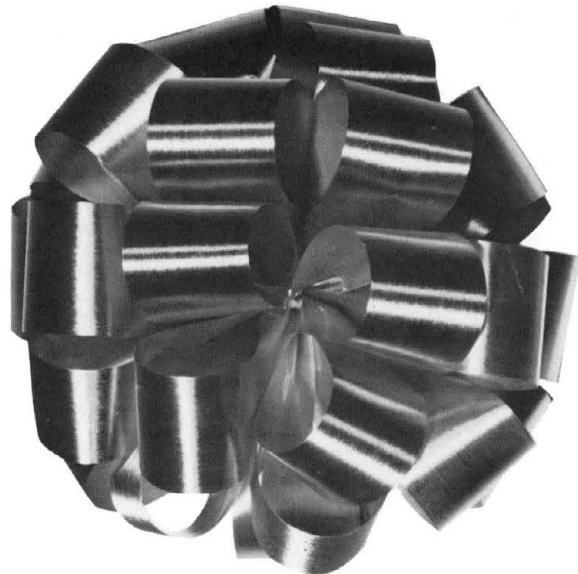
BULK PACK-STORE-USE (or Resale)



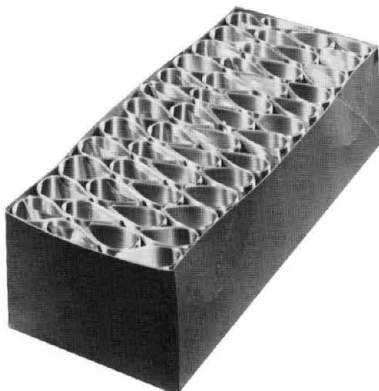
NO. 1 PRE-FAB (Small)
12 Loops - 3½" Diameter



NO. 2 PRE-FAB (Med.)
18 Loops - 4½" Diameter



NO. 3 PRE-FAB (Large)
20 Loops - 6" Diameter



NEW! CIRCLE NOTCH - EASY TO PULL - MAKES PERFECT BOWS
PRE-FAB BOWS Nos. 1-2-3 Packed 100 Per Box
STAR BOWS Nos. 4-5-6 Packed 100 Per Box - No. 7 Packed 50 Per Box.

ALL SIZES AVAILABLE IN - EVERYDAY & CHRISTMAS ASSORTMENTS

RETAILER NET PRICE - PRE-FAB and STAR BOWS

NO. 1 PRE-FAB (Small)		12 Loops - 3½" Diameter	100 Per Box
NO. 2 PRE-FAB (Med.)		18 Loops - 4½" Diameter	100 Per Box
NO. 3 PRE-FAB (Large)		20 Loops - 6" Diameter	100 Per Box
NO. 4 STAR BOW		12 Loops - 3½" Diameter	100 Per Box
NO. 5 STAR BOW		18 Loops - 4½" Diameter	100 Per Box
NO. 6 STAR BOW		20 Loops - 6" Diameter	100 Per Box
NO. 7 STAR BOW		20 Loops - 6" Diameter	50 Per Box
NOTE: SPECIFY ASSORTMENT (Everyday or Christmas) when Ordering.			
COLORS: ALL COLORS IN COLOR CARDS. ADD 10% TO ABOVE PRICES FOR TIE-DIE DESIGN.			
No. BC-1 BOW CARD FOR NO. 1 BOW		100 Per Box	
No. BC-2 BOW CARD FOR NO. 2 BOW		100 Per Box	
No. BC-3 BOW CARD FOR NO. 3 BOW		100 Per Box	
No. BC-4 BOW CARD FOR NO. 4 BOW		100 Per Box	
No. BC-5 BOW CARD FOR NO. 5 BOW		100 Per Box	
No. BC-6 BOW CARD FOR NO. 6 BOW		100 Per Box	
No. BC-7 BOW CARD FOR NO. 7 BOW		50 Per Box	

TYLON MFG. CORP. 645 REGAL ROW, DALLAS 7, TEXAS
P. O. BOX 10861

Tylon®

GIFT WRAP RIBBON

Resale Items



No. 25 — 12/25¢ Rolls ($\frac{3}{4}$ " x 180")
RETAILERS' COST: \$1.50/dozen
COLORS: All colors on color card



No. 26 — 12/Rolls ($\frac{3}{4}$ " x 180")
RETAILERS' COST: \$9.54/dozen
No. 26E — Everyday Assortment — 12 Rolls
No. 26X — Xmas Assortment — 12 Rolls
COLORS: All colors on color card



No. 31X — 24/Boxed

Variety Assortment

CONTAINS: Curling, Tinsel,
Deluxe and Shadow Designs

2,208 inches

RETAILERS' COST: \$19.08/case (2 dozen)

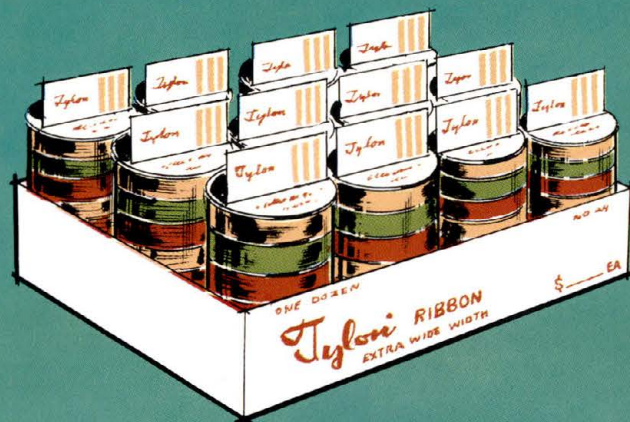
BOX DIMENSION: $4\frac{5}{8}$ " x $4\frac{5}{8}$ " x $8\frac{3}{4}$ "

Tylon® GIFT WRAP RIBBON

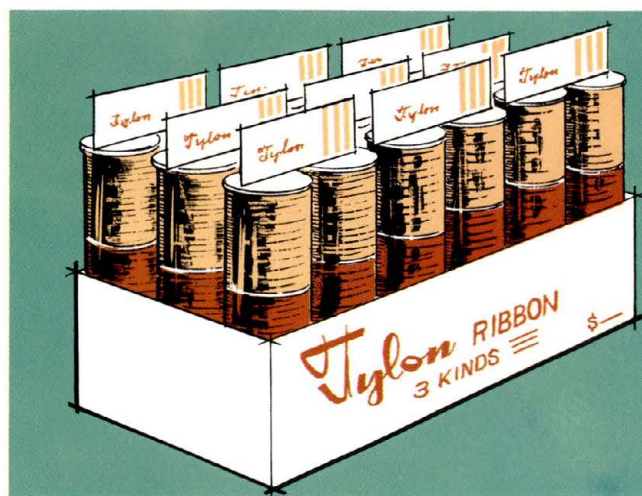
Resale Items



No. 29X — 6/25¢ rolls
(1080 inches)
RETAILERS' COST: \$15.00/case
(2 dozen packages per case)



PACKED 24 PACKAGES TO "TEAR TAPE" DISPLAY CARTON.
For MASS DISPLAY



PACKED 12 PACKAGES TO "TEAR TAPE" DISPLAY CARTON.
For MASS DISPLAY



No. 30X — 12/Pkgs. — Xmas Assortment
RETAILERS' COST: \$6.00/case
(1 dozen packages per case, 3600 inches per package)

Tylon® GIFT WRAP RIBBON

Resale Items



No. 27E — 48/Pkgs. — Everyday
Curling Ribbon Assortment
No. 27X — 48/Pkgs. — Xmas Curling Ribbon
Assortment
RETAILERS' COST: \$14.16/case (48 boxes, each box
contains 1800 inches). Box Dimensions 3 1/4" x 3 1/4" x 9 1/8".



No. 28E — 24/Pkgs. —
Everyday Curling Ribbon
Assortment
No. 28X — 25/Pkgs. — Xmas
Curling Ribbon Assortment
RETAILERS' COST: \$12.00/case (24 boxes,
each box contains 3600 inches)
BOX DIMENSION: 7 7/8" x 2 3/4" x 8 1/4".



GIFT WRAP RIBBON

Resale Items



No. 33 — 12/25¢ Bow and
Hank (Carded)
RETAILERS' COST:
\$1.50/dozen
COLORS:
All colors on color card



No. 32E — 72/25¢ Everyday
Bow and Hank Assortment
with Rack
No. 32X — 72/25¢ Xmas Bow
and Hank Assortment with
Rack
RETAILERS COST:
\$11.70/Assortment



No. 34E — 6 "Stick-on" Bows Every-
day Assortment
No. 34X — 6 "Stick-on" Bows Xmas
Assortment
RETAILERS' COST: \$14.16/case
(48 boxes)
BOX DIMEN: 6 1/4" x 1 1/2" x 8 1/2".



No. 35E 10 "Stick-on"
Bows Everyday Assortment
No. 35X 10 "Stick-on" Bows
Xmas Assortment
RETAILERS' COST: \$12.00/case
(24 boxes)
BOX DIMEN: 6 1/4" x 1 1/2" x 14".

TYLON MFG. CORP.

645 Regal Row Dallas 7, Texas P. O. Box 10861
MEIrose 1-3565



DISTRIBUTOR COST SHEET

MAY, 1962
Effective until further noticeTYLON RESALE GIFT WRAP RIBBON

For the first time in the history of our industry, we are offering our Resale Line only on a FULL GUARANTEE to our Distributors and/or Retailers as follows:

<u>ITEM</u>	<u>DIST.</u> <u>NET PRICE</u>	<u>DISCOUNT %</u>
No. 25 12/25¢ Rolls	\$ 1.35	40-25%
No. 26 12/\$1.59 Rolls	8.59	40-25%
No. 26E 12/\$1.59 Rolls	8.59	40-25%
No. 26X 12/\$1.59 Rolls	8.59	40-25%
No. 27E 48/59¢ Curling Ribbon	12.74	40-25%
No. 27X 48/59¢ Curling Ribbon	12.74	40-25%
No. 28E 24/\$1.00 Curling Ribbon	10.80	40-25%
No. 28X 24/\$1.00 Curling Ribbon	10.80	40-25%
No. 29X 24/\$1.49 Pkg-6/25¢ Rolls	14.40	40-33%
No. 30X 12/\$1.39 Pkg-3 kinds	5.76	40-43½%
No. 31X 24/\$1.59 Variety Pak	17.18	40-25%
No. 32E Bow Rack Assortment	NO GUARANTEE	
No. 32X Bow Rack Assortment	NO GUARANTEE	
No. 33 12/25¢ Bow & Hank	1.35	40-25%
No. 34E 48/59¢ Boxed Bows	12.74	40-25%
No. 34X 48/59¢ Boxed Bows	12.74	40-25%
No. 35E 24/\$1.00 Boxed Bows	10.80	40-25%
No. 35X 24/\$1.00 Boxed Bows	10.80	40-25%

MINIMUM ORDER: \$150.00 or more at Distributor Cost.

TERMS: 2 - 10 - e.o.m. Transportation Charges prepaid - December Dating allowed to rated accounts.

RETURNED GOODS: Customer must prepay freight on all goods returned and shipment to us must be made no later than January 31, 1963.

The Distributor and/or Retailer who does not want a FULL GUARANTEE may purchase at the lower price as published on our regular Catalog pages.

Price pages and photos will show the Retail list price on each item, however, the actual item will have a blank space for the price. The reason for this is to be in accord with the Federal Trade Commissions ruling since most of these items will be discounted.

With this FULL GUARANTEE Program, we know you can really go to town! We would like to caution you to use good sound judgement when making sales as we do not want you to oversell any account as this would mean a return after Christmas.

TYLON MFG. CORP.
P.O. Box 10861 645 Regal Row
Dallas 7, Texas
ME-1-3565

Tylon® Gift Wrap RIBBON

TYLON MFG. CORP. 645 REGAL ROW
DALLAS 7, TEXAS P. O. BOX 10861

STORE-USE ITEMS

DELUXE DESIGN		DISTRIBUTOR NET PRICE				PER ROLL NET PRICE TO ALL RETAILERS					
		5 Rolls 30%	25 Rolls 40%	50 Rolls 40-5%	100 Rolls 40-10%	1 to 9 Rolls	10 Rolls 10%	25 Rolls 15%	50 Rolls 20%	75 Rolls 25%	100 Rolls Contract
100 Yd. Rolls	No. 3 x 100 Yds. (½")	\$ 1.02	\$.87	\$.83	\$.79	\$ 1.45	\$ 1.31	\$ 1.24	\$ 1.16	\$ 1.09	\$.95
	No. 5 x 100 Yds. (¾")	1.51	1.29	1.23	1.16	2.15	1.94	1.83	1.72	1.62	1.40
	No. 9 x 100 Yds. (1-1/8")	2.07	1.77	1.69	1.60	2.95	2.66	2.51	2.36	2.22	1.92
200 Yd. Rolls	No. 3 x 200 Yds. (½")	1.82	1.56	1.48	1.41	2.60	2.34	2.21	2.08	1.95	1.69
	No. 5 x 200 Yds. (¾")	2.56	2.19	2.08	1.97	3.65	3.29	3.11	2.92	2.74	2.38
	No. 9 x 200 Yds. (1-1/8")	3.75	3.21	3.05	2.89	5.35	4.82	4.55	4.28	4.02	3.48
600 Yd. Rolls	No. 3 x 600 Yds. (½")	4.55	3.90	3.70	3.51	6.50	5.85	5.53	5.20	4.89	4.23
	No. 5 x 600 Yds. (¾")	6.79	5.82	5.53	5.24	9.70	8.73	8.25	7.76	7.27	5.94
	No. 9 x 600 Yds. (1-1/8")	10.08	8.64	8.21	7.78	14.40	12.96	12.24	11.52	10.80	9.36
TINSEL DESIGN - AVAILABLE IN NOS. 1 - 5 - 9 WIDTHS - 200 YD. & 600 YD. ROLLS ONLY											
200 Yd. Rolls	No. 5 x 200 Yds. (¾")	3.15	2.70	2.57	2.43	4.50	4.05	3.82	3.60	3.37	2.93
	No. 9 x 200 Yds. (1-1/8")	4.62	3.96	3.77	3.57	6.60	5.94	5.61	5.28	4.95	4.29
600 Yd. Rolls	No. 1 x 600 Yds (3/16" Traverse)	2.63	2.25	2.14	2.03	3.75	3.38	3.19	3.00	2.80	2.44
	No. 5 x 600 Yds. (¾")	8.65	7.41	7.04	6.67	12.35	11.12	10.50	9.88	9.26	8.03
	No. 9 x 600 Yds. (1-1/8")	12.57	10.77	10.24	9.70	17.95	16.16	15.26	14.36	13.47	11.67
SHADOW DESIGN - AVAILABLE ALL WIDTHS - 200 YD. & 600 YD. ROLLS ONLY											
200 Yd. Rolls	No. 3 x 200 Yds. (½")	1.37	1.17	1.12	1.06	1.95	1.76	1.66	1.56	1.47	1.27
	No. 5 x 200 Yds. (¾")	2.03	1.74	1.66	1.57	2.90	2.61	2.47	2.32	2.18	1.89
	No. 9 x 200 Yds. (1-1/8")	2.98	2.55	2.43	2.30	4.25	3.83	3.62	3.40	3.19	2.77
600 Yd. Rolls	No. 3 x 600 Yds. (½")	3.54	3.03	2.88	2.73	5.05	4.55	4.30	4.04	3.79	3.29
	No. 5 x 600 Yds. (¾")	5.46	4.68	4.45	4.22	7.80	7.02	6.63	6.24	5.85	4.95
	No. 9 x 600 Yds. (1-1/8")	7.98	6.84	6.50	6.16	11.40	10.26	9.69	9.12	8.55	7.41
CURLING DESIGN - AVAILABLE IN NO. 1 WIDTH (3/16") - 1000 YD. ROLLS ONLY											
1000 Yd. Rolls	No. 1 x 1000 Yds. (3/16" Traverse)	2.38	2.04	1.94	1.84	3.40	3.06	2.89	2.72	2.55	2.24
CONTRACT SALES: Contract price applies when Customer agrees to purchase 100 or more of 100 Yd. - 200 Yd. - 600 Yd. - 1000 Yd. Rolls within a one (1) year period. Distributor may ship from Stock at Contract Price (Based on 40-10% discount - Distributor Profit 17%).											
CONTRACT DROP SHIPMENTS: Minimum Order, 25 Rolls, freight prepaid, Distributors Profit 10%. Fifty (50) Rolls or more, Distributors Profit 15%. Mark all Contract Sales "CONTRACT ORDER."											
QUANTITY DISCOUNTS: 100 Yd.-200 Yd.-600 Yd.-1000 Yd. rolls may be assorted to make quantity. All sizes count as 1 roll against quantity requirements.											
PACKING: 100 Yd.-200 Yd.-600 Yd.-1000 Yd. rolls packed 5 rolls per size and color per box.											
COLORS: Write factory for special colors or designs.											
SIZES: Tinsel Design Available in Nos. 5 & 9 widths only. Curling Design Available in No. 1 width only.											
PRE-FAB and STAR BOWS					Distributor Net Price 30%	Nos. 1-2-3-4-5-6 Packed 100 Per Box-No. 7 Packed 50 Per Box					
						1 to 9 Boxes	10 Boxes	25 Boxes	50 Boxes	75 Boxes	100 Boxes
Pre-Fab Bows	No. 1 Pre-Fab Bow - 3½" Dia. (Packed 100)				\$2.63	\$3.75	\$3.60	\$3.45	\$3.30	\$3.10	\$2.90
	No. 2 Pre-Fab Bow - 4½" Dia. (Packed 100)				4.17	5.95	5.65	5.35	5.05	4.80	4.60
	No. 3 Pre-Fab Bow - 6" Dia. (Packed 100)				6.97	9.95	9.50	9.05	8.55	8.10	7.75
	No. 4 Star Bow - 3" Dia. (Packed 100)				2.24	3.20	3.05	2.90	2.80	2.65	2.50
Star Bows	No. 5 Star Bow - 3½" Dia. (Packed 100)				2.63	3.75	3.60	3.45	3.30	3.10	2.90
	No. 6 Star Bow - 4½" Dia. (Packed 100)				4.17	5.95	5.65	5.35	5.05	4.80	4.60
	No. 7 Star Bow - 6" Dia. (Packed 50)				3.68	5.25	5.10	4.95	4.80	4.60	4.45
NOTE: Specify Assortments with E (Everyday) or X (Christmas) behind number i.e.: 2E or 2X											
COLORS: All Colors on color card - Add 10% to above prices for TINSEL DESIGN.											
No. BC-1 Bow Card for 25¢ Bow & Tie					\$1.80	Per 100 Cards					\$2.00
No. BC-2 Bow Card for 10¢ Bow					.90	Per 100 Cards					1.00
No. BC-3 Bend-over for No. 3 Hank					6.00	Per 1M bend-overs					6.60
TERMS: 2-10-e.o.m.-F.O.B. Dallas, Texas. Freight prepaid to Distributor on all shipments Store-Use Long Rolls at respective Distributor quantity discounts - Pre-Fab and Star Bows shipped prepaid for orders of \$100.00 or more, otherwise f.o.b. Dallas, unless shipped with 25 rolls or more ribbon - NON CONTRACT Drop Shipments will be billed at respective quantity discounts, less 15% to Distributor, freight prepaid - Prices subject to change without notice.											

SEE REVERSE SIDE FOR RESALE and ACCESSORY ITEMS

Tylon® GIFT WRAP RIBBON

RESALE ITEMS

ITEM NUMBER and DESCRIPTION	DISTRIBUTOR NET PRICE		List Price	Retailer Net Price
	Less Than \$100.00	More Than \$100.00		
No. 25 12/25¢ (¾" x 180") Solid Pack	\$ 1.20	\$ 1.13	\$ 3.00	\$ 1.50
No. 26 12/\$1.59 (¾" x 1800") Solid Pack	7.68	7.20	19.08	9.54
No. 26E 12/\$1.59 (¾" x 1800") Everyday Assmt.	7.68	7.20	19.08	9.54
No. 26X 12/\$1.59 (¾" x 1800") Xmas Assmt.	7.68	7.20	19.08	9.54
No. 27E 48/59¢ Boxed Curling Ribbon - E.D. Assmt.	11.33	10.62	28.32	14.16
No. 27X 48/59¢ Boxed Curling Ribbon Xmas Assmt.	11.33	10.62	28.32	14.16
No. 28E 24/\$1.00 Boxed Curling Ribbon E.D. Assmt.	9.60	9.00	24.00	12.00
No. 28X 24/\$1.00 Boxed Curling Ribbon Xmas Assmt.	9.60	9.00	24.00	12.00
No. 29X 24/\$1.49 Pkgs. (6 25¢ Rolls) Xmas Assmt.	13.40	12.00	35.76	17.88
No. 30X 12/\$1.39 Pkgs. (3 Kinds) Xmas Assmt.	5.10	4.80	16.68	6.00
No. 31X 24/\$1.59 Boxed Variety Xmas Assmt.	15.36	14.40	38.16	19.08
No. 32E 72/25¢ Bow & Hank - Wire Rack - E.D. Assmt.	9.95	9.36	18.00	11.70
No. 32X 72/25¢ Bow & Hank - Wire Rack - Xmas Assmt.	9.95	9.36	18.00	11.70
No. 33 12/25¢ Bow & Hank - Solid Pack	1.20	1.13	3.00	1.50
No. 34E 48/59¢ (6 Bows Per Box) E.D. Assmt.	11.33	10.62	28.32	14.16
No. 34X 48/59¢ (6 Bows Per Box) Xmas Assmt.	11.33	10.62	28.32	14.16
No. 35E 24/\$1.00 (10 Bows Per Box) E.D. Assmt.	9.60	9.00	24.00	12.00
No. 35X 24/\$1.00 (10 Bows Per Box) Xmas Assmt.	9.60	9.00	24.00	12.00
QUANTITY DISCOUNTS: Freight prepaid on all orders for \$100.00 or more, Resale and Store Use Items. Resale Items and Store Use Items CANNOT be assorted for quantity discount.				

ACCESSORY ITEMS

ITEM NUMBER and DESCRIPTION	Quantity	Distributor Net Price	Retailer Net Price
No. T-1 Star Bow Machine - For Widths Nos. 3 - 5 - 9	1 Machine	\$73.50	\$89.50
	3 Machines	69.50	89.50
No. T-2 Bow Buttons (Plastic)		1.35	1.75
No. T-3 Bow Tabs		1.50	2.00
No. T-4 Ribbon Rack - For 100 Yd. and 200 Yd. Rolls		2.25	2.50
No. T-5 Ribbon Rack - For Traverse Wound Rolls		.20	.25
No. T-6 Ribbon Rack - 600 Yd. Rolls		3.55	3.95
No. T-7 Bow Rack For Resale Bows		3.55	3.95
No. T-8 Ribbon Shears		2.25	2.50
No. T-9 Prefab Bow Machine - For Widths Nos. 3 - 5 - 9		44.55	49.50
QUANTITY DISCOUNTS: Freight Prepaid on all orders for \$100.00 or more. Accessory Items may be assorted with other ribbon items to receive prepaid transportation. May not be assorted to receive quantity discount on Resale Items - T-1 Star Bow Machine may be offered to Retailer at \$79.50 with 25 rolls of ribbon.			
TERMS: 2-10-e.o.m. Prices subject to change without notice.			

TYLON MFG. CORP.
645 REGAL ROW DALLAS 7, TEXAS
P. O. BOX 10861

cc: D.J. David
R.L. Hager
J.R. Lane
W.T. Hinrichs
G.M. Gudahl
B.E. Frank

SUBJECT: Possible Carry-over
in 9 colors.

8-9-62

TO: A.W. BOESE - G.W. & FAB. DIV. 220-8.W

FROM: L.G. NASH - FAIRMONT

The attached analysis is an estimate of the number of rolls of finished goods inventory we would have in stock on December 15, 1962.

This assumes we would have no additional production on these 9 Sasheen colors in the long roll items noted as being in stock on Dec. 15th.

It is also our understanding that:

- 1) no additional jumbo is to be made in the 9 colors being changed.

Presently we are out of Orchid, Aqua and Mist Green. Pastel Blue will also be gone very shortly.

- 2) Present jumbo stocks may be used out for:

- a. Further production on Long rolls as long as we can be sure it will be sold out by Dec. 15, 1962.
- b. Reel, bow, hank, regular Decorette, Floral Decorette, and Floral Lacelon regular production. We understand there is no Dec. 15, 1962 cut off plan on sales of these colors as used in these items and it will be just a gradual transition to the new colors as stock of jumbo and finished goods are used out on the old colors.

3) we are to start slitting the new colors for finished goods requirements immediately even though this will undoubtedly mean that some items will be selling in the new color prior to Dec. 15, 1962. This is to be carried out only after due consideration of points 1) and 2).

The analysis shows total rolls by size in column A' - and to the right, the Break-down by color.

Lowell B Nash

LGN:jfa



SAINT PAUL 19, MINNESOTA

A. W. BOESE

February 27, 1963

Dear Don:

Congratulations and good wishes on your appointment to
Division Vice President.

The best of luck for the future.

Sincerely,

Donald R. Guthrie
Coated Abrasives and
Related Products Division



SAINT PAUL 19, MINNESOTA

A. W. BOESE

February 27, 1963

Dear Art:

Congratulations on your appointment to Division Vice President announced by Mr. Buetow.

I wish you every success for the future both for yourself and your division.

Best regards.

Sincerely,

Arthur K. Telfer
Chemical Division



GENERAL OFFICES • 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA • TEL: 733-1110

cc: A. W. Boese

Interoffice Correspondence

Subject

May 8, 1963

Confidential

TO: E. B. MOFFET

FROM: J. R. LANE

This past week we had an opportunity to discuss long roll sales and ribbon business in general. This discussion was prompted by your asking me what is wrong with our ribbon business and what can we do to correct the situation. The following will more or less serve to document this discussion. I have added some additional comments and a possible solution to our problem. The intent of the comments and observations is not to be critical, but only to get to the root of the problem and find corrective solutions. I have confidence in you that it will be taken in this manner.

From a merchandising standpoint, I feel we have made some significant and drastic changes in 1963. We put into effect (1) a price reduction, (2) the availability of all colors in all widths and lengths, (3) the assortability of all ribbons for quantity discount, (4) branch stocks of all ribbon colors, lengths, and widths as standard items, (5) new colors as standard items, (6) additional widths plus a new color card, "SASHEEN" mailer, bow kit, and periodic package idea kits. Based on the experience, the wealth of knowledge and help contributed by everyone associated with ribbon products, I don't know of anything at this moment that could have been done that hasn't been done. It could, of course, very well be that we did too much. If you or anyone else feels that more could be done by merchandising, I would appreciate knowing what it might be. All of us feel that we have given the customer and our salesmen everything they have asked for in our 1963 long roll line and policy.

Several things have happened that, I believe, effect our ribbon sales to a great extent. Probably the most significant is the impression created by many of us in St. Paul. I know without any question that this is not intentional, but, believe me, it does exist. As I recollect, there have been three general sales meetings and three manager meetings since the merger of ribbon and tape. As you pointed out, ribbon has been given equal time with tape. But, Ernie, has it really? The product sessions during these meetings have been devoted to tape long rolls, tape resale, and ribbon. Tape has two-thirds of the meeting and ribbon one-third. Add to this the informal discussions which take place, and tape then has even a larger portion of the meeting. The latter, I am sure, is due to the fact that most of the people at the meetings are more familiar with tape than ribbon, and consequently, feel more at ease in discussing it. Now I realize that this is probably the way the meetings have to be run because of the volume tape contributes. In the past, however, this same amount of time was spent on ribbon products alone. At any rate, to the manager and salesmen these meetings seem to impress them as "tape meetings"

May 8, 1963

with ribbon as a "guest". Some of us can be impressed with what the guest says, but few of us remember because we aren't familiar enough with the subject.

I think you will agree that most of us have a tendency to lean toward that which is most familiar. In the case of our present organization, the Division is made up primarily of tape-educated personnel. Because of age and past experience, their thinking is mostly on tape products. The tape market is highly competitive. In order to exist and show an increase, a vast amount of products, deals, and promotions are needed to sell. There is a tremendous amount of volume at stake. Should the emphasis then be placed on the familiar big volume items or the unfamiliar lower volume items? A choice has to be made. It is only logical to assume that the former is done. It is probably hoped and expected the latter products will come around in due course because of the experienced people associated with them. Unfortunately, this thinking is sensed by those concerned and seems to motivate a feeling of disinterest.

Ribbon is a highly complicated and difficult product to sell, especially long rolls. I doubt whether it can ever be sold in the same manner as tape. It is completely unrelated as far as end use is concerned. Tape is sold for utility purposes and ribbon to beautify. Ribbon requires a highly trained specialist. I seriously doubt that those responsible for ribbon sales are being given this training or even the proper direction. They may get an occasional "lift", but if they haven't been familiar with the product, more than a prod is necessary.

Our future growth in ribbon products must come from new or competitive accounts. With all the products our Division is responsible for, how can anyone chance spending a lot of time selling aesthetics? Eighty percent of our Division's volume is, in the eyes of most of us, concentrated in those products which are almost a necessity. Because of the number of these products, deals, and promotions to sell, a man hardly has ample time to do a proper job pitching them. Where can he possibly find the time to go after new or competitive ribbon business? If he takes the time, how can he sell all the tape products in order to maintain and increase his volume, which represents 80% of our business?

It is very frustrating to observe all of this and feel that what you are contributing isn't helping to change the situation. Have we gotten so big and cumbersome in organization and products that we find ourselves in a position of not being able to make progress? In evaluating field trips, in conversations with salesmen, managers, customers, merchandisers, etc., I get the feeling that there is a lack of enthusiasm for ribbon products, that there is not enough interest shown in using the sales aides furnished, too many are accepting objections and not selling against them, and that ribbon generally is looked at as a by-product. Most of this, I am sure, can be attributed to the number of products the Division is responsible for as related to the amount of time required for each one and the uncertainty of many toward ribbon products, which are complicated and unfamiliar. I want to re-emphasize that this feeling and attitude is not intentional. It's just a situation that exists.

I spoke of possible solutions. First of all, let me say I intend to do exactly what you suggest--fight for what I believe is necessary for non-woven products. I can almost assure you, however, that I will not become a candidate for any popularity contest. Secondly, I do not feel that I am in any position to be giving direction to a product sales manager. You mentioned that this was partially my responsibility. It seems to me that this is a sales responsibility; however, I would like to discuss this with you further. Thirdly, it may be advisable to make some changes in our merchandising staff. We can go into this later also.

May 8, 1963

The primary purpose of our price reduction was to get new and competitive accounts. To date we have not accomplished this. Unless we can find the means to do so, I would recommend that we have a price increase as soon as possible. At the same time I suggest we re-establish the 500 roll quantity for a 40-10 or more discount. We would accomplish several things:

1. Increase dollar volume at present buying levels.
2. Give a stocking distributor an incentive for handling and promoting long rolls.
3. Return the profit to the Division which we are losing rapidly.
4. Return to the distributor his loss on floor stocks caused by the price decrease.

There is no doubt that such a move would cause a considerable amount of turmoil in the field. I feel, however, that if we are going to do it, we might as well get it done in 1963 so that 1964 can be devoted entirely to promotions, new ideas, and new products.

I have given a lot of thought to what can be done in the field to improve our position. To progress, the Retail Tape and Gift Wrap Division must continue to improve and add products to the line. Yet in order to do this, present sales volume must be increased or maintained. Under these circumstances, how can our present sales force be expected to handle these new products and continue to service existing accounts selling all the products presently in the tape and ribbon line? I can't see how they can possibly find the time to seek out new ribbon customers, let alone effectively using the sales aides we send out to help them increase their ribbon business with existing accounts. If we are to continue as a combined Division, shouldn't we consider a corps of detail men to work with the territory salesmen? Their responsibility would be calling on competitive accounts and working with jobber salesmen. I would like to see them given specific products to sell depending on territory needs--in most cases, this would be long rolls of ribbon to start with. This should help ribbon in two ways--a means to get to the small account and a way to maintain the jobbers' interest in ribbon products. Both of these areas offer us our biggest growth potential.


Finally, I would like to suggest that consideration be given to a full-time long roll ribbon sales force. This group of forty to fifty salesmen would handle only long rolls of ribbon and machines. (All resale ribbon, distributor line, HOLLY TIE, and Home Agent would be sold by the tape salesmen.) They would sell to and contact all trade classes including existing and potential industrial consumers and converters. It might also be possible to use them in the Group I variety accounts and major Group II chains. In the sparsely populated areas this sales force could, on occasion, work with the tape salesmen. I would also suggest this group be augmented by four or five supervisors responsible to a product sales manager located in St. Paul, who in turn is responsible to the general sales manager of the Retail Tape and Gift Wrap Division. I also suggest that this long roll ribbon sales force be paid on the basis of what they sell as individuals and not as a group. In my opinion, the results of such a change would be as follows:

May 8, 1963

1. Relieve present tape minded managers and salesmen of a product which they are unsure of, thus giving them more time to spend on tape and resale ribbon products.
2. The creation of a better impression that ribbon is an important product.
3. Giving ribbon the specialized selling that is so important, especially in the area of exploiting new uses.
4. Giving the salesmen more time to go after new and competitive accounts, to show and sell ideas, to talk about and use the "Sara Littles" and selling aides furnished them.
5. The creation of new jobs and promotions, which would certainly generate enthusiasm.
6. Recognition on the basis of self-accomplishment.
7. A competitive spirit.

As far as merchandising goes, the present organizational set up with ⁱⁿ the Tape Division Group can be maintained.

In conclusion, I would again like to say this is not a criticism of anyone. We have a problem, and I would like to see it solved. Whatever decisions are made I want you to know that I will be behind them 100%. I have a lot of faith and confidence in ribbon products. I am attaching a summary of field trips made by Rocky for your evaluation.


JRL:fb

Attachment



GENERAL OFFICES • 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA • TEL: 733-1110

Interoffice Correspondence

cc: W. A. Aitken - 220-7W
A. W. Boese - 220-8W
J. E. Corbin - 220-8W
L. W. Lehr - 220-8W
J. A. Searles - 220-13E
H. B. Wistrand - 42-1E

Subject Proposed Multiple-Product
Nonwoven Maker
Project 63-6027

May 9, 1963

TO: F. R. OWEN - TAPE ENGINEERING - 42-1E

FROM: J. S. FOWLER - TAPE ENGINEERING - 42-1E

As requested by Mr. A. W. Boese, we have prepared the following proposals and equipment cost estimates for a multiple-product nonwoven maker to produce dusting fabric, surgical tape backing, and artist fabric. Equipment for laminating artist fabric to board stock is not included.

The estimates are based on using existing components of the 1-K dusting fabric maker either at Hutchinson, or moved to Fairmont, and additional equipment as required. The estimates are preliminary and may be different when preparing an Authority for Expenditure after obtaining shop estimates on completed designs. Since these proposals are of a confidential nature, we have limited the copy list to those indicated above.

Messrs. P. H. Carey, Gift Wrap Laboratory; F. S. Copeland, Medical Products Laboratory; and L. J. Miller, Retail Tape Laboratory have reviewed the proposed process web lines for feasibility. Production representatives have not reviewed the proposed web lines or equipment locations; however, if an Authority for Expenditure is prepared, more detailed information will be required from them. We do not expect minor changes which may be recommended by production to appreciably influence the cost. Additional drying studies will also be required before designing and fabricating hot cans for artist fabric.

For this study we are considering using existing tow cutting and opening equipment; however, representatives of Gift Wrap and Medical Products laboratories expressed desires for equipment to provide better quality opening than presently obtained on the Kirkman and Dixon opening equipment.

The proposed equipment is for making webs at present speeds as follows:

Dusting Fabric	70 fpm
Surgical Tape Backing	50 fpm
Artist Fabric	
Light Weight (40 lb.)	34 fpm
Medium Weight (70 lb.)	24 fpm
Heavy Weight (110 lb.)	18 fpm

30 / 1000 10

May 9, 1963

Each proposal is separate and does not depend on the other alternates. For this study we have considered the following alternates:

Proposal No. 1: Modify the 1-K maker at Hutchinson for a two-trip making and retreating operation for artist fabric in addition to making dusting fabric and surgical tape backing.

Proposal No. 2: Move components of the 1-K maker and equipment for converting dusting fabric to Fairmont and modify the maker for a two-trip making and retreating operating for artist fabric in addition to making dusting fabric and surgical tape backing.

Proposal No. 3: Move components of the 1-K maker and equipment for converting dusting fabric to Fairmont and modify the maker for a one-trip making and retreating operating for artist fabric in addition to making dusting fabric and surgical tape backing.

A one-trip making and retreating operation is not proposed for Hutchinson because of space limitations. Housing retreating equipment in a separate room across an aisle would require excess operating people.

Copies of process flow diagrams are enclosed for each proposal.

If additional information on these proposals is needed, please contact the writer.


JSF:cah

Attachments

PROPOSAL NO. 1

Modify the 1-K maker at Hutchinson for a two-trip making and retreating operation for artist fabric in addition to making dusting fabric and surgical tape backing.

Modifications and Additions

Relocate slitter rewinder and Dilts winder.

Modify Rando Webber drive and coater.

Fabricate and install 5 hot cans, unwind stand, retreating tank, and piping.

Install sheeter and improve sheet stacker.

Estimated Costs

Equipment and installation - \$55,000

Engineering hours - 3000

Operation

Making surgical tape backing and dusting fabric will be the same as the present operation, except slitting, perforating and rewinding of dusting fabric will be at the opposite end of the maker room.

Making and retreating artist fabric will be similar to the method presently used at the Profab Laboratory, except with improved sheet stacking for operating with two people. Sheets of artist fabric will be palletized and shipped to Fairmont for inspecting and packing.

Space Requirements

Maker Area 2200 square feet

Warehouse Area

Artist Fabric	350 square feet
Dusting Fabric	100 square feet
Surgical Tape Backing	300 square feet

Converting Area

Artist Fabric	500 square feet at Fairmont
Dusting Fabric	300 square feet

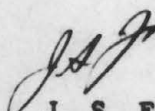
Illustrations

Illustrations are attached as follows:

Location of equipment areas in building.

Block flow diagrams of major equipment.

Elevation and plan view of equipment and web line.


J. S. Fowler
Tape Engineering
5/9/63

cah

PROPOSAL NO. 2

Move components of the 1-K maker and equipment for converting and packing dusting fabric to Fairmont and modify the maker for a two-trip making and retreating operation for artist fabric in addition to making dusting fabric and surgical tape backing.

Modifications and Additions

Disconnect and ship existing 1-K maker and dusting fabric converting and packing equipment to Fairmont.

Construct maker room with utility services in the warehouse area at Fairmont.

Modify Rando Webber drive, coater, and oven heater.

Fabricate and install 5 hot cans, unwind stands and retreating tank and piping.

Install existing 1-K maker equipment.

Install existing sheeter and improve sheet stacker.

Estimated Costs

Construction, equipment, and installation - \$113,500

Engineering hours - 4700

Operation

Making surgical tape backing and dusting fabric will be the same as the present operation with the dusting fabric slitting, perforating, and rewinding equipment located adjacent to the Dilts winder.

Surgical tape backing will be rewound on an existing rewinder at Fairmont to check for blocking before shipping to St. Paul for surgical tape making.

Making and retreating artist fabric will be similar to the method presently used at Profab Laboratory, except with improved sheet stacking for operating with two people. Sheets of artist fabric will be palletized for inspecting and packing at Fairmont.

Space Requirements

Maker Area 2200 square feet

Warehouse Area

Artist Fabric	350 square feet
Dusting Fabric	100 square feet
Surgical Tape Backing	300 square feet

Converting Area

Artist Fabric	500 square feet
Dusting Fabric	300 square feet

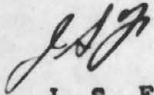
Illustrations

Illustrations are attached as follows:

Location of equipment areas in building.

Block flow diagrams of major equipment.

Elevation and plan view of equipment and web line.



J. S. Fowler
Tape Engineering
5/9/63

cah

PROPOSAL NO. 3

Move components of the 1-K maker and equipment for converting and packing dusting fabric to Fairmont and modify the maker for a one-trip making and retreating operation for artist fabric in addition to making dusting fabric and surgical tape backing.

Modifications and Additions

Disconnect and ship existing 1-K maker and dusting fabric converting and packing equipment to Fairmont.

Construct maker room with utility services in the warehouse area at Fairmont.

Modify Rando Webber drive, coater, and oven heater. Fabricate and install two sets of 5 hot cans, retreating tank with squeeze rolls and piping.

Install existing 1-K maker equipment.

Install existing sheeter and improve sheet stacker.

Estimated Costs

Construction, equipment, and installation - \$155,000

Engineering hours - 5000

Operation

Making surgical tape backing and dusting fabric will be the same as the present operation with the dusting fabric slitting, perforating, and rewinding equipment located adjacent to the Dilts winder.

Surgical tape backing will be rewound on an existing rewinder at Fairmont to check for blocking before shipping to St. Paul for surgical tape making.

Making and retreating artist fabric will be similar to the method presently used at Profab Laboratory, except with continuous in-line making and retreating and with improved sheet stacking for operating with two people. Sheets of artist fabric will be palletized for inspecting and packing at Fairmont.

Space Requirements

<u>Maker Area</u>	2500 square feet
<u>Warehouse Area</u>	
Artist Fabric	200 square feet
Dusting Fabric	100 square feet
Surgical Tape Backing	300 square feet
<u>Converting Area</u>	
Artist Fabric	500 square feet
Dusting Fabric	300 square feet

Illustrations

Illustrations are attached as follows:

- Location of equipment areas in building.
- Block flow diagram of major equipment.
- Elevation and plan view of equipment and web line.

J.S.F.

J. S. Fowler
Tape Engineering
5/9/63

cah

cc: A. W. Boese ✓

August 20, 1963

TO: J. R. LANE

FROM: E. B. MOFFET, JR.

I am extremely interested in keeping abreast of the progress which Roger Schmidt will be making on the development of non-gift wrapping uses for long rolls of Ribbon. Although it is a bit unusual, I would like to request that Roger write a monthly progress report, of a brief nature, stating what he has been doing during the past month. I know he undoubtedly keeps in close contact with you relative to his activity but because of the fact that he is not actually on our Merchandising staff, I think it might be worthwhile to keep us posted by way of a monthly progress report.

Would you discuss this with Roger and ask him to briefly outline what he has done in the last thirty days on the first of each month. However you and Roger feel this should be reported would be fine with me.

Many thanks.

EBM:sl



GENERAL OFFICES • 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA • TEL: 733-1110

Interoffice Correspondence September 25, 1963

Subject

TO: R. G. BIRKINS - RETAIL TAPE & GIFT WRAP SALES MANAGER #2 - RIDGEFIELD BRANCH

FROM: H. R. COURTNEY - TECHNICAL DIRECTOR - G.W. & F. LAB. - 27-1

The Gift Wrap and Fabric Laboratory has a program to develop non gift wrap use of ribbon products. We have been conducting background studies combining "SASHEEN" with other materials or modifications of the basic "SASHEEN" structure to provide additional properties not inherent in the basic "SASHEEN".

In order for this program to be successful, specific applications must be found so that our development can be concentrated on definite objectives. From the contacts of your men, we are aware of two potential customers: Kent Paper Company for matchbook covers, and Mod-Weave for place mats. I plan to meet with such potential customers to discuss the technical aspects of their requirements. While I am in the New York area, I would like the help of your men to call on other potential non gift wrap customers. Please advise if October 15 and 16 would be satisfactory dates.


HRC:seg

cc: A. W. Boese - 220-8W
H. F. Groth - 220-8W
J. R. Lane - 220-8W
R. J. May - 220-8W
M. W. McCaskill - 220-8W



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Interoffice Correspondence

Subject

September 26, 1963

TO: A. W. BOESE
S. E. CLEVINGER
J. R. LANE
C. O. MOOSBRUGGER
J. L. OVERMAN

FROM: R. F. HOW

In the last few weeks, I have been doing a lot of thinking about the kind of operation we need to get our long roll ribbon sales out of the doldrums. In my opinion, there are certain elements which such a promotion has to have:

Excitement ... we must produce enthusiasm for the promotion at every level: our own salesmen, distributor salesmen, and the ultimate customer.

Concentration ... we must concentrate in a number of ways: Time-wise, we must coordinate the operation with a completely integrated advertising and selling schedule. Dollar-wise, we must spend a sufficient share of our total budget to make a real splash. Target-wise, we must rifle our marketing impact against the customers who offer us the biggest potential return.

Competitive power ... this promotion should be aimed at knocking competition out of established accounts which already are sold on the in-store gift-wrapping idea, as almost every worthwhile account must be by this time.

The following proposal is advanced as an example of a program which would accomplish these three objectives, rather than a definite, "short-stroke" operating plan. There probably are a lot of reasons why it wouldn't work in its exact present form. But let's not be discouraged by the first that comes to mind: "We never did anything like this before."

I'm sure we could think of a lot better titles than this, but just to get the show on the road, let's call it the

"PRIZE-PACKAGE-OF-THE-MONTH CONTEST"

- Objectives:
1. To introduce our new gift-paper line emphatically to its best potential customers (department stores, gift and specialty shops, etc.).
 2. To convince these customers of the relatively low cost of in-store gift-wrapping with 3M products.
 3. To force purchases of at least trial quantities of our products by accounts now buying from competitors.

4. To make distributor salesmen actively promote our new papers and new colors of ribbon.
5. To get our own salesmen excited.

HOW IT WORKS

Our salesmen hold meetings with all important jobbers, telling them that starting April 1, 1964 (or whatever date the introduction of paper is possible) 3M is inaugurating a six month's national prize contest in which they can play a prominent and profitable part. The plan is this: Jobber salesmen will be furnished with a limited number of contest entry material: entry blanks, do-it-yourself design kits containing samples of new papers and ribbons, etc. These they will distribute to their customers who already are using in-store gift wrapping or are seriously contemplating it. If one of their customers is a monthly winner, the salesman who furnished the customer with his entry blank will win \$100 cash.

ENTRY BLANKS

These will contain in addition to the ordinary material like name and address of store, etc. the following items: signature of jobber salesman providing the entry blank to the customer, cost of ribbon used (per package), cost of paper used (per package), approximate cost of wrapping time (per package), special equipment used (if any). It will specify that both ribbon and paper used in making prize-entry package must be 3M products. It will detail package size which must be used in submitting entries to 3M for judging. It will enunciate monthly contest entry closing dates, and other specifics, if any, bearing on prizes. First prize will be one year's supply of gift-wrapping material of kind used in contest entry (though not necessarily same color, etc.). Probably there should be a smaller value cash alternate to this. (\$500?)

JUDGING

There will be three master judges: a leading woman designer (Sara Little?); a nationally-known color expert (Faber Birren?); a prominent industrial designer (Jean Reineke?). I think these people all are on retainers from 3M Company at this time. Judges will meet every month shortly after monthly contest closes to pick out prize winning packages, and announcement by mail will be made to every contestant as soon as possible thereafter. (This will keep their interest up. It will also give us a chance to pour in more information about the new lines.) (And to distributor salesmen.)

There are a lot of different ways of weighting contest entries: for instance: practicality from cost or time standpoint, seasonality, store identity, departmental or occasion identity, free-wrap or pay-wrap. These details would have to be worked out in advance.

DO-IT-YOURSELF-DESIGN KITS

When the jobber salesman makes his initial contact with the account, he would leave with him, as stated above, one of these kits. They would be a triple-fold stiff cover folder approximately 18 inches wide by 7 inches deep, which folds down to 6 by 7. The third (or center) fold of this piece is die-cut with the shape of a package with a bow on top. Enclosed in the folder are 4 by 5 samples of the new papers, and 5-inch lengths of all ribbons, of a width which would fit under the

bow part of the die-cut. By placing paper and ribbon samples under the die-cut, store personnel could rapidly work out possible combinations for themselves. Also enclosed would be a form-sheet which would cover various bows, wrapping styles, and bow-making equipment. This sheet would be black and white. Entry blank could also be enclosed.

We would really shoot the works on this kit, and make it as exciting as possible, and undoubtedly it would cost quite a bit per unit. However, we should remember that its distribution will be only to accounts with a known and probably present potential. And the cost of the actual call by a salesman -- many times the price of the kit -- will be borne by the jobber, not by 3M. If the kit is done right, there is scarcely a person who will be able to resist playing around with it a little, and thus becoming familiar with our new lines ... even if they never do anything about entering the contest. Frankly, I can't see how we can accomplish this in any other way.


LATERAL BENEFITS OF THE CONTEST

If you stop to think about all the possibilities of this idea, such as making the jobber salesman do a real introductory job, or the possibility the contest gives us to reach big accounts regularly with interesting direct mail, you can get quite enthusiastic. For instance we might get quite a few new ideas for this kind of packaging. And while it isn't usual to show prize-winners in any contest, yet we might be able to parlay the prize-winning packages into some direct mail or publication advertising (particularly if the stores involved are big names). Also, since all entries become the property of 3M Company, we might have here the raw material for a real package-wrapping library which we could use in a variety of ways. If we decided to set up our own individual package design service, this would be a fine way to get into it.

The important thing is the simple one: by going into this kind of promotion, we would give our salesman and our jobber salesman something that would be a lot more exciting than rolls of ribbon and S71's to talk about. And we'd practically guarantee effective calls by both classes on the big customers and prospects.

AS FOR MONEY ...

We budgeted between \$50,000 and \$60,000 (including preparation) against these specific markets in 1963. I'm pretty sure that half of this would cover the total expenses of such a promotion described above, including all cash prizes, and everything except the "year's supply" of wrapping materials, which might vary widely. This would leave us enough money to carry on reduced campaigns against this market in the six months not covered by the contest.



RFH:ms

September Summary of Work

October 10, 1963

TO: J. R. LANE - MERCHANDISING MANAGER - R. T. & G. W. DIV - 220-8W

FROM: R. M. SCHMIDT - GIFT WRAP & FABRIC LABORATORY - 27-1

The following is a summary of my work in Department 1515 for the month of September. This work is divided into two major groups of projects.

1. Immediate Projects:

A. Decorative Kits:

Work continues on the development of a Christmas decoration kit to be used as a method of selling 50-yard rolls of "Sasheen" through needle-work departments in department stores. The kit, when completed, will contain instructions for making a topiary tree, twin table center pieces and a wall decoration.

B. Holiday Handicraft:

Samples of Christmas decoration ideas using "Sasheen" ribbon were made up for presentation to Holiday Handicrafts, a large New York manufacturer of hobby kits.

2. Long Range Developments:

A. Scented Ribbon:

Samples of a scented ribbon were produced, but the results were not good. The ribbon did not retain the scent for a satisfactory length of time, and a darkening of color was noted in the ribbon.

RMS:bcf

cc: A. W. Boese 220-8W
H. R. Courtney 27-1
E. B. Moffet 220-8W

cc: A. W. Boese ✓
R. M. Schmidt - 27-1

Non Gift Wrap Applications

October 18, 1963

TO: E. B. MOFFET

FROM: J. R. LANE

To bring you up-to-date, we are putting together a type of ribbon put-up which would be sold to the Needleart and/or Notions Departments of department stores. This product would consist of several 50 yard rolls of "SASHEEN" in accent colors.

The purpose would be to promote it for the use in making topiary trees, table decorations, wall decorations, etc. We are preparing instruction sheets for these various items, which can be given out to a customer when they purchase such a put-up.

As we discussed, these types of departments are usually looking for items of this type which can help them out during the Christmas Season when they normally do not sell a lot of merchandise.

Tentatively, I plan to call on Daytons with Roger Schmidt and discuss this with them on the basis of having Roger demonstrate the use of such products during a three-day period. This would help us to evaluate such a program for nationwide distribution in 1964.

As you mentioned, this could also be sold to accounts such as the Singer Sewing Machine Company. While I am in New York next week, I will try to get into these departments at Macy's and Gimbl's to find out a little more about how they buy, what mark-up they normally want, etc.

On my return Roger and I will make the call on Daytons. By that time we should have a better idea as to the type of product we would have to offer and also have available samples of some of the suggested ideas which we would want the stores to promote in selling this put-up.

JRL:bet

Subject:

March 23, 1964

*all
if you can attend
call Pat Jacobson.
3/10*

MESSRS: R. C. BERTELSEN
A. C. BOYDEN
R. L. BUCHER
W. M. CORDNER
H. A. FINK
C. W. HANSON
M. W. HART
A. F. JACOBSON ✓
J. H. KUGLER
E. C. LUND
R. A. LePAGE
W. F. MacKENZIE

J. R. McCLINTICK
W. J. McNAMARA
H. M. MERRILL
L. L. MORIN
K. M. POEHLER
M. E. SMITH
S. W. THIELE
A. F. THOMSON
J. A. THWAITS
L. E. VOKATY
J. G. WIRSIG

From time to time Manufacturing Managers question the activities of 3M Company General Staff Manufacturing. These questions point up the need for "communication" on Staff Manufacturing; what does it include, what are its objectives, what programs does it have, and what management is it being given.

You are invited to a meeting at which Art Boyden will cover the foregoing. Other members of Staff Manufacturing will be present to participate in question discussion.

We will meet at 10:00 a.m., Monday, April 13, in Building 220-14, Management Room, and adjourn for lunch to 220-15, Dining Room "B", at 12:00 noon.

Please confirm your attendance with Pat Jacob, ext. 35249, by noon, April 10.

HWR
H. W. Rehfeld

pj

cc: R. R. McKenzie - 220-7W
C. P. Pesek - 220-14E

MAR 24 1964

F. Staff Mfg

Interoffice Correspondence



Subject:

CONFIDENTIAL

APRIL 8, 1964

TO: A. H. REDPATH

FROM: A. W. BOESE

AS REQUESTED BY MR. SAMPAIR, I AM OUTLINING MY VIEWS ON RIBBON MARKETS.

TO INCREASE OUR INSTORE RIBBON VOLUME, I BELIEVE WE HAVE TO PICK UP THE LEADERSHIP DEVELOPED IN THE PAST WHEN OUR RIBBON HAD STYLE LEADERSHIP BECAUSE OF SHEEN, WORKABILITY AND COLOR. THIS LEADERSHIP WAS EXTENDED THROUGH INTRODUCTION OF THE POM POM BOW AND S-10, BOWS WHICH HAD INDIVIDUALITY THROUGH ABILITY TO STYLE.

WITH THE ADVENT OF THE STAR BOW, S-71 AND COMMERCIAL BOWS, WE BROADENED THE MARKET BASE BUT DID NOT SIGNIFICANTLY INCREASE OUR VOLUME. THE ECONOMICS OF MAKING STAR BOWS IS WELL KNOWN. SUSAN CRANE HAS TAKEN LEADERSHIP IN PAID GIFT WRAP BECAUSE OF HIGH STYLE AND ESTHETIC CONTENT OF THEIR PRESENTATION AND PRODUCTS.

I BELIEVE THAT WELL PLANNED PRESENTATIONS, BETTER INFORMED SALESMEN MAKING USE OF OUR BROAD COLOR LINE, AND HAVING A GOOD WORKING UNDERSTANDING OF STYLE AND COLOR CAN RE-ESTABLISH OUR LEADERSHIP AT THE BETTER DEPARTMENT STORE AND HI-CLASS SPECIALITY SHOPS AND THIS STYLE LEADERSHIP AND PRESTIGE CAN ONLY HELP US IN THE BROAD GENERAL MARKET WHICH FOLLOWS THE STYLE AND COLOR DIRECTIONS OF DEPARTMENT AND SPECIALITY STORES. THIS HAS TO BE A CONTINUED AND PLANNED PROGRAM CONTINUALLY UPDATED BY FOLLOWING FASHION AND COLOR PREFERENCES AND PROMOTING THE COLORS IN OUR LINE WHICH HAVE HIGH CURRENT ACCEPTANCE.

IN THE PROMOTIONAL FIELD WE SHOULD DEVELOP MORE KNOWLEDGE OF PREFERENCES IN PACKAGING AND COLORS BY CONSUMERS SO AS TO HAVE LEADERSHIP IN THIS MARKET THROUGH CUSTOMER KNOWLEDGE; HOWEVER, TO ESTABLISH RIBBON ON A SOUND BASIS WE HAVE TO BROADEN THE MARKET BASE BEYOND THE GIFT WRAP AREA. THE AREA THAT OFFERS THE HIGHEST POTENTIAL IS AS A CRAFT PRODUCT TO USE FOR HOME DECORATION, WHETHER IT BE CURTAIN TIE-BACKS TO GIVE AN ACCENT COLOR TO A ROOM, TO A TABLE AND PARTY DECORATION AND, OF COURSE, HOLIDAY DECORATIONS TO NAME A FEW EXAMPLES.

WORK HAS BEEN DONE IN THIS FIELD TO INDICATE THE INTEREST, SUCH AS CLASSES THROUGH THE 3M CLUB CHRISTMAS WORKSHOPS. ALSO THE MANY ORGANIZATIONS WHO HAVE USED RIBBON FOR DECORATIONS.

THE WOMEN'S CHRISTMAS MAGAZINES, YEAR AFTER YEAR, SHOW HOME DECORATIONS MADE OF RIBBON BUT THERE IS NO ESTABLISHED MARKET FOR THEM TO BUY RIBBON FOR THESE USES AS THE GIFT WRAP COUNTERS DO NOT CARRY THE SIZE, WIDTH, OR COLORS NEEDED FOR CRAFT USE. I BELIEVE THE OUTLETS IN THE DEPARTMENT STORE WOULD BE THE NEEDLE ARTS DEPARTMENT OR THE ARTIFICIAL FLOWER DEPARTMENT AS WELL AS TRIM-A-TREE SHOPS AT CHRISTMAS.

I DO NOT BELIEVE DEMONSTRATORS WILL BE NECESSARY WITH WELL DESIGNED BROCHURES THAT WILL SHOW METHODS AS WELL AS MADE UP SAMPLES.

THE RAPIDLY GROWING CRAFT DISTRIBUTOR AND STORES ALSO HAVE A VAST POTENTIAL. THEY CAN NOT ONLY GET TO THE HOUSEWIFE, BUT REACH THE WOMEN'S ORGANIZATIONS WHICH WE DO NOT

MR. A. H. REDPATH

- 2 -

APRIL 8, 1964

REACH TODAY AS WELL AS BUSINESS PLACES WHICH HAVE ORGANIZED RECREATIONAL PROGRAMS. CRAFT OUTLETS COULD ALSO HAVE BOW MAKERS AVAILABLE TO RENT TO GROUPS OR INDIVIDUALS WHICH WOULD NOT ONLY BROADEN THE USE OF RIBBON FOR DECORATION, BUT GIVE US ADDITIONAL GIFT WRAP BUSINESS FOR HOME USE BASED ON LONG ROLLS.

THE MAJOR CRAFT DISTRIBUTORS HAVE DEMONSTRATORS FOR INSTORE AND GROUP DEMONSTRATIONS AND THIS SERVICE WOULD BE AVAILABLE TO OUR PRODUCTS. THROUGH CRAFT AND SCHOOL DISTRIBUTORS, WE CAN REACH THE UNTAPPED MARKET OF THE SCHOOLS FOR CRAFT USES FROM KINDERGARTEN THROUGH HIGH SCHOOLS AND COLLEGES IN HOME ECONOMIC PROGRAMS. RIBBON HAS BEEN USED IN THESE AREAS LOCALLY WITH ENOUGH INTEREST TO INDICATE A MARKET.

THE PROGRAM TO ACCOMPLISH THIS HAS TO BE DEFINED, ACTIVATED AND DIRECTED WITH CONCENTRATED EFFORT. THIS CAN BEST BE DONE WITH A CLOSE KNIT GROUP WORKING TOGETHER IN A COORDINATED FASHION AND DEDICATED TO ACCOMPLISH THE RESULTS.

I WOULD LIKE TO RECOMMEND AGAIN THAT THE RIBBON GROUP BE SEPARATED FROM THE TAPE ORGANIZATION WITH SALES REPORTING AS PRESENT, BUT FUNCTIONAL DIRECTION COMING FROM THE RIBBON GROUP. I WOULD LIKE TO HAVE THE RESPONSIBILITY TO DIRECT AND LEAD THIS GROUP TO ACCOMPLISH WHAT I SINCERELY BELIEVE WE CAN DO AND THAT IS TO INCREASE SALES AND PROFITS.

THIS COULD BE TRIED FOR TWO YEARS, WITHIN PRESENT ESTABLISHED BUDGETS, AND THE ACCOMPLISHMENTS REVIEWED AT THAT TIME TO DECIDE THE CONTINUANCE OF THE PRODUCT GROUP.

I WOULD LIKE TO STATE THAT THESE RECOMMENDATIONS ARE IN NO MANNER A CRITICISM OF OF THE CURRENT OPERATION OR PERSONNEL WHO HAVE HELPED ACCOMPLISH TREMENDOUS SAVINGS AND HAVE EXTENDED THEIR HELP, ALONG WITH THE MANY PROBLEMS THEY ARE CONCERNED WITH ON TAPE. IT IS MAINLY SUGGESTED THAT THE NEXT LOGICAL STEP IN THE INTEGRATION IS TO CONCENTRATE EFFORT AND DIRECTION TO EXTEND THE PRODUCTS FUTURE GROWTH.

AWB
AWB/AP

CC - R. W. MUELLER
C. B. SAMPAIR

Muchansky

Lab

Factory

PRODUCTS

WOMEN'S CLUBS

CHURCH
SCHOOL
GARDEN
OTHERS

ALL COLORS, ALL WIDTHS 250-YARD ROLL

HOME DECORATING MARKET

HOUSEWIVES
TEEN-AGE GIRLS

ALL COLORS, ALL WIDTHS 50-YARD ROLL

RECREATIONAL PROGRAMS
(COMMUNITY AND BUSINESS)

CHILDREN
TEEN-AGE
ADULT

ALL COLORS--POSSIBLY ONE WIDTH HANKS
ALL COLORS--VARIETY WIDTHS 50-YARD ROLLS

OUTLETS: DEPARTMENT STORES, HOBBY & CRAFT SHOPS, BOOK STORES

SIZE OF MARKET POTENTIAL: DIFFICULT TO DETERMINE WITHOUT A DETAILED MARKET STUDY
AND TESTS

ADVERTISING AND PUBLICITY: PUBLICITY (AUDIO, VISUAL, AND EDITORIAL PUBLICITY)

ADVERTISING: NOT DETERMINED

SCHOOLS

GRADE (1 THROUGH 5)

CLASSES: CRAFT AND ART ACTIVITIES

JUNIOR AND SENIOR HIGH SCHOOL

CLASSES: HOME ECONOMICS

CLUBS: DECORATIONS, DANCES, GAMES, CORSAGES

COLLEGE

CLASSES: HOME ECONOMICS

CLUBS: SORORITIES, SPECIAL SCHOOL EVENTS

DECORATIONS, DANCES, GAMES, CORSAGES

OUTLETS: SCHOOL DISTRIBUTOR, CRAFT DISTRIBUTOR AND DEALER

ADVERTISING AND PUBLICITY: PUBLICITY

SALES MANAGERS CHARGED TO SATIN + SPUN RIBBON

	Retail + Industrial STAFF	EASTERN DIV Retail + GIFT WRAP	MIDWEST Retail + GIFT WRAP	VARIETY CHAIN	WESTERN Retail - GIFT WRAP	ST. PAUL Retail - GIFT WRAP
ATLANTA	.18					
BOSTON	.05					
HIGH POINT	.27					
NEW YORK	.48					
PHILADELPHIA	.31					
BUFFALO	.10					
ST LOUIS			.62			
CLEVELAND			.15			
CINCINNATI			.08			
CHICAGO			.07			
DETROIT			.15			
LOS ANGELES				.20		
SEATTLE				.15		
DALLAS				.24		
SAN FRANCISCO				.26		
ST PAUL	2.80			.49		.36
	2.80	1.39	1.07	.49	.85	.36

6.96 Total

APR 4/30/64

1964 SALES FORECAST REVIEW 5/1/64

TRANSPARENT SHORT ROLLS

000's Dollars	Actual Sales			Sales Forecast				Actual Jan-April			
				Official		Revised		1963		1964	
	1962	1963	% Inc.	1964	% Inc.	1964	% Inc.			% Inc.	% Forecast
15¢ - Red Plaid	1,038	1,098	5.8	1,000	8.9cr	1,020	7.1cr	388	305	21.4cr	101.0
25¢ - Red Plaid	2,139	2,421	13.2	2,800	15.7	2,655	9.7	774	769	0.6cr	92.8
39¢ - Red Plaid Dispenser	1,646	2,731	65.9	3,000	9.8	2,810	2.9	1,065	1,028	3.5cr	104.5
39¢ - Red Plaid Refill	1,078	1,073	0.5cr	900	16.1cr	850	20.8cr	469	269	42.6cr	102.7
Total Red Plaid	5,901	7,323	24.1	7,700	5.1	7,335	0.2	2,697	2,371	12.1cr	99.7
39¢ - Green Plaid	4,608	3,658	20.6cr	3,900	6.6	3,460	5.4cr	1,522	1,161	23.7cr	82.9
59¢ - Green Plaid Dispenser	-	572	-	1,242	117.1	1,010	76.6	13	303	-	73.4
59¢ - Green Plaid Refill	650	743	14.3	558	24.9cr	515	30.7cr	277	196	29.2cr	133.3
Total Green Plaid	5,258	4,973	5.4cr	5,700	14.6	4,985	0.2	1,812	1,660	8.4cr	84.7
TOTAL RED & GREEN PLAID	11,159	12,296	10.2	13,400	9.0	12,320	0.2	4,509	4,031	10.6cr	92.9
ROCKET BRAND	1,286	1,722	33.9	1,600	7.1cr	1,535	10.8cr	564	465	17.6cr	86.6
RESALE DOUBLE FACED	280	338	20.7	400	18.3	405	19.8	118	126	6.8	93.3
TOTAL RESALE TRANS. FIIM	12,725	14,356	12.8	15,400	7.3	14,260	0.7cr	5,191	4,622	11.0cr	92.3
GIFT TAPE	1,174	774	34.1cr	900	16.3	780	0.8	26cr	13cr	-	-

1964 SALES FORECAST REVIEW - 5/1/64

LONG ROLLS & EXTRA PROFIT

000's Dollars	Actual Sales			Sales Forecast				Actual Jan- April			
	1962	1963	% Inc.	Official		Revised		1963	1964	% Inc.	% Forecast
				1964	% Inc.	1964	% Inc.				
Resale Colored Plastic	1,012	1,175	16.1	1,600	36.2	1,440	22.6	369	430	16.5	84.1
Resale Plastic Electrical	803	855	6.5	965	12.9	840	1.8cr	280	258	7.9cr	87.2
RESALE PLASTIC	1,815	2,030	11.8	2,565	26.4	2,280	12.3	649	688	6.0	85.3
Home Masking	1,862	2,015	8.2	2,300	14.1	2,180	8.2	702	712	1.4	91.0
Freezer Tape	1,164	1,219	4.7	1,120	13.2cr	1,280	5.0	398	415	4.3	118.2
Package Sealing	486	578	18.9	710	22.8	690	19.4	117	157	34.2	101.3
Resale Drafting	169	171	1.2	195	14.0	160	6.4cr	49	48	2.0cr	78.7
RESALE PAPER	3,681	3,983	8.2	4,325	8.6	4,310	8.2	1,266	1,332	5.2	98.7
Crystal Bay Cello	325	359	10.5	395	10.0	395	10.0	117	110	6.0cr	88.0
Transparent Cello 1296"	5,996	5,223	12.9cr	5,350	2.4	5,555	6.4 (*5,447)	1,673	1,951	16.6	100.4
Transparent Cello 2592"	7,399	6,840	7.6cr	6,850	0.1	7,030	2.8 (*6,900)	2,085	2,333	11.9	99.2
Double Coated Film	893	936	4.8	975	4.2	1,035	10.6	279	337	20.8	106.6
Magic Mending 1296"	2,201	2,420	40.3	2,825	16.7	3,200	32.2 (*3,139)	888	1,233	38.8	125.4
Magic Mending 2592"		667		870	30.4	910	36.4 (* 891)	219	295	34.7	106.1
Acetate Film	828	843	1.8	905	7.4	900	6.8	312	302	3.2cr	95.6
TRANS. COMMERCIAL FILM	17,642	17,288	2.0cr	18,170	5.1	19,025	10.0	5,573	6,561	17.7	103.9
Colored Crepe	565	527	6.7cr	490	7.0cr	515	2.3cr	174	181	4.0	110.4
Drafting, Long Rolls	687	634	7.7cr	620	2.2cr	625	1.4cr	219	207	5.5cr	101.0
Locker Tape	368	358	2.7cr	345	3.6cr	365	2.0	116	121	4.3	93.4
PAPER TAPES	1,620	1,519	6.2cr	1,455	4.2cr	1,505	0.9	509	509	0	94.7
RETAIL ACCESSORIES	1,495	1,688	12.9	1,525	9.7cr	1,560	7.6cr	646	588	9.0cr	105.6
TOTAL TAPE	40,152	41,638	3.7	44,340	6.5	43,720	5.0	13,808	14,287	3.5	98.5

* If 6% Price Cut Were Made 9/1/64

1964 SALES FORECAST REVIEW 5/1/64

RIBBON PRODUCTS

Sales Forecast

Blm
What part of increased profit
is sales area or factory?
or 3

Budget at end of year on Kelly Tyb

000's Dollars	Actual Sales			Official		Revised		Actual thru April			% of Forecast
	1962	1963	% Inc.	1964	% Inc.	1964	% Inc.	1963	1964	% Inc.	
*Decorette Resale	103	69	33.0 Cr.	-	-	5	-	9	4	-	-
Decorette Private Label	139	201	44.6	200	.5 Cr.	220	9.5	106	85	19.8 Cr.	197.7
**Sasheen Resale	667	340	49.0 Cr.	135	60.3 Cr.	150	-	33	9	-	-
Sasheen Private Label	178	88	50.6 Cr.	70	20.5 Cr.	90	20.5 Cr.	-	5	100.0	83.3
Promotional Ribbon	1,085	1,066	1.8 Cr.	1,100	3.2	1,100	3.2	7 Cr.	1	-	-
TOTAL RESALE	2,172	1,764	18.8 Cr.	1,505	14.7 Cr.	1,545	12.4 Cr.	141	104	26.2 Cr.	226.1
Decorette 50 Yd.	37	26	29.7 Cr.	25	3.8 Cr.	20	23.1 Cr.	9	6	33.3 Cr.	85.7
Sasheen 50 Yd.	203	126	37.9 Cr.	130	3.2	120	12.7 Cr.	37	31	16.2 Cr.	83.8
Decorette Package Line	117	85	27.4 Cr.	65	23.5 Cr.	75	11.8 Cr.	16	21	31.3	123.5
Sasheen Package Line	964	752	22.0 Cr.	840	11.7	800	6.4	126	112	11.1 Cr.	78.9
Sasheen 200 Yd.	141	144	2.1	120	16.7 Cr.	120	16.7 Cr.	44	45	2.3	102.3
TOTAL VARIETY	1,462	1,133	22.5 Cr.	1,180	4.1	1,125	.7	232	215	7.3 Cr.	87.0
Lacelon	195	191	2.1 Cr.	210	9.9	210	9.9	52	54	3.8	87.1
Decorette 100 Yd.	253	232	8.3 Cr.	275	18.5	240	3.4	51	46	9.8 Cr.	74.2
Decorette 200 Yd.	71	86	21.1	85	1.2 Cr.	85	1.2 Cr.	26	22	15.4 Cr.	110.0
Sasheen 100 Yd.	2,380	1,903	20.0 Cr.	1,560	18.0 Cr.	1,900	.2	306	298	2.6 Cr.	114.6
Sasheen 250 Yd.	1,494	1,915	28.2	2,725	42.3	2,000	4.4	294	306	4.1	72.0
*Floral Decorette	65	43	33.8 Cr.	-	-	-	-	27	-	-	-
TOTAL LONG ROLLS	4,458	4,370	2.0 Cr.	4,855	11.1	4,435	1.5	756	726	4.0 Cr.	88.6
Decorette 500 Yd.	116	70	39.7 Cr.	60	14.3 Cr.	60	14.3 Cr.	17	17	-	81.0
Sasheen 500 Yd.	780	729	6.5 Cr.	825	13.2	650	21.2 Cr.	103	47	54.4 Cr.	58.8
TOTAL CONVERTER	896	799	10.8 Cr.	885	10.8	710	11.1 Cr.	120	64	46.7 Cr.	63.4
GRAND TOTAL SPUN	1,096	1,004	8.4 Cr.	920	8.4 Cr.	915	8.9 Cr.	313	255	18.5 Cr.	109.9
GRAND TOTAL SASHEEN	7,892	7,063	10.6 Cr.	7,505	6.3	6,900	2.3 Cr.	936	854	8.8 Cr.	86.2
Ribbon Accessories	673	673	-	365	45.8 Cr.	435	35.4 Cr.	85	77	10.6 Cr.	79.4
TOTAL RIBBON PRODUCTS	9,661	8,740	9.5 Cr.	8,790	.6	8,250	5.6 Cr.	1,334	1,186	11.1 Cr.	89.8

* Sellouts in 1964

** Sellouts in 1964 - Everyday Only

1964 SALES FORECAST REVIEW 5/1/64

NEW PRODUCTS

Sales Forecast

000's Dollars	Actual Sales			Official		Revised		Actual thru April			% of Forecast
	1962	1963	% Inc.	1964	% Inc.	1964	% Inc.	1963	1964	% Inc.	
Type Cleaner	230	207	10.0 Cr.	210	1.4	200	2.4 Cr.	67	71	6.0	101.4
Tarni-Shield											
3M - Resale	-	9	-	0		375	-	-	-	-	
3M - Commercial	210	312	48.6	450	44.2	465	49.4	96	149	55.2	122.1
Private Label	-	843	-	645	23.5 Cr.	505	40.0 Cr.	267	216	19.1 Cr.	90.0
TOTAL	210	1,164	454.3	1,095	5.9 Cr.	1,345	15.7	363	365	0.6	100.0
Dusting Fabric	137	159	16.1	180	13.2	165	3.8	52	52	0	92.9
Molded Products											
Industrial Mask	291	528	81.4	630	19.3	675	27.8	160	230	43.8	109.0
Cold Weather Mask	-	44	-	30	-	200 ²³⁵	-	1	38	-	19.0
TOTAL	291	572	96.6	660	15.4	875 ⁹¹⁰	53.0	161	268	66.5	127.0
Art & Education Products	29	27	6.9 Cr.	250	-	250	-	7	39	457.1	67.2
Bookshelf Games	-	-		350	-	580	-	0	11	-	47.8
Chalkboard	-	-		100	-	0	-	0	-	-	0
Scotchfoam & Misc.	43	-		25	-	0	-	0	1 Cr.	-	-
TOTAL NEW PRODUCTS	940	2,129	126.5	2,870	34.8	3,415	60.4	650	805	23.8	101.3

* Resale Dusting Fabric & Lint Remover

1964 SALES FORECAST REVIEW 5/1/64

SUMMARY

Sales Forecast

	<u>Actual Sales</u>			<u>Official</u>		<u>Revised</u>		<u>Actual January - April</u>			
	<u>1962</u>	<u>1963</u>	<u>% Inc.</u>	<u>1964</u>	<u>% Inc.</u>	<u>1964</u>	<u>% Inc.</u>	<u>1963</u>	<u>1964</u>	<u>% Inc.</u>	<u>% Forecast</u>
Tape	40,152	41,638	3.7	44,340	6.5	43,720	5.0	13,808	14,287	3.5	98.5
Ribbon	9,661	8,740	9.5 Cr.	8,790	0.6	8,250	5.6 Cr.	1,334	1,186	11.1 Cr.	89.8
New Products	940	2,129	126.5	2,870	34.8	3,415	60.4	650	805	23.8	101.3
TOTAL DIVISION	50,753	52,507	3.5	56,000	6.7	55,385	5.5	15,792	16,278	3.1	98.6

Interoffice Correspondence **3M**

Subject:

MARCH 17, 1964

MESSRS. R. W. MUELLER
A. H. REDPATH
C. B. SAMPAIR

FROM: A. W. BOESE

I AM DEEPLY CONCERNED WITH THE LACK OF PROGRESS RIBBON IS MAKING IN A SUBSTANTIAL AND GROWING MARKET. IN FACT, THE RECORD SHOWS THAT WE HAVE PLATEAUED IN OUR BEST AREAS OF THE MARKET AND HAVE CLOSED OUT, OR HAD DEEP DOWNWARD TRENDS, IN OTHERS (AS THE ATTACHED CHART SHOWS).

1963 HAD THE LOWEST VOLUME SALES OF RIBBON PRODUCTS SINCE 1957. CERTAINLY THE GREAT UPWARD SURGE IN PROFITS, SINCE THE COMBINATION OF THE RETAIL AND GIFT WRAP DIVISIONS, HAS MADE RIBBON A DESIRABLE COMMODITY. HOWEVER, AT THIS POINT OF COMPLETE ASSIMILATION OF THE GROUPS AND PRODUCTS, CERTAIN WARNING SIGNS APPEAR. IT IS INEVITABLE THAT THE PRODUCT LINE OF LESSER VOLUME WILL NOT RECEIVE THE ATTENTION OF THE MAJOR PRODUCTS FROM THOSE CONCERNED WITH TAPE PRODUCTS.

IT IS NECESSARY UNDER THESE CONDITIONS THAT A RESPONSIBLE DECISION MAKING MANAGER BE COMPLETELY AWARE OF THE PROBLEMS THROUGH CONTINUAL APPRAISAL AND THAT HE REACTS FROM A POSITION OF PRODUCT KNOWLEDGE TO THE CHANGING TRENDS AND ADJUSTING TO THEM IN PRESENT MARKETS. I DO NOT BELIEVE THIS IS POSSIBLE IN BLENDING TWO DISSIMILAR PRODUCTS AS RIBBON AND TAPE UNDER THE SAME MARKETING AND SALES MANAGEMENT.

TAPE IS PRIMARILY A FUNCTIONAL PRODUCT WHICH DEFINES THE MARKETING AND SALES TECHNIQUES. RIBBON HAS NO FUNCTIONAL USE AS SUCH; IT IS PURELY A DECORATIVE PRODUCT. THESE DIFFERENCES DEFINE A COMPLETELY OPPOSITE TYPE ORGANIZATION TODAY, AND I SINCERELY BELIEVE THAT RIBBON WILL HAVE A DIMINISHING VALUE AS A PRODUCT LINE TO A POINT OF EVENTUALLY BECOMING A BURDEN AND WILL REACH A POSITION OF NEGATIVE VALUE. I BELIEVE THAT WE CAN REORIENT THE RIBBON OBJECTIVE WITHOUT LOSING THE ECONOMIC ADVANTAGES GAINED THROUGH THE MERGER AND BUILD SALES VOLUME TO A SUBSTANTIAL LEVEL AT GOOD PROFIT.

THIS COULD BE ACCOMPLISHED WITHIN PRESENT BUDGETS BY GIVING A RIBBON GROUP AN AUTONOMOUS POSITION WITHIN THE RETAIL DIVISION TO FASTER EXPAND THE SALES AND PROFITS.

I WOULD LIKE TO DISCUSS THIS PROBLEM WITH YOU, GENTLEMEN, AT YOUR EARLIEST CONVENIENCE.

AWB
AWB/

ATTACHMENT (1)

3/17/64

RIBBON PRODUCTS ANNUAL SALES

COMMODITY (\$000)

	1957	1958	1959	1960	1961	1962	1963	1964 FORECAST
PACKAGED LINE	1360	1538	1819	1533	1162	964	752	840
RESALE AND PRIVATE LABEL	1411	1252	1106	1090	739	845	428	205
HOLLY & PRO.					1022	1085	1066	1100
50-YARD "SASHEEN"	965	863	679	465	269	203	126	130
100 & 200-YD. "SASHEEN"	2778	2568	2814	2864	2739	2521	2047	1680
250-YARD "SASHEEN"	<u>414</u> 4157	416	<u>720</u> 3534	<u>977</u> 3841	<u>1138</u> 5646 3877	<u>1194</u> 4212 4015	<u>1915</u> 4028 780	2725
IND. & CONV. "SASHEEN"	264	500	440	759	612	780	729	825
TOTAL "SASHEEN"	7192	7137	7578	7688	7681	7892	7063	7505
TOTAL SPUN RIBBON	1313	1290	1436	1439	1221	1096	1004	920
TOTAL RIBBON PDTS.	8505	8427	8852	9127	8902	8978	8067	8425

C/S
C/O
Con O/S
6/1/63
A/B

January 25, 1963

TO: J. R. LANE
FROM: A. W. BOESE

Just to put on record our discussions of the past few months on new markets for ribbon in the field of home decorations, school uses, club uses, etc.

I believe we should start a program to explore the market areas in which ribbon could be sold and promoted for these uses. I do not believe just pamphlets or publicity which would be based on people going to the gift wrap ribbon counter for their materials will adequately get or hold interests in these uses.

I know this is a very complex subject as to how you promote, how you get your story across, and where you go; nevertheless, it is a major field of potential ribbon volume which we do not have today and which would certainly increase our sales if we develop it in the longer rolls and better profit items.

While the national magazines in their Christmas issues pretty broadly used ribbon for decorative media in the homes, it still left the individual with the initiative to go to the gift wrap counters to get their ribbon. There are not areas of marketing for this use which would actively promote it and new ideas to increase sales.

I would appreciate some serious thought be given this, and that we have a program developed both to explore methods to get into this market and then develop ideas so we can start some sales in this area before the year is out.

AWB:js

cc: H. R. Courtney
R. J. May
E. B. Moffet
A. H. Redpath

RIBBON SALES BY CLASSIFICATION OF SALESMEN

<u>Salesmen</u>	<u>MARCH TO-DATE</u>		<u>% Inc.</u>
	<u>1963</u>	<u>1964</u>	
Ribbon	382,304	396,904	3.8
Combination	<u>230,985</u>	<u>227,794</u>	<u>1.4 Cr.</u>
TOTAL	613,289	624,698	1.9

RIBBON SALESMEN

DOLLARS

MARCH TO-DATE

	<u>1963</u>	<u>1964</u>	
Boston	6,432	4,990	
New York	54,263	47,782	
Buffalo	19,435	17,569	
Philadelphia	13,055	18,950	
High Point	34,230	41,900	
Atlanta	-	-	
Cincinnati	13,235	10,296	
Cleveland	18,207	18,162	
Detroit	1,797	7,362	
Chicago	29,964	39,175	
St. Paul West	-	-	
St. Paul East	33,997	31,388	
St. Louis North	-	-	
St. Louis South	26,804	27,050	
Dallas	60,271	64,269	
Los Angeles	41,116	42,359	
San Francisco	16,762	14,961	
Seattle	<u>12,736</u>	<u>10,690</u>	
TOTAL	382,304	396,903	3.8%

COMBINATION SALESMEN

MARCH TO-DATE DOLLARS

	<u>1963</u>	<u>1964</u>	
Boston	11,347	10,449	
New York	-	-	
Buffalo	2,155	1,562	
Philadelphia	17,801	16,521	
High Point	7,347	9,306	
Atlanta	35,848	37,596	
Cincinnati	20,282	16,010	
Cleveland	4,097	2,934	
Detroit	9,754	10,594	
Chicago	2,658	3,849	
St. Paul West	26,320	26,316	
St. Paul East	2,152	3,916	
St. Louis North	18,711	19,818	
St. Louis South	16,809	23,744	
Dallas	11,582	10,511	
Los Angeles	17,102	13,204	
San Francisco	23,167	15,672	
Seattle	<u>3,853</u>	<u>5,292</u>	
TOTAL	230,985	227,794	1.4% Cr.

Hiram Walker Canadian Club

1-1/4" x 500 yds.
With two 1/8" Gold Metallic
For Quarts, Fifths and Half Gallons



Top to Bottom

Emerald

Moss

Citron



Top to Bottom

Royal Blue

Medium Blue

Pastel Blue



Top to Bottom

Red

Orange

Burgundy



Top to Bottom

Orange

New Gold

Pecan

3M Company
P. A. Bard
R. T. & G. W. Division
220-8W
5-4-64



GENERAL OFFICES • 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA • TEL: 733-1110

Interoffice Correspondence

3 M-COMPANY
CONFIDENTIAL

Subject

August 31, 1965

RETAIL TAPE AND GIFT WRAP OPERATING COMMITTEE

Minutes of Meeting

The Retail Tape and Gift Wrap Operating Committee met on August 6, 1965. All members were present except Mr. A. W. Boese.

Financial Review

Sales and profits for the first six months were:

	<u>1964</u>	<u>Forecast</u> <u>1965</u>	<u>Actual</u> <u>1965</u>
Sales (000's)	\$ 24,207	\$ 25,500	\$ 26,212
Profits (000's)	\$ 7,735	\$ 7,590	\$ 8,397
% Profit	32.0	29.8	32.0

Sales were ahead of last year and \$712M over the forecast. Profits were 8.6% ahead of 1964 and \$662M over the forecast. Factory costs are below both last year and the forecast. All other areas of spending are below the forecast level.

At this point, we estimate sales for the total year 1965 to be \$59,500M and profits to be \$20,850M, 35.0%. If this estimate is attained, sales would exceed forecast by \$1,200M and profits would exceed forecast by \$1,370M. The 35.0% profit compares to a forecast of 33.4% and 35.5% in 1964. Discretionary spending is \$344M below forecast in this estimate.

Mid-year inventory levels for the division were also reviewed. Semi-finished and finished goods inventories are about \$675M higher than last year. Resale Tarni-Shield and Games account for approximately \$250M of the increase. Semi-finished and finished goods inventories, as a ratio to cost of goods sold, have gone up from 3.73 last year to 3.99 this year. Some of the Bristol contract negotiation inventory buildup still remains. We expect substantial decreases in inventory in July and August. Inventory levels are being reviewed in detail, and will be held at the lowest possible levels from now until year end.

The Operating Committee also met on August 18, 1965, to discuss new product activity.

Interdivisional Marketing

W. A. Schoonenberg reviewed the marketing activity on interdivisional products.

New Products Division

- Bumper Buttons - Initial consumer evaluation showed good results. Currently, a regional market test in the 3 West Coast branches is being planned for this fall.
- Plant Mats - Consumer evaluation in 75 homes proved unfavorable, and no further work is planned.
- Sunset Tape - Consumer evaluation indicated this product had limited uses and the price may be high. No more work is being planned.
- Coasters - Consumer evaluation showed good results, but packaging and pricing appears to require more study.
- Weatherstrip Tape - Sales through the 3M consumer catalog showed good interest. Additional testing on this product is required.

A C & S Division

- Spot Remover - Both aerosol cans and pads were tested in a consumer evaluation which indicated the aerosol can to be superior. We recommend a market test, but the division is considering a regional or national introduction.
- Adhesives - There are seven different products currently beginning a four city market test:
1. Wood and Paper Glue
 2. Super Strength Adhesive
 3. Epoxy Glue
 4. Tub and Tile Calk
 5. Contact Cement
 6. Spray Adhesive
 7. Rug Stop

Chemical Division

- "SCOTCHGARD" - We are furnishing marketing assistance in the Retail areas other than grocery and department stores.

Medical Division

- "MICROPORE" Tape - We are currently testing in the Atlanta Branch to determine share of market, movement of product and reaction to several promotional approaches.

Industrial Tape Division

- "SCOTCHMOUNT" Foam - Tests 1 1/2 years ago were very poor, but the product has been substantially improved and new tests will be conducted.

Current Laboratory Developments

J. E. Corbin and H. G. Nachtsheim reviewed some of the current laboratory developments:

1. New Metallic Ribbon - A gold metallic ribbon has been developed and introduced with efforts underway to develop additional colors.
2. Gold Transfer Printed Ribbon - A new high speed, inexpensive technique has been developed by our laboratory for gold transfer printing, which is being employed on the Hiram-Walker 1965 line. This new technique may have many potential applications.
3. Plastic Ribbon - Competition has introduced a new foamed polypropylene film as a decorative ribbon. Initial laboratory experiments have been completed with encouraging results. This may be a new and less expensive decorative type of ribbon. It also may have potential as a pressure sensitive tape backing, primarily for heavy duty packaging. Additional laboratory work is underway.
4. Toxic Dust Mask - Most masks on the market for this use are undesirable because they are heavy, uncomfortable and difficult to talk through. A prototype which would overcome these three primary objections has been developed and is currently being evaluated by the Bureau of Mines for tentative approval for further evaluations. We expect to have an answer from them by year end. We are investigating the patent possibilities on the new valve and pressure sensitive filter used in our mask.
5. Delayed Tack Tape - A tape incorporating glass bubbles in the adhesive to make it non-tacky until pressure is applied. Results should be completed in about three weeks on evaluations of possible end uses of the product in the home or office.

Stationery Product Market Research

W. P. Erickson reviewed the market research being done in the stationery trade. Currently, 28% of the division's volume is sold through this trade, which has demonstrated good loyalty to 3M Company. We have a desire to expand our business in this area. Our research is in three areas:

1. The products stationers would like which we could make.
2. The products we currently have which stationers might sell in addition to those currently in their line.
3. The products which might be added to the line through acquisition. Further reports will be submitted as research progresses.

Current New Product Marketing Programs

E. B. Moffet reviewed the current status of marketing programs on new products.

1. #44 Strapping Tape - A new consumer size roll of Filament Tape in a plastic dispenser is being introduced nationally. We have a target of \$100M sales this year and \$250M in 1966. Profits are above division target.

2. Label Laminating Tape - Currently many department stores have a central packaging department. Articles sold for delivery to customers' homes are sent to this central location where they are packaged and labeled for delivery. Many stores are unhappy with this system because of the large number of labels (generally a duplicate copy of the sales slip) which are lost and separated from the material. Our tape is part of a new "clerk wrap" system where the sales clerk actually wraps the product and places the address label on the package so that it is ready for delivery. The tape is designed to completely cover the address label, thereby eliminating the separation of the label from the material. The system has been tested in several stores including Dayton's, May D & F (Denver), L. S. Ayres (Indianapolis) and Broadway Stores (Los Angeles).

There are about 10% of the 11,000 department stores in the U. S. on this "clerk wrap" system. Selling our tape to 10% of these would yield sales of about \$1,000M.

3. Gift Paper and Pre-Bows - There appears to be a need for co-ordinating ribbon and wrapping paper for in-store gift wrapping. We are testing rolls of wrapping paper co-ordinated with pre-bows and "Sasheen" Brand ribbon. It is hoped that this co-ordinated package concept will increase the sales of our ribbon for gift wrapping.

Games and Household Products

W. P. Erickson reviewed the status of Bookshelf Games, Oven Liner and Spray Starch.

1. Bookshelf Games - We introduced four games nationally in 1964 with sales totaling \$373M. In 1965, three more games were added to the line as a result of favorable tests in 1964. We estimate that sales will reach \$800M this year. In addition, four more games are being tested. Mr. Peters indicated our investment in the game program through 1964 was \$198M on sales of \$392M. Based on estimated 1965 sales of \$800M, losses for the year are estimated at \$50M with a strong possibility of breaking even. He also pointed out that finished goods inventories have increased \$112M since year end. This inventory buildup is in anticipation of the high seasonal sales in the 3rd and 4th quarters.
2. Oven Liner - We are targeting for 30% of a total market of 12 to 15 million dollars. A test program was started in October, 1964, in 4 cities on a consignment basis. So far, the results have not been encouraging. The unit sales per store per week dropped under two. A major problem is one of category confusion. We have been unsuccessful in getting across the story to the consumer that our product is an oven protectant, not a cleaner. It is essential that this product category problem be overcome if we are to be successful. Our agency, BBD & O has submitted the complete file to their New York office for a recommendation. A decision will be reached by mid-September on further testing.
3. Spray Starch - Total market, approximately \$40 million at manufacturers prices. Our objective is to capture 10% of this market. We initiated a test program in four cities in February of 1965 with

a 19 oz. can retailing for 98¢. Two of the cities were on a consignment basis and two of the cities on a sell basis. We offered one case free with five purchased, also a 50¢ per case display allowance, television and printed advertising and some coupon promotion. The last store audit indicated that we had captured 5% of the market with relatively low sales per store per week of 3 1/2. It appears that price is a major problem. Most of the competition is at 79¢ or below. At that price, we would project a maximum profit of 20%. The division has decided to test a 79¢ can and a 15¢ off label on the 98¢ can.

Mr. Redpath indicated that many consumer products like Spray Starch had profit projections below our division target of 32%. This is true because of the heavy advertising and merchandising required to sell these household products through super markets.

Mr. Mueller indicated that profits in the 25% range were certainly worth going after. In the 20-25% profit range, each product would have to be looked at individually, and it is very questionable whether anything with a projection below 20% should be pursued. This will be used as a guideline in considering future consumer products. The Division feels that a number of consumer products could be added to the current product line without changing the overall division profit target of 32%. The division has exceeded its profit target for the last two years and also expects to exceed it in 1965.



R. D. Peters
Controller, Tape Group

/sjt

cc - W. W. Becker
D. P. Selleck
Management Committee
Division Operating Committee

CCC-C-46a

INTERIM AMENDMENT-1 (Army-GL)

October 13, 1965

FEDERAL SPECIFICATION

CLOTH, CLEANING, NONWOVEN FABRIC

This Interim Amendment was developed by the U.S. Army Natick Laboratories (GL), Natick, Massachusetts, for use by Defense Personnel Support Center, based on currently available technical information. It is recommended that Federal Agencies use it in procurement and forward recommendations for changes to the preparing activity at the address shown above. The General Services Administration has authorized Federal Agencies to use this Interim Amendment as a valid exception to Federal Specification CCC-C-46a, dated November 4, 1963.

Page 1, paragraph 1.2.1 - Under "Type I - Untreated" add "Class 2 - Medium duty".

Page 2, paragraph 3.3 - Add to end of paragraph: "Red - 21158".

Page 2, paragraph 3.5.1.4, 1st line - Delete "Class 1 cloth" and substitute "Classes 1 and 2 cloths".

Page 3, paragraph 3.7.1, 1st line - Delete "Class 1" and substitute "Classes 1 and 2".

Page 4, Table I - Add the following:

Type	Class	Bursting strength	Weight per square yard	
		Minimum (dry)	Minimum	Maximum
		Pounds	Ounces	Ounces
" I	2	17	1.26	1.94 "

Page 4, paragraph 4.3.1 - Delete in its entirety and substitute: "4.3.1 Component and material inspection.- In accordance with 4.1 above, components and materials shall be tested in accordance with all the requirements of referenced specifications, drawings and standards unless otherwise excluded, amended, modified or qualified in this specification or applicable purchase documents."

Page 4, paragraph 4.3.2.1, line 15 - Delete "L-4" and "4.0" and substitute "S-2" and "2.5" respectively.

FSC 7920

Page 5, paragraph 4.3.2.6 - Delete inspection levels "L-4" and substitute "S-2".
Delete AQL's "4.0" and substitute "2.5".

Page 6, paragraph 4.4.1.4, 1st line - Delete "class 1 cloth" and substitute
"classes 1 and 2 cloths".

Page 8, paragraph 6.1 - Add the following sentence: "Type I, class 2 cloth is
used for survey markers."

Page 8, paragraph 6.3, 3rd line - Delete "classes 2 and 3" and substitute
"class 3".

Military custodian:

Army - GL

Preparing activity

Army - GL

Project No. 7920-A009

budget

Interoffice Correspondence



Subject: Control of Discretionary
Spending in First Six
Months of 1966

cc - R. W. Mueller, 220-14W
R. J. May, 220-8W
A. F. Jacobson, 220-7W
R. D. Peters, 220-13E

November 18, 1965

TO: A. W. BOESE, 220-8W
J. E. CORBIN, 220-8W
W. P. ERICKSON, 220-8W
H. F. GROTH, 220-8W

A. W. HORNING, 42-1E
E. B. MOFFET, 220-8W
C. O. MOOSBRUGGER, 220-8W
W. A. SCHOONENBERG, 220-8W

FROM: A. H. REDPATH, 220-8W

At the Executive Conference on October 7, Bert Cross asked all the Division General Managers to maintain a realistic balance between our sales forecast and our spending. He is suggesting that we spread out our spending.

It is evident that many divisions of the company spent heavily on new programs in the first and second quarters of 1965, which historically are not our best. Bert Cross is suggesting that we do not spend any optional money and take a hard look at what spending can be deferred until the last half of 1966. This should give us a firmer profit foundation earlier in the year.

Don Selleck warned the group that unless all the divisions enter 1966 in a cautious mood, the company could wind up in somewhat the same profit squeeze as was evident during the first six months of 1965.

Don Selleck suggested as a guide line that divisions increase their spending in the discretionary areas in a ratio equal to 80% of the forecasted percent of sales increase for the period. It is suggested that the divisions follow this policy for the first six months of 1966, or until such time as the sales forecast can be reasonably assured.

Since all of you are responsible for certain budgets, will you review your actual discretionary spending for the first two quarters of 1965 and then determine your limit of spending, by quarter, for the first two quarters of 1966, using Selleck's guide line. Then let us plan to control our early 1966 spending accordingly. If, however, following this guide line would prevent us from meeting our sales forecast or delay an important sales or new product program, I'd like to review the matter with all concerned.

al

AHR:hm

Interoffice Correspondence

3M

Subject:

November 24, 1965

CONFIDENTIAL

TO: ✓ A. W. BOESE, 220-8W
J. E. CORBIN, 220-8W
W. P. ERICKSON, 220-8W
R. J. MAY, 220-8W

FROM: A. H. REDPATH, 220-8W

Attached for your information is a copy of my annual report to Bert Cross. Will you please keep it in a confidential file.

AHR
hm

AHR:hm



Subject: Annual Report of the Retail
Tape and Gift Wrap Division

cc - Management Committee

November 24, 1965

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

MR. BERT S. CROSS

This report and the attachments deal with the Retail Tape and Gift Wrap Division 1965 results and the 1966 forecast.

1965 OPERATIONS

Sales in 1965 will be the largest in the history of our Division. Although we continue to encounter aggressive competitive price activity in both tapes and ribbons, the marketing and sales plans we have implemented will give us a 6.6% increase in 1965 versus 1964.

	<u>1963</u>	<u>1964</u>	<u>1965</u>	
			<u>Forecast</u>	<u>Estimate</u>
Sales (\$000's)	\$52,510	\$56,455	\$58,300	\$60,200
Profit (\$000's)	17,842	20,065	19,480	21,170
Per cent	34.0	35.5	33.4	35.2

Sales are estimated at \$60.2 million and profits at \$21.2 million or 35.2% for 1965. Sales and profits are above the forecast by \$1.9 million and \$1.7 million, respectively. Based on our record October and what we see so far in November, this estimate should be exceeded.

Our 1965 marketing plans had included the introduction of a Diamond Clear Tape (acetate backing/acrylate adhesive) in commercial lengths at existing cellophane prices. In addition, we planned to reduce the price of our long rolls of standard cellophane tape. Due to quality problems relating to breakage, we were unable to launch this program. This delayed the planned selling price reductions.

The Division profit target of 32.0% has been exceeded for three consecutive years, but we feel it is a realistic long-range target.

The sales growth of the Division's items sold in square yards for the past ten years is shown on the attached Chart No. 1. Using 1955 as the base, we have charted the growth percentage of the United States population, domestic square yard sales of tape and ribbon, and dollar sales relating to these square yard items. In all ten years, our square yard sales have grown faster than the United States population. The severe competitive problems in short rolls during 1960 and 1961, prior to the introduction of Magic Transparent Tape, are very evident on the dollar sales growth curve. The introduction of Magic Tape plus our second line (Rocket Brand) corrected the problem. We are currently facing somewhat the same situation in long rolls and will cover our proposed corrective action later in this report.

1966 FORECAST

I. SALES AND PROFITS

The 1966 sales forecast of \$64.0 million represents an increase of \$3.8 million (6.3%) over 1965.

The 1966 profit forecast of 34.7% or \$22.2 million is a \$1.0 million increase over 1965. The decline in the per cent of profit is related primarily to -

1. National introduction of low-priced second line cellophane tapes to meet competitive pressures.
2. A 7% lower price on all transparent tape long rolls (postponed in 1965).
3. Increased investment in laboratory research.

II. 1966 MARKETING PROGRAMS FOR EXISTING AND NEW PRODUCTS

A. Transparent Long Roll Tape - Continued intense competition is expected in commercial sizes of transparent tape. Prices as much as 50% below "SCOTCH" Brand Transparent Tape continue at the whole-sale level. Many wholesalers purchase competitive low-priced tape and sell it slightly under "SCOTCH" Brand consumer prices, thereby creating artificially large trading margins.

In January of 1966, we plan to lower prices to distributors by about 7% and to consumers by about 4%. This will improve distributor relations in that their margins will be increased slightly. At the time these price adjustments on "SCOTCH" Brand Tape take place, we intend to introduce our second line (Rocket Brand) in commercial sizes, at prices slightly higher than competitive tapes, in an effort to stop the erosive effect on our distributor system by competitors.

We are continuing tests on a superior quality tape which we plan to use to hold current price levels as cellophane prices continue downward. We are hopeful that the quality objections to Diamond Clear can be overcome, but we are also testing a UPVC backed construction.

B. Short Roll Transparent Tape - As was reported last year, we did extensive market research in several areas of this business. As a result, we have dropped the word "Mending" from the name, and, early in 1966, will announce some additions to the Green Plaid line of resale rolls. Research indicates these additions will tend to increase the market share of Magic Transparent Tape. Because profit on Green Plaid is higher than on Red Plaid short rolls, it is advantageous to direct as much business as possible into the Green Plaid line. Market research indicates that there are still only 40% of the consumers who have tried Magic Tape. Therefore, we intend to introduce a 25¢ starter size roll on January 1, and the current 39¢ size metal utility dispenser will be changed to a plastic dispenser. These changes will be introduced with a repeat of our very successful "Tape-it-Rich" Sweepstakes promotion of last year.

The Back-to-School program will be supported with an "in-the-mail" offer of a Revere Camera. This inter-divisional promotion will help us to place our display units, and, at the same time, create advertising and volume for the Revere Premium group.

C. Ribbon - Prices of "SASHEEN" Brand Ribbon will be elevated January 1 by approximately 5%. The advantage of 250-yard over 100-yard rolls will be narrowed, and the relationship of prices by width will be made more uniform. At the same time, we will standardize a line of Metallic Ribbons at premium prices. Major emphasis on our new line of Fiesta "DECORETTE" is planned during the year.

The test selling program during the last Christmas season on commercial gift wrap paper was disappointing. However, we feel that we must sell a total co-ordinated gift wrapping program, and, therefore, have modified the program and are continuing further tests this season.

D. Miscellaneous - Continued marketing emphasis will be placed on resale electrical, colored plastic, masking, package sealing, and freezer tape throughout the year. A new commercial roll of Double Stick tape will be introduced. The resale roll of filament tape introduced late in 1965 has been exceptionally well received with \$400,000 sales forecast in 1966, the first full year of sale. The filter face mask business is expected to continue strong. The total face mask business, including medical masks, is forecast at \$2.3 million. Additional new masks are being worked on in the laboratory.

E. Art Products - Sales of this new product line are expected to more than double in 1966--to \$640,000. To strengthen this area, next year's program will include better packaging and marketing approaches for the retail field. Brochures on product use will contain simple, direct instructions, and will stress more areas of craft usage. Penetration of new markets for art fabric and water color paper in the printing fields are planned in the form of high-grade brochures. We plan improved workshop techniques to gain better teacher awareness and understanding of our art products.

F. 3M Brand Bookshelf Games - Sales of games in 1966 are forecast at \$1.0 million and will return a profit. The line now consists of seven games, all of a strategic nature. Four additional games are being test marketed this year. We are confident two or three will be successful and will be added to the 1966 game line.

G. "SCOTCH" Brand Oven Liner - We are continuing to test Oven Liner in Omaha, Grand Rapids, Columbus, and Portland. The current test has been running one year, and the results to date are somewhat disappointing. The test is scheduled to run through April, 1966, and by that date, we should have enough information regarding our product, competitive products, and the market, to determine our future course of action.

H. "SCOTCH" Brand Spray Starch - This product has been in test market in Phoenix, Oklahoma City, Syracuse, and Richmond since February, 1965. We are scheduled to complete our testing by April 1, 1966. Our future program is dependent upon our findings in the test markets.

I. "SCOTCH" Brand Sales Slip Tape - This tape and accompanying dispenser are designed to facilitate the delivery of items sold by department stores where the "clerk wrap" method of packaging is used. The system has been in test during the past year, and we plan to announce the program nationally early in 1966. Sales of \$300,000 for 1966 are forecast. Market research indicates that the potential for this program is \$1.0 million dollars annually.

III. COSTS

A. Manufacturing - This cost ratio will rise 0.6% in 1966 due primarily to lower selling prices. Programs for Profit in 1966 will exceed normal cost increases. Mr. Jacobson's report for the combined factory operations has been submitted separately, but it is significant that our manufacturing cost per cent to sales is 35.6 compared to a target of 36.0.

B. Laboratory - During 1966, we propose to spend 2.0% of our sales dollar for laboratory. This is our target per cent and is the same level as was forecast in 1965. The increase over 1965 actual expenditures is due primarily to increased personnel and the need for the Retail Division to share a greater portion of the cost of the Tape Group Research Laboratory.

While the estimated year-end 1965 manpower is at the forecast level, these people were not added as early in 1965 as planned, resulting in our being nearly \$100,000 below the forecast this year. Our laboratory manpower is covered on the attached Chart No. 2.

C. Engineering - Additional engineering effort will be primarily directed toward Retail Tape projects in Hutchinson. This work represents cost reduction projects as well as expansion studies.

D. Salesmen and Sales Managers - We are asking for salesman authorizations for our retail sales force totaling 290, an increase of nine over our current authorized manpower. Of this increase, we expect to be able to hire eight in 1966. With this increased manpower, our average sales territory will be \$217,000. We feel that these salesman additions are necessary to maintain adequate coverage on existing products and to successfully introduce our new products. Our forecast allows for the addition of one staff sales manager at mid-year. The attached Chart No. 3 gives the requested breakdown on our manpower.

E. Merchandising and Sales Promotion - In 1966, we are transferring the cost of our market research group to the General Sales line of the P & L, where this function properly belongs. As a result, marketing and sales promotion costs appear to be less in 1966. If these two lines of the P & L are added together, they are at the same per cent to sales as 1965.

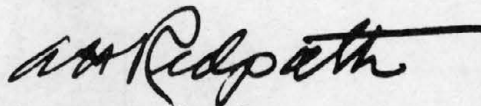
F. Advertising - Total advertising is up \$173,000 but remains 5.1% to sales. This includes our share of the corporate advertising program (\$228,000), the same as 1965. We will be spending slightly more on Magic Tape, with other products of the Division carrying approximately the same advertising in 1966 as in 1965.

G. Administrative - Total administrative costs are decreasing from 3.6% to 3.3% to sales. This is due primarily to the revised allocation of Executive costs. Our Division share of Executive will decrease from \$544,000 to \$353,000 (\$191,000). Had the allocation of Executive cost remained on the same basis as 1965, our total administrative would have been 3.7% to sales with the only increase appearing in the Other Administrative area.

Total discretionary spending increased 6.9% in 1965 compared to a sales increase of 6.6%. In 1966, we forecast that total discretionary spending will increase 5.9% compared to our sales increase of 6.3%.

Our return on capital employed continues at a very high level, forecast at 69.3%. Considering this rate of return on investment, the amount of competitive activity is more understandable.

Attached are all the schedules requested.



A. H. Redpath
Division Vice President
Retail Tape and Gift Wrap Division

AHR:hm

RETAIL TAPE AND GIFT WRAP SALES
RATIO TO 1955

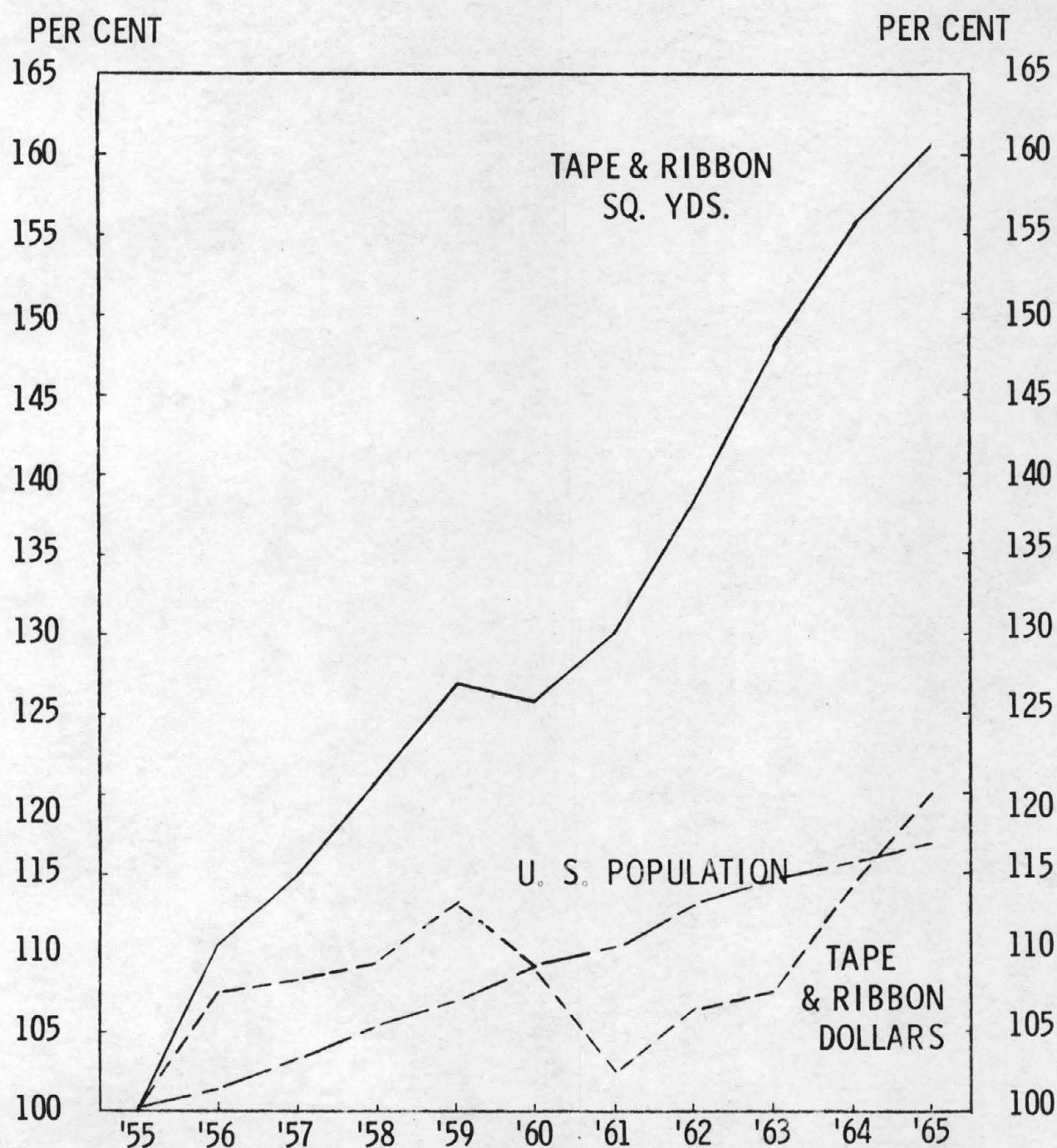


CHART 2

RETAIL TAPE AND GIFT WRAP DIVISION
LABORATORY COSTS AND MANPOWER

	<u>1963</u>	<u>1964</u>	<u>EST. 1965</u>	<u>F'EST. 1966</u>
<u>RETAIL TAPE AND GIFT WRAP</u>				
<u>LABORATORIES</u>				
<u>MANPOWER (YEAR END)</u>				
TECHNICAL	34 1/2	36	40	42
NON-TECHNICAL	19 1/2	20	25 1/2	27 1/2
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	54	56	65 1/2	69 1/2
 <u>LABORATORY COSTS (\$M)</u>				
SALES SERVICE	93	106	104	119
PRODUCT SERVICE	222	246	188	223
RESEARCH & DEVELOPMENT	562	634	767	921
	<hr/>	<hr/>	<hr/>	<hr/>
TOTAL	877	986	1,059	1,263

RETAIL TAPE AND GIFT WRAP DIVISION
SALESMEN & SALES MANAGERS MANPOWER REPORT

	<u>YEAR END:</u>	<u>1963</u>	<u>1964</u>	<u>EST.</u> <u>1965</u>	<u>F'CST.</u> <u>1966</u>
<u>SALESMEN</u>					
RETAIL TAPE AND GIFT WRAP		277	267	279	287
SOLD TO OTHER DIVISIONS		(15)	(14)	(16)	(19)
NET DIVISIONAL		262	253	263	268
PURCHASED FROM OTHER DIVISIONS:					
INDUSTRIAL TAPE		13	13	12	13
RELATED PRODUCTS		13	13	12	12
OTHERS		2	1	1	2
TOTAL PURCHASED		28	27	25	27
GRAND TOTAL MANPOWER		290	280	288	295
<u>SALES MANAGERS</u>					
RETAIL TAPE AND GIFT WRAP		27	26	26	27
SOLD TO OTHER DIVISIONS		(1)	(1)	(1)	(1)
NET DIVISIONAL		26	25	25	26
PURCHASED FROM OTHER DIVISIONS:					
INDUSTRIAL TAPE & MISC.		1	1	1	1
RELATED PRODUCTS		2	2	2	2
TOTAL PURCHASED		3	3	3	3
GRAND TOTAL MANPOWER		29	28	28	29

Schedule No. F-3

RETAIL TAPE & GIFT WRAP DIVISION
(M DOLLARS)

	Profit Target Percent	1963	1964	Forecast 1965	Estimated Actual 1965	Forecast 1966
Gross Sales		52,510	56,455	58,300	60,200	64,000
% to Gross Sales	100.0	100.0	100.0	100.0	100.0	100.0
Cash Discount		937	1,023	1,090	1,145	1,215
% to Gross Sales	1.8	1.8	1.8	1.9	1.9	1.9
Net Sales		51,573	55,432	57,210	59,055	62,785
% to Gross Sales	98.2	98.2	98.2	98.1	98.1	98.1
Net Manufacturing Cost		18,903	19,710	20,581	21,095	22,775
% to Gross Sales	36.0	36.0	34.9	35.3	35.0	35.6
Laboratory & Research		877	986	1,150	1,059	1,263
% to Gross Sales	2.0	1.7	1.8	2.0	1.8	2.0
Gross Engineering		421	410	565	465	694
Less: Capitalized Engin.		(231)	(185)	(265)	(181)	(353)
Net Engineering		190	225	300	284	341
% to Gross Sales	.3	.4	.4	.5	.5	.5
Sales Costs:						
General Sales		205	230	283	255	550
Sales Managers		844	854	900	895	960
Salesmen		3,776	3,893	4,166	4,105	4,298
Mdse. - Sales Prom.		1,449	1,475	1,723	1,662	1,516
Advertising		2,227	2,939	3,207	3,098	3,271
Sales Mgrs. Br. Serv.		248	232	240	240	250
Branch Services		1,586	1,515	1,558	1,590	1,670
Total Sales Costs		10,335	11,138	12,077	11,845	12,515
% to Gross Sales	21.0	19.7	19.7	20.7	19.6	19.6
Administrative Costs		2,122	2,004	2,230	2,158	2,131
% to Gross Sales	4.4	4.0	3.6	3.8	3.6	3.3
Freight, Etc.		1,304	1,304	1,392	1,444	1,560
% to Gross Sales	2.5	2.4	2.3	2.4	2.4	2.4
Total Costs		33,731	35,367	37,730	37,885	40,585
% to Gross Sales	66.2	64.2	62.7	64.7	62.9	63.4
Commodity Oper. Profit		17,842	20,065	19,480	21,170	22,200
% to Gross Sales	32.0	34.0	35.5	33.4	35.2	34.7

RETAIL TAPE AND GIFT WRAP DIVISION
SALES HISTORY - (\$M)

<u>COMPARISON - TOTAL SALES</u>	<u>1963</u>		<u>1964</u>		<u>ESTIMATED 1965</u>		<u>FORECAST 1966</u>	
	<u>\$</u>	<u>% INCR.</u>	<u>\$</u>	<u>% INCR.</u>	<u>\$</u>	<u>% INCR.</u>	<u>\$</u>	<u>% INCR.</u>
FORECASTED SALES	50,500	(.5)	56,000	6.6	58,300	3.3	64,000	6.3
ACTUAL SALES	52,510	3.5	56,455	7.5	60,200	6.6		
FORECAST ATTAINMENT	104.0%		100.8%		103.3%			

<u>COMPARISON OF NEW AND ESTABLISHED PRODUCTS</u>	<u>1963</u>		<u>1964</u>		<u>ESTIMATED 1965</u>		<u>FORECAST 1966</u>	
	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>	<u>\$</u>	<u>%</u>
NEW PRODUCTS	2,201	4.2	1,466	2.6	1,890	3.1	2,590	4.0
ESTABLISHED PRODUCTS	50,309	95.8	54,989	97.4	58,319	96.9	61,410	96.0
TOTAL ACTUAL	52,510	100.0	56,455	100.0	60,200	100.0	64,000	100.0

<u>ACTUAL & FORECASTED INCREASE BY QUARTER</u>	<u>1963</u>		<u>% INCREASE</u>	<u>EST. 1965</u>	<u>% INCREASE</u>	<u>F'CAST. 1966</u>	<u>% INCREASE</u>
	<u>1963</u>	<u>1964</u>					
1ST QUARTER	12,227	12,879	5.3	14,286	10.9	14,900	4.3
2ND QUARTER	11,278	11,327	.4	11,925	5.3	12,770	7.1
3RD QUARTER	13,438	14,572	8.4	16,216	11.3	16,740	3.2
4TH QUARTER	15,567	17,677	13.6	17,773	.5	19,590	10.2
TOTAL	52,510	56,455	7.5	60,200	6.6	64,000	6.3

RETAIL TAPE AND GIFT WRAP DIVISION
PROFIT HISTORY - (\$M)

	<u>1963</u>	<u>1964</u>	<u>ESTIMATED 1965</u>	<u>FORECAST 1966</u>
<u>COMPARISON - TOTAL PROFIT</u>				
<u>FORECAST</u>	14,480	18,670	19,480	22,200
<u>ACTUAL</u>	17,842	20,065	21,170	
<u>FORECAST ATTAINMENT</u>	123.2%	107.5%	108.7%	

SALES \$ FORECAST ATTAINMENT

104.0%	100.8%	103.3%
--------	--------	--------

HISTORICAL PROFIT % TO SALES

1962	29.6
1963	34.0
1964	35.5
1965 ESTIMATE	35.2
1966 FORECAST	34.7
TARGET	32.0

RETAIL TAPE AND GIFT WRAP DIVISION
RETURN ON CAPITAL EMPLOYED

(M DOLLARS)	<u>1963</u>	<u>1964</u>	<u>EST.</u> <u>1965</u>	<u>F'CST.</u> <u>1966</u>
<u>CAPITAL EMPLOYED</u>				
CASH	4,639	4,796	5,200	5,550
% TO SALES	8.5	8.2	8.3	8.4
ACCOUNTS RECEIVABLE	6,955	6,454	5,830	6,200
% TO SALES	12.7	11.0	9.3	9.3
INVENTORIES	6,090	6,513	7,050	7,550
% TO SALES	11.2	11.1	11.2	11.3
TOTAL WORKING CAPITAL	17,684	17,763	18,080	19,300
% TO SALES	32.4	30.3	28.8	29.0
GROSS PERMANENT INVESTMENT	18,749	21,396	23,400	25,900
ADJUSTMENTS & RESERVE	(8,154)	(9,871)	(11,200)	(12,500)
NET PERMANENT INVESTMENT	10,595	11,525	12,200	13,400
% TO SALES	19.4	19.6	19.5	20.1
<u>TOTAL CAPITAL EMPLOYED</u>	28,279	29,288	30,280	32,700
% TO SALES	51.8	49.9	48.3	49.1
TOTAL SALES	54,560	58,671	62,685	66,600
<u>COMMODITY PROFITS</u>				
PROFIT BEFORE TAX	18,129	20,408	21,600	22,650
% TO SALES	33.2	34.8	34.5	34.0
<u>RETURN ON CAPITAL EMPLOYED</u>				
% RETURN BEFORE TAX	64.1	69.7	71.3	69.3
<u>CAPITAL TURNOVER RATE</u>	1.93	2.00	2.07	2.04

NEW PRODUCT SALES HISTORY
(M DOLLARS)
RETAIL TAPE AND GIFT WRAP DIVISION

<u>YEAR OF INTRODUCTION</u>	<u>PRODUCT DESCRIPTION</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>POTENTIAL PROFIT MARGIN</u>
<u>1957</u>	RESALE DOUBLE FACED CELLO	279						32
	NEW CONSTRUCTION DECORETTE	981						32
		<u>1,260</u>						
<u>1958</u>	DUSTING FABRIC	160	137					32
	CLASSIC RIBBON	132	36					25
	S-71 BOW MAKER	342	296					40
	S-79 BOW PINS	107	144					50
	GOLD & IRRIDESCENT BAND SASHEEN	304	354					25
		<u>1,045</u>	<u>967</u>					
<u>1959</u>	LINT REMOVERS	75	3	-				-
	TYPEWRITER CLEANER	213	144	138				25
	TARNI-SHIELD	187	210	1,164				30
	DECOR DISPENSER	181	164	177				10
	S-19 ECONOMY BOW TYER	14	16	-				-
	S-80 HANKER NOTCHER	4	5	5				15
		<u>674</u>	<u>542</u>	<u>1,484</u>				
<u>1960</u>	FILTER FACE MASKS	215	291	528	748			30
	S-73 MOTORIZED BOW TYER	-	24	17	24			10
		<u>215</u>	<u>315</u>	<u>545</u>	<u>772</u>			
<u>1961</u>	#577 DATA PROCESSING TYPE CLEANER	30	86	69	66	157		35

NEW PRODUCT SALES HISTORY
(M DOLLARS)
RETAIL TAPE AND GIFT WRAP DIVISION

<u>YEAR OF INTRODUCTION</u>	<u>PRODUCT DESCRIPTION</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>	<u>1966</u>	<u>POTENTIAL PROFIT MARGIN</u>
<u>1962</u>	#8485 BOOKBINDING TAPE		-	8	4	32	74	35
	ART FABRIC		23	23	33	45	105	30
			23	31	37	77	179	
<u>1963</u>	BOOKSHELF GAMES			19	374	800	1,000	35
	TEMP. CONTROL MASKS			44	136	208	240	30
	PRINTMAKER'S PLATE			9	30	57	133	35
				72	540	1,065	1,373	
<u>1964</u>	PRINTMAKER'S PRESS				23	20	47	30
	MULTI-ART PAINT				28	117	272	35
					51	137	319	
<u>1965</u>	OVEN LINER					30	50	30
	SPRAY STARCH					50	70	30
	PAPER GIFT TAPE					109	114	20
	RESALE STRAPPING TAPE					230	400	35
	GIFT WRAP PAPER					35	65	20
						454	699	
<u>1966</u>							-	-
TOTAL		3,224	1,933	2,201	1,466	1,890	2,570	

RETAIL TAPE AND GIFT WRAP DIVISION
FIVE YEAR SALES FORECAST

	<u>\$ M</u>	<u>% INCR.</u>
1966	64,000	6.3
1967	70,500	10.2
1968	77,000	9.2
1969	83,000	7.8
1970	90,000	8.4

February 14, 1967

Miss D. J. Sirman
Fibres
Union Carbide Canada Limited
123 Eglinton Avenue East
Toronto 12, Canada

Dear Miss Sirman:

Reference is made to your letter of January 20, 1967, concerning an article by Mr. Boese entitled "Bonded Fabric Development".

I have enclosed a copy of the subject article which you requested.

Thank you for your interest and if we can be any further service, please let us know.

Very truly yours,

Shirley Jackson
Secretary to Mr. A. W. Boese
Project Manager
Art and Education Products

saj

Enclosure (1)

*Bert
Frank*



UNION CARBIDE CANADA LIMITED

123 Eglinton Avenue East, Toronto 12, Canada

January 20, 1967

Minnesota Mining & Manufacturing Co.,
2501 Hudson Rd.,
St. Paul 19, Minn.

Gentlemen:

We would appreciate receiving a copy of the article,
"Bonded Fabric Development" by A.W. Boese.

Thank you.

Yours very truly,

(Miss) D.J. Sirman,
Fibres.

/js



MINNESOTA MINING AND MANUFACTURING COMPANY

GENERAL OFFICES • P.O. BOX 3800 • ST. PAUL 1, MINNESOTA, U.S.A. • TELEPHONE: 733-1110

International Division

INTEROFFICE CORRESPONDENCE

irc:

A.W.Boese-Retail Tape-220-8W

SUBJECT: Non-Woven Fabric

March 28, 1967

TO: MR. F. R. OWEN - 3M FRANCE

FROM: R. M. ADAMS - INTERNATIONAL DIVISION - 220-4W

Dear Fred:

Your letter to Al Boese and your comments to me in Paris concerning your continued interest in non-woven fabric developments prompts me to encourage your continued contact with this field. Certainly any information you can obtain and provide to Al Boese or others in 3M's research organization will have potential value. If Mr. Berlin has no objections to your putting some effort on such a project, we'd be glad to hear from you whenever you have something to report. Obviously, this must be done within the framework of your position as Chief Engineer for 3M France.

Best regards.

RMA:VA



MINNESOTA DE FRANCE

CORRESPONDANCE INTER-OFFICE

March 1, 1967

TO : A.W. Boese - Tape Department (St. Paul) ✓ OBJET :

FROM : F.R. Owen - 3M France

irc. : R.M. Adams - Intern'l

Dear Al,

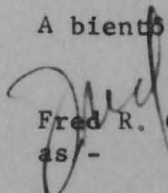
Time passes very quickly in International and even quicker when a foreigner goes to St. Paul for home leave. I certainly enjoyed the few moments that we had together to reminisce and discuss potential new products development in your area.

I have been somewhat remiss in my promise to you to keep in touch with nonwooven fabric development in Europe. I have been reminded of this promise by an article which Mr. Berlin has passed on to me which is named "Danish Firm Tests Dry Process for Paper". I believe you will be interested to read it and perhaps it will help stimulate some new ideas in your group. In the meantime, if you and Bob Adams feel that we should investigate this nonwoven process or others which you have heard about, I will be very pleased to do so.

I fully realize Bob's responsibilities as Technical Director in International and would only work on such a subject under his direction. In the meantime, I would like to keep him appraised of the fact that I am still keenly interested in nonwoven processes and equipment and would like to help out where it is possible.

In closing, I might mention that you and I will not get to see each other for sometime, unless you come to France, as I offered to stay at 3M France for a little while longer.

A bientot,


Fred R. Owen

as -

Encl.

cc: R. D. Peters

June 29, 1967

TO: A. H. REDPATH

FROM: A. W. BOESE

written 6/29/67
discussed with Peters & Redpath
6/29/67 Agreed to program Redpath will discuss
with Corba & Miller to get Chem Eng. for non woven
program. Agreed to my keeping and craft research
+ Production. Peters looking budget for non woven I am
As we discussed, following is an outline of the Research program *to get*
to evaluate fibers and processes for non-woven sheets and to create *necessary*
sheets of various properties as basic materials to be utilized for *time in*
further product development by existing laboratories. The work can *and craft*
be roughly organized as follows: *changed to be*
1970

Process

Heat Bond Resin Bond Comb. Dry Laid Needling

Finish

Calendering Embossing Resin Finish With variations

Fibers

All modern developments and combinations.

Evaluation

All chemical and physical properties.

Start of project will be assembly of information and samples of fibers.

Equipment available in 3M for fiber handling and processing.

Make basic webs on small card.

Organized and report periodically results.

Consult with product development people.

The work of the project will not be product development in nature but will be basic preliminary study to accelerate and point to product development areas.

The program will utilize existing space and equipment available at 3M.

AWB:br

As this work is basic time is necessary to get basic information established

Budget. manpower - space - utilization of other
Divisions equipment for samples & tests
Raw material
Travel - Equipment Manufacturers - filter people

This program is essentially a raw material
or semi processed material development to
feed into product development areas

Advise Divs of basic constructions and
developments - for further product study.
And current developments in non woven field.

Other Research.

Manpower 1 Chem. Eng.

Space Utilize present space in mask-and area which is not crowded.

Small card in Rando. room.

Utilizing equipment presently available

Space for detailed file system to be set up.



How will my budget be set up, ~~to~~?

Research Study

6/28/67

Process

Heat bond Resin bond Comb. Dry laid markers

Finish

Callendering

Resin Finish

Others

Wt variation

Fibers

All modern developments & combinations

Evaluation.

All chemical & physical properties

categorizing and report developments as research report.

Start of project would be study and collection of fibers

Bring equipment ^{info} available up to date

Make first series of samples on ~~hand cards~~
small card as hand
samples

Art & Craft.

6/28/67

Leave job and production as current.

Merchant & sales report to new product mgr.

Set up cooperative lines between fab & sales.

~~Leave unsubmitted for product~~

Solve some of our production problems to reduce cost.

Help develop - the product line & variations for broader market such as surfaces for fine printing



Subject: Fibers Group --
R&D Effort for 1968

September 8, 1967

file 3M fiber

TO: A. W. BOESE - RETAIL TAPE & GIFT WRAP DIVISION - 220-8W
FROM: C. I. HAUSE, TECHNICAL DIRECTOR - BS&CP DIVISION - 235-O-106

The Fibers Group, physically located in Bldg. 209, is now a part of the Building Service and Cleaning Products Division. We look forward to continuing sponsorship of fibers research and development from other interested groups within 3M.

So far in 1967, progress has been made in the following areas of specialty fibers:

- Melt Spinning
- Solution Spinning
- Jet Spinning
- Hollow Fibers (Micromembranes)
- Filled Fibers
- High Temperature Fibers
- Inorganic Fibers
- Fibers Other Than Round
- Alloy (or Composite)

Will you help us arrange our project and manpower schedule for 1968?
Please let me know by September 15th:

1. The project area of fibers in which you are interested.
2. The approximate level of manpower desired.

Thank you.

CIH

CIH-RAM:pfm

cc: E. W. Brown - BS&CP Division - 220-6W
R. A. Matthews - Fibers Laboratory - 209-BC
W. L. Merrill - Cost Accounting - 42-4W
D. E. Reid - Cost Accounting - 220-13E

9/5/67

Characteristics for Drapery. from Non Woven fabrics - Burech

Tensile Hi
Tear Hi
Abrasion Hi
Mullen Hi
no pulling
Delamination none
Stretch very low (must be stable)
Hand + drape excellent
soft
Good body.
opaque
Discoloration none

Dry cleanable excellent

Washable

Seam strength Hi

Width 39" - 56"

Others

Printing dyeing - cross dyeing - embossing
Take Scotch guard. -

Sunlight resistance (excellent)

2032

1.5 dm 1/4 staple Polyester 72 gram feed

11/27/67

~~slow~~ card speed

DB 57°

Dry 78°

Good opening poor web adh. fibers spread width of dyer ^{string} at comb
Hi fiber clump loss - no fiber condensing to room things
1 carding

Poor web formation + ~~strong~~ web adh.
union across web.

Main cylinder filled streaky

DB 78

WB 63

same fiber, 72 gram feed
fibers grown conditioned
~~slow~~ speed

Opening Poor web uneven clumps
some fiber loss at feed Condensed clumps
main filled in streaks,

Carding

Feed rolls filled - main + workers filled (streaky)

Very big 4th poor formation web. no web unity
stronger edge of comb

WB 77

same

Dry 64

3 Opening better web unity - main filled streaky
Very few fiber clumps
Less clump loss at feed less comb hangups

Carding slightly better uneven clumpy web

4

some 19 gram pearl

Coding not a good deal

78
64

79
61

79
62

11/21/67

Vis case.

Operating procedure. - Feeding and

opening. Feed weight 17.5 gms.

Hold fibers in hand and pluck small clumps out of walnut form mass. Spread out over feed apron area as evenly as possible. Do not try to open fibers by hand as this gives an uneven feed.

Press fibers to apron with hand.

The entrance to feed rolls should be as even as possible that is no straggly fiber clumps.

Wind up bat after machine has carded clean.

Carding Fold bat into 8" x 10" bat. patting edges to even them.

Run thru press rolls between papers to compress wet.

Place compressed bat on feed apron pushing slightly against feed rolls to insure even contact.

Be careful that no foreign matter gets into card rolls as this can damage the teeth.

11/21/67

Viscose fiber

1 1/2 den 19/16 staple

Yield 17.5 grams

Opening

distributed to cover apron - 20 min construction apron.

Temp 80 - F 38% RH

1st card med square dapped a round 11" roll

doublet lays compressed on card press

2nd card ped lay med square

good opening light edges good formation
ply identifiable

Carding

11/20/47

1.5 dm - 1 1/2" staple Polyester

17.5 g/s feed to heavy overloaded machine
no second card

12 g/s feed 6" wide on fullayron

Better opening poor web unity clumpy
in fiber loss

Second carding wound on takeoff roll
pressed but for feed

Many carding problems poor web unity
good opening fairly good finish but not
continuous - hangers on comb

11/17/67

Carding

Rayon?

17.5 grams feed weight

picked clumps of fiber spread over feed apron plucked
direction of clumps sideways

Round web on roller after doffing

Compressed web between paper on belt press metal rolls.

Carded second time

Good web slightly flaky + uneven across no perceptible
fiber clumps.

Rayon? 17.5 feed
17.5 fiber carded

1. Opening, spread fibers over feed apron in small clumps.

Web was streaky light in center flaky fairly large unopened clumps.

2- 2nd carding

17.5 gms carded

Not a satisfactory web flaky in even across web. probably caused by poor opening web.

3- 3rd card

17 grams carded

Better web good fiber opening

3-4th card

17 gms carded

Very open web but showed signs of overwork.

fair amount of fly. — overcarded.

17.5 grams feed seems maximum possibly slightly high

Carding exp.

11/16/67

Rayon? 17.5 gr. feed.

1. cover complete apron for, at opening ^{17.25 grs} (small clumped)
~~2. cover half apron~~ " " "
fairly opened small unopened clumps - streaky web

No 2 cover half apron.

17.25 grams

Very clumpy web many unopened clumps

No 3 cover 1/4 apron

12 grams carded wt.
(incl. tray)

very streaky clumpy web
first worker not clogged.

- 1- second trip good web cohesion - flaky few nubs
fairly level across web.
2- About same as one 1 - light weight on edges
flaky - few nubs
3- flaky streaked light weight on edges. poor web
very little fly on all webs

Carding experiment

11/10/67

Rayon?

Card mae to open
2nd card reverse 1st web.

Feed wt.	15 grams	17.5 grams	20 grams	25 grams
1 st card wt.	15 grams	17.5	20-	24
Quality of fiber.				
Reverses + card.				
4 x 6 wt.	1/6 grams			
Web strength 2 nd card	good.	good	good	good.
2 nd card	sl. flaky.	with	good.	flaky - barrel.
fibers opened 1 st card	good	good.	sl lumps	Unopened clumps thru first card.

Spread fiber in clumps over 1/2 apron 1st card.
Carded sliver covered complete apron second card.

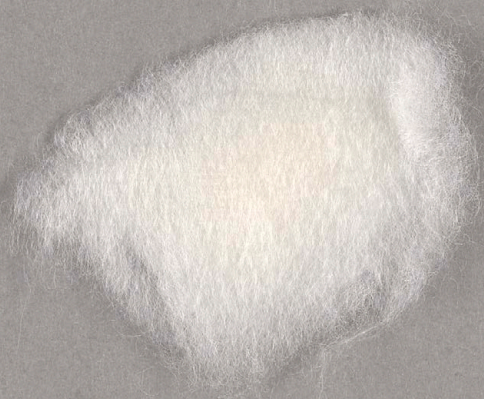


GENERAL OFFICES: 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA

.184

258

4x6





GENERAL OFFICES: 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA

.163 gram

20 grams

4 x 1



152 gram

17.5

4 v 46





GENERAL OFFICES: 2501 HUDSON ROAD • ST. PAUL 19, MINNESOTA

.165 gram

15-



Subject: Nonwoven Products

September 27, 1967

Comment
John

TO: PAUL HANSEN - NEW PRODUCTS - 219-1

FROM: P. H. CAREY, JR. - RT & GW DIVISION LABORATORY - 230-B

I'd like to have your group prepare some samples of resin bonded spread tow for my work. I'd like to see samples of both polyester and rayon fiber spread uniformly and resin bonded with Rhoplex B15 at about 65% fiber and 35% resin in the finished web. Please try for a finished weight of:

1. .05 lbs./yd² about 1.6 gram/8½" x 11"
2. .10 lbs./yd² about 3.3 gram/8½" x 11"
3. .25 lbs./yd² about 6.6. gram/8½" x 11"

I need only ten to fifty yards of each weight.

Pat
PHC/saj

cc: A. W. Boese - 220-8W
B. E. Frank - 230-B
W. M. Westberg - 219-1

Subject: Meeting Minutes

cc: J. E. Corbin 220-8W
R. D. MacDonald
L. J. Miller
G. R. Rabuse
Those Present

October 11, 1967


MEETING MINUTES

On October 10, 1967 the Retail Tape Laboratory's programs on fabrics and Mr. A. W. Boese's work on fibers and textiles were reviewed to coordinate areas of mutual interest. Mr. Boese's work will be directed at a basic study of fibers and bonding resins for non-wovens and new methods for producing webs. Most of our present products are based on a limited number of fibers and resins using a rando-web or Garnet machine for production. By studying non-wovens on a more fundamental basis, it should be possible to control web properties for the manufacture of unique materials. This basic work will not be directed at the development of specific products.

Mr. J. N. Korich and C. W. Roberts reviewed Product Development's work on non-woven fabrics for use in hair styling tape and the proposed program on non-wovens for tape backings.

The writer outlined New Products' investigation of 3M fabrics for disposable clothing. Finished products, not roll goods, are being considered.

It was agreed that future reviews should be held to coordinate interests. Messrs. A. W. Boese, A. W. Haglund, J. N. Korich, J. E. Wehling, C. W. Roberts and the writer attended the meeting.


H. J. Revoir

/smw

THE HALE MANUFACTURING COMPANY

PROCESSORS OF SYNTHETIC FIBERS

PUTNAM, CONNECTICUT 06260

CABLE CODE: HALEFIBER

AREA CODE 203 WALNUT 8-6512
TWX-710-434-0032

OCTOBER 20, 1967

✓
MR. F. FISCHER
DIVISION PURCHASING AGENT
MINNESOTA MINING & MFG. COMPANY
2501 HUDSON ROAD
ST. PAUL, MINNESOTA 55119

Comment
11/3/67

DEAR MR. FISCHER:

Shorter
check & advise
AB
WE HAVE YOUR LETTER OF OCTOBER 17TH INQUIRING ABOUT THE AVAILABILITY OF SILK NUPS. WE DO HAVE SILK NUPS AVAILABLE AND THEY ARE KNOWN AS OUR TYPE 58 BLEACHED SILK NUB. THE CURRENT PRICE IS 85¢/POUND NET 30 DAYS F.O.B. PUTNAM, CONNECTICUT. THE AVAILABILITY IS EXCELLENT.

X
WE ARE SENDING YOU A SAMPLE OF THIS PRODUCT. WE HAVE MADE THIS TYPE OF SILK FOR FIFTEEN YEARS AND IT IS MORE OR LESS A STANDARD IN THE INDUSTRY.

THANK YOU FOR YOUR INQUIRY.

VERY TRULY YOURS,

Newell D. Hale
NEWELL D. HALE
VICE PRESIDENT

NDH:JMR

T/F
for your info
11/23/67

TO:
Technical Communications
Center, 201-25

3M TECHNICAL REPORT SUMMARY

DATE: October 20, 1967

Retail Tape & Gift Wrap LABORATORY, DEPT. # 3119

COPIES:

R. J. Barghini -230-B(33)
R. F. Clayton -230-B(33)
J. E. Corbin - 220-8W
H. R. Courtney -230-B(33)
D. J. David - Fairmont
B. E. Frank - 230-B(33)
B. A. Galligan - 201-2E
A. F. Jacobson - 220-7W
A. E. Johnson - 42-8E
L. A. Kirk -Fairmont
R. J. Kostohryz-230-B(33)
Lab. File
J. H. Masters-230-B(33)
R. F. Merrill - 230-B(33)
G. W. Miller- 230-B(33)
I. Erickson - 220-11E

New 3M Chemicals ☐ Yes
reported? ☐ No

No. of Data Sheets: _____

Security: _____

Open ☒ Closed ☐

KEYWORDS: (include
general, specific, and 3M
product terms)

Filter Fabric

Product Control
Art & Education Prdts.

Title

Manor Farm Filter Fabric

Project:

Nonwoven Products

#

962003-001

To:

A. W. BOESE

Leave Blank

By:

P. H. CAREY, JR.

Employee No.

48277

Objective:

To report on production of sixty rolls of
filter fabric for Manor Farms.

Notebook Ref.:

No. of Sheets:

ABSTRACT and Conclusions

1. The material appears comparable to the sample PSL61003 Lot 2 with respect to weight, caliper, and porosity which was ordered.
2. The 1K maker should have an increased fiber feed rate if this material is produced again. At least twice the making speed could be obtained.
3. The jumbo stock contained an excessive amount of dirt and greasy fiber -- better maintenance or care in cleaning is indicated.
4. The converted rolls contained a large number of splices because of the need to remove the dirty fibers from the finished web.
5. More thorough opening of the fibers would result in a more uniform fiber distribution and a better product.
6. The process next time should consist of:
 - (a) Jumbo making
 - (b) Rewinding to remove reject material
 - (c) Final slitting and packing in Dept. #1626.

SPECIFIC PROBLEMS remaining to reach stated objective.

TEW
10/26/67

REPORT

The 1K maker was extensively cleaned in preparation for this run. The feeder section was modified by putting a 12T sprocket on the elevator drive shaft, a 30T sprocket on the stripper, and a 43T sprocket on the drive motor. The cam motion on the feed apron was reduced to minimum radius. The feeder air bridge blower was at maximum volume. The rando was able to produce a finished web of 3.2 gram weight at 14 fpm. The equipment is capable of handling 30 fpm speed if the feeder could supply more fiber. This would be easily done by increasing the rotational speed of the feeder drive and keeping it independent of the rando weber. The saturating solution was mixed in an empty Rhoplex barrel, and the volume of solution per batch completely filled the barrel. The Carbapol solution was mixed in two five gallon pails since a ten gallon container was not available. The jumbo rolls were rewound to provide smooth rolls, and to remove obviously reject material. The material was slit to 11½" width by 600 lineal yards on #33 slitter in Dept. #1626. A considerable amount of reject material was removed at the slitter. It was primarily dirty fiber, brown in color and usually occurring as clumps of five to twenty groups. Occasionally large fiber clumps, caused by poor opening, were removed.

RESULTS

Table I - Process Data

Speed:	Fourteen feet per minute
Width:	Thirty-eight to thirty-nine inches
Dry Fiber Weight:	2.35 (2.16 to 2.52) grams per 8½"x11" sheet
Solution pickup %:	454 (412 to 526) based on bone dry fiber
Solution solids %:	14.0 (13.4 to 14.9)
Calculated resin %:	36.3 (33.0 to 40.0)
Nip Pressure Pounds per Square Inch:	30
Oven Temperature °F:	400°

Table II - Material Balance

INPUT

Machine Hours Making:	48
Man Hours Making:	50
Fiber - RM5474 Viscose:	1,245 pounds
Solution RM3896 AC33:	196 gallons
" RM5070 B-15:	27 gallons
" RM5075 Carbapol:	12 pounds
" RM92 Ammonia:	780 mls.

OUTPUT

Jumbo:	12,710 -- 38" yards	13,420 square yards	
Converting:	60 rolls -- 600 yard x 11½"		} 11,610 square yards
	3 rolls -- 125 yard x 11½"		
Roll Diameter:	14½" to 15½"		

Table III - Finished Properties

Weight:		
(Grams per 8½"x11" sheet	3.23	(2.99-3.70)
Caliper in inches:	8.0	(6.5 to 11.5)
Porosity Δ P-HOH:	#6-13.0 Lpm	.004 (2-7)
	10-23.8 "	.008 (6-10)
	15-38.5 "	.013 (9-15)
	20-53.8 "	.018 (15-22)
	25-68.2 "	.022 (18-27)

Using flow meter FM1048B with stainless steel float - Monostat Corporation
predictability flow meter.

P.H. Carey
PHC/saj

Interoffice Correspondence



Subject: Watercolor Paper Product Development

October 20, 1967

Comment
11/6/67

TO: H. W. CUNNINGHAM - RETAIL TAPE & GIFT WRAP DIVISION - 220-8W
FROM: P. H. CAREY - RETAIL TAPE & GIFT WRAP DIVISION LAB - 230-B(35)

Enclosed are light weight Watercolor Paper samples for Andrews/Nelson/Whitehead. They are identified as follows:

20966-8-1	7.5 to 8.0 mils
" 8-2	6.5 to 6.75 mils
" 8-3	6.0 to 6.25 mils
" 8-4	6.0 to 6.0 mils
" 8-5	5.6 to 5.8 mils
" 8-6	5.0 to 5.5 mils
" 8-7	5.0 to 5.0 mils

#20966-8-1 is the roughest and #20966-8-7 is the smoothest.

I'd suggest you send the following:

20966-8-2
" 8-4
" 8-5
" 8-7

If they want a heavier rather than just a thicker paper, then we would have to obtain raw samples from the mill and process it here. All of the samples sent to you are produced from our light weight-smooth Watercolor Paper.

PHC
PHC/saj

Enclosures

cc: A. W. Boese
W. P. Erickson

Al Base

com

It's a Young World

ZIPCODE U.S.A.

by Bobbie Ashley



TINT HINT: Q. Can anything be done about prematurely gray hair, besides dyeing it? — R.B., Warren, Ohio.

A. No. In order to eliminate gray hair you have to color it. But if you feel the gray is not becoming, why not tint your hair?

STAR SWITCHEROO: Q. A few weeks ago you mentioned that Sidney Poitier was directing a play. Do actors often try directing? — W.A., Rochester.

A. Lots do and lots more would like to. Right now Paul Newman is trying his hand at directing for the first time — a film called "A Jest of God" starring



Actor Paul Newman directs actress-wife Woodward

his wife Joanne Woodward. Warren Beatty produced and starred in "Bonnie and Clyde." And, of course, Gower Champion danced his way to directing plays.

BLUE BOY: Q. Tell us all about Frank Converse. Why is "Coronet Blue" off the air? — L.R., Boston and R.Y., Santa Ana.

A. Those are the two most often asked questions in my mail basket this week. "Coronet Blue" was filmed about two years ago, and after about 11 episodes were completed CBS decided to dump the series. Last summer they threw it in as a summer replacement show. It got great response but by then CBS was out of luck. Converse had signed for another series — "NYPD" — now on ABC. Converse comes from Lahaska, Pa., a small town in Bucks County. He's 6'2", went to prep school at Phillips Academy and got his B.A. from Carnegie Tech. He's been acting ever since he graduated from college and between acting jobs he's been a

See Cover

DEAR DOCTOR: Q. Could you tell me if that beautiful red-haired actress, Samantha Eggar, is married and also when is her new movie, "Doctor Doolittle," coming out? — H.T., Hartford.



A. Sam and husband Tom Stern have a two-year-old son Nicolas and a baby girl born Sept. 23. We agree she's beautiful, too. Pretty enough to be on our cover today. "Doctor Doolittle" will be released in mid-December. The movie of the Doctor Doolittle series is one of the most ambitious projects 20th Century-Fox has ever tackled — and one with the most headaches.

The film ran into local opposition when they

tried shooting in an English village. They overcame that hostility but could not overcome the weather (it rained for 53 out of the 58 days). That and the problem of keeping a guard on a dog actor (required by British quarantine) sent the production back to Hollywood. In England, Rex Harrison kept waiting for a sunny day to do a scene, throwing Sophie the seal back into her home in the sea. In Hollywood they had plenty of sun but Sophie had gained 23 pounds, making it a little tough on Harrison. Even that was minor compared to building an English manor house set for 150 animal actors. The floors were slanted and equipped with drains, and all the upholstery and drapes were made of plastic as none of the animals were housebroken. The goat ate the script and a fawn had to have her stomach pumped after she drank paint. Then Polynesia, the parrot, who was taught NOT to talk, screamed "CUT!" in the middle of Rex's big number. Word is, it's a musical as fine as "My Fair Lady."

motor scooter salesman, an egg salesman, a night porter at a drive-in — and a haberdashery salesman. He is married, has two children, a boy and a girl, and lives in Manhattan.

BOOK GUIDE: Q. My family is planning to buy a set of encyclopedias. Now this is a very expensive purchase for us, and we were wondering if you could give us some suggestions as to what to look for. — W.E., Mineola, L. I.

A. You might consider purchasing a Bantam Book called "Books and The Teen-Age Reader" by G. Robert Carlsen. This 60-cent paper back sponsored by the National Book Committee, has an excellent chapter on reference books. There is a checklist on what to look for in an encyclopedia and some of the points are:

1. Check to see that the encyclopedia has a policy of updating and revising material.
2. Watch out for high-pressure salesmen.
3. Talk to your school or public librarian.
4. Look over the list of contributors to the encyclopedia. A good one is written by scholars and authorities in each field.
5. Check binding and paper. These books have to last a long time.
6. Find out who prepared the maps. These should be done by a reputable atlas company.
7. Sample the encyclopedia and see how you like it. Simply try looking up a few subjects.

ZIPCODE wishes to thank the readers who've been deluging us with letters and regrets that no mail answers can be given. Address: Zipcode U.S.A., Box 1299, Grand Central Station, N.Y., N.Y. 10017.

YOUNG IDEAS

TRICK OR TREAT TIME: Remember Tuesday night, when the trick or treaters come by, to give generously for UNICEF, celebrating its 21st birthday this year. The Children's Fund has more than met its challenge over the years. So far, over 200,000,000 youngsters have been vaccinated against tuberculosis; 22,000,000 saved from blindness. UNICEF-equipped health centers reach about 70,000,000 needy people, most of them mothers and children.

TRAVELING LIGHT: The ultimate in care-free travel is a throwaway wardrobe. Fashion experts at National Airlines slipped

BONANZA

By Mort Weisinger

FOR FOOTBALL FANS: Free . . . a special issue of America's leading gridiron weekly, "The Football News," complete with predictions by

two pounds of clothing, two bathing suits, a beach shift with hat, two daytime dresses, pants, an evening gown and disposable lingerie in an overnight case. Traveler



wears a Sterling Paper Fashions rain and shine coat. Added bonus, wear the evening gown long, then shorten. And pack sticky tape — just in case.

MEDICAL NEWS

MEASLES CAMPAIGN: There are still about six million children who should be vaccinated against measles if epidemics of the disease are to be wiped out entirely. Dr. Cyril Solomon, THIS WEEK's Medical Consultant, says that the number of cases is running about 25 per cent less than last year. Dr. Solomon adds, if the Public Health Service drive for all school children is successful, measles will be eradicated.

Readers' Corner

STOCKING SAVER: Old unmatched nylons can be dyed one of the new bright colors. Use color remover first and then tint. — Eleanor West, Utica, N. Y.

WELCOME DRINK: Slip a package of dry pre-sweetened soft-drink mix into your letters to servicemen in Vietnam. The packet weighs less than half an ounce and helps make the water taste better. — Mrs. Edwin Johnson, Iron River, Mich.

GOOD SUBSTITUTE: A jar of baby banana food is a perfect substitute for mashed bananas in a recipe. — Alma Pope, Alden, N.Y.

the experts for both college and pro football. For your copy, write: The Football News, P.O. Box 2043, Detroit, Mich. 48231.

ROCK 'N' ROLL TRANSFER: Teen-agers will love this iron-on authentic BLUES MAGOOS transfer. It's ideal for adorning a T-shirt or sweatshirt or even putting up on a wall. To obtain, send a stamped, self-addressed envelope to: Mercury Record Productions, Inc., 745 Fifth Ave., Suite 815, New York, N. Y. 10022.

Special survey offer

24-kt.
*electro-plated**

GOLD LONG STEM SPOONS

*delicately sculptured in solid steel,
by the craftsmen of*

THE INTERNATIONAL SILVER COMPANY

ideal for desserts, iced drinks, parfaits

NOW! \$3
Set of four only

(plus your answers to short questionnaire. Read details below.)

PRIOR TO NATIONAL DISTRIBUTION AT \$12.00



Americana Golden Heritage Pattern
Iced Drink and Dessert Spoons.
Made in U.S.A.

THESE SPOONS are a treasure you'll cherish forever. They have the regal elegance that only pure gold can give to your table. Their slim tapering lines are classic in design. Their golden beauty will make even the plainest dessert or iced drink a very special occasion.

The versatility of these Long Stem Spoons is boundless. They're perfect for iced coffee, tea, ice cream sodas... as well as parfaits, desserts and cakes.

We believe that you will lose your heart to these golden spoons. We're gambling a fortune on that belief. A few months from today, this heavily electro-plated gold set will carry a \$12 price tag. But we must obtain quick consumer reaction to our new AMERICANA GOLDEN HERITAGE stainless flatware (crafted by famous International Silver Company)*—and we're more than willing to pay for it.

YOUR PERSONAL OPINION NEEDED

Thus, in return for your *personal* appraisal of the deep-gold magnificence of this lovely "sample" set, you may have all four electro-plated gold spoons for only \$3. And even this token sum will be instantly refunded if you are not absolutely thrilled.

All we ask is that you answer the three brief questions on the card enclosed with your spoons—and return it to us promptly.

Understandably, only a limited number of 24-kt. electro-plated Long Stem Spoons have been set aside for this special survey. (Please—no more than two sets per family.)

To get yours, mail the coupon with your remittance now. (This offer may not be repeated again in this publication.) The spoons will be rushed to you—with the short questionnaire—by insured postal delivery.

MAIL NO-RISK COUPON FOR 4 ICED DRINK SPOONS.

GOLDEN SPOONS, Market Research Division,
Box 156, Dept.H-11, Meriden, Conn. 06450

Please send _____ sets of four 24-kt. electro-plated Gold Long Stem Spoons. I enclose \$3 for each set of four. (Limit of two sets per family.) I'll answer and return your questionnaire. My satisfaction is guaranteed or you'll refund my money.

Name _____

Address _____

City _____

State _____ Zip _____

Al Boese

BRING ERASER

Gals on the Go Pack Paper Clothes

By KRYSTAL POOL

The Los Angeles Times

Girls, if you have to travel light these days your packing problems are over: get a paper wardrobe you can call your own; the further you go the lighter your suitcase gets. (After a few wearings you can nonchalantly toss that frock in the trash can to make room for newly purchased loot on your return trip home.)

Seriously, the latest madness for swinging female jet setters is a paper wardrobe. Paper-covered dolls are showing up in all the hot spots. And you can take that literally. You won't want to take a paper dress to Asaka, but they are the newest rage in Acapulco, Miami Beach, Hawaii, Jamaica and most of the warmer climates.

You can buy all types of paper garments in different textures and thickness. There are cocktail dresses, culottes, shifts, swimsuits, hats, lingerie and even coats made of paper. They come in prints, plaids, flowers and checks and in every imaginable color in the spectrum. Ranging in price from \$2.50 to \$30 they are quite inexpensive when you consider you won't have to worry about dry cleaning bills.

The Mod thing to do is to cut them up and use them as posters after wearing them a few times, but if you really want to prolong their wearability include a repair kit in your suitcase. This should consist of an eraser for dirty spots, a pair of scissors for the more persistent spots (also useful if you want to shorten a dress or make shorts of the culottes) and a roll of cellulose tape.

Best feature about this latest fad in women's apparel is that they are flameproof, so you don't have to worry about setting the world on fire. Another good feature is that the material is very clothlike in feel as well as appearance and no one will even know you're wearing paper unless you dress up in one of the pop art newspaper prints, in which case you're bound to

be the best pressed girl on the airplane.

As I mentioned earlier, paper garments are the answer to traveling light. Just as an example, you can fit two bathing suits, one beach shift hat, two dresses, one jump suit or pants costume, an evening gown and even paper lingerie easily into an attache case. And that's about as light as you can go!



Subject:

October 31, 1967

TO: R. SMITH - COST ACCOUNTING - 220-13E

FROM: P. H. CAREY - RETAIL TAPE & GIFT WRAP DIVISION LAB - 230-B(35)

The following process information can be used on the cost request for prices on 14,000 and 35,000 -- $24\frac{1}{2}" \times 32\frac{1}{2}"$ -- sheets of calendered Watercolor Paper as requested by Andrews/Nelson/Whitehead (letter of August 4, 1967). The information has been verbally approved by production at Chemolite and St. Paul. Since the material has not actually been processed in the factory the estimates are tentative.

I. Waste Estimate on 14,000 Sheet Order -- Ship 5% over or under on order

$(14,000) \div (1.05) =$	14,700 sheets	$24\frac{1}{2}" \times 32\frac{1}{2}"$	packed out - grain short
$(14,700) \div (.995) =$	14,800 sheets		packing waste -- 100 sheets
$(14,800) \div (.87) =$	17,000 sheets		sorting waste -- 2,200 sheets
$(17,000) \div (.99) =$	17,150 sheets		guillofine waste -- 150 sheets
$(17,150) \div (.98) =$	17,500 sheets		sheeting waste -- 350 sheets
$(17,500) (25.25) \div (36) =$	12,300 lin.	37" yards from calender	
$(12,300) \div (.97) =$	12,700 lin.	37" yards into calender	
$(12,700) \div (.96) =$	13,200 lin.	37" yards into New Product Machine	

II. Materials(a) Paper

RM 94827 $(13,200) \div (4.29) =$ 3,080 pounds

(b) Solution

NP 3264 - solution

$(13,200) \frac{(37)}{(36)} \div \frac{(.150)}{(.85)} =$	2,400 pounds (8.3% solids)
RM 3004 Acetone	= 640 pounds

III. Time(a) New Products -- (Dept. 0505)

$(13,200) \div (360 \text{ lin. yd/hr}) =$

<u>Machine Hrs.</u>		<u>Man Hrs.</u>
36.7	run time	112
4.0	down time	12
9.0	start up	33
8.0	clean up	24
57.7	TOTAL	181

(b) Calendering (Dept. 1524) 12 calender -- Ralph Archer

$(12,700) \div (1200 \text{ lin. yd/hr}) =$

<u>Machine Hrs.</u>		<u>Man Hrs.</u>
10.6	run time	10.6
2.0	start up	2.0
1.0	down time	1.0
1.0	clean up	1.0
14.6	TOTAL	14.6

(c) <u>Sheeting (Dept. 3641) W. Sheldon(PIE)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
(12,300) ÷ (1500 lin. yd./Hr.) =		8.2 Run Time	8.2
Interleaf every 500 sheets with		(1.3)	(1.3)
green drug bond 50½" x 37" width		9.5 TOTAL	9.5
(d) <u>Trimming (Dept. 3642) W. Sheldon</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
(17,150) ÷ 1,000 = 17 cuts =		4.0 TOTAL	4.0
(35) (10) ÷ 60 = .006"/sheet			
24½" x 32½"			
(e) <u>Sorting and Counting (Dept. 3643) W. Sheldon</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
(17,000) ÷ 500 = 34 Reams		17.0 Run Time	17.0
(34) (1/2 hr. per ream)		1.0 Start up	1.0
Vacumatic counter after sort =		1.0 Clean up	1.0
		19.0 TOTAL	19.0
(f) <u>Packing (Dept. 3643) W. Sheldon</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
14,700 ÷ 500 = 30 reams			
30 ÷ 10 reams/pallet = 3 pallets			
Place on pallet (3) (1/2 hr./pallet) =		1.5 Trim	1.5
Overwrap and band			
10 reams/pallet			

35,000 sheet order 24½" x 32½" calendered L-S-Watercolor Paper Grain Short

I. Waste Estimate - ship 5% over or under the order

(35,000) ÷ (1.05) =	36,800 sheets packed out
(36,800) ÷ (.995) =	37,000 sheets packing waste 200 sheets
(37,000) ÷ (.90) =	41,200 sheets sorting waste 4,200 sheets
(41,200) ÷ (.99) =	41,600 sheets guillotine waste 400 sheets
(41,600) ÷ (.98) =	42,500 sheets sheeting waste 900 sheets
(42,500) (25.25) ÷ 36 =	29,800 lin. 37" yard from calender
(29,800) ÷ (.98) =	30,400 into calender
(30,400) ÷ (.97) =	31,400 lin. 37" yd. into New Products Machine

II. Materials

(a) Paper

RM 94827 (31,400) ÷ (4.29) =	7,330 pounds
Inventory	5,700 pounds
Need to order	1,630 pounds

(b) Solution

NP 3264	
(31,400) (37) ÷ (.150) =	5,700 pounds
(36) (.85)	

RM 3004 Acetone	1,500 pounds
-----------------	--------------

III. Time

(a) New Products

(31,400) ÷ (360 lin. yd./hr.) =	<u>Machine Hrs.</u>	<u>Man Hrs.</u>
	87.5 Run Time	260
	10.0 Down Time	30
	9.0 Start Up	33
	8.0 Clean Up	24
	114.5 TOTAL	347

October 31, 1967

(b) Calendering (Dept. 1524) R. Archer

(30,400) ÷ 1200 lin. yd/hr. ■

Machine Hrs.Man Hrs.

26	Run Time
2	Down Time
2	Start Up
1	Clean Up
<u>31</u>	<u>TOTAL</u>

31

(c) Sheeting (Dept. 3641) W. Sheldon
 (29,800) ÷ 1500 lin yd/hr. =
 Interleaf every 500 sheets
 51" x 37" cut

Machine Hrs.Man Hrs.

20	Run Time
	Down Time
1	Start Up
	Clean Up
<u>21</u>	<u>TOTAL</u>

21

(d) Trimming (Dept. 3642) W. Sheldon
 (41,600) ÷ 1000 = 42 cuts
 42 ÷ (10 min/cut)
 (60)

Machine Hrs.Man Hrs.

11	Run Time
	<u>TOTAL</u>
<u>11</u>	

22

(e) Sort and Count (Dept. 3643) W. Sheldon
 41,200 = 84 reams
 (84) ÷ (1/2 hr/ream) =
 Vacumatic counter after sort

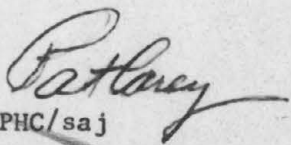
Machine Hrs.Man Hrs.

42	Run Time	42
1	Start Up	1
1	Clean Up	1
<u>44</u>	<u>TOTAL</u>	<u>44</u>

(f) Packing (Dept. 3643) W. Sheldon
 74 reams
 74 ÷ 10 ream/pallet = 8 pallets
 (8) ÷ (1/2 hr. per pallet) =
 Palletize - overwrap and band

Machine Hrs.Man Hrs.

4	<u>TOTAL</u>	4
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 PHC/saj

cc: R. R. Archer - 24-2

A. W. Boese

W. M. Sheldon - Chemolite

Interoffice Correspondence



Subject: Third Quarter Report
October 31, 1967

cc

J. G. Erickson 220-11E

A. H. Redpath 220-8W

November 6, 1967

TO: A. W. BOESE - RETAIL TAPE & GIFT WRAP DIVISION 220-8W

FROM: P. H. CAREY - NON-WOVEN BASIC RESEARCH - 230-B(35)

Summary

The major portion of the time in July and August was spent on product control work on all products. Production runs on Printmaker's Plate, Watercolor Paper, Art Fabric were completed. Significant improvement in Printmaker Plate was made. All laboratory work on the products ceased on September 1, 1967 and the laboratory people were reassigned. Art Fry is now with the Gift Wrap Laboratory; Don Hennen is with the New Products Division, Perri Medin, secretary resigned and the writer is working on Non-Woven products in the Retail Tape Division Laboratory. The month of September was spent in cleaning up loose ends and reorienting the activity to the new direction.


PHC:ya

TYPE B



1257.83
1210
1274.93
500.00
774.93

1-015 - Standard M. B.
1-015 - Standard M. B.
1-015 - Standard M. B.

1-015

1-015 - Standard M. B.



TYPE B



TYPE B

1-015 - Standard M. B.
1-015 - Standard M. B.
1-015 - Standard M. B.

1-015 - Standard M. B.

1-015 - Standard M. B.

TYPE B



1-015 - Standard M. B.

1-015 - Standard M. B.

1-015 - Standard M. B.

Watercolor Paper

November 7, 1967

TO: H. W. CUNNINGHAM - RETAIL TAPE & GIFT WRAP DIVISION - 220-8W

FROM: P. H. CAREY - RETAIL TAPE & GIFT WRAP DIVISION LAB - 230-B(35)

I have sent process information to Ralph Smith on the calendered smooth - light weight Watercolor Paper. This information assumes that we will buy 25½" wide paper and the sheets will have the grain long, that is, in the direction of the 32½" length of the sheet.

If I use the present stock of 37" paper, then the grain will be short, that is, in the direction of the 24½" length of the sheet.

When you correspond with Mr. Claudio, would you please determine whether his customer wants the grain long or short or if it makes any difference.

PHC:saj

cc: A. W. Boese



Subject:

November 7, 1967

TO: RALPH SMITH - COST ACCOUNTING - 220-13E

FROM: P. H. CAREY - RETAIL TAPE & GIFT WRAP DIVISION LAB - 230-B(35)

I am revising the process information for the 14,000 and 35,000 sheet cost request for Andrews/Nelson/Whitehead as we discussed on November 3, 1967. This assumes we buy paper at 25½" width from our supplier at a cost of \$0.3039 per pound.

I. Material Estimates

14,700 sheets 24½" x 32½" -- packed out - grain long
 16,700 sheets into sorting -- 2,000 sheets waste
 16,750 sheets into guillotine -- 50 sheets waste
 16,950 sheets into sheeter -- 200 sheets waste

$(16,950) (33) \div 36 = 15,550$ lineal 25½ yard from calender
 $15,550 \div .99 = 15,700$ into calender
 $15,700 \div .96 = 16,350$ into New Products Coater

II. Materials

(a) Paper $16,350 \div 6.44 = 2,540$ pounds

(b) Solution NP3264 (2540) (.78 pounds solution per pound of paper)
 equals 1,980 pounds
 RM 3004 Acetone = 500 pounds

III. Time

(a) <u>New Products (Dept. 0505)</u>	<u>Machine Hrs.</u>	<u>Man Hrs.</u>
$16,350 \div 360$ lin. yd/hr =	(Run Time) 45.5	136
	(Misc. Time) 21.0	69
	66.5	TOTAL 205

(b) <u>Calendering (Dept. 1524)</u>	<u>Machine Hrs.</u>	<u>Man Hrs.</u>
$15,700 \div 1200 =$	(Run Time) 13.0	13.0
	(Misc. Time) 4.0	4.0
	17.0	TOTAL 17.0

(c) <u>Sheeting (Dept. 3641)</u>	<u>Machine Hrs.</u>	<u>Man Hrs.</u>
$15,500 \div 1500 =$	(Run Time) 10.3	10.3
	(Misc. Time) 1.2	1.2
	11.5	TOTAL 11.5

(d) <u>Trimming (Dept. 3642)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
17 cuts	=	4.0	8.0
		TOTAL	
(e) <u>Sort and Count (Dept. 3643)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
		(Run Time) 17.0	17.0
		(Misc. Time) 2.0	2.0
		19.0	19.0
		TOTAL	
(f) <u>Packing (Dept. 3643)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
3 pallets	=	1.5	1.5
		TOTAL	

35,000 sheet order - grain longI. Material Estimates

36,800 sheets	-- packed out	
39,800 sheets	-- into sorting	- 3,000 sheets waste
39,900 sheets	-- into guillotine	- 100 sheets waste
40,100 sheets	-- into sheeter	- 200 sheets waste
(40,100) (33) ÷ 36	=	36,800 lineal 25½" yds from calender
36,800 ÷ .99	=	37,100 into calender
37,100 ÷ .96	=	38,700 into New Products Coater

II. Materials

(a) <u>Paper</u>	38,700 ÷ 6.44	=	6,000 pounds
(b) <u>Solution</u>	NP 3264 (6,000) (.78)	=	4,690 pounds
	RM 3004 Acetone	=	1,150 pounds

III. Time

(a) <u>New Products (Dept. 0505)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
38,700 ÷ 360	=	(Run Time) 108	324
		(Misc. Time) 21	21
		129	345
		TOTAL	
(b) <u>Calendering (Dept. 1524)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
37,100 ÷ 1200	=	(Run Time) 31	31
		(Misc. Time) 4	4
		35	35
		TOTAL	
(c) <u>Sheeting (Dept. 3641)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
36,800 ÷ 1500	=	(Run Time) 24	24
		(Misc. Time) 1	1
		25	25
		TOTAL	
(d) <u>Trimming (Dept. 3642)</u>		<u>Machine Hrs.</u>	<u>Man Hrs.</u>
40 cuts	=	11	22
		TOTAL	

Ralph Smith

-3-

November 7, 1967

(e)	<u>Sort and Count (Dept. 3643)</u>		<u>Machine Hrs.</u>		<u>Man Hrs.</u>
	39,800 sheets	=	(Run Time)	41	41
			(Misc. Time)	2	2
			43	TOTAL	43
(f)	<u>Packing (Dept. 3643)</u>		<u>Machine Hrs.</u>		<u>Man Hrs.</u>
	74 reams				
	8 pallets	=	4	TOTAL	4

Pat
PHC:saj

cc: A. W. Boese

Interoffice Correspondence



Subject: Monthly Report
October 1967

cc: B. E. Frank - 230-B(35)
A. H. Redpath - 220-8W

November 7, 1967

TO: A. W. BOESE - RETAIL TAPE & GIFT WRAP DIVISION - 220-8W
FROM: P. H. CAREY - RETAIL TAPE & GIFT WRAP DIVISION LAB - 230-B(35)

The filter fabric for Manor Farms was produced at 3M Hutchinson.
Laboratory Report 9612003-001 was published covering the work.

An accoustical tile veiling for the Sonolite Company in Massachusetts was made in the New Products Division. Samples using polyester and acrylic fiber were made and evaluated in the laboratory before being sent to the customer. Information was published in Laboratory Report 9612003-002.

A variety of calendered paper samples were produced for Andrews/Nelson/Whitehead. I have supplied the process and production data to Cost Accounting for pricing work.

Experimental work on nonwoven-vinyl laminates was begun using Warren release paper and vinyl plastisols. Examples of Du Pont Reemay, polyester web, Art Fabric and spread tow have been made. I plan on using the Oakes Frother to make vinyl foam constructions of this type.

I have started a study on resin bonding a heat bonded fabric as part of a program to understand bond mechanism and develop improved fabrics. We produced and are evaluating a three fiber series of light weight fabrics using Rhoplex HA8 as the binding agent. A theoretical study on the mathematics of nonwoven fiber structures was also begun as a part of the study to understand the type of construction.

I have started work on polyester spread tow using equipment in the New Products Laboratory. Samples of acrylic Verel fiber are on order. This method could allow an inexpensive light to heavy weight fabric to be made with minimum capital investment. The samples produced so far are unidirectional, they have excellent drape and good hand. Samples of one and two color printing on this material were made on the New Products Roto Press to illustrate their design potential.

Literature studies on filtration theory applied to nonwovens has been started. A basic question that still needs to be answered relates to the mechanism of removal of .05 to .20 micron particles. It appears that electrostatics play a major role in removal. Calculations of air dwell time in the filter mask and air velocity gave surprisingly (to the writer) low velocities and high dwell times when compared to commercial filtration practices.

PHC:saj

MINNESOTA MINING & MFG. CO.

FIELD LETTER OF

Burton E. Frank

CITY St. Paul

Laboratory -230-B(35)

DATE November 27, 1967

TO A. W. Boese

12/1/67
How to test for
web resilience & recovery?
UB

SUBJECT: Trip to Philadelphia to visit the Textile Research Department of FMC Corporation (American Viscose Division) and the research laboratories of Rohm and Haas.

OBJECTIVES:

1. To check on web forming equipment which can be used in the manufacture of non-wovens.
2. To check on testing equipment for accurate evaluations of non-woven sample webs.
3. To discuss binders for non-woven fabrics, with emphasis on methods of minimizing binder migration in webs.
4. To observe laboratory equipment and methods for producing precision non-woven webs.

November 15, 1967

Textile Research Department of FMC Corporation
Marcus Hook, Pennsylvania

Mr. W. J. Bieberle met us at the Philadelphia airport, and took us to the Textile Research Department. Mr. Jeff Shearer acted as our guide. First, we observed their carding equipment. Several cotton cards were in operation, making viscose slivers for spun yarns. A new, high capacity cotton card, which they recently installed, was of interest. It has about three (3) times the output capacity of a conventional card (up to fifty pounds per hour) and a roll-doffing system instead of the usual oscillating comb. In place of the moving slat apron above the main cylinder, there is a close-fitting cover with a granular surface. This machine was not in operation. Also not in operation were several wool and worsted cards, as well as a 64" garnett and a Rando Webber. For smaller scale work they have three Davis and Thurber cards (10"), similar to ours, with garnett clothing-wire on the rollers. Take-up of the output webs was on a large diameter roll (about 14") which was surface driven from a slat apron.

We observed a "Turbo-Crimper" in operation. This machine is fed a chemically crimped tow, to which it mechanically adds more crimp. In the final product, the total crimp did not appear to be very uniform or very "deep".

They have a small paper laboratory which we also toured. Much of the equipment is usable in non-woven work for materials made by either a wet (paper) process or a dry (carded) process.

Full sized weaving looms, knitting machines, dyeing equipment, etc., were only of limited interest to us. However, their textile testing

November 27, 1967

laboratory was most interesting. While orientated mainly toward the testing of conventional fabrics and yarns, their impressive array of testing equipment can almost all be utilized in the testing of non-wovens.

In our discussions following the tour, Jeff showed us samples of several relatively common non-wovens (diaper covers, disposable clothing, and interliner material). He stated that while many Rando Webbers are in use in laboratories and pilot plants all over the country, he knew of none that were actually in production use. (We didn't mention the half-dozen or so in production use here at 3M) He suggested the cotton card as being the best equipment to use in the manufacture of non-wovens.

November 16, 1967

Rohm & Haas Laboratories,
Spring House, Pennsylvania

Fred Schucker of Rohm & Haas picked us up at the motel in Valley Forge, and drove the twenty-odd miles to Spring House, where their new laboratory facilities are located.

A two hour, conference type meeting was held with the key personnel involved with Rhoplex emulsions and their uses in the paper, woven fabric, and non-woven fabric fields. Attending were:

Rohm & Haas: Don Glusker -- Laboratory Manager
Vince Moser -- Textiles & Chemicals
Frank Chaucer -- Development
Ed Sweeney -- Paper
Fred Schucker -- Textiles

3M: Willis Olson -- Purchasing
Walt Westberg -- New Products
Myself

Vince Moser started the discussion with a run down of the processing steps in making non-wovens. There at the Rohm & Haas laboratories, they generally start with webs which have been made to order for them by an outside supplier (Prodesco Co.). These webs are usually supplied with a paper interliner, although sometimes they are lightly prebonded with PVA. In making up samples, he uses pieces of glass marquisette fabric on each side of a pre-weighed web, saturates with latices of at least 25% solids thru a dip pan, removes excess binder with a pair of vertical squeeze rolls, removes the marquisette layers, places the wet web on a release paper, and dries in a steam heated, drawer type oven at 240° F.. (Usually a wetting agent, Triton X-100, is used at a concentration of 0.1%, based on latex resin solids.) These conditions assure proper penetration of the binder into the web and minimize resin migration. To minimize migration in an actual production drying oven, they suggested zone drying (warm to hot), careful control of air flow, control of air temperature, and high pad solids. Also multiple applications of the resin might be necessary to obtain proper distribution of the resin throughout the web. On heavier fiber mats, they often use a spraying process. Two passes usually are necessary, with adjustments made so that the binder soaks thru 1/2 way on the initial pass. Subsequently, the materials is turned over and sprayed on the second side. This is invariably followed, after drying, by a high temperature cure (300° F. or higher).

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Their laboratory equipment, while good, did not appear to be slanted toward non-woven research to any great extent. Several sets of motor driven pad rolls, with saturation pans, were available, along with drying facilities, including the "pizza", drawer type oven mentioned earlier. They also have a fine selection of test equipment.

During the afternoon we drove to Philadelphia to the headquarters building of Rohm & Haas. Here we met with Hank Schneider, Gordon Dean, and Bill Buhler for a discussion of 100% solids monomer syrups. Generally these are applied to non-wovens by a dual operation:

1. Catalyst is sprayed or padded onto the substrate,
2. Monomer and activator (mixed together) are added, again either sprayed or padded.

An inert gas atmosphere (N_2 , for example) is advantageous, if not mandatory, since the vapors given off in drying (for example, methyl methacrylate) are both dangerous and a nuisance, and usually must be removed or recovered from the exhaust gases.

At least two other processes for polymerizing the monomers, that at the same time eliminate the need for catalysts and activators, are known. One is an electron beam radiation method, and the other an ultra-violet method (using a photo-sensitizer to start the polymerization reaction).

The advantages of using monomers instead of the prepared polymers are:

1. Cost savings (initial and shipping) estimated at six cents to seven cents a pound.
2. Greater purity.
3. Elimination of drying.
4. Improved properties (better control of the chemistry involved).

All of the monomer systems available now give a stiffer hand than Rhoplex B-15. There are still many technical problems to be solved before the use of acrylate and substituted acrylate monomers becomes routine. Only large companies will have the resources to finance the needed long term research.

Rohm & Haas can supply a method of making monomer syrups from some of the solid monomers also.

Our proposed Friday visit to National Starch was cancelled because their people would not be available to meet with us.

Burton E. Traub

BEF:saj

cc: P. H. Carey - 230-B(35)
W. M. Westberg - 219-1



Subject: MINUTES: RIBBON MARKETING
COMMITTEE MEETING

Held: Tuesday, December 12,
1967

The Ribbon Marketing Committee Meeting was held on Tuesday, December 12,
with the following in attendance:

W. A. Schoonenberg
D. E. Truhler
R. F. How
J. R. Lane
M. L. Porcaro
G. L. Harper
C. A. Parsons

1. TOY FAIR

The American Toy Fair, March 11 - 15, is being moved from the Hotel New Yorker to the Statler Hilton. We have requested three display rooms and a suite. Two of the display rooms will be used for product while the third will be used as an order writing room.

2. GIFT SHOWS

We have requested 30' of display space in the following 1968 Gift Shows:

California (at Los Angeles)	-	January 21 - 26
San Francisco	-	February 4 - 7
Seattle	-	February 18 - 21
Chicago	-	February 18 - 23

Although we requested better display space in the California and Chicago shows, we were unable to improve our position and will retain the same display space as 1967.

C. A. Parsons

C. A. PARSONS

cc: J. E. Barnard
A. W. Boese
J. E. Corbin
W. P. Erickson
W. F. Evans - Ridgefield
H. F. Groth
G. L. Harper - 220-4E
R. F. How
J. R. Lane
R. J. May

M. W. McCaskill
E. R. McLeod
C. O. Moosbrugger
R. D. Peters - 220-13E
G. H. Phillips
M. L. Porcaro - 220-4E
A. H. Redpath
W. A. Schoonenberg
D. E. Truhler
N. E. Wigart