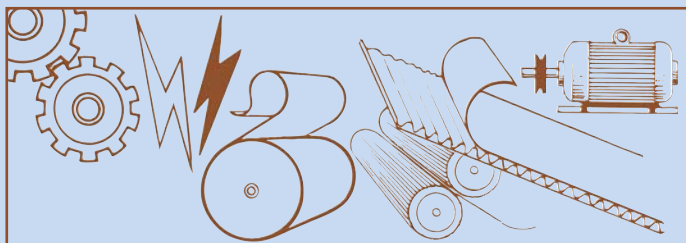
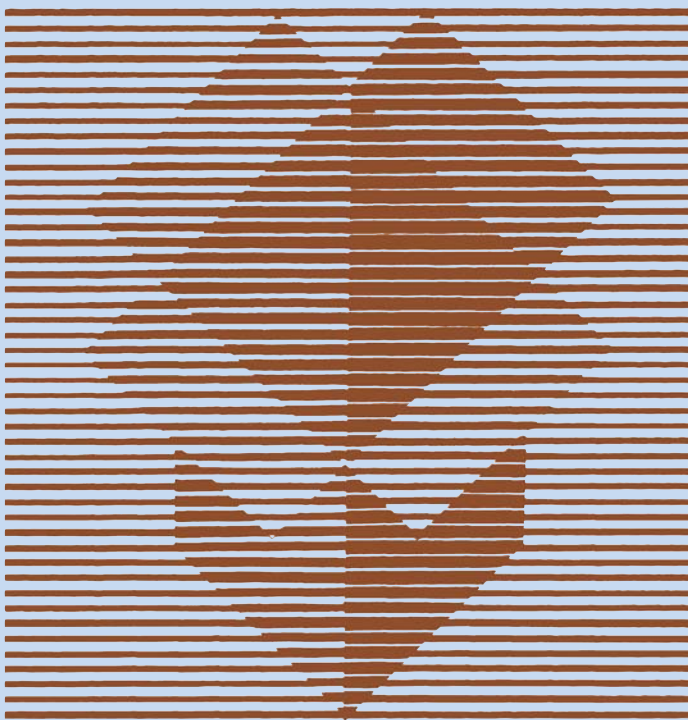


TECHNICAL INFORMATION BOOKLET

FOR PRIVATE CIRCULATION ONLY

FCBM 30:04

2003 INDUSTRY SURVEY



**FEDERATION OF CORRUGATED BOX
MANUFACTURERS OF INDIA**

Research & Development is a continuous on going process. Updating of data and information is vital for scientific analysis, projection of trends and identifying priorities.

The Research & Development Committee of FCBM has been making continuous and dedicated efforts to bring out useful, up to date, and informative booklets on practical standards, industry brochure, survey reports etc., for the benefit of the industry. These publications have been well received by the people connected with the Corrugated Packaging Industry, as these data and information help in formulating the basis for analyzing and predicting trends and making projections.

With the objective of keeping people informed about the changing trends in the industry, 'Industry Survey' was first started in 1996 and is being continued every year.

The present booklet is a compilation of Industry Survey for the year 2002. I am sure this booklet, like the earlier Industry Surveys, will be useful for everyone connected with the Corrugated Packaging Industry.

I congratulate the R&D Committee, headed by Shri Pankaj Shah, for their dedicated efforts and hope the Committee will continue to bring out such useful publications, periodically, in the years to come.

Ashok Vyas

President

***Federation of Corrugated Box
Manufacturers of India***

15th February, 2003

INTRODUCTION

The Industry Survey is now a regular feature, conducted as part of the technical sessions during the FCBM Annual Conferences. The data collected is compiled and published in a booklet form.

The statistical data and analysis in this booklet is an indicator of the changing trends in our industry. This will help us to reassess our strengths and prepare ourselves to meet the expected challenges.

Some of the highlights of the survey reported in this booklet are:

- Number of participants in this survey has gone up to 160 from the past average of 90 in the last few years. This is an encouraging feature.
- Average production per day and productivity has gone up which is a positive indication.
- Higher percentage of 5-ply boxes compared to 3-ply and 7-ply boxes appears to be the continuing trend. However, there is a shift towards less plies.
- There is an upward trend for paper gsm from 144 to 147. However due to less no. of plies, the corrugated board gsm shows 3.5% decline. There is an increase in average BF from 19 to 21.
- There are some changes in the market profile:
 - Textiles, Processed Foods and Consumer Durables are the leading market segments for corrugated boxes.

- There is a significant increase in Electrical and Lamps segment.
- Average wastage has come down. Another good feature.

We do hope more and more members will participate in this annual survey.

I look forward to your comments on this booklet and your active participation in such surveys.

Pankaj D. Shah
Chairman
R&D Committee

2001 INDUSTRY SURVEY

THE LEGEND

Column A : Survey conducted during
32nd FCBM Conference held at Khajuraho
in December, 2003

For Comparison Purpose

Column B : Survey conducted during 31st FCBM
Conference at Mumbai in December, 2002

Column C : Survey conducted during 30th FCBM
Conference held at Chennai in December, 2001

Column D : Survey conducted during 29th FCBM
Conference held at Agra in December, 2000

Table 1

PRODUCTIVITY

	A	B	C	D
No. of participants in the survey	87	160	90	95
No. of Single Facers used	161	291	155	172
Average Single Facer per participant	1.85	1.82	1.72	1.81
Average production per day per Single Facer (in kgs)	2206.7	2816.0	2328.0	2208.0
Average number of people employed per participant	45.3	50.0	51.0	40.0
Average production per day (in kgs)	4083.7	5122.0	4008.0	3997.0
Productivity kgs/person/day	90.1	102.0	78.0	100.0

Columns B, C and D are for comparison purpose only.

Table 2**PRODUCT CATEGORY**

Number of plies	A	B	C	D
2-ply	1.1%	2.0%	2.0%	2.0%
3-ply	20.4%	27.0%	23.0%	25.0%
5-ply	52.0%	50.0%	45.0%	49.0%
7-ply	22.6%	17.0%	25.0%	19.0%
9-ply	4.0%	4.0%	5.0%	5.0%
	100.0%			

Columns B, C and D are for comparison purpose only.

Table 3

WASTAGE

Process Waste (%)	A	B	C	D
Average wastage during manufacture (Not including trim, slots or punch scrap)	4.01%	3.34%	4.01%	5.42%

Columns B, C and D are for comparison purpose only.

Table 4

RAW MATERIAL CATEGORY – GSM

GSM	A	B	C	D
80 gsm	1.7%	1.0%	1.0%	4.0%
90 gsm	3.0%	3.0%	1.0%	5.0%
100 gsm	20.1%	18.0%	17.0%	23.0%
120 gsm	18.1%	20.0%	25.0%	18.0%
140 gsm	17.3%	13.0%	12.0%	18.0%
150 gsm	17.0%	16.0%	18.0%	10.0%
170 gsm	1.4%	4.0%	2.0%	2.0%
180 gsm	14.0%	10.0%	9.0%	11.0%
200 gsm	3.8%	6.0%	12.0%	5.0%
Other	3.5%	9.0%	3.0%	4.0%
	<u>100.0%</u>			

Columns B, C and D are for comparison purpose only.

Table 5**RAW MATERIAL CATEGORY – BF**

Grade	A	B	C	D
14 BF or less	17.6%	9.0%	19.0%	15.0%
16 BF	18.8%	8.0%	20.0%	19.0%
18 BF	12.0%	18.0%	13.0%	11.0%
20 BF	16.5%	13.0%	11.0%	18.0%
22 BF	16.5%	11.0%	10.0%	15.0%
24 BF	6.8%	14.0%	6.0%	4.0%
25 BF or more	6.2%	19.0%	14.0%	12.0%
Duplex	3.5%	5.0%	4.0%	4.0%
Imported	1.5%	1.0%	3.0%	1.0%
Others	0.5%	2.0%	– *	1.0%
	<u>100.0%</u>			

Columns B, C and D are for comparison purpose only.

* Not available.

Table 6

MARKET PROFILE

Segment	A	B	C	D
Pharmaceuticals	5.6%	7.0%	12.0%	6.0%
Processed Foods	9.6%	13.0%	13.0%	13.0%
Fresh Fruits/ Vegetables	1.1%	3.0%	3.0%	2.0%
Poultry	3.0%	2.0%	2.0%	3.0%
Soaps/Cosmetics	6.0%	9.0%	6.0%	8.0%
Beverages	6.9%	4.0%	6.0%	3.0%
Distillery	5.5%	6.0%	5.0%	8.0%
Tobacco/Cigarettes	3.5%	1.0%	1.0%	6.0%
Textiles/Yarns	19.6%	15.0%	18.0%	14.0%
Electricals/Lamps	3.5%	6.0%	2.0%	3.0%
Electronics	10.8%	3.0%	1.0%	6.0%
Glass	2.9%	3.0%	2.0%	2.0%
Engineering Goods	3.1%	7.0%	9.0%	5.0%
Consumer Durables	7.2%	10.0%	10.0%	9.0%
Defence	0.8%	1.0%	1.0%	1.0%
Miscellaneous	10.9%	10.0%	9.0%	11.0%
	<u>100.0%</u>			

Columns B, C and D are for comparison purpose only.

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