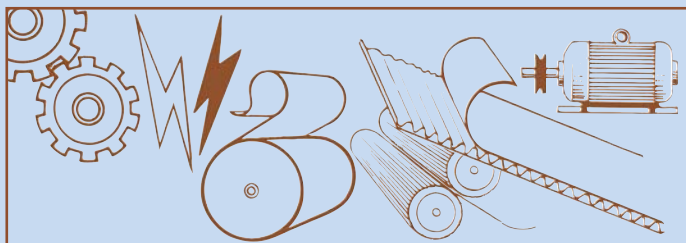
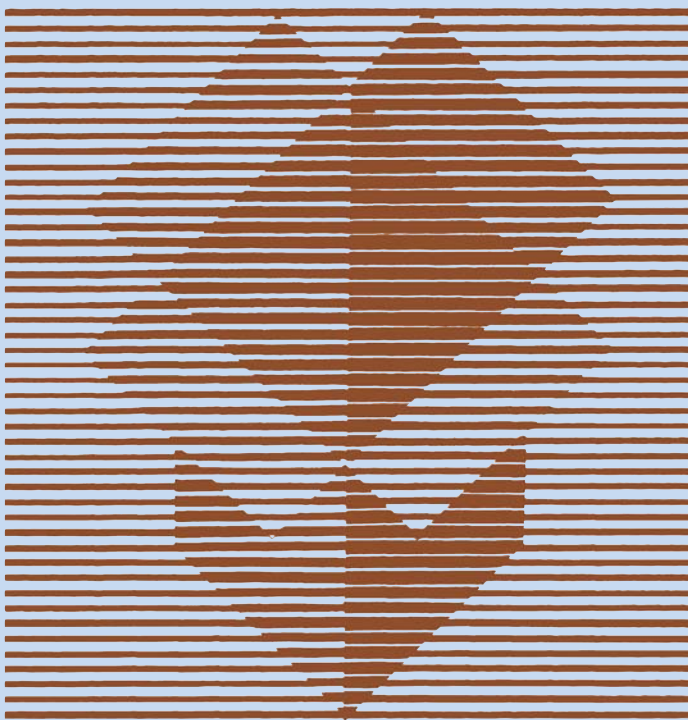


TECHNICAL INFORMATION BOOKLET

FOR PRIVATE CIRCULATION ONLY

FCBM 35:06

2005 INDUSTRY SURVEY



**FEDERATION OF CORRUGATED BOX
MANUFACTURERS OF INDIA**

Research & Development is key to the growth of industry and business.

The Research & Development Committee of FCBM has been actively engaged in conducting studies on the properties and performance of corrugated packaging.

One of the activities of R&D Committee, is publication of Practical Standards and other Technical Information booklets. Over the years, these publications of FCBM have become significant in establishing standards in the design and manufacture of corrugated boxes.

Compilation of statistical data and its analysis is part of Research & Development and is aimed at establishing a basis for predicting trends in the industry and identifying priorities.

The Industry Survey, which was started in 1996, is conducted every year during the Annual Conference of FCBM as part of Technical Sessions. The objective of the Survey is to analyse the changing trends in the industry.

I am pleased to present this booklet – “2005 Industry Survey” which is a compilation of the data collected during the 34th FCBM Conference at Bangalore.

I congratulate the R&D Committee, headed by Shri Ram Kumar Sunkara, for its dedicated efforts and hope that the committee will continue its good work in the years to come.

Manohar Shetty

President

**Federation of Corrugated Box
Manufacturers of India**

15th June, 2006

INTRODUCTION

The industry survey is now a regular feature, conducted as the 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 down to 52 (lowest ever in the last 10 years) from a peak 160 in the year 2002.
- Average production per day per single facer has gone up as compared to last two years.
- Average production per day per unit has remained steady.
- Productivity has dropped.
- Number of people employed has gone up.
- 86 per cent of production is 3- and 5-ply and shows a continuous increasing trend towards shifting from higher plies to lower plies.
- The weighted average GSM of Corrugated Board has decreased.
- The weighted average GSM of Paper used has remained unchanged.
- The weighted average BF of Paper used has gone up from 19 to 21.

- There are some changes in the market profile:
 - There is an increase in the Processed Food segment.
 - There is an increase in Electronic Goods segment.
 - There is a decrease in Textile / Yarn segment.
- Average wastage has remained unchanged.

We do hope that more and more members will participate in this Annual Survey.

Ram Kumar Sunkara

Chairman

R & D Committee

2005 INDUSTRY SURVEY

THE LEGEND

Column A : Survey conducted during
34th FCBM Conference held at Bangalore
in December, 2005

For Comparison Purpose

Column B : Survey conducted during 33rd FCBM
Conference at Agra in December, 2004

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

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

Table 1

PRODUCTIVITY

	A	B	C	D
No. of participants in the survey	52	80	87	160
No. of Single Facers used	140	192	161	291
Average Single Facer per participant	2.69	2.40	1.85	1.82
Average production per day per Single Facer (in kgs)	2724.0	2423.0	2206.7	2816.0
Average number of people employed per participant	62.0	56.5	45.3	50.0
Average production per day (in kgs)	5796.0	5815.5	4083.7	5122.0
Productivity (kgs/person/day)	93.5	102.9	90.1	102.0

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

Table 2

PRODUCT CATEGORY

Number of plies	A	B	C	D
2-ply	2.0%	1.0%	1.1%	2.0%
3-ply	30.0%	28.0%	20.4%	27.0%
5-ply	56.0%	57.0%	52.0%	50.0%
7-ply	11.0%	13.0%	22.6%	17.0%
9-ply	1.0%	1.0%	4.0%	4.0%
	<u>100.0%</u>			
Weighted Average	4.60	4.77	–	4.88

CORRUGATED BOARD – GSM

Weighted Average	784	821	–	818
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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)	4.64%	4.49%	4.01%	3.34%

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

Table 4

RAW MATERIAL CATEGORY – GSM

GSM	A	B	C	D
80 gsm	3.0%	3.0%	1.7%	1.0%
90 gsm	< 0.3%	1.0%	3.0%	3.0%
100 gsm	15.0%	15.0%	20.1%	18.0%
120 gsm	16.0%	18.0%	18.1%	20.0%
140 gsm	10.0%	20.0%	17.3%	13.0%
150 gsm	15.0%	12.0%	17.0%	16.0%
170 gsm	5.0%	2.0%	1.4%	4.0%
180 gsm	17.0%	13.0%	14.0%	10.0%
200 gsm	6.0%	4.0%	3.8%	6.0%
Others (250)	13.0%	12.0%	3.5%	9.0%
	<u>100.0%</u>			
Weighted Average	147	151	–	147

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	10.0%	10.0%	17.6%	9.0%
16 BF	16.0%	18.0%	18.8%	8.0%
18 BF	9.0%	9.0%	12.0%	18.0%
20 BF	18.0%	19.0%	16.5%	13.0%
22 BF	9.0%	19.0%	16.5%	11.0%
24 BF	10.0%	6.0%	6.8%	14.0%
25 BF or more	17.0%	14.0%	6.2%	19.0%
Duplex	3.0%	4.0%	3.5%	5.0%
Imported	6.0%	1.0%	1.5%	1.0%
Others	2.0%	< 0.5%	0.5%	2.0%
	<u>100.0%</u>			
Weighted Average	21.0	19.0	–	21.0

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

Table 6

MARKET PROFILE

Segment	A	B	C	D
Pharmaceuticals	3.0%	4.0%	5.6%	7.0%
Processed Foods	19.0%	18.0%	9.6%	13.0%
Fresh Fruits/ Vegetables	1.0%	2.0%	1.1%	3.0%
Poultry	4.0%	1.0%	3.0%	2.0%
Soaps/Cosmetics (FMCG)	8.0%	6.0%	6.0%	9.0%
Beverages	3.0%	3.0%	6.9%	4.0%
Distillery	2.0%	3.0%	5.5%	6.0%
Tobacco/Cigarettes	6.0%	2.0%	3.5%	1.0%
Textiles/Yarns	9.0%	12.0%	19.6%	15.0%
Electricals/Lamps	3.0%	4.0%	3.5%	6.0%
Electronics	17.0%	8.0%	10.8%	3.0%
Glass	7.0%	3.0%	2.9%	3.0%
Engineering Goods	2.0%	8.0%	3.1%	7.0%
Consumer Durables	9.0%	15.0%	7.2%	10.0%
Defence	< 0.5%	2.0%	0.8%	1.0%
Miscellaneous	7.0%	10.0%	10.9%	10.0%
	100.0%			

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

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Sri. P. D. SHAH	Past Chairman
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