# PROJECT PROFILE ON ELASTIC TAPES

# MONTH & YEAR JULY 2011

# PREPARED BY TANSTIA – FNF SERVICE CENTRE B – 22, INDUSTRIAL ESTATE, GUINDY, CHENNAI – 600 032

This publication is supported by

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# **ELASTIC TAPES**

#### INTRODUCTION

Garment forms one of the basic needs of human being. In a country like India with growing population, the increase in demand for the readymade garments is a continuing process. A good dress should give importance to three basic parameters. These are comfort to wearer, matching colours and climate adjustments.

Elastic tapes are required for the purpose of holding the garments tightly when it is worn by the person. In addition to providing comfort, it also increases the life of the garments. Generally, the elastic tapes are used in undergarments like briefs. Panties, brassieres, baggies, children's dress etc. It is also used in suitcases for inside straps for better grip holding and in car seats for safety driving etc.

#### MARKET POTENTIAL

With the increasing demand for the undergarments and readymade garments, there is enough scope for the garments ancillary units including the elastic tapes. There is always good demand for the elastic tapes.

The Indian rubber industry has been growing in strength and importance, as a part of India's burgeoning role in the global economy. India is the world's largest producer and the third largest consumer of natural rubber and India is also one of the fastest growing economy globally. With a stable annual growth rate of 8-9%, rising foreign exchange reserves, rapid expansion in the capital markets and FDI inflow, India proudly stakes its claim as the second fastest growing major economy in the world. These factors along with high concentration of automobile production and the presence of large and medium industries in South India, Chennai is the perfect place for the event India Rubber Expo-2011.

The Indian Rubber Expo 2011 is a testament to the confidence and relevance of India's largest rubber body the All India Rubber Industries Association AIRIA, the organiser of the India Rubber Expos. AIRIA, established in 1945 is comprised of over 1200 members and is headquartered in Mumbai.

It is considered to be one of the key players in global rubber business. Rapid progress in made in the production of natural rubber. India is home to some of the world's largest rubber enterprises through direct investment and technical collaboration.

There is no doubt that with rubber consumption stagnating in various Western countries and the shift in consumption of rubber to the Asia Pacific region, the focal country for this decade is India. There exists a huge scope for expansion causing import of machinery, technology, raw materials and export Rubber goods. There are 5000 units comprising 30 large scale, 300 medium scale and around 4600 small scale and tiny sectors in India.

These units are manufacturing more than 35000 rubber products, employing close to four hundred thousand people, which includes technically qualified support personnel's contributing Rs 40 Billion to the National Exchequer.

Natural rubber production in the country rose 3.7 per cent during 2010-11 against the previous year.

Domestic production stood at 8,31,400 tonnes in 2009-10 and 8,61,950 tonnes in 2010-11,as per the Rubber Board. The Rubber Board Chair anticipates the production for 2011-12 was 9,02,000 tonnes. Domestic consumption also increased by 2 per cent in 2010-11.

During 2010-11, growth in tyre production in the automotive sector grew by 23 per cent. Export of tyres also increased by 20 per cent. However, truck and bus tyre exports declined by five per cent.

The projected rubber consumption in 2011-12 is 9,77,000 tonnes.

During 2010-11 fiscal, exports stood at 28,424 tonnes compared with 25,090 tonnes in the previous fiscal. Imports accounted for 1,77,482 tonnes, 73 per cent of which was through duty free channels.

The chairperson said there would not be any shortage as the opening stock of rubber in 2011-12 was relatively high at 2,77,095 tonnes against 2,11,290 tonnes in 2010-11.

According to the International Rubber Study Group report, global rubber production-consumption balance in 2010 and 2011 showed deficits of 380,000 tonnes and 234,000 tonnes, respectively.

#### **INSTALLED CAPACITY**

Product	Installed	No of	Capacity	Capacity per
	capacity	working	per day	annum
	per hour	hours per		300 days per
		day		annum
Elastics Tape	700 metres	8	5600	1680000 metres
			metres	

#### PLANT AND MACHINERY

Sl.No.	Description	Qty/	Cost (Rs)
		Nos	
1.	High-speed needle loom 12:shaft front reed 12" without back frame and beam Model 6/27 varitex.	2	20 50 000
2.	Warping machine type b 350 mm dia and 250 mm width with warp speed 180 mts./ min. max.	1	3 80 000

3.	Creel for 250 ends	1	2 88 000
4.	Aluminum flanged beams bolted	50	2 20 000
5.	Finishing machine series Fs-2 main drum guide	1	5 70 000
	rollers made of SS 304 dia 800mm, length		
	1210mm, 38 heaters, maximum speed 36 mts./		
	min.		
6.	Back frames	3	78 000
7.	Measuring and winding machine suitable for	1	100 000
	making rolls up to 30mm. Dia		
8.	Fire fighting equipments	LS	52 000
9.	Lab equipments	LS	62 000
	Total		3800000

#### MANAFACTURING PROCESS

#### 1. Process Outline

Different types of yarn like viscose, nylon and cotton and placed on creel for working purpose as per design. Warping prepared on warping machine. It is to be ensured that no loose threads are present in the warp sheet in order to run the machine without stoppage. Prepared warp beam is shifted to needle loom and individual threads are drawn as per design. When the machine starts weaping, the woven tapes will come out of the machine and finally wound on the rolls, After finishing on finishing machine, rolls and packed into polythene packs for supply to the customers.

### **RAW MATERIALS**

For-Metres	1680000		
	Qty-kgs	Rate/kg	Value
			Rs lakhs
Crimped Nylon yarn	12000.00	320.00	38.40
Viscose	9000.00	200.00	18.00
32s cotton yarn	9000.00	240.00	21.60
Latex thread	9300.00	200.00	18.60
Glue/starch	1200.00	18.00	0.22
			96.82
Packing materials	1680000	0.15	2.52

## **UTILITIES**

### **Power & Fuel**

Three phase-	KW	70.00
Power charges Rs.la	akhs p.a	9.24
Power & fuel		9.24
For process-Litres p	oer day	0
For human consum	ption-litres/day	200

### **LOCATION LAND AND BUILDING**

Built up area-Sq.ft	1000
Rent p.mRs per 10 per sq.ft	10000
Advance-10 months. Rs	100000

# **MANPOWER**

		Monthly	Total
		wages	
Supervisor	1	9000	9000
Skilled	2	7000	14000
Unskilled	4	5000	20000
Accounts Assistant	1	6000	6000
Sales Executive	1	7000	7000
Security	2	5000	10000
sub total			66000
Add benefits		20%	13200
Total per month			79200
TOTAL PER ANNUM-Rs. lakhs			9.50

# **COST OF PRODUCTION AND PROFITABILTY**

# **Assumptions**

Installed capacity	16.80 lakh metres of various elastic tapes per
	annum
Capacity utilisation	Year-1 -60%
	Year -2 -70%
	Year-3 onwards- 80%
Selling price	Rs.9.00 per metres
Raw materials	As per the details given above
Packing materials	As per details given above
Power & Fuel	Rs.9.24 lakhs per annum at 100%
Wages and salaries	Rs. 9.50 lakhs with increase 5% every year.
Repairs and Maintenance	Rs.0.60 lakh per annum
Depreciation	Written down value method -15 % on machinery

Selling general and	Rs.30000 per month
administrative expenses	
Interest on Term loan	14% per annum
Interest on working capital	14 % per annum
Income tax	34% on profits

#### **MACHINERY SUPPLIERS**

- 1. M/s. Baku Bhai Ambalal, 3-Madrwah Estate, Saki Vihar Road, Sakinaka, Mumbai–72.
- 2. M/s. Prashant Engg. Co. Plot No. 4/1-!, GIDC Estate, Vatva, Ahemedabad-382445.

#### **SUPPLIERS OF RAW MATERIALS**

- 1. M/s. Moupan Ltd. Modi Nagar, (U.P.)
- 2. M/s. Lohia Machine Ltd. (Fiber Div.) C-3 and 4, Panki Industrial Estate, Kanpur.
- 3. M/s. Vardhman Spinning and Gen. Mills Ltd. Chandigarh Road, Ludhiana.
- 4. M/s. India Spinners and processors 5309, Basti Harphool Singh, Delhi-110006.

#### **FINANCIAL ASPECTS**

### 1. COST OF PROJECT

	[Rs.lakhs]
Land & Building (Advance) Plant & Machinery Other Misc. assets Pre-Operative expenses Margin for WC	1.00 38.00 0.50 2.00 2.20
Margin for WC	43.70
2. MEANS OF FINANCE	
Capital Term Loan	15.20 28.50

#### 3. COST OF PRODUCTION & PROFITABILITY STATEMENT

	[Rs.lakhs]				
Years	1	2	3	4	5
Installed Capacicity-Metres Utilisation Production/Sales-Metres	1680000 60% 1008000	1680000 70% 1176000	1680000 80% 1344000	1680000 80% 1344000	1680000 80% 1344000
Selling Price perMetre -Rs.	9.00				
Sales Value (Rs.lakhs)	90.72	105.84	120.96	120.96	120.96
Raw Materials	58.77	68.57	78.36	78.36	78.36
Packing Materials	1.51	1.76	2.02	2.02	2.02
Power& fuel	5.54	6.47	7.39	7.39	7.39
Wages & Salaries	9.50	9.98	10.48	11.00	11.55
Repairs & Maintenance	0.60	0.66	0.73	0.80	0.88
Depreciation	5.70	4.85	4.12	3.50	2.98
Cost of	81.62	92.29	103.10	103.07	103.18

43.70

Production					
Selling, Admin, & General exp	3.60	3.78	3.97	4.17	4.38
Interest on Term Loan	3.99	3.49	2.49	1.49	0.50
Interest on Working Capital	1.12	1.12	1.12	1.12	1.12
Total	90.33	100.68	110.68	109.85	109.18
Profit Before Tax	0.39	5.17	10.28	11.11	11.78
Provision for tax	0.13	1.76	3.50	3.78	4.01
Profit After Tax	0.26	3.41	6.78	7.33	7.77
Add:	5.70	4.85	4.12	3.50	2.98
Depreciation					
Cash Accruals	5.96	8.25	10.90	10.83	10.75
Repayment of Term loan	0.00	7.13	7.13	7.13	7.11

#### 4. WORKING CAPITAL:

	Months Consumptions	Values	%	Margin Amount	Bank Finance
Raw Materials	0.50	2.45	25%	0.61	1.84
Consumables	2.00	0.25	25%	0.06	0.19
Finished goods	0.50	3.40	25%	0.85	2.55
Debtors	0.50	3.78	10%	0.38	3.40
Expenses	1.00	0.30	100%	0.30	0.00
		10.18		2.20	7.98

### 5. PROFITABILITY RATIOS BASED ON 80% UTILISATION

Profit after Tax Sales	=	<u>6.78</u> 120.96	6%
Profit before Interest and Tax Total Investment	=	<u>13.89</u> 51.68	27%

Profit after Tax	=	<u>6.78</u>	45%
Promoters Capital		15.20	

# 6. BREAK EVEN LEVEL

Fixed Cost (FC):

Wages &			[Rs.lakhs] 10.48		
Salaries Repairs & Maintenance Depreciation			0.73 4.12		
Admin. & General expenses		3.97			
Interest on TL			2.49		
Profit Before Tax (P)			10.28		
BEL = FC x 100	=	<u>21.79</u>	x	<u>80</u>	x 100
FC +P		32.07		100	100

54% of installed capacity