***Diversification of markets, quality upgradation and competitive rates could boost exports of Indian belts and inject vitality to this sector***

# GOOD PROSPECTS FOR FAN BELTS AND 'V' BELTS

**S. Mohankumar & K.S. Gopalakrishnan**

Beltings constitute an important segment of rubber parts used in automobile and industrial sectors. Among beltings, fan belts and V-belts are the major types used for silent drives between short centre distances in industries and for fractional horse power drives in domestic appliances. Available in different specifications and sizes, they are classified on the basis of their structure as wrapped belts, cut edge belts, narrow belts, joined belts, double V-belt, endless flat belt and so on.

The V-belt is a composite rubber product containing rubber, fabrics and other compounding ingredients. They are commonly manufactured from less heavy fabric with a skimmed thin layer of rubber compound including two rubber sheets serving as cover layer. The fabric gives strength and enrich the belts in maintaining good performance and used servicing. Initially cotton was used for making belts but now rayon, nylon, terylene and even metallic fabrics are used. However, a host of belt makers are still depending on cotton as the main fabric, while some big companies are now using nylon and polycord for the production of belts. Developments have also been made in advanced countries to fabricate light weight monofilament, polyurethane, silicone and polyvinyl chloride belts for use in agriculture and food industries.

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## Present situation

Presently there are 6 large, 10 medium and 49 small scale units manufacturing fan belts and V-belts with an installed capacity of around 375 lakh numbers. These factories are mainly concentrated in Punjab, Tamil Nadu, Maharashtra, West Bengal and Haryana. A summary of distribution of units and their installed capacity is given in the table.

### Fan belts and 'V' belts manufacturing units

| Name of the States | No of units | Installed capacity (in lakh numbers) |
|---|---|---|
| Punjab | 16 | 49 |
| Tamil Nadu | 14 | 104 |
| Maharashtra | 7 | 48 |
| West Bengal | 6 | 77 |
| Haryana | 6 | 49 |
| Other States | 16 | 48 |
| Total | 65 | 375 |

These 65 producers jointly made 239.06 lakh belts in 1991-92 accounting for an increase of 2.39 per cent over the previous year's production. Though the growth was very significant in 1990-91 (29.33%) available statistics reveal that the growth rate of the belt industry for the last seven years is only 6.81 per cent. Assuming this growth rate, the country's production of belts for the year 1994-95 can be worked out as 291 lakh numbers.

## Marketing

Belts manufactured in big units are generally sold through their depots in main cities and towns. They also have sales agreements with established big consumers for taking a sizeable part of their production. The small scale units depend mainly on agents and other intermediaries. There are enlisted agents and retail dealers in all regions for selling these products on a commission basis which varies generally from 5 to 15 percent of the output value. In this context it is worthwhile to mention that even some small business people have shunned their traditional intermediaries and started direct selling.

## Market

The market for fan belts and V-belts can be broadly classified into four segments. Viz:

**Original equipment market** :
This consists of vehicle and machine manufacturers who use belts as original equipment for the vehicles and machines they make. This group buy belts directly from the producers on negotiated price and terms.

**Replacement market**:
The worn out and damaged belts are replaced by the owners of vehicles and machines periodically. This segment buy belts generally from spare parts dealers who stock all brands of belts and sell according to customer preference.

**Public sector undertakings**:
This segment consists of state transport and public sector companies who buy belts directly from the belt makers through open tenders and direct negotiations regarding the price, terms of payment and delivery schedule.

**Export market**:
The export market for belts should be developed by producing good quality items matching international specifications.

Every year India exports fan belts and V-belts in the range of 8 to 15 crores. Exports in 1987-88 was Rs. 7.83 crores and in 1990-91 this has increased to Rs. 14.97 crores. But in 1991-92, there was a setback in export of fan belts and V-belts. Belts worth only Rs. 5.73 crores against the target of Rs. 15.4 crores could be exported.

It is understood that the fall in export during 1991-92 was mainly due to the concentration of the export market in a few countries like USSR and Egypt. It is pertinent to recall that USSR's share was 85.18 per cent of the total export made in 1987-88. But in 1991-92, USSR's share was 8.6 percent of total belt export. Industry sources feel that the export of fan belts and V-belts could be increased to Rs. 19 crores in the next one or two years by diversifying the existing market. Chances are also good to augment exports owing to liberalisation in industrial licensing and a favourable exchange rate.

***As the demand grows, it is imperative that the existing units should expand and modernise their plants with improved technology to make quality belts***

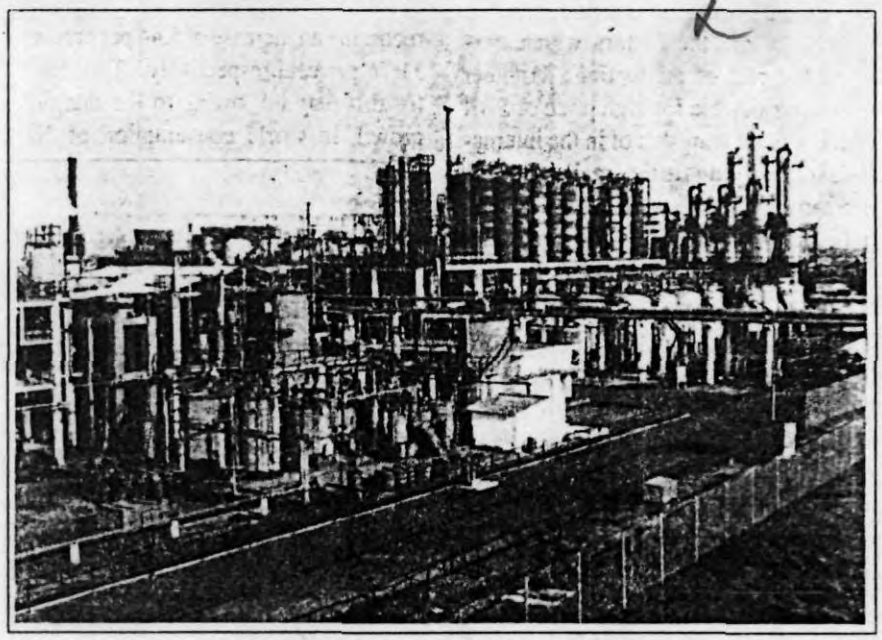
## Demand prospects

In the automobile sector, all categories of vehicles except two and three wheelers use one or another type of automotive V-belts. The replacement market is also promising as belts in every automobile should be replaced after a certain period. In the industrial sector, all power transmission devices like flat belt and centre drives used in machines are now replaced by industrial V-belt are mainly used. Industrial V-belts are in compressors, elevators, electric generators, printing machines, flour and feed mills, machine tools, pulp and paper mixing machines and drilling machines-all these are growth sectors. With our everburgeoning engineering and automobile sector, the requirements for fan belts and V-belts will also go up.

Market studies reveal that European/East Asian countries and the United Arab Emirates provide good opportunities for export. Similarly the embassies can pass on the trade information received to the potential exporters.

In these circumstances, it is imperative that the existing units expand and modernise their plants with improved technology to make quality belts. Efforts to reduce raw material prices, particularly rubber chemicals, are also necessary to make Indian belts competitively priced. □

*What are the factors that determine the prices of natural and synthetic rubber in India? How the prices of different grades vary? In their second and concluding article, the authors make an indepth analysis of the fluctuations in the prices of NR and SR, and suggest that SR can be produced at a price comparable to the international market by modifying the existing technology of production and utilising the installed capacity to the optimum level*



*A Synthetic rubber plant : Outdated technology*

# How to check SR price rise

**S. Mohankumar and V.I. Babu**

The price factor which strongly affects demand remains mostly in favour of natural rubber as it enjoys a comparative advantage in India against general purpose synthetic rubber. Of the different types of grades available in NR and SR, price of RSS-IV grade NR which is considered to be equivalent to imported RSS-III grade NR, and the price of SBR-1502 are taken into consideration for the present analysis. Details of price variation of these rubber for the past five years are given in Table - 1.

Rise in the price of SR is higher than that of NR. Average annual increase in price over the past five years is worked out as 7.66 per cent of NR and 14.98 per cent of SR which is on the higher side. Moreover fluctuation in NR prices is more erratic causing a lot of disquiet both to the consumers and producers. It is a fact that the price tends to rise when supply position weakens and fall when arrivals improve resulting in an imbalance and instability. Though the country was importing and operating buffer stock for quite some time, growers often described these as discriminatory towards them. They argued for a higher price for rubber which will be commensurate with the escalating input costs. One might feel the case for a higher price is quite reasonable. The cost of tyre which is the main output produced from NR has increased tremendously. It is also interesting to note that during this period, prices of all commodities of commercial importance like pulses and cereals have gone up several folds.

**Table - 1**

**Price variation of RSS-IV and SBR-1502**

| Year | Price per 100 kg. of rubber (in Rupees) | | | |
|---|---|---|---|---|
| | RSS-IV | % of variation | SBR-1502* | % of variation |
| 1988-89 | 1815 | +1..34 | 2886 | 11.00 |
| 89-90 | 2131 | +17.41 | 3280 | 13.65 |
| 90-91 | 2129 | -0.09 | 4010 | 22.26 |
| 91-92 | 2141 | +0.56 | 4899 | 22.17 |
| 92-93 | 2550 | +19.10 | 5184 | 5.82 |
| Average annual variation | | +7.66 | | 14.98 |

*The above prices are ex-factory & exclusive of excise duty.

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Source of raw material used for processing SBR in India and the outdated technology are the factors which may affect the cost of production. Another reason attributable for high price of SBR which is more than that of in the international market is due to the smaller production capacity of Indian SBR plants which fail to avail of the advantage of economies of large scale production and reduce cost and prices. However, the consumers are optimistic that SR prices will come down in future as the recent cut in import duty will pave way for the foreign companies to dump the product.

Price of NR and SR in international market for the past five years is given in Table - 2.

It is observed that the price of NR in London market was declining up to 1991. The average growth of prices over the three year period from 1989-1991 is worked out as 10.14 per cent. An ANRPC report stated that weakness in demand and structural oversupply had led the NR market to depress in this period. Other reasons attributed for low price of NR in international market was due to globalisation of the tyre industry which eroded the bargaining position of producing countries, developments in Commonwealth of Independent States and downward revision of growth prospects in OECD countries.

However it is to be noted that the price of NR in 1992 and 1993 slightly improved recording an increase of 5.44 per cent and 11.76 per cent respectively. The reason for this may be owing to the marginal growth in world consumption of NR. Rubber consumption in tyre and non-tyre manufacturing in key countries like the USA, Japan, France, Germany, South Korea and Italy has increased marginally in 1992 and the first half of 1993. NR consumption in tyre manufacturing has increased 6.5 per cent in 1992 as against a negative growth of 3 per cent in 1991. Likewise, non-tyre consumption of NR has increased 3.8 per cent in 1992 against a growth rate of –1.1 per cent in 1991. Apart from this, it is understood that the oversupply position which has been depressing the market for the past two years came to an end. There is also a general expectation of higher prices to come in the first half of 1994 as the growth of NR output in Thailand, Indonesia and Malaysia is slackening more rapidly than expected and the indication of a general recovery in demand. Support given by EC and U.S. Governments for renegotiation of INRA also indicated the possibility of renewal of INRA which will pave the way for improving balance in supply and demand which will reflect in the forecast stock and prices.

**Table - II**

**Price variation of RSS-III and SBR-1502 in London Market**

| Year | Price per 100 kg. of rubber (in pound sterling) | | |
|---|---|---|---|
| | RSS-III | % of variation | SBR-1502 |
| 1989 | 61.06 | -11.91 | 99.5 |
| 1990 | 51.24 | -16.08 | 99.5 |
| 1991 | 50.00 | -2.42 | 99.5 |
| 1992 | 52.72 | +5.44 | 99.5 (Jan - April) |
| 1993 | 58.92 | +11.76 | NA |
| Average annual variation | | -2.64 | |

**Table - III**

**Installed capacity, production and consumption of SBR in different countries - 1993 (000 Metric Tonnes)**

| Country | Installed Capacity | Production (Jan-Sept) | Consumption (Jan-Sept) |
|---|---|---|---|
| USA | 3105 | 1690 | 1513 |
| CIS | 2578 | 1125 | 1140 |
| Japan | 1727 | 985 | 774 |
| Germany | 781 | 402 | 354 |
| France | 648 | 358 | 236 |
| World Total | 13062 | 6720 | 6780 |

### Regulated supply

It is also interesting to observe from the Table - 2 that SBR prices in London market is constant throughout this period. Since SR production is more responsive to changes in demand than NR and the producers and consumers of SBR are mostly in the developed countries like the USA, CIS, Japan, France and Germany they have proper understanding and hence the price will not be allowed to fluctuate. Moreover, the producers of SR in these countries are largely self-sufficient in raw materials. Like most basic petrochemicals; styrene and butadiene, acrylonitrile etc. have been in chronic oversupply. Hence SBR price in these countries is to be more stable. But in the case of NR, which is mainly coming from the South East Asian countries like Thailand, Indonesia and Malaysia price realisation is low due to the poor bargaining capacity of the producers. The price of NR in London Market is only 53 per cent of the price of SBR in 1992.

Another point to mention here is that, the SBR producers are controlling their production with the actual requirements (See table - 3). Therefore, they can easily control the price through a system of regulated supply. Such a system is difficult to adopt for NR as it is mainly produced by small and marginal farmers. In order to stabilise the price of NR in the world market and at the same time to offer fair prices to the growers, NR producing countries evolved schemes like NR agreement and buffer stock purchases by INRO. However, due to over representation of consuming countries, these schemes also became partially ineffective to give a remunerative price to the growers. The price realised by rubber growers in Thailand, Indonesia and Malaysia is low compared to that of it in India. Indian rubber growers realise 88 per cent of the price paid by the consumers of NR.

### S B R price

This does not mean that NR price in India is high. The average price of RSS-III rubber in London market during 1993 was around Rs. 28 per kg. and in Kuala Lumpur it was around Rs. 26 per kg. But in India its equivalent grade rubber in Kottayam market costs only Rs. 25.46 per kg. It is also pertinent to note in this context that the price of SBR in India is 104 per cent higher than that of NR but in international market SBR costs only 69 per cent higher than that of NR. From this we may conclude that SBR price in India is comparatively higher than that of in the international market.

Therefore, it is suggested that appropriate steps should be taken by the Indian SBR plants to produce rubber at a price comparable to the international market. This can be achieved only by modifying the existing technology of production with more economies of scale. Economies of scale can be improved by fruitfully utilising the installed capacity to the optimum level. Once capacity utilisation combined with production technology is improved, then the cost of production will automatically come down. What is needed is producing sufficient quantum of SR at reasonable prices so that both SR and NR can act as complementary to each other.

(Concluded) □