

## LATEX CREPE RUBBER INDUSTRY OF SRI LANKA REACHES NITCH STATUS

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Although the rubber industry in Sri Lanka has been started over a century ago, latex crepe rubber has been introduced first in Sri Lanka by Francis Holloway in 1906 at Matale. This has been introduced by British Planters at that time, to cater to the pharmaceutical rubber products industry, purely due to the very high purity and very much lower natural protein levels usually found in this grade of rubber. Compared to other grades of rubber there is very much more manual labour involved in the manufacture of latex crepe rubber and hence the cost of manufacture of crepe rubber is at last 3 times the COM for RSS grades.

Although Malaysia caught up the latex crepe production nearly half a century ago and produced double the Sri Lankan production. In 1960's, due to the increase in labour cost in Malaysia and due to the very high skill needed for latex crepe production, they switched over to the semi automatically manufactured grades of Technically Specified (TSR) rubber. Latex crepe production in Malaysia was completely stopped in 1969.

However, Sri Lanka has not made an effort to cater to the vacuum created by the Malaysian production by increasing both latex crepe and sole crepe manufacture. At that time there was a reasonably good premium price paid for both these grades of quality crepe consumed exclusively by the Western European countries, USA and Japan for making medical rubber appliances and transparent adhesives and adhesive tapes.

Further, due to the lack of market promotion by Sri Lanka, who was the sole producer of latex crepe and sole crepe by 1970, the demand for this premium grade of rubber started declining very fast and hence the premium price paid for this rubber grade also declined at the same rate. From mid 1970's to early 1990's in many instances the price of latex crepe has even recorded a lower figure below the price of RSS I grade which is the general purpose rubber used mainly in the tyre industry. Also it is very clear that though latex crepe has been made for the manufacture of hygienic products where the purity is important the buyers of latex crepe shifted from the Western Europe, USA and Japan to the Eastern European block, where they had financial problems to purchase RSS and TSR rubber for their industrial needs. In other words between late 1970's and through out 1980's we have been selling this rubber to the Eastern European countries as the cheapest natural rubber available in the market. During this period this premium grade of rubber has not been used for

making high quality hygienic rubber products like surgical rubber appliances infant toys and transparent adhesive tapes. Further the sole crepe made for the purpose of making winter boots due to its unique ability to grip well on icy surfaces had been used during this period for making fancy shoes. However due to the negligence of the authorities and traders to market this premium product to the special purpose for which it is made for and also due to the problems connected with the poor way of packing crepes, contaminated with mould and in fragile wooden crates, the demand for the crepe rubber declined and the traditional users of crepe rubber diverted to the manufacture of light coloured grades of TSR such as TSR5L and TSR L. This was mainly due to the uniformity in quality of the TSR grades and also due to the standard packaging done for TSR to meet consumers convenience in handling and transportation.

From the middle of 1980's, effort was made by RRI with the help of Colombo Rubber Traders Association, SLSI and the crepe rubber manufacturing Estates to launch a campaign to promote crepe rubber not as a commodity but as a specialty rubber made for some special end uses. Specifications were drawn for all grades of latex crepe rubber depending on the methods of manufacture and on the technical property specifications of different grades to suit the normal properties sought by the manufactures of medical rubber appliances, rubber components used in food industry, adhesives and adhesive tapes. During this period several articles have been published by the RRI scientists in foreign journals and bulletins and several papers have been read by RRI scientists at foreign conferences and seminars highlighting the superior quality of latex crepe rubber for the manufacture of above mentioned specialised products and also highlighting the suitability of sole crepe rubber for winter boots manufacture. Further, action has also been taken by the RRI with the help of planters Association to improve the packaging for sole crepe in perfectly dried corrugated cardboard boxes instead of packing them in wet albizzia boxes as it had been done earlier. The use of corrugated cardboard for sole crepe packing was made mandatory in Sri Lanka from September 1995.

Guide lines were given to eliminate mould contamination in latex crepe rubber, specially thin lace form by taking precautions at the manufacturing, drying and packing stages. Here too, drying of laces in hot air drying towers was made mandatory for quality white crepes. Recommendation of the use of water soluble bleaching agent for crepe rubber manufacture, which is not leaving any residual toxic thiols in the crepe rubber after processing was also a key factor which made the crepe rubber popular among Western European manufacturers who are the leading medical equipment and adhesive manufacturers in the world. Use of the water soluble bleaching agent eliminated the problem of softening of the crepe on storage and during transportation in metal containers too.

It is very clear that we have now been able to develop a 'niche' market for this quality grade of rubber made exclusively by Sri Lanka to the open market. Crepe rubber will not be going to Eastern European countries for making cheap quality products as the cheapest raw rubber available in the market, in the future. The present major buyers of latex crepe and sole crepe in the world are Canada, USA, Japan and EU countries. This is the greatest achievement Sri Lanka gained in the recent past due to the efforts of RRI scientists, brokers shippers and also the Planters Association of Sri Lanka. If not for this and if crepe rubber was also selling as an ordinary commodity like RSS, the price paid for this grade today would have been in par with the price of RSS or TSR which are selling around Rs.40 per kg. The average price for latex crepe today is around Rs.80 per kg., while sole crepe is selling at Rs.130 per kg. If not for the high premium price paid for latex crepe rubber accounting for nearly 30 percent of the total rubber manufactured in the country, the effect of the present currency devaluation in major rubber producing countries in South East Asia would have affected the economy of Sri Lanka in a very big way. Although some traders and rubber producers were laughing at this proposal of creating a niche market for latex crepe rubber as far back as early eighties by RRI scientists; now not only Sri Lanka, even the International Rubber Study Group has accepted the fact that latex crepe rubber is not a common commodity and it is a special product for which nitch status have already been created.

However, in order to maintain this situation in the future, crepe producers must be quality conscious. They must follow standard practice of producing quality IX crepe without going for shortcut methods to earn a fast buck. Fractionation of latex, which is ensuring resistance to mould contamination and better colour must be carried out as a compulsory need. Drying of laces must be done in hot air drying towers and never in lofts until all white spots are completely eliminated. All hygienic precautions must be taken while processing packing and transportation of crepe to prevent contamination of the crepe with dust and moisture which ultimately cause mould contamination. Standard manufacturing process should be followed by all crepe factories to ensure uniformity in quality of the crepes produced all over, without having batch to batch variation in technical properties. Semidried laces should not be unloaded from drying towers to fulfil urgent orders. All the packing materials used must be perfectly dry.

Easiest way to achieve all these requirements is to obtain ISO 9002 registration for all the crepe rubber factories in Sri Lanka. So far the effort made by the crepe factories to obtain this important registration, without which any products produced in Asian countries may not be permitted entry to USA, Canada, Japan and E.U. countries in the near future. Hence in order to enjoy this niche status Sri Lankan crepe industry has achieved with a great difficulty in the future too, all crepe factories must try hard to obtain ISO 9002 registration as early as possible.