

## **DARTONFIELD CREPE RUBBER FACTORY RECEIVES ISO 9002 CERTIFICATION**

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Dartonfield crepe rubber factory which is under the management of the Rubber Research Board of Sri Lanka, is the first latex crepe factory out of over 150 crepe factories in the country to obtain ISO 9002 certification from the Sri Lanka Standards Institution. Dr Srilal de Silva, Director, Certification of the SLSI after conducting the final auditing on the 3<sup>rd</sup> and 4<sup>th</sup> of June 1998 admitted Dartonfield factory to this highest quality certification scheme.

This is a certification scheme earned the hard way by this crepe factory which was under the consideration for privatization in early nineties as it was losing over 2½ million rupees per annum of the Rubber Research cess money due to many problems. But when the scientists took the management of it in 1993, losses were converted to profits by minimizing the cost of production of the rubber produced by cutting down unwanted expenditure and by improving the quality of the latex crepe produced. Wastage at all levels of processing including tapping, collection and fractionation of latex down to the level of packing and transporting the end product was minimized. Under the management of the scientists, this factory was manufacturing only unfractionated and unbleached latex crepe rubber (UFUB) thereby gaining an additional profit of Rs.4-5 per Kg of rubber produced. From this exercise of manufacturing unfractionated and unbleached crepe rubber the factory was able to minimize the production of yellow fraction rubber, which is usually sold as grade 4 crepe rubber.

Further, in the processing of UFUB rubber, the cost of the bleaching agent which is over Rs.1.50 per kg was also saved fully while saving tremendously on overtime and electricity wastage during the removed of the yellow fraction of the rubber latex by fractional coagulation. Depending on the quality of latex, fractionation operation is some times continued till late in the night.

Off grades of latex crepe rubbers No. IX and I and even the unfractionated and unbleached grade of crepe rubber is marketed locally for white shoe sole manufacture and for rubber thread manufacture. Even top quality latex crepe exports are subjected to quality claims due to wide variation in its properties caused by the day to day slight variations in the process of manufacture and due to latex quality variation caused by rain interference. Inaccurate estimation of chemicals to be used for bleaching and to inhibit enzymatic discolouration generally done by eye estimation of the rubber

content of the latex is also contributing to day to day quality variation of this grade of rubber.

Hence, there had been many instances where this highest quality grade of natural rubber made for the manufacture of food and pharmaceutical quality rubber products and infant toys owing to its extrapurity, freedom from chemicals and its pure water white colour has been subjected to quality claims and have been selling even below the price of RSS rubber at times. RSS rubber is the grade of rubber produced by the small holders in their back yards under poor processing conditions. The demand for crepe rubber was mainly affected by the mould contamination of the rubber and colour fading during storage caused by excess moisture in incompletely dried rubber. Poor packing also contributes to mould contamination and dust contamination.

However, due to the efforts, and extensive propaganda given to this superior quality grade of rubber by RRI scientists jointly with the shippers, brokers and the Planters Association at world forums and in journals and bulletins, it was possible to regain the market demand latex crepe had in late 1960's. This helped the rubber industry in Sri Lanka to survive during the past 10 months even after the currency crisis that occurred in South East Asia starting on the 2<sup>nd</sup> July 97.

When all the grades of general purpose rubbers such as RSS, Technically specified rubber (TSR) and latex came down in price by 50 - 60% ; latex crepe was able to enjoy a premium of over 100% over any of the above grades of rubber due to the Niche status it has gained in the international market. The lowest price at which latex crepe IX was sold during this period was Rs. 70/kg while RSS and TSR prices came down to below Rs.40/kg.

Hence, the scientists of the RRI strongly felt that in order to maintain this Niche status for crepe rubber in the international market in the future too, the quality of the latex crepe must be maintained constant throughout.

They felt that the best way to achieve this consistency in quality is by standardization of the process of manufacture without even slight deviations to overcome unexpected constraints. The best way to achieve this is by obtaining ISO 9002 registration to the latex crepe factory where by every process from the point of tapping and collection of latex to the packing and storing stage of the end product the complete process details are documented at each level and the documented process is carefully followed to its last word without even a slight deviation from the written process.

Further, even when there is weather interference or in the absence of a manager who is trained to do the job according to the standardized methods, the substitute who is also trained, can follow exactly the same quality and process as documented thereby gaining the same physical properties to the end product.

In the process of obtaining this important registration there was a very big task to be played by the Manager of the Dartonfield Estate Mr Anusha S Perera and to the Rubber Chemist Mr Susantha Siriwardena under the guidance of Dr Gamini Seneviratne. If not for their untiring effort it would not have been possible for the estate to obtain this important registration which is not only a guarantee of the constant quality of their product, but also a way of minimizing wastage of chemicals, latex and even water. As water is scarce in some of the crepe rubber factories this is really a worth investment specially for such places to economize on water without wastage and also to eliminate the excess usage of chemicals.

Further, it is not possible easily to place a false quality claim against the quality of the rubber of a ISO 9002 registered factory as documents are available to check the processing details of each batch of rubber produced in the factory at each level. Even the negligence and lack of dedication of factory people responsible for the defect in the claim could also be traced easily from the quality variation of the product as processing details leading to that particular defect is written-down in the documents.

The RRI while thanking the SLSI for helping to receive this prestigious registration, wish to work in close collaboration with the SLSI to assist all crepe rubber factories in the country to obtain this important registration in the near future and to protect the name of this premium grade of rubber produced exclusively by Sri Lanka now. This should be done fairly rapidly before the E.C. countries, USA and Japan close the doors to products entering their countries which do not have ISO 9000 certification, at any moment now. If all factories gain it, it will not be difficult to maintain the Niche status gained for this extra pure quality grade of rubber in the future too.