

LATEX GLOVES OFFER TREMENDOUS OPPORTUNITIES

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As the title indicates, latex gloves offer tremendous opportunities in the present day world. It has spread its wings in many areas of uses and is found to be indispensable for modern living. Why?

While the conventional gloves including surgical gloves are reused after sterilisation, disposable gloves are thrown after a single use. These gloves are now the largely sought after material among the gloves, the demand for which was on the increase due to the spreading of the dreaded disease AIDS.

The situation has thrown up tremendous opportunities for latex goods producers. Malaysia, Indonesia, Thailand, Philippines, Hongkong, Taiwan, South Korea, Japan and China have all put up plenty of plants to produce them. The demand is so high that the manufacturers are buying NR latex from all available sources. NR producing countries are hectically setting up latex centrifuging plants. The developments in the international scene have made reflective ripples in India. We on our part have to cope with this new trend as the competitiveness in the world market would be a major factor influencing sale of our goods, Shri Thomas Ouseph in his article analyses the modern trends in gloves manufacturing and explains the rapid strides being made in India.

Latex gloves have sneaked into many areas of modern living. They protect the hands from pollution and at the same time keep materials from contamination by human touch. They cover the forehands and palms with a sheath for each finger and are generally used in industries, houses and in hospitals.

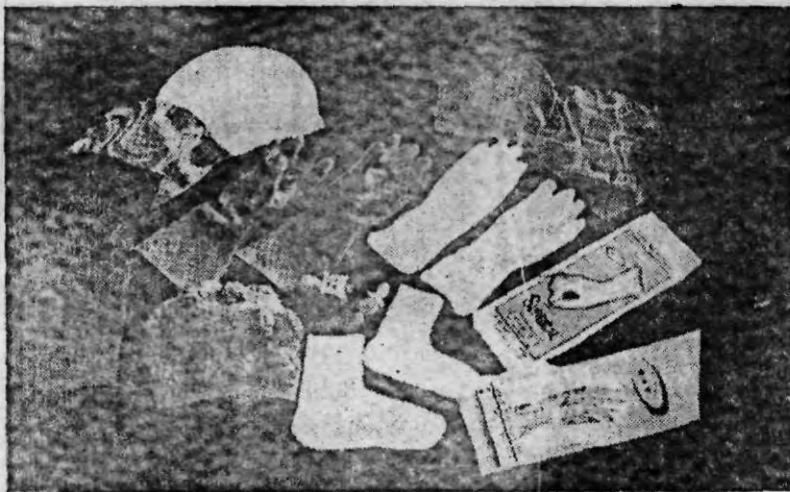
Surgical glove is sophisticated among them. The specifications are exacting. It is the thinnest among the gloves, as thin as human skin and allows the wearer feeling and sensation of the bare hand. It has sufficient film strength to be elastic under stretch. While giving absolute freedom of movement to the fingers the glove does not

succumb to pinholes. It withstands firm grips, stretches, strains and invasion of virus and other microcellular organisms as the surgeon works in operation theatres on the human body with surgical instruments. These gloves are made of natural rubber. Natural rubber latex stands ahead of synthetic substitutes in imparting film strength to the thinnest gloves, resisting porosity even under scrubs and scratches.

Household gloves keep the hands free from bacterial action while handling materials in liquids and solids. Detergents are allergic to many. Recent studies have brought to light that their frequent handling can cause skin cancer. Gloves protect the hands from contamination while handling detergents. Soft tissues of the palms and forehands of workers get exposed to harmful bacteria while cleaning utensils etc in hotels and restaurants. Here too the gloves can keep the hands free from infection.

Importance of gloves

Gloves have an important place in food processing. A major source of bacterial contamination in preserved food is through the personnel engaged in processing. Workers wear rubber gloves over their hands to prevent transmission of bacteria and as a shield against sharp spines of shrimps and lobsters and bones of fish, chicks and



Different types of gloves, caps, nipples etc. made of rubber.

ducks. Cashewnut processing is another area. While cracking the shell, scattering shell fluid stains the hands, corrosive action of which causes blisters on the skin. Gloves give effective protection from this fluid while clay or castor oil conventionally applied over the hands give only partial protection. In canning and fruit processing also gloves play an important role against bacterial attack.

Another glove has emerged in recent times for massive application, the disposable gloves. While the conventional gloves including surgical gloves are reused after sterilisation, disposable gloves are thrown away after a single use. They are now the largely sought after material among the gloves, extensive demand for which was sparked off by concern over spread of the dreaded disease AIDS. The World Health Organisation has estimated that over 2.5 lakh people are now suffering from this disease in countries like Africa, Latin America, United States, Europe, and

Asia while five to ten million are carrying the AIDS virus. Though medical practitioners have made it clear repeatedly that the disease gets transmitted only through intimate human contacts and blood transfusion, the world is now alarmed over its rapid spread as no effective remedy has been discovered against it. The fate of an affected person is almost sealed.

Increasing uses

Even while maintaining that the disease is not communicable through normal human contacts, doctors examine patients wearing gloves, which they change for every patient. Some doctors resort to even double gloving as an extra precaution. Health care workers and law enforcement personnel also use gloves in plenty. Hepatitis B is another threat against which gloves are used to resist bacterial penetration. Human mouths are potential sources of bacteria and dentists who examine the teeth also wear gloves, which are discarded

after examination of every patient. Many federating States in USA have passed legislations requiring dental workers to wear gloves while examining and treating patients.

All these have forced the common man to take precautions. A pair of gloves is kept in almost every vehicle in USA as a measure of prudence. Donning gloves in shops and markets has turned out to be a regular practice. It has been estimated that USA used 500 million pairs of gloves in 1985. Two years later, in 1987, their use went up fivefold, to 2,500 million. The upsurge in demand is tremendous. By 1991 it may reach 15,000 million pairs in USA and 35,000 million the world over.

The situation has thrown up tremendous opportunities for latex goods producers. Production of examination gloves has rapidly gone up in the western world. Far East is not far behind; countries like Malaysia, Indonesia, Thailand, Philippines, Hong Kong, Taiwan, South Korea, Japan and China have all put up plenty of plants to produce them. China is reported to have added in the past couple of years 80 production lines to its 200 glove making enterprises. The demand is so strong that manufacturers are buying NR latex from all available sources. Consequently the latex price, which was below M \$ 3 per kg (drc basis) in the Kuala Lumpur market in January 1988 went up to M \$ 11 (Rs. 55 per kg) in June, which came down later and is ruling around M \$ 5 per kg (December) as the peak season in NR production has set in.

Hectic activities

To meet the growing demand NR producing countries are hectically setting up latex centrifuging plants. Sweeden, which supplies most of the world requirements of latex centrifuging plants is finding it difficult to meet export orders. The lead time for supply is about one and a half years now from date of the order. Though Germany and China are also in the field, they have yet to establish themselves in the international market.

Difficulty in getting immediate supply of dependable centrifuge plants coupled with the mushroom growth of glove making units within the NR producing nations has affected the flow of latex to the world market. There are moves in Indonesia to impose restrictions on latex export consequent on the tremendous rise in domestic consumption. Thailand, the third major supplier of latex to the world market, also finds it difficult to fully honour export orders in view of the surge in internal demand. Calls for export restrictions have also emerged in Malaysia, though the Government have denied of any move to curb supplies. However, they are contemplating enhancement in export cess on latex concentrates.

Malaysia now tops world producers of medical examination gloves. Taking a 60% share in the world market it has earned a distinction in production and marketing the material. Producing 294 million pairs of gloves, it earned \$85 million in foreign exchange in 1986. Next year 396 million pairs were produced, earning \$ 243.3 million. The Malaysian Statistics Department has indicated

that production of rubber gloves shot up by 138.6 per cent to 412 million pairs during the first half of 1988, from 172.5 million in the first half of 1987. According to the General Secretary of the Ministry of Trade and Industry in Malaysia, this year the production would leap to 1300 million pairs.

New Ventures

New glove manufacturing ventures are going up in the country ahead of any other nation. The Malaysian Industrial Development Authority received 275 applications in 1988 to licence glove units. Reports in the Far East Press indicate that



Gloves are used in the medical profession by doctors and nurses while examining patients and treating them.

203 licences have been issued. About 125 units have come into production. However, there is a lurking fear that the mushroom growth of units may create demand recession in the near future. As a precautionary step, the Malaysian Government has stopped issue of licences to put up new units. But demand abounds as Europe, Africa, Australia and countries in the western hemisphere increasingly slip into an AIDS induced fear psychosis.

These developments have made considerable ripples in India. Many have come forward to put up glove making plants. Under our industrial licensing policy glove manufacture is reserved for the small scale sector. But 100% Export Oriented Units and units in the Free Trade Zones get special consideration irrespective of the size of their operation. Other countries are producing gloves in large, automated plants to reap the economy of scale. We have to fall in line with this trend as competitiveness in the world market would be a major factor influencing sale of our goods. The Export Processing Zones in Cochin, Falta, Kandla, Madras and Noida have given clearance to a number of glove units. Majority of these units are coming up in the Southern States of Kerala and Tamilnadu in consideration of proximity to the major raw material.

Fresh latex is essential to make quality gloves. Long distance latex transport has many disadvantages. Latex concentrates contain only 6% dry rubber; 40% is water. Transport of this water along with the rubber content in air tight metal containers add considerably to the cost. Rough handling.

in transit would result in dents and cracks to the latex drums. Even small fissures on the drums would seriously affect quality of the latex. Ammonia, the gas preservative used in the latex, would escape into the air even through hairsplitting cracks. Once ammonia escapes, bacterial action would set in and the latex would lose its precious properties due to putrefaction and autocoagulation. Long delay in transit would also affect latex properties. For these reasons it is better to put up latex goods units as near to the rubber plantations as possible.

Cost factors

The only unit which has started production of examination gloves in India is now facing bottlenecks mainly due to mechanical troubles. The machinery was imported from Taiwan. British, American and German dipping plants are reported to be more efficient. Machinery selection should be an important consideration in setting up a unit. One of the major problems in gloves is porosity of the end-product. Employment of good automatic plant together with use of fresh latex concentrate and quality chemicals can bring down the porosity. Less efficient units turn out porous gloves upto 25% which would certainly go under rejection.

The percentage of rejection is a critical factor in profitability of a unit. Rejection, if contained within 5%, may not affect profitability.

The economics in gloves production is in no way unimpressive. Cost of a disposable glove would come to about 40 to 50 ps while it can be marketed at a price ranging from 75 to 100 ps. A glove line with capacity to produce 10 lakh pieces a month would require only investment below Rs. 1.5 crores to reach production stage. Ten lakh pieces a month would fetch a net profit ranging from Rs. 3.5 to 5 lakhs, which on an annual basis would work out between Rs. 42 and 60 lakhs. A unit with higher capacity could bring down the cost further. As the gloves are sold abroad to fetch foreign exchange, the whole revenue would enjoy incometax exemption under Section 80 HHC. This means that in about 3 to 4 years the whole investment could be retrieved. There is no reason to be sceptic about the market as enquiries from foreign countries for supply of gloves have been pouring in off and on. The domestic market is also getting strong.

Excepting for the automated dipping plant India has all the resources to produce examination gloves. NR latex, which constitutes about 90% of the raw

material, is readily available. So are chemicals. Skilled manpower is an added advantage. It is not difficult for the export oriented ventures to get the machinery imported as the import licence would be available on a priority basis.

Apprehensions have however been raised in certain quarters about availability of latex concentrates. These have no basis whatever. We have now 40 latex centrifuging units in the country, which can process about 60,000 tonnes of latex per annum if capacity utilisation is achieved upto 70%. We produced only about 30,000 tonnes of latex concentrates in 1987/88 while the NR production, going up 6 to 7 per cent per annum in the country was 235,200 tonnes. After all a standard glove unit would require only about 200 tonnes of latex concentrate a year. Even if ten units come up in a year into full production, the additional quantity needed would be only 2,000 tonnes. Enough field latex is available for operation of the latex processing plants at 100% capacity. The premium of latex concentrates over dry rubber grades, at about Rs. 10 per kg, is sufficiently high to induce processors to collect field latex even from far off centres.

THE CLERGYMAN'S GIFT

Condom companies the world over are now reaping sales boom as people increasingly use the prophylactics against spread of AIDS. Most of the companies have increased production to meet the increasing demand. The largest condom manufacturers, Carter Wallace of New York and Schmid Laboratories of New Jersey saw their sales soaring by 20 per cent last year. A protestant Church minister in New York recently hit headlines in the world Press when he distributed condoms among his people. The congregation was surprised, but welcomed the thoughtful 'gift'!