The Second Penang Bridge
Malaysian-made rubber bearings for a national landmark
In featuring the use of High Damping Rubber Bearings (HDRB) in the construction of the Second Penang Bridge, this issue of STRETCH seeks to highlight the many ways in which the rubber products industry has contributed to nation building. All too often, these contributions are taken for granted because rubber products are found everywhere and are a part of our daily lives.

We know that rubber products contribute significantly to export earnings each year, with a total of RM14.68 billion in 2013. Malaysian rubber products are used as inputs into various industries including healthcare, construction, automotive, oil and gas, mining and sports and recreation, in Malaysia as well as in foreign markets. Our enviable reputation in the design, manufacture and export of rubber products is recognized in specific applications in many countries.

Malaysian rubber medical gloves, both natural rubber and synthetic, are the gloves of choice in developed markets as well as in developing countries. Malaysian made condoms are supplied to donor organizations for social programs in less developed countries as well as to some of the leading brands marketed in many parts of the world. Rail pads, bridge bearings, seismic bearings, dock fenders and other engineered rubber products manufactured in Malaysia are used in major projects in many countries.

There are, however, many projects and activities in Malaysia where Malaysian manufactured rubber products are not the preferred choice, where imported rubber products are used instead. The choice of foreign products is not because they are better in quality, are of lower cost or because of any flaws in equivalent locally manufactured products: all too often, foreign products are chosen because they have been used in the past, because the contractors or users of the products are committed to obtain the products from countries that supply the main components of the project or activity, or because of some perceived “superiority” of foreign products. Some rubber products are also imported because local manufacturers are not able to supply the fittings and component parts that are required by users.

Imports of rubber products into Malaysia have continued to grow over the years, from a total value of RM2.8 billion in 2008 to RM4.6 billion in 2013. Tyres account for 36% of imports. About 33% of these imports, amounting to a value of over RM1.5 billion in 2013, are classified as industrial and general rubber goods.

Increased domestic utilization of Malaysian manufactured rubber products serve as further testimony to the quality and competitiveness of our products. Use of Malaysian products in world class projects such as the First and Second Penang Bridge, the KLCC Petronas Philharmonic Hall in Malaysia, the Hong Kong MRT line and Kuwait Airport, whether in Malaysia or overseas, lend credence to claims that Malaysian rubber products are among the world’s best.
– The Market for Medical Gloves in Latin America –

The Latin American region comprises 26 countries in South America, Central American and the Caribbean. Brazil, Mexico, Argentina and Chile are the major countries of Latin America by size of population and economy. The four countries have a combined population of 377.2 million, representing about 63% of the total Latin American population in 2013.

Brazil and Mexico are the two countries in Latin America with the largest healthcare sector by health expenditure, number of healthcare professionals (physicians, dentists and nurses), number of visits to physicians and number of hospital beds. Although Argentina and Chile have smaller healthcare markets, the two countries surpass Mexico in terms of healthcare expenditure as a percentage of GDP and per capita spending.

| Table 1: Socio-Economic Indicators of Selected Countries of Latin America, 2013 |
|-------------------------------------------------|---------|---------|---------|---------|
| Indicators                                      | Argentina | Brazil   | Chile   | Mexico  |
| Population (million)                           | 41.5     | 199.9    | 17.6    | 118.2   |
| Population Growth (%)                          | 1.1      | 0.9      | 0.9     | 1.2     |
| GDP (USD billions)                             | 484.6    | 2,190.2  | 281.7   | 1,327   |
| GDP Growth (%)                                 | 1.9      | 0.9      | 5.6     | 3.6     |
| Health expenditure as % of GDP, 2011           | 8.1      | 8.9      | 7.5     | 6.2     |
| Growth in health expenditure (CAGR ‘07 – ’11)  | -0.3     | 1.2      | 2.5     | 1.6     |
| Health expenditure per capita (USD)            | 892      | 1,121    | 1,075   | 638     |
| Health expenditure per capita (CAGR ‘07 – ’11) | 13.0     | 16.4     | 12.2    | 2.3     |

Source: World Bank, IMF

Healthcare expenditure in the four countries is balanced between the public and private sectors although most people are covered under public insurance. The quality of healthcare services ranges from world-class to deficient.

The growth of healthcare sectors in Argentina, Brazil, Chile and Mexico has been driven mainly by healthcare reforms. Mexico has achieved universal healthcare coverage as about 52 million of previously uninsured Mexicans were incorporated into the System of Social Protection in Health (SSPH) and the budgetary allocation necessary for universal coverage was made in April 2012. Argentina, Brazil, and Chile have aspirations to achieve universal healthcare and are seeking increases in foreign investment and international partnerships in the healthcare sector.

Market Size for Medical Gloves

The total market size for medical gloves in Argentina, Brazil, Chile and Mexico was estimated at 4.43 billion pieces in 2013. Rubber gloves, including natural rubber (NR) and nitrile gloves, account for about 98% of the total consumption of all medical gloves. All four countries rely on imports, mainly from Asia, to meet domestic demand, as the capacity for local production of medical gloves is limited and varies by country.

1 Argentina, Guyana, Belize, Haiti, Bolivia, Honduras, Brazil, Jamaica, Colombia, Mexico, Costa Rica, Nicaragua, Cuba, Panama, Dominica, Paraguay, Dominican Republic, Peru, Ecuador, St. Lucia, El Salvador, St. Vincent and the Grenadines, Grenada, Suriname, Guatemala, Venezuela RB.
Brazil and Mexico are the two largest markets for medical gloves in Latin America. In 2013, demand for medical gloves in Brazil was estimated at 2.5 billion pieces and in Mexico at 1.3 billion pieces. The market size for Argentina was approximately 334.1 million gloves and in Chile, 254.5 million gloves.

During the period 2008 – 2013, the market for medical gloves in Brazil registered a CAGR of 6.4%, the highest among the four countries of Latin America. In contrast, the market for the products in Argentina, Chile and Mexico grew by around 4% per annum. Besides healthcare reforms, growth in the demand for medical gloves in the four countries can be attributed to population growth, ageing populations and recurring H1N1 influenza virus outbreaks which increased physicians visits. New healthcare laws and regulations have also positively impacted the usage of gloves.

Consumption of NR surgical and examination gloves was considerably higher than that for other types of gloves in all the four countries. NR latex gloves account for 92% of the total glove demand. The proportion of latex gloves is the highest in Brazil at 95% and Mexico at 91%. It is lower in Argentina and Chile at 82% and 76%, respectively. Nevertheless, the growing concern for latex allergies as well as the better price stability of synthetic rubber has led to growth in the market for synthetic rubber (nitrile) examination gloves.

Imports of Rubber Gloves

Among the four Latin American countries, Brazil is the largest importer of rubber surgical and non-surgical gloves (including examination gloves), with imports valued at USD225.6 million in 2012 (Figure 1). For the period 2008 – 2012, imports recorded a CAGR of 15.1% in value terms. Mexico’s imports of rubber gloves were valued at USD70.9 million in 2012. Imports grew by a CAGR of 9.2% between 2008 and 2012.

In 2012, Argentina imported USD45.8 million worth of rubber gloves, increasing by a CAGR of 8.5% from USD33 million in 2008. For Chile, although imports were relatively low at USD37 million in 2012, a strong CAGR of 16.9% was recorded between 2008 and 2012.

![Figure 1: Imports of Rubber Surgical and Non-Surgical Gloves](source: GTA)
The spread of influenza virus, which began in mid-2009 in many Latin American countries, contributed to the sharp increase in imports of rubber gloves in 2010 and 2011, primarily in Brazil, Argentina and Chile. Across the four countries, non-surgical gloves, mainly examination gloves, made up about 85 – 98% of the total imports of rubber gloves in 2012.

Malaysia was the largest exporter of rubber gloves to the four countries between 2008 and 2012. In 2012, Malaysia’s import share amounted to 62% in Brazil as well as in Argentina. In Mexico, Malaysia had about 43% import share while in Chile, imports from Malaysia accounted for 67% of the total imports of rubber gloves in 2012. Other major exporters of rubber gloves to these four countries included Thailand, China, Sri Lanka, USA and Uruguay.

Market Outlook for Medical Gloves

Total consumption of medical gloves in Brazil, Mexico, Argentina and Chile is projected to grow by 7.9% on average per annum from 4.43 billion pieces in 2013 to 6.48 billion pieces in 2018.

<table>
<thead>
<tr>
<th>Year</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Chile</th>
<th>Mexico</th>
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<td>2013</td>
<td>334.1</td>
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<td>2015</td>
<td>337.7</td>
<td>3058.7</td>
<td>263.7</td>
<td>343.1</td>
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<td>2018</td>
<td>337.7</td>
<td>4115.7</td>
<td>278.2</td>
<td>1741.9</td>
</tr>
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</table>

Between 2013 and 2018, demand for rubber surgical and examination gloves will grow at a faster pace as indicated by a projected growth of 8.1% annually. Among the four countries, Brazil is expected to register the fastest growth in the market for medical gloves with a CAGR of 10.4%. Continued economic development, healthcare reform, and growth in medical tourism are the main drivers of future market growth in Brazil.
The Sultan Abdul Halim Muadzam Shah Bridge, also known as the Second Penang Bridge, is the longest bridge in South East Asia. It is also the longest bridge in the world with high damping rubber bearings (HDRB). The Bridge connects Batu Kawan on the mainland to Batu Maung on Penang Island, with a length of 16.9km over water and total length of 24km. Launched under the Ninth Malaysian Plan, the Second Penang Bridge project provides an alternative route linking the Penang Island to the Mainland, and is expected to serve as a catalyst for the socio-economic development and growth in the Northern Corridor Economic Region (NCER).

The Bridge was officially opened by the prime Minister of Malaysia on 1 March 2014 and opened to traffic the next day.

The Second Penang Bridge project was initiated in 2008 under the management of Jambatan Kedua Sdn Bhd (JKSB), the concessionaires appointed to construct, manage, operate and maintain the bridge. It was constructed at a cost of RM4.5 billion.

**Bridge Design incorporating High Damping Rubber Bearings (HDRB)**

Package 1 of the Bridge construction, for the Main Navigation Span and the Substructure and Foundation Works for the Approach Spans was awarded to China Harbour Engineering Company Ltd (CHEC) while Package 2, for Superstructure Works of Approach Spans was awarded to UEM Builders Bhd. A Seismic Hazard Assessment Study was carried out for the project. The requirement was for the Bridge to be fully designed for a 475 year earthquake event with minimal damage to marine spans and critical land expressways, and repairable damage to other land expressways; and for all the spans to withstand a 2500 year earthquake event without collapse.

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**Bridge Specifications**

- **Overall length**: 24 km (15 mi)
- **Length over water**: 16.9 km (10.5 mi)
- **Main span**: Length - 250 m
- **Height clearance (above water)**: 30 m
- **Number of vehicle lanes**: 2 + 1 for motorcycles (each direction)
- **Date opened to the public**: 2 March 2014
- **Overall cost**: RM 4.5 Billion
- **Average time taken to drive from Batu Kawan to Batu Maung**: 20 mins
- **Proposed speed limit on bridge**: 80 km/h (50 mph)
- **Percentage of local content used**: 60%
During the design review process, it was found that the spun piles at the Approach Marine Bridge would be able to cater for a 450 year earthquake event but would be overstressed by a 2500 year event. To resolve this, it was decided that the Bridge articulation be changed by adopting HDRB in place of the conventional mechanical pot bearings in the original design.

HDRB was chosen because the bearings are able to withstand relatively large lateral and rotational displacement and have high damping properties. They are also flexible and good energy dissipaters. They are durable and do not require extensive maintenance. Another positive aspect is that HDRB are made from natural rubber and add to the local content of the bridge.

**Supplying the bearings**

The bearings were supplied by Doshin Rubber, a Malaysian company manufacturing a wide range of engineered rubber products. The Tun Abdul Razak Research Centre (TARRC) of the Malaysian Rubber Board (MRB) provided design input, supervision and testing of the bearings.

Doshin, with its extensive experience in the design and supply of engineered rubber products, particularly HDRB, participated in and won the international tender to supply the HDRB required for the Second Penang Bridge. Mr. Or Tan Teng and his team of engineers worked closely with the design team from TARRC and MRB to ensure that the HDRB supplied would comply with the requirements as stipulated by the main contractor.

At the design stage, four variants of the bearings, with variations in bearing size, design load, displacement, and shear stiffness, were specified. In all, over 2000 bearings were manufactured and tested to ensure that they meet the specifications. The bearings were delivered and installed with preset plates to accommodate creep and shrinkage of the bridge deck.
Mr. Or Tan Teng, the Managing Director of Doshin Rubber, speaking about their role in supplying HDRB for the Second Penang Bridge, said, “We are proud of our role in this iconic project and to play our part in nation building. Doshin’s success in supplying the HDRB for the Bridge is testament to the capability of Malaysian rubber product manufacturers in completing complex projects and meeting stringent requirements, particularly for rubber engineered products”.

Doshin Rubber Products Sdn Bhd

Doshin Rubber is a one-stop centre for the design, manufacture, testing, supply and servicing of engineered rubber products for the civil engineering, construction and marine sectors. They also supply a wide range of rubber products to the mining and oil and gas industry, as well as products for railways. The company, established in 1978, is now a subsidiary of the Kossan Group of companies, listed on the Kuala Lumpur Stock Exchange (KLSE).

The Head Office and manufacturing facilities of Doshin Rubber are located in Klang, Selangor, Malaysia, where they have set up complete design, engineering, quality control, laboratory, testing and customer service departments to provide a comprehensive range of services for customers.

Doshin Rubber has contributed to many other major projects in Malaysia as well as in other countries. Among these is the supply of laminated rubber bearing pads to isolate vibration and movement in the Petronas Philharmonic Hall in KLCC, pads for the Express Rail Link from Kuala Lumpur to the KL International Airport, supply of expansion joints, compression seals and bearing pads for the Kuwait International Airport. They have also supplied rubber bearing pads and strips, water stops, expansion joints, rubber dampers, boots, marine fenders and a variety of similar products to contractors and suppliers all over the world.
The 39th edition of Arab Health, the premier healthcare show in the Middle East and the second largest medical products and services exhibition in the world, was held in Dubai, UAE, from 27 – 30 January 2014. This year Arab Health drew participation from over 3,700 exhibitors from 70 countries, with over 87,000 visitors. With a large array of events held in conjunction with the exhibition and medical congress, the number and range of visitors exceeded previous years.

The MREPC Pavilion at Arab Health 2014, with its distinctive colours and striking design, attracted a large number of visitors. The Pavilion featured 10 Malaysian manufactures of rubber medical devices who displayed a comprehensive range of products, including rubber surgical and examination gloves, rubber catheters, condoms and exercise bands. Generally, the response from participating manufacturers was positive, with reports of good visitor turnout, both in terms of number and quality.

MREPC also coordinated business matching sessions between interested foreign buyers and manufacturers.

Auto Expo India, held New Delhi from 6 – 9 February 2014, was jointly organized by the Automotive Component Manufacturers Association of India (ACMA), Confederation of Indian Industry (CII) and Society of Indian Automobile Manufacturers (SIAM). Auto Expo India is the largest trade exhibition on automotive components in India and this year, the event saw participation of about 1,100 exhibitors.

The MREPC promotional booth at the 12th Auto Expo India displayed a variety of rubber automotive products including engine mountings, bushings, hoses, and seals and weather-strips.

MREPC attracted a significant number of trade enquiries during the four day exhibition, mostly from local Indian companies comprising vehicle and auto component manufacturers as well as auto parts importers, distributors and traders, including companies requiring products for both the OEM and aftermarket sectors. Rubber hoses, seals and engine mountings were among the popular items required.
Pakistan Auto Parts Show, Lahore, Pakistan

The Pakistan Auto Parts Show (PAPS) was held in Lahore, Pakistan from 6 – 8 March 2014. This event, organized by the Pakistan Association of Automotive Parts & Accessories Manufacturers (PAAPAM) every two years, is the premier show for the automotive industry in Pakistan.

Although this is MREPC’s first participation in PAPS, and in Pakistan, MREPC received a considerable number of trade enquiries throughout the three-day exhibition. Over 70% of the enquiries were for automotive rubber components, with inquiries also received for raw rubber (NBR/SMR/BNR/SR) as well as other products, such as gloves, rubber sheets, conveyor belts, food grade rubber lids, etc. Most enquiries for automotive rubber parts were for bushings, o-rings, mountings, oil seals and hoses.

The majority of the visitors at the MREPC booth were manufacturers, traders, importers, suppliers and dealers supplying to the local OEM and REM market in Pakistan.

Medical Fair India, Mumbai, India

The 20th edition of the Medical Fair India, one of the most important healthcare events in India, was held in Mumbai from 14 – 16 March 2014. The event attracted over 410 exhibitors from 17 countries, and an estimated 8,000 visitors.

The MREPC Pavilion at Medical Fair India, with its striking green and canary yellow colours and the wide range of medical devices displayed, was popular with visitors to the Fair. Seven Malaysian manufacturers of rubber medical devices participated with MREPC at the Fair with booths displaying a variety of products including medical gloves, condoms, foley catheters, and exercise bands, breathing bags and medical tubing. Most of the visitors to the MREPC Pavilion were from India.

A 3-day conference with the theme “Healthcare Profitability through Quality, Finance & Marketing” was held in conjunction with the exhibition and MREPC presented a paper, “Know Your Medical Gloves for Better Protection and Patient Care”, at the conference. MREPC also coordinated business matching sessions between interested foreign buyers and Malaysian manufacturers.
When Associated First Rubber (M) Sdn Bhd (AFR) faced difficulties in the establishment of a rubber compound processing unit, the Outreach Advisory Service (OAS) of MREPC was on hand to provide assistance and support. The successful completion of this OAS project enabled AFR to undertake formulation of compounds to meet specific client requirements and to establish procedures that can form the basis for a compounding unit.

AFR is a company manufacturing and assembling automotive rubber products and moulded rubber parts such as O-rings, diaphragms, seals, grommets and gaskets. AFR is located in the Klang Valley and was established in 1989 as a servicing and installation company for car air conditioning systems. In 1993, the company expanded and ventured into manufacturing, wholesaling and distribution of car air conditioning components, parts and accessories. In 1999, the company further expanded into manufacturing rubber automotive components and rubber moulded parts. In recent years, AFR has sought to export a greater portion of their automotive rubber parts, actively participating in trade shows and marketing missions. They have acquired the necessary quality certifications including ISO 9001:2008 QMS in 2003, ISO/TS 16949:2009 in 2011 and ISO 14001:2004 in 2013.

AFR is working to improve its export capabilities through process improvement and has implemented 5S in the workplace to ensure cleanliness and smooth flow of operations. Quality improvement is another area of concern and being able to formulate and produce requisite rubber compounds was recognized as being critical in ensuring consistent quality. One of AFR’s objectives at the time was to set up its own compound processing line to develop and produce consistent quality compounds to meet clients’ specifications. In a preliminary assessment under the OAS program in March 2013, MREPC felt that this was an aspect that would have impact on the export capability of AFR and that a project in this area would be beneficial to the company. Subsequently, AFR was selected to receive technical assistance under the OAS program.
MREPC engaged a technical expert with many years of experience in rubber compounding and knowledge in rubber technology to assist AFR in the establishment of its rubber compound processing unit. The appointed expert, Dr. Abu Amu, provided technical advice to the company to ensure that the equipment was suitable for the purpose and that the process was in line with best practices in the industry. The company was also provided with technical advice on rubber compounds to ensure the appropriate formulation is used for the product to be manufactured. On-the-job technical and operational training was a part of the OAS process, to equip staff with the skills and knowledge needed to produce the required compounds.

“The MREPC Outreach Advisory Services Programme (OAS) is good way to help Malaysian SME rubber manufacturers. At AFR, with the OAS, we have improved our knowledge on polymers, the mixing (formulation) process, on master batches and compounding. The consultation with Dr Abu Amu also helped us to understand the mixing process and the controls required. It updated us on the standard formulation of master batches and compounds currently being used. Dr Abu has also given advice on testing of compounds and products which is of benefit to us. After the OAS programme, AFR has managed to produce master batches and compounds with confidence for use in our products. Thanks again to MREPC for making us more successful in our rubber business.”

Mr. Yeaw Kok Kwey,
Managing Director of Associated First Rubber (M) Sdn Bhd (AFR)
ISO 18001 Awareness Training on Occupational Health & Safety

The ISO 18001 Occupational Health & Safety Awareness Seminar (OHSAS) was held on 28 January 2014, with 26 participants from 15 companies. This one day seminar was a joint effort organized by MREPC and TUV SUD PSB Sdn Bhd. The assigned trainer, Mr. Lee Ying Chien of TUV has wide experience from various industries including rubber molding and extrusion, automotive parts, electronic components, plastic injection molding, vacuum forming, metal stamping, and precision engineering. Mr. Lee was able to successfully involve participants in interactive sessions and to get them to contribute their ideas and prepare presentations.

The seminar provided insights into occupational health & safety models and the basic principles of OHSAS 18001 as well as the identification of potential hazards, the implementation of preventive and corrective actions and the control of records and internal audit. The resources, authority, competencies, accountability and training required to implement OHSAS 18001 were discussed. The roles and the responsibilities of those involved as well as the communication, participation and consultation necessary for successful implementation were highlighted.

Implementation Updates on Minimum Wages Order

The Specialized Market Briefing on “Implementation Updates on the Minimum Wages Order” was organized by MREPC on 4 March 2014 (Tuesday) together with representatives of the National Wages Consultative Council (NWCC) from the Ministry of Human Resources. The 32 participants at the Seminar The national Minimum Wages (MW) Order which took effect on 1 January 2013 was extended to cover all employers on 1 January 2014. This briefing provided the latest updates and developments related to the implementation of the Order, and examined how it affects industry members, employers as well as employees.

The Secretary of the NWCC, Mr. Shanmugam A/L Thiagarajan, explained the rationale for the Minimum Wage Order, its main provisions and its implementation schedule. The 32 participants at the briefing noted that the Order would be reviewed every two years, and that input from industry members would be taken into consideration during the review exercise.
Rubber Medical Devices - Condoms in China and Medical Gloves in Latin America

The Market Information Seminar (MIS) on Rubber Medical Devices (RMD), with two presentations, on Condoms in China and Medical Gloves in Latin America, was held at on 18th February 2014 (Tuesday). The Trade Commissioner of the Brazilian Embassy in Malaysia also made a presentation on guidelines on how to do business in Brazil.

This seminar, targeted at decision makers in the rubber medical devices industry, presented updated information from market research undertaken by MREPC in China and Latin America. The MIS is part of a series of seminars presented by MREPC to inform the rubber products industry on current trends in the marketing of rubber products, with input from trade representatives of various embassies and other organizations.

MREPC Northern Region Seminar
Sunway Hotel Seberang Jaya, Penang

MREPC organized a regional seminar in the northern region on 25 February 2014 as part of MREPC’s continuous efforts to inform Malaysian rubber product companies on the services and programmes offered by MREPC as well other agencies. The seminar also provided an insight into the market outlook for Malaysian rubber product exports in 2014. The event, held at the Sunway Hotel in Seberang Jaya, Penang, was well attended with 33 participants from 20 rubber product companies.

The Deputy Chief Executive Officer of MREPC, Ms Low Yoke Kiew, in her opening remarks, welcomed participants to the Seminar and invited the rubber companies to make full use of the facilities and services provided by MREPC. Mr. Brandon Chan, MREPC’s Director of Industry Relations and Public Affairs gave a presentation on MREPC and its 2014 Programmes, Events and Services, followed by a presentation from Mr. Foo Tew Nam on the Market Outlook for Malaysian Rubber Products in 2014. Dato’ Dr Ong Eng Long, President of the Malaysian Rubber Products Manufacturers Association (MRPMA) spoke on Future Directions for MRPMA.
The MREPC Northern Region Seminar was well received by participants. It is expected that more rubber product companies will avail themselves of the services and facilities offered by MREPC and the government agencies who made presentations at the event.

Incentive for participation in Seminars/Workshops/Training in Malaysia

This incentive is aimed at upgrading knowledge and skills of employees in rubber product companies through participation in seminars, workshops and other training programs* within Malaysia. Companies organizing in-house training programs with external trainers are also eligible to claim under this incentive.

SBIM14 provides 50% of fees for company employees participating in seminars, workshops or training programs held in Malaysia. Companies organizing in-house training may also claim 50% of costs of such programs. Each company is entitled to claim up to a maximum of RM5,000 per year.

For more information on MREPC incentives, please log on to http://www.mrepc.com/incentives/Incentives.php

*The seminars, workshops or training programs must be relevant to the development of the industry or organization and must be approved by MREPC.
## Malaysia's Exports and Imports of Rubber Products (RM'000)

<table>
<thead>
<tr>
<th>Month</th>
<th>Exports 2013</th>
<th>Exports 2012</th>
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<tr>
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<td>1,059,666</td>
<td>367,270</td>
<td>307,775</td>
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<td>February</td>
<td>1,091,231</td>
<td>1,150,189</td>
<td>275,507</td>
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<td>March</td>
<td>1,338,113</td>
<td>1,268,148</td>
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<td>1,226,278</td>
<td>1,197,895</td>
<td>390,208</td>
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<td>1,203,810</td>
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<td>1,174,278</td>
<td>399,630</td>
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<td>December</td>
<td>1,249,268</td>
<td>1,254,283</td>
<td>441,072</td>
<td>392,197</td>
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<td>January–December</td>
<td>14,678,480</td>
<td>14,531,248</td>
<td>4,637,267</td>
<td>4,501,567</td>
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% Change (January–December) 13/12: 1.0 3.0

Source: Department of Statistics, Malaysia

## Major Destinations for Malaysia’s Rubber Product Exports (RM'000)

<table>
<thead>
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<th></th>
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<tbody>
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<td>4,015,317</td>
<td>4,040,149</td>
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<td>South Korea</td>
<td>223,137</td>
<td>212,473</td>
<td>5.0</td>
<td>1.52</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>154,655</td>
<td>196,102</td>
<td>-21.1</td>
<td>1.05</td>
</tr>
<tr>
<td>UAE</td>
<td>125,381</td>
<td>136,740</td>
<td>-8.3</td>
<td>0.85</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12,674,653</td>
<td>12,344,798</td>
<td>2.7</td>
<td>86.3</td>
</tr>
<tr>
<td>World Total</td>
<td>14,678,480</td>
<td>14,531,248</td>
<td>1.0</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Malaysia
Latex baby bedding products from GETHA

Getha has introduced a range of baby bedding products made from natural latex to cater for the growing demands for natural products in this market segment, where high quality products are in high demand.

Getha is well known for its environment friendly products that use only 100% natural rubber latex from Malaysia. These “green concept products” are of high quality and appeal to a wide range of consumers.

Getha’s range of baby products comprises natural latex pillows, bolsters, baby mattresses, baby latex pads, baby beddings and covers. Their selection of baby latex pillows caters to varying age groups and needs of babies. This is a market segment that is growing and has requirements that differ from the general consumer market for bedding products. Recognising this, Getha has recently increased the variety of products available for babies and growing children and now offers a wider selection of products for this market segment.

Natural latex beddings are hypoallergenic, dust-mite free and have antibacterial properties. These are properties that make natural rubber latex the material of choice for children’s bedding products.
Lahore, the second largest city in Pakistan, is known as the Pearl of the Punjab. It is the capital city of the Pakistani Province of Punjab. We were Lahore for the Pakistan Auto Parts Show, in early March, when the weather was comfortably cool. When we arrived in Lahore at midnight we noticed the many military road blocks on the road into the city, and decided that for our security we would not travel unnecessarily around the city.

The hotel where we stayed was in a high-rise neighborhood, MM Alam Road, an area with access to many restaurants and cafes, and a few shopping malls. This was an up-market area frequented by locals looking for food especially at night.

In moving around the city of Lahore, we faced numerous security restrictions. Most buildings such as shopping malls, restaurants, office buildings, and larger shops had armed security guards in place. Almost all buildings were set up with the metal detectors, with either one or two armed security guards to ensure that all visitors passed through the metal detectors. Weapons were openly displayed but somehow both of us felt safe walking in the streets. Street crimes in Lahore are not common but we were advised to take precautions when we left our hotel. Prior to our visit, we had heard reports of bombings in Karachi but Lahore was relatively safe.
We found the people of Lahore to be curious and friendly and some were eager to help. Being friendly and smiling at people goes a long way.

However, beware about asking directions from people on the street; they don’t like to say they do not know and are likely to send you in the wrong direction rather than admit ignorance.

For food, the ubiquitous briyani was our food of choice in Lahore. The briyani we had in the hotel was very good, possibly the best that we have had, and the portion was more than generous. We also enjoyed the chicken kofta and tea or chai that was the most popular drink everywhere we went. Surprisingly, there was also a good selection of western food, with “Fatburgers” and other fast food as well as restaurants serving steaks and the usual fare, and also some Chinese food, albeit with a local flavor.
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