Yokohama Rubber's Growth Strategy for 2017

Protecting the Environment and People Around the World
Yokohama Rubber's Efforts to Achieve Robust and Responsive Growth

Below we report on medium-term management plan GD100 started in FY2006 and the growth strategy of each division to examine the type of value we will provide to society through our business activities in the run up to our centennial in FY2017. Pages 12 to 18 highlight our MB growth strategy and tire growth strategy seen through our products and the eyes of our employees.

GD100 Vision and Basic Policy

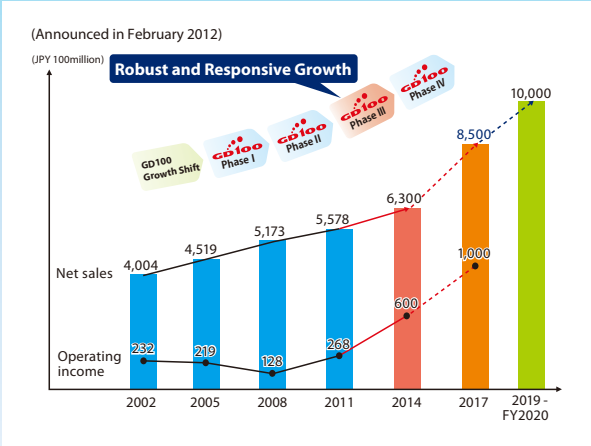
- **We will evoke a distinctive global identity in building corporate value and in building a strong market presence by FY2017.**
- **Long-term financial targets (FY2017)**

Net sales	Operating income	Operating margin
¥1 trillion	¥100 billion	10%

- **Basic Policy**

- Deliver the best products at competitive prices and on time.
- Assert world-class strengths in technologies for protecting the environment.
- Foster a customer-oriented corporate culture that honours rigorous standards of corporate ethics.

Position of Phase III



We expect to achieve ¥1 trillion in net sales sometime between FY2019 and FY2020 due to changes in operating environment. However, the target for operating income will be achieved as planned and we anticipate attaining operating margin of 10% ahead of schedule.

Basic Approach of Phase III

Given the basic approach of Phase III, we have created a specific strategy and initiatives for tires, MB, technology, operating base and CSR. Our growth strategy for tires and MB is presented below.

Generate investment funds using a solid operating base
and proactively invest these funds to increase primarily tire production on a large scale

Capture rising demand in growth markets without delay by expanding supply capacity

Aim to achieve an operating margin of 10% by improving cost competiveness and enhancing brand power

Tire Growth Strategy

See pages 16 to 18

● Establish a distinctive identify in global markets

- Japan: Enhance competitiveness by improving technological prowess and product development capabilities
- Overseas: Expand supply capacity and achieve profitable growth

● Increase tire production capacity on a large scale

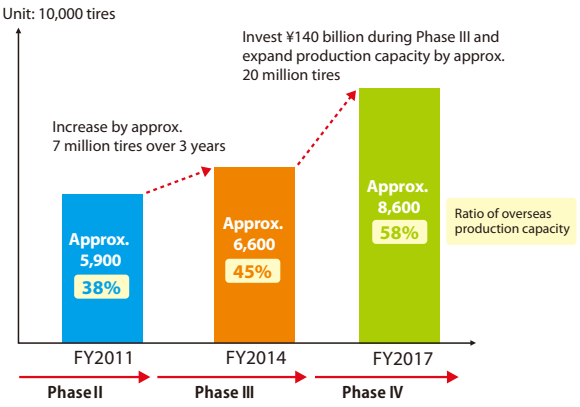
- Increase capacity annually by approx. 7 million tires mainly in Russia, China, the Philippines and Thailand
- Carry out ¥140 billion in new investments to increase production aimed at Phase IV and beyond (expand production capacity by approx. 20 million tires per year)

● Roll out high value added products globally

- **Consumer goods:** Accelerate worldwide rollout of flagship tire ADVAN, fuel efficiency-focused tire BluEarth, winter tire iceGUARD, SUV tire GEOLANDAR and carry out sales and marketing to increase their use on new luxury cars
- **Production goods:** Launch and increase production of large tires for construction vehicles (especially radial tires over 49 inches in wheel diameter)/ increase the number of highly functional products, such as super low profile truck and bus tires, and increase rollout of retread tires.

Expand Tire Production Capacity by Increasing Production and Investing in New Facilities

(Announced in February 2012)



New plants (candidates)	Third plant in China, new plant in India, new plant in North America, new plant in Latin America
Expansion of existing plants (candidates)	Plant in the Philippines, plant in Thailand, plant in Vietnam, plant in Russia

MB Growth Strategy

See pages 12 to 15

● Aim to develop a new number one product from the 3 core technologies

- Create a new number one product using the 3 core technologies of transport, adhesion, and cushioning
- Continue to expand overseas production sites and pursue structural reforms at domestic plants

● Generate and expand new business opportunities

- Generate new business opportunities with new products and distinctive technologies that utilize advanced telecommunications and measurement technologies

3 Core Technologies

Transport	Adhesion	Cushioning
Conveyor belts	Construction sealants	Rubber bearings
High pressure hoses	Hard coat materials	Fenders
Water tanks	Windshield sealants for automobiles	Aero-cell cushions for wheelchairs

Supporting the Joy of Mobility with Medi-Air Technologies

Tadao Aida
(pictured at right)

Mr. Aida is utilizing his experience in product development and sales promotion support for companies in various sectors to help revitalize Japanese society, which is expected to see its population gray further moving forward. He also investigates uneven parts of the road and sidewalk using his wheelchair in order to achieve universal designs in community development plans. Mr. Aida is also an advocate of the Human Resource Self Sustainability Project that focuses on caring for those providing care.

Looking to fulfill expectations for manufacturing that improves people's quality of life in Japan's rapidly aging society

I first learned about Medi-Air at the International Home Care & Rehabilitation Exhibition held in 2011. At the time, bed sores on my hip had gotten worse and for some time I was very close to being bedridden since I could only sit in a wheelchair for only so long. I borrowed the air cushion as a product monitor only half believing, but I was desperate to try anything.

I lost my freedom of movement when I fell down an escalator in 2007. After the accident, I began my new life in a wheelchair, and the wheelchair turned out to be more than just a method of getting around, it was where I lived. The question mark I had toward the Medi-Air One was whether it could rid me of my fears and give me peace of mind about life in a wheelchair. I don't have feeling in my upper body, too, so I'm unable to lift and reposition myself alone even if I know my I have poor blood flow when sitting in the same position for an extended period of time. I remember the automatic inflation and deflation of the Medi-Air One felt just like my own hands were repositioning my body. I was really troubled by bed sores so much, so that my doctor told me I would need surgery if I couldn't get them under control. After about six months of using the Medi-Air One I began to feel my bed sores improving. I was receiving various other treatments at the time, so it wasn't until after about one year of using the Medi-Air One that I firmly believed it was responsible for my progress. I was able to use a wheelchair freely again, which greatly extended my scope of activities. The sound of the Medi-Air One inflating and deflating eased my fears of my bed sores reoccurring and gave me a positive outlook.

Today, I have an even greater outlook on life, which has broadened my vision from myself to the rest of society and encouraged me to take action. My goal is to contribute to a more comfortable aging society through my verification work on the unevenness of various surfaces around town.

I believe that rubber products will provide us with even more possibilities in the future. For example, I think it would be a good idea to develop products for nursing care providers that leverage the unique features of rubber, such as its water repellency and prevention of static electricity. I sincerely hope that Yokohama Rubber will use its company-wide commitment to take the lead in the industry toward broadening the possibilities of rubber technologies.

Pursuing Product Development in Tune with Customer Lifestyles

Yokohama Rubber decided to enter the nursing care sector about ten years ago. When I was placed in charge I must say I found myself with cold feet since it was a field I knew nothing about. First, I felt I must understand the front lines of nursing care, so I studied the field and received Level 2 certification as a home helper. While receiving advice and support from a graduate school professor who specialized in bed sores, we finally completed the Medi-Air One after four years.

The unfortunate thing about this product, which brought us closer to actual people in need, is that it can't be mass produced due to the need for customization. It is essential that we work closely with each and every person with disability to find out their needs.

As the person in charge of development, nothing brings me a greater sense of joy that to see this product become an integral part of someone's life like Mr. Aida. I feel that each and every one of our employees needs to broaden their understanding toward the fact that Yokohama Rubber's technologies can make contributions to new parts of society we had never considered. That is, we need to change the way we think to come up with new value for consumers and society.

Hideki Nihei (pictured at left)
Development Group No. 2
Industrial Products Technical Department
Industrial Products Technical Division

Yokohama Rubber has applied the many technologies it has amassed as a rubber company to develop and market the Medi-Air series of air cushions with deflators for wheelchairs. The persons in charge of development were given an opportunity to speak with customers currently using the product to share each other's thoughts.

Masaaki Chiba
(pictured at middle)

Mr. Chiba established the NPO called Variety Club Japan in 2001 to support the independent living of children with disabilities and currently works as its Representative Director. Using his experience of appearing in three straight Paralympics Games as a representative of Japan in short-distance track and field, he promotes ways to help children with disabilities enjoy sports. Mr. Chiba also serves as Director of the Japan Association of Athletics Federations for the Disabled.

Working together so that Medi-Air can pave the way for a brighter tomorrow for people and society

I lost all feeling from my chest down after an injury about 30 years ago and I've been in a wheelchair ever since. Being paralyzed means my body can be stuck in the same position a long time, leading to bed sores, which if unnoticed can get infected and even lead to death in some cases. This is why a cushion seat for a wheelchair is an extremely important device that can literally save my life and lives of others.

In my case, scoliosis has caused my spine to curve, which means a large amount of pressure is placed on one point on the right side of my ischial bone. I tried Medi-Air, which was under development at the time, for the first time in 2011. My abdominal and back muscles don't work because I have no feeling, but I compared to before I didn't lose my sitting position and I felt very stable. Using the Medi-Air Sky, the pressure on the right side of my ischial bone is now distributed and I am no longer at risk for developing bed sores. This is because the cushion contains an air pocket cell on the right and left side that can be finely adjusted. I inflate the right side higher and deflate the left side a bit so that my upper body is straight.

However, people with disabilities are overly careful when it comes to selecting a new device or piece of equipment because it could make their condition worse if doesn't work for them. This is why I feel that manufacturers involved in the development process need to continually convey the positives of their product with a long-term perspective. Therefore, we, the customers, need to be the recipient of a one-sided service.

Currently there are two types in the Medi-Air series and many types of people with disabilities (deformities or otherwise) and different conditions, so if there is a product for those of us that want to live more active lifestyles, I think this increases the possibilities and those that exercise or do desk work for extended periods of time can use Medi-Air.

People with disabilities are able to notice a lot of things others cannot. This is why I hope to be a part of the manufacturing process so that I can share my ideas and unique perspective.

I feel very encouraged by the fact that a company like Yokohama Rubber has entered the healthcare device industry in this manner. I hope Yokohama Rubber will continue to develop and expand its sales, and establish a presence as a successful role model for other industries to follow.

Reference: Medi-Air website: http://www.yrc.co.jp/medi-air/ (Japanese language only)

Bringing smiles to people around the world with Yokohama Rubber's technologies

The manual type Medi-Air Sky makes it possible for the user to adjust the air pressure as they see fit. The reason why we designed a manual version is because users shared with us that they wanted to feel the joy of doing something themselves and maintaining their existing abilities. We chose the product name "Sky" to embody our wishes that users will be able to go out and live more freely under the sky without the worry of bed sores.

During the development process we asked Mr. Chiba several times to provide frank feedback about the prototype. By asking actual users about their daily experience in the wheelchair with the prototype we were able to make a number of modifications. Medi-Air Sky was designated as a component for an assistive device by Japan's Ministry of Health, Labour and Welfare on March 31, 2014, which enables National Health Insurance enrollees to purchase it for a 10% co-pay.

My hope is for people feeling inconvenienced by a disability to be able to use their wheelchair with peace of mind and live a more free and independent life.

I look forward to evolving more products into something useful for more people not only in Japan, but internationally, too.

Kiyoshi Iida (pictured at right)
Development Group No. 2
Industrial Products and Technical Department
Industrial Products Division

We communicated closely with the overseas OEM supplying the component to ensure they thoroughly understood the performance we required.

Ryotaro Suefuji
Managing Corporate Officer, MB Production and Technology
Raw Materials Development Group
MB Materials Development Department

The key is to persistently and continually think it through.

Atsushi Miyashima
Development Group No. 1
Industrial Products and Technical Department
Industrial Products Division

The development concept was to provide an even better conveyor belt to customers.

Gang Hou
Technical Planning & Administration Group
MB Materials and Development Department

It was a difficult challenge, but I gave it my utmost efforts knowing that a rubber company should never be beat by another company when it comes to a rubber product.

Hidehiro Sasakuma
Raw Materials Development Group
MB Materials Development Department

Developing Superior Eco Conveyor Belts in Terms of Environmental Performance and Economics

A More Energy Efficient Eco Conveyor Belt

One of core products of the Yokohama Rubber MB Division is conveyor belts. These conveyor belts are used to transport goods at quarries and in factories as eco-friendly solutions that feature superior quality and environmental performance.

ECOTEX, which was first developed in 2001 and has since undergone several modifications, optimizes the visco-elasticy of rubber using proprietary rubber compounding technologies to reduce the running resistance of conveyor belts. ECOTEX has earned a strong reputation among customers for its ability to curb power consumption during use, the phase of the lifecycle that produces the largest environmental impact next to development, production, and disposal.

The mission behind this project was to develop the undisputed leader in eco-friendly conveyor belts, with further improvements in environmental performance beyond ECOTEX, which had already reached the limits of resource saving and energy efficiency. Of course, this was no easy task. One of the development team members honestly thought it wasn't possible to squeeze any more performance out of ECOTEX.

The development team focused on the rolling resistance that occurs when the conveyor belt passes over the spinning roller to transport goods. Reducing the resistance that occurs where the roller and belt contact would reduce the amount of energy needed to spin the rollers and in the process reduce the amount of electricity used. Even the smallest improvement on a part of the each roller will have a great impact on overall energy reductions because these conveyor belts can span up to one kilometer in length with a large number of rollers. However, simply looking at reducing rolling resistance to curb electricity usage could mean that the required durability and strength of the rubber gets overlooked. The question becomes how can something be made more energy efficiency while maintaining the same materials? The answer to this question of finding the perfect balance was found with Yokohama's groundbreaking eco tires. The expertise gleamed from daily research on rubber compounding used reduce roll resistance between the road and tire, and improve fuel economy served as a big hint for the development of an eco conveyor belt.

Also, the team repeated a trial and error approach with the structure and materials of other components besides rubber. Until now Yokohama Rubber's eco conveyor belts had mainly attempted to reduce the use of resources and electricity through rubber compounding alone. This time, they looked at optimizing the entire conveyor belt structure. This approach led to a major step forward in the project.

Repeated Failures Turned Out to be the Key

Development team members look back and find that their daily dedication and repeated failures actually turned out to be the key to success. There were times when the prototype turned out for some reason to have poorer performance than existing conveyor belts. The team never gave up, and instead thoroughly looked at why that happened, which produced new knowledge to use. These repeated efforts lead to the successful development.

These efforts to develop the undisputed champion in eco conveyor belts and greatly reduce environmental impacts during usage represent the true embodiment of Yokohama Rubber's commitment to protect the environment and people around the world. Yokohama Rubber is set to leverage its strength of enhancing durability, reducing weight and employing the same technologies in other products to tackle the challenge of addressing the many challenges that society faces.

I focus on having a never-give-up attitude in our pursuit of developing the number one product in the market.

Eita Minegishi
Technology Group No. 1
Aerospace Engineering Department
Aerospace Division

I always devote my attention to the materials and technology aspect, while carefully thinking about the endless possibilities.

Ayano Hirose
Technology Group No. 1
Aerospace Engineering Department
Aerospace Division

Making the Best Airplane Lavatory in the Skies with a Focus on Quality and Passion for Flying

Integrated Approach from Materials Selection to Production

Yokohama Rubber manufactures a number of products for the aerospace components field, including tanks and insulation, among others. One of its core products is the wash basin unit installed in commercial airplanes known more commonly by passengers as the lavatory. Due to space restrictions, a lavatory must be compact and yet easy to use. At the same time, a lavatory also needs to be light weight, flame resistant and solidly built from the standpoint of safety and lessening environmental impacts. This demands materials and manufacturing technologies that meet rigorous standards for development and production.

One of Yokohama Rubber's advantages is that it has the Aerospace Engineering Department, which is responsible for everything from materials selection through to production. This means that everyone on the front lines of each field works in close proximity, making it possible to develop and manufacture while sharing each other's knowledge and experience. This has contributed to Yokohama Rubber's strength of adequately being able to respond to customer needs.

Aerospace components is known as a rather peculiar field. One reason is because commercial airplanes are used for 10- or 20-year periods and the timeline for development differs compared to consumables. This makes for rigorous demands when it comes to quality and start-overs are not acceptable. The field requires a precision that needs to satisfy not only customer requirements, but also comply with aviation laws and regulations. No matter how extraordinary a material or design may be, it cannot be used if it does not comply with the applicable laws and regulations. Therefore, persons in charge of development at Yokohama Rubber note that they have acquired the habit of devoting their attention to materials and technologies, and thinking carefully about all possibilities, by constantly questioning conventional approaches and methods.

Yokohama Rubber's corporate culture of always pursuing the highest possible quality has made development possible under such rigorous conditions. The other advantage is the passion that employees involved in development and manufacturing have toward airplanes. Even the employees acknowledge that the Aerospace Engineering Department is full of airplane aficionados. This strong passion translates into making the impossible possible and creating ideas that have earned the trust of customers.

Pursuing People-and Eco-friendly Products that are Leaders in Their Respective Markets

Yokohama Rubber's commitment to protecting the environment and people around the world is alive and well in the field of airplane lavatories.

For example, the selection of sustainable materials that do not impact the environment. The fiberglass reinforced plastics used to make many of the interior components of a lavatory is not recyclable and can only be disposed of by crushing and incineration. By switching to a highly recyclable thermoplastic plastic material and making innovations to the design and production method, Yokohama Rubber was able to successfully reduce environmental impacts by a large margin, while maintaining the same strength, flame resistance and light weight design. In addition to including the customer's requirement for a universal design, Yokohama Rubber occasionally pitches ideas to the customer to make the lavatory design even easier to use for any passenger. In this manner, we have created and supplied a large number of products that are eco-friendly, people-friendly, and offer a more comfortable travel environment for all passengers. We believe this culture will help us to constantly pursue the goal of developing the next number one product in the world cited in our medium-term growth strategy.

Tire Growth Strategy

Delivering Tires that Protect the Environment and People Around the World

In 1996 Yokohama Rubber was among the first in the industry to focus on the fuel economy of tires with the belief that tires represent a game changer. In 1998 it launched the Eco Tire DNA series, and since then Yokohama Rubber has consistently been at the forefront of the eco-friendly tire market in Japan. The BluEarth series that aims to protect the environment and people around the world represents a culmination of these efforts.

In 2013, the new BluEarth-1 EF20 was launched. This tire maintains the same fuel economy performance as conventional BluEarth tires, but with improved safety features. This tire, which stands as the pinnacle of fuel efficient tires, captured the highest grade possible in terms of both safety and environmental performance. How did Yokohama do it? Below two employees involved in the development process take a look back on their experiences.

Masaki Sato (left)
Amino Research Lab
Tire Technology Development Division

Masaya Mita (right)
Tire Designing Department No. 1

Received the Highest Grade Possible for both Environmental Performance and Safety

The development project that would give rise to the BluEarth-1 EF20 was launched in 2011 with the mission to develop a tire that could obtain the highest grade in terms of environmental performance and safety from the fuel economy tire grading system.

The Japan Automobile Tyre Manufacturers Association (JATMA)'s labeling system that was started in 2010 shows the grade of a tire's rolling resistance performance and wet grip performance on a five-level scale and four-level scale, respectively. The grade for rolling resistance considers how well the tire is able to improve the vehicle's fuel economy by reducing energy loss from the rotation of tires, while the grade for wet grip examines how firmly a tire grips wet road surfaces and the degree to which it can bring the vehicle to a stop. Any tire that receives a grade of at least "A" for rolling resistance performance and between a grade of "a" and "d" for wet grip performance is defined as a fuel efficient tire. The BluEarth-1 EF10 received the highest grade for rolling resistance, or "AAA," while it also received the highest grade for wet grip performance, or "a." This marked the first time ever a tire received the highest score for both.

"Being the first to receive the highest grade under this labeling system was a major goal of all the technology divisions involved. While having the chance to work on this project was a major motivation, honestly I had a lot of unease about whether it was actually possible to accomplish this goal," says Masaya Mita, who is in charge of structural design with the Tire Designing Department No. 1. Masaki Sato, who was in charge of the tire's tread rubber development with the Tire Technology and Development Division looks back and notes, "A grade is assigned for the overall tire, but the role of the tread rubber is especially important, so I felt a strong sense of responsibility." Enthusiasm, unease and responsibility. With these mixed emotions in tow the project was launched with a firm focus on its mission.

Yokohama Rubber's Amassed Technologies made Development Possible

Just as Sato says, "At the start of the project I knew we wouldn't succeed without the help of various people," development got started with collaboration between various departments within the company. "The cooperation of our plants was essential, since we examined the conceptual image of the tire on countless occasions with planning departments and checked with production departments to see if the manufacturing process was reasonable. This is because no matter how good a tire might be, it's pointless if we can't mass produce it," says Mita about his own experience working at a plant for this project.

A turning point for the project was the development of new ingredients. As for the compounding design for tread rubber, adding silica, which is used as a type of reinforcement filler, will markedly improve wet grip performance, but silica tends to lump up in rubber, which greatly increases rolling resistance. "The development of ingredients that increased the use of silica but made it harder for it to lump up and achieved even consistency within the rubber turned out to be one of the missing pieces of the puzzle," says Sato.

Yet, there was still something needed to help everything come together. The two of them mentioned this was the presence of initial technology research carried on from before the project was started that had undergone a number of daily trials and tribulations. Development turned out to be a success not because of single breakthrough, but rather a culmination of the technologies that Yokohama Rubber had built up to date.

Continually Evolving with New Ideas

The BluEarth-1 EF20 was released in the summer of 2013 just one year from the start of the project. However, for Mita, Sato and other members of the development team, this wasn't the end goal of the project. "We feel the need to further improve the technological level of both safety and environmental performance. For example, if we can create a rubber that causes less friction, we can extend the life of the tire and reduce the number of replacements, which will help conserve resources. I'd like to focus more energy on these aspects," says Sato.

There is also the possibility that performance requirements for tires will change due to the spread of the electric vehicle. Today, Yokohama Rubber is in talks with Kumho Tire, a major South Korean tire manufacturer about a possible technical tie-up, and both Sato and Mita believe these talks have provided positive stimuli and motivated them to work on the development of more new ideas.

Work has already begun on rolling out the BluEarth-1 EF20 tire in overseas markets, which involves market research and preparation for certifications. BluEarth tires, which protect the earth and people around the world, are set to continually evolve thanks to the commitment of Yokohama Rubber's many future-looking employees.

BluEarth-1 EF20

Balancing rolling resistance and wet grip performance with increased amounts of silica and an evolved compounding technology

Silica is needed to achieve a high degree of balance between fuel efficiency and grip performance. The BluEarth-1 EF20 successfully developed a technology to increase the amount of silica used while minutely and evenly distributing it. This enabled the tire to receive the highest grade for wet grip performance, or "a," and the highest grade for roll resistance performance, or "AAA," under JATMA's labeling system for fuel efficient tires. This tire balances safety and fuel economy at the highest possible level.

Aerodynamic dimpled design

Air resistance, or drag, works against a vehicle's fuel economy, with resistance becoming particularly large at higher speeds. Yokohama Rubber developed an aerodynamic simulation for use in the tire design process based on the idea of creating a tire with reduced air resistance. This lead to a dimpled design optimized for effectively reducing air resistance by changing the flow of air on the surface of the rotating tire.

Preventing air leaks using a proprietary new technology

Tires naturally lose air as time passes and lower air pressure causes an increase in rolling resistance. The AIRTEX Advanced Liner, made from a specially developed combination of rubber and plastic, is used as the inner liner inside the tire. This design helps reduce the loss of air and also reduces the weight of the tire, which maintains good fuel economy and reduces the burden of maintenance.

Making Comfort Accessible to People and Society

Punctureless Wheelchair Tires that Make Recycling Possible

Yokohama Rubber's tire business is moving forward with the development of eco-friendly tires under the theme protecting the Earth and people around the world in search of further technological innovations. Here, we will take a closer look at the development of a wheelchair tire that can be recycled and is virtually impossible to puncture, which represents one of Yokohama Rubber's technology-driven social contributions.

For Protecting the Earth and People Around the World

Generally, most wheelchair tires use the same type of inflated tires as bicycles, which require that the tire be able to support weight, have low rolling resistance and be long lasting (including resistance to wear). Inflated tires need to be regularly filled with air and carry with them the risk of punctures, resulting in a number of inconveniences for users.

Yokohama Rubber's basic philosophy is to enrich people's lives and contribute to their greater happiness and well-being by devoting our wholehearted energies and advanced technologies. This is why it decided to embark on the development of a recyclable, punctureless wheelchair tire to help mitigate impacts on people and the environment while satisfying the basic requirements.

Overcoming Technical Challenges with Amassed Technological Prowess and Expertise

Today, most rubber, once used, is incinerated as fuel without ever being recycled or reused. Certain products use a small amount of recycled rubber, but rubber's characteristics are difficult to maintain after recycling. However, Yokohama Rubber recognizes that rubber recycling will be an important way to conserving resources in the future and has begun research into possible methods. As a result, Yokohama Rubber arrived at a heat-based recycling method that uses hydrogen bonding, which makes it possible to reform rubber by heating and cooling it. Today, the company is beginning to partially use this technology.

At the same time, Yokohama Rubber was able to develop a punctureless tire. The capacity of a normal tire to support weight is determined by the volume inside the tire and the air pressure. However, Yokohama Rubber used a method to fill the tire with rubber instead of air, making it completely solid. A solid tire can never be punctured, but it weights more than an inflated tire and lacks the same resiliency, causing greater rolling resistance. In turn, this places a large burden on wheelchair users. To solve this problem, Yokohama Rubber welcomed Takuma Aoki as a development advisor and gathered others together to share ideas and insights, including the use of foamed rubber and innovations in the contact shape of the tire. These ideas are being put to use in solutions.

Aiming to Develop Technologies that can Contribute to the Fields of Healthcare and Welfarea

Although still tackling various challenges, Yokohama Rubber is on the verge of commercializing a product that will eliminate the hassle of filling wheelchair tires with air, alleviate concerns over punctures, and reduce stress. The development of a recyclable rubber has brought us one step closer to resolving certain social issues. Going forward, Yokohama Rubber will research the potential of rubber in the fields of healthcare and welfare to create products that protect the Earth and people around the world as well as help resolve social issues.

©takuma-gp

Takuma Aoki
A former GP rider active on the world stage in the 1990s, Takuma Aoki was injured in an accident in 1998 and has been confined to a wheelchair ever since. Despite his disability, Mr. Aoki still participates in a number of car racing events for the disabled.

A punctureless tire mindful of people and society

Yokohama Rubber's punctureless wheelchair tire uses a solid tire that eliminates concerns over punctures and alleviates the stress of users by offering greater ride comfort (resiliency) and operability (reduced rolling resistance).