

# Next Generation Products Offered by the Yokohama Rubber Group

Yokohama Rubber offers an extensive lineup of products that span from its core tire products to multi-business products that play an important role in society and the lives of people.

The following section introduces a selection of our next generation products that will help us to build a trusted identity as a contributing member of the global community.

## Highest AAA rating for reduced rolling resistance

## BluEarth-1 AAA spec

### A new flagship tire with the highest fuel efficient grade rating

*BlueEarth-1* is a fuel efficient tire that has been given the highest AAA rating for rolling resistance, which serves as an indicator for the environmental performance of a tire. This tire features Yokohama Rubber's proprietary nano-blend rubber featuring a golden ratio of differing performances, AIRTEX, which prevents air leaks, a dimpled wall design that reduces air resistance, and a silent ring that reduces road noise when driving. These features ensure the tire is both people and society friendly, a goal Yokohama Rubber aspires to achieve.



#### MEMO

### Winner of environmental award in France



In February 2012, Yokohama Rubber was announced as the winner of the environmental category for the Pneu Expo Innovations Trophy at the PNEU EXPO, an exclusive trade show for tire companies held in France.

Yokohama Rubber was presented with this honor because *BlueEarth-1* was recognized for its excellent fuel economy performance and its ability to reduce impacts on people and society, while the company was recognized for its long-standing development of fuel efficient tires.

### A cushion helping to make wheelchair users more comfortable

## Medi-Air Sky

The *Medi-Air series* is a wheelchair cushion lineup that was the first in the world to use a built-in bottoming out detective sensor. Conventional model, *Medi-Air 1*, was designed

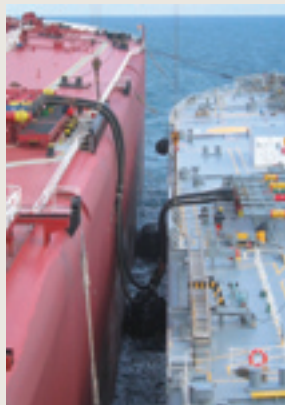
to automatically adjust air volume to distribute the air pressure and partially release pressure on the posterior after detecting the bottoming out. In contrast, *Medi-Air Sky* offers users the

chance to manually adjust air volume by using a manual pump. *Medi-Air Sky* was mainly developed to help manual wheelchair users to more easily and freely enjoy outings.



## World's First!

## Pneumatic fender monitoring system and cargo handling support system



Pneumatic fenders deployed between two vessels

Fenders are used between vessels for cargo transportation (Ship to Ship operation) and as a cushioning material when a vessel berths at a pier (Ship to Terminal operation). Yokohama Rubber has utilized its pneumatic fender design technologies and vessel movement analysis technologies to develop two different monitoring systems.

These two systems, both world firsts, are able to prevent damage to vessels, piers and cargo handling equipment, which in turn helps to prevent serious maritime accidents such as oil spills.

Please see page 10 to learn more about pneumatic fenders.

### Integrated pneumatic fender monitoring system

The first of these two systems is the fender monitoring system, which comprehensively monitors the status of pneumatic fenders. This system collects data on the internal air pressure of pneumatic fenders wirelessly, making it possible to monitor internal air pressure from a remote location.

### Support system for cargo handling at sea

The second of these systems is the dual vessel operation and mooring monitoring system, which uses pneumatic fender design technologies and vessel movement analysis technologies. This system simultaneously monitors the status of pneumatic fenders used as a cushioning material between two vessels and the status of vessel operations when two oil tankers are moored together to transfer crude oil or LNG offshore.