

SUMITOMO
RUBBER INDUSTRIES

Go for Value

ANNUAL REPORT
2006





Adhering to its Go-for-Value concept, the Sumitomo Rubber Group is committed to increasing value for all stakeholders including customers, shareholders and employees. To that end, the Group will further refine its product and technological development, front-line capabilities as well as its earnings power to ensure sustainable growth.

Go for Value

70%

non-petroleum-based tire

The Sumitomo Rubber Group has continued to focus on eco-tire development as part of its environmental efforts to help curb global warming and the depletion of petroleum resources. In addition to making greater use of natural rubber, the Dunlop ENASAVE ES801 tire, which was released in March 2006, successfully raised the ratio of non-petroleum-based materials to 70% with the use of natural materials for filler, oil and reinforcing agents. The ENASAVE ES801 tire also reduces rolling resistance by 30% compared with conventional tires, contributing to improved fuel efficiency. The Group is proactively engaging in development activities associated with the launch of a 97% non-petroleum-based tire set for 2008.



30%

use of production facilities

The *Taiyo* cell production system is a cutting-edge tire production method that compactly integrates the automated processes from components manufacture to final product inspection. This system has enhanced high-speed uniformity by 50% compared with the conventional method, contributing greatly to improvements in product quality, performance and investment efficiency while using existing production facility space of approximately 30%. The Group is in the process of introducing this system to its domestic factories following its installation in the new Thai factory that came on line in November 2006. This marked the system's overseas debut as part of concerted efforts to maintain superior efficiency and quality in tire production. Dunlop's high-performance SP SPORT MAXX A1 A/S tire was also produced using the *Taiyo* cell production system for fitting on Lexus luxury vehicles.



**SP SPORT
MAXX A1 A/S**





-1.5 dB ^{*1}

car interior noise-level reduction

A special acoustic sponge mounted inside the Dunlop VEURO VE302 premium tire realizes excellent noise-level reduction and thus a more comfortable drive by damping the air vibration inside a tire that is caused by road contours. The sponge boasts Dunlop's proprietary noise-reduction technology, which featured as a world first^{*2} in the launch of the LE MANS LM703 tire in 2006.



*1 Tire compared with: VEURO VE301 ■ Vehicle tested on: Toyota Mark X (with one passenger) ■ Tire size: 215/60R16 95H ■ Rim: 16×6, 5JJ ■ Tire pressure (kPa): 220 (front and rear) ■ Road surface: Smooth asphalt road on Sumitomo Rubber's Okayama test track. Note: In the absence of a specific Japanese Industrial Standard, a proprietary Sumitomo Rubber method was applied for trials.

*2 A world first in the commercial production of passenger tires with an internally mounted, non-ring configured special acoustic sponge that realizes noise reduction. This tire acquired three patents in Japan (including Patent No. 3612059) and six patents overseas (including Patent No. 6726289) as of March 31, 2007. In addition to these achievements, the Group is currently applying for 93 patents around the world, including Japan. Following a search of general information, including patent documents, non-patent technical literature, newspapers and journals issued between January 1, 1985 and August 31, 2005, the Group concluded that the invention and adoption of this technology marked a world first. Sumitomo Rubber Industries commissioned a specialist third-party to conduct this search.



The Sumitomo Rubber Group has been implementing a technical inspection education system for young engineers for over 40 years. Under this system, teams of one incumbent engineer and three young engineers are formed to engage in on-site improvement activities for four weeks. This experience enables engineers to become familiar with the Group's technology and philosophy of *monozukuri* (manufacturing) and provides an opportunity for on-the-job training covering front-line capabilities to proactively discover and solve problems. Furthermore, the Group established a manufacturing training center in January 2007 to build a system for passing on manufacturing skills from one generation to the next and to inspire young engineers.

40+

years experience in technical inspection
education systems

The Group achieved complete zero emissions at each of its six factories in Japan. In November 2006, all four of the Group's overseas factories achieved zero emissions, defined as landfill waste disposal of less than 1% of the total amount of waste. This requires each employee to maintain a strong awareness of environmental preservation. The Group continues to focus on daily environmental control and improvement activities in its efforts to contribute to the formation of a sustainable, environmentally friendly society.



0%
landfill waste