Used on Land, Sea, and Air in a Wide Range of Industries Environmentally Sound Products of the MB Group

"MB" stands for multiple businesses, reflecting the diversifying and expanding nature of this group's operations. The MB Group serves a wide range of industries, and its diverse products can be broadly divided into four fields: hoses and pipes (such as high-pressure hoses and metal joints), adhesives (for building and automotive use, etc.), industrial materials (such as conveyor belts and seismic isolation rubber), and aviation parts.

Prevention of global warming

High flow-rate STS hoses

STS hoses that enable safe and rapid petroleum transshipments between vessels at sea. Flame-resistant conveyor belts

Belts that are resistant to combustion even when transporting materials such as hightemperature coke, thus preventing generation of smoke due to mine fires.

Ultra-lightweight aircraft interior products

Lavatory Modules and water tanks are developed for Boeing.

Lavatory Modules contributing to cuts in CO2 We have developed a retrofit Lavatory Module that is 100kg (10%) lighter than the units it replaces, American Airlines Boeing 757s fitted with this product entered service in January of this year. The reduction in CO2 emissions resulting from the weight reduction is equivalent to a reduction of around 1.4 tons per aircraft operating between Narita, Japan, and the U.S. over the course of a year. In addition to being lighter in weight, this unit is also roomier and brighter, improving passenger comfort. There are plans to deliver around 500 units to American Airlines





Front (left) and back of solar panel

High flow-rate STS hoses

Solar panel sealants

Edge sealant for sealing the edges between power generation panels and exterior frames is used in photovoltaic power generation systems, currently attracting interest as a next-generation energy source.



Retrofit Lavatory Module used in American Airlines Boeing 757s



Resource recycling

Non-chlorine cover hose (Eco-Finelex)

High-pressure hose that emits no dioxins even when incinerated.

e-can

Materially recyclable containers for building sealant.

Trivalent chrome-plated metal joints

The chrome plating used for the metal joints of high-pressure hoses has been changed from carcinogenic hexavalent chrome to risk-free trivalent chrome.





Metal joints with hexavalent chrome plating (left) and trivalent chrome plating (right)

e-can

52% of all e-cans shipped are recovered

e-cans are polypropylene containers that have been collected for free from locations throughout Japan (except Okinawa) since 2005. After collection, they are processed into pellets for recycling into synthetic wood and other materials. Tin cans have conventionally been used for this kind of container. As this has been one cause of the increase in industrial waste, Yokohama Rubber has switched to using materially recyclable e-cans. 52% of all e-cans shipped are presently recovered and reused.







Self-settling hose for aeration systems



Coupling for ultra high-pressure oil hydraulics

Safety and compo

Safety and comfort

Reel hose

Wound hoses for loading and unloading at petroleum terminals. The advantages of this type of hose are that it takes up less space and is less easily damaged.

Aeration system hose

Hose for aeration systems installed at the bottom of dams and lakes to aerate and stir up the water to prevent the growth of blue-green algae. It employs a self-settling mechanism that requires no weighting.

UH-01NB building sealant

This sealant has excellent non-staining properties and adheres superbly to finish coatings. Used for concrete, slate, ALC, and other joints of low- and mid-rise buildings. Couplings for ultra high-pressure oil hydraulics

High-performance coupling that prevents dripping when hose is removed. **YS-II Type highway joint**

Joint installed at road seams. The surface of the rubber in the joint section was designed to reduce noise caused by the passage of vehicles by applying tire pattern design technology.

YS-II Type joint section reduces noise levels

The expanding major grooves in the joint section are corrugated so that tires do not hit them at right angles. The major and minor grooves are in addition arranged at an irregular pitch (a technique used with tire tread patterns to disperse noise levels) and laminated rubber is used in the expanding mechanism to reduce noise beneath bridge girders. These technologies have enabled noise levels to be reduced in comparison with conventional road joints by 2-5dB in the case of passenger cars and 3-7dB when crossed by trucks.



YS-II Type joint section featuring corrugated expanding grooves and tire tread-like patterning of major and minor grooves



Resource conservation

Double-glazing sealant

This double-glazing sealant for attaching panes to sashes improves the effectiveness of air conditioning in homes and buildings by ensuring that the space between the panes is hermetically sealed.

Water-Proofing for roof (Urban roof)

Made from materials of a lower specific gravity so that it is lighter to carry than a conventional roof of equivalent volume.

Energy-saving Conveyor Belt (Ecotex)

The belt's lower resistance when it moves over the rollers allows power consumption when the conveyor is on moving.

Reduction of power consumption using Ecotex conveyor belt

Approximately 60% of the resistance encountered by conveyor belts occurs when the belt moves over the rollers. Ecotex is made from a highly elastic cover rubber that dramatically reduces resistance when the belt moves over rollers. One customer has reported an average reduction in power consumption of 28.6% compared with before belt replacement.

One customer's	experience	R
Customer	Cement manufacturer	C
Belt specification	ST-1400 900×5.0mm×5.0mm	E
Horizontal system length	7,741m	
Lifting range	-140.4m (downward)	,
Load (capacity)	Limestone (1,500t/h)	
Belt speed	200m/min.	
System power	300kW × 2 units (1 head and tail)	





Urban roof



Conveyor Belt "Ecotex"

Reduction in power consumption		
Before replacement		
257.3kW		
After replacement (Ecotex)		
184.0kW	73.3kW	
Average reduction: 28.6%		