

December 25, 2014  
For immediate release

Contact:  
Corporate Communications Dept.  
Phone: 81-3-5400-4531  
Fax: 81-3-5400-4570

## Yokohama Rubber's pneumatic fenders of all sizes receive ISO17357-1:2014 certification

Tokyo – The Yokohama Rubber Co., Ltd., announced today that it has received ISO17357-1:2014 certification of its marine-use pneumatic fenders and began production of the fenders in line with the ISO standard. ISO17357-1:2014 standard was published in January 2014 as a revision to the original ISO17357:2002 standard. The new standard specifies the materials, dimensions, performance, and other requirements for marine-use pneumatic fenders as well as minimum test and inspection procedures. Pneumatic fenders are inflatable floating rubber cushions used between ships and between ships and their berthing. They play an essential role in protecting ship hulls during ship-to-ship transfers of crude oil, LPG, and other natural resources. Demand for floating pneumatic fenders has grown along with expanding global resource development activities.

The original ISO17357 standard established in 2002 was based on the specifications and performance standards of existing Yokohama Rubber pneumatic fenders. The transfer of crude oil between two vessels is a challenging and dangerous operation that poses the risk of oil spill accidents. Pneumatic fenders must therefore meet strict safety standards. Yokohama Rubber's pneumatic fenders became the model for the original ISO standards because of users' high evaluations of the products' quality, including their durability and strength. The revised standards were published in January 2014 to prevent potential declines in fender quality and performance and to enhance the safety of cargo-transfer operations. The new standards include (1) specifications for tire cord material used in the fender's reinforcing layer, which has a major impact on performance, (2) specification for the size of end fittings, and (3) establishment of a recertification requirement after a 10-year period.

Yokohama Rubber is one of the world's leading tire makers as well as a maker of world-class floating pneumatic fenders and marine hoses. The Company began manufacturing the world's first floating pneumatic fenders in 1958. Yokohama fenders account for 60% of pneumatic fenders in use in the world today and play a major role in offshore cargo transfers between ships. At present, all Yokohama pneumatic fenders are manufactured in Japan, but the Company is constructing a marine products plant on the island of Batam in Indonesia, with production scheduled to start in the second half of 2015.



*A Yokohama pneumatic fender*



*Yokohama floating pneumatic fenders at work*