

Special Feature

# Helping transform the mobility industry by strengthening our presence in the OHT business

The off-highway tire (OHT) market is expected to grow in the future amid increased food production and the growth of logistics driven by economic development in global markets. In May 2023, the Yokohama Rubber Group acquired all shares of Trelleborg Wheel Systems Holding AB (TWS), turning it into a wholly owned subsidiary, with the aim of expanding earnings in the OHT business, which is expected to generate consistently high profits. Yokohama will make full use of TWS's advanced technological capabilities in the OHT market to tap into greater growth.

## Current market situation for commercial tires and our challenges

Considering the global tire market, the ratio of consumer tires to commercial tires is around 1:1, within a market scale of around ¥20 trillion. As CASE, MaaS, and DX become more widespread in the future, the number of privately owned cars is expected to decrease, while the number of infrastructure vehicles that support the movement of people and goods is expected to increase. The Yokohama Rubber Group has positioned the OHT business, which offers consistently high profits among commercial tires, as a growth driver and is focusing on business expansion.

The global OHT market was valued at \$30 billion in 2022 and is expected to grow at a compound annual growth rate (CAGR) of 6% from 2023 to 2027, reaching \$40 billion by 2027. This is due to continuous and stable growth in North America, the largest market, as

well as the growing need for residential construction due to the rapid population growth and migration to large cities in the Asia-Pacific region, as well as the expected growth of agricultural and mining industries worldwide.

With the acquisition of Trelleborg Wheel Systems Holding AB (TWS), the Yokohama Rubber Group aims to achieve sustainable growth by seizing growth opportunities and solving social issues, while optimizing its sales ratio of consumer tires and commercial tires from 2:1 currently to 1:1, in line with the global market.

## TWS: Leading manufacturer of tires for agricultural machinery and industrial vehicles

TWS, headquartered in Tivoli, Italy, is a leading manufacturer of tires

### After TWS joins: OHT product portfolio

										
		Agriculture	Construction	Earthmover and Mining	Forestry	Lawn Garden & Turf	Material Handling	Truck (off highway)	Two wheelers	Rims
Tier 1			✓	✓			✓	✓		
										
		✓	✓	✓	✓	✓	✓	✓		
After TWS joins: OHT product portfolio										
Tier 1		✓	✓	✓	✓	✓	✓	✓		✓
										
										
Tier 2		✓	✓	✓	✓	✓	✓		✓	
										
Tier 3		✓	✓	✓	✓	✓	✓	✓		
										



for agricultural and industrial machinery with a history spanning more than 110 years, as it began producing tires in 1909. Approximately 60% of its products are for agricultural machinery, about 20% for industrial vehicles, and the rest for construction vehicles and motorcycles. TWS boasts world-class product strengths, brand power, technical prowess, and service capabilities in agricultural machinery and industrial vehicles. In fiscal 2022, the company's net sales totaled 13,277 million Swedish kronor (approximately ¥172.5 billion), and over the past decade, its net sales and EBIT have more than tripled.

## Strengthening the Yokohama Rubber Group's ability to help transform the mobility industry through the acquisition of TWS

### Expanding product portfolio

The acquisition of TWS renders the brand lineup of tires for agricultural machinery and construction vehicles complete in all categories, from basic to standard and premium. This enables the Yokohama Rubber Group to better respond to sales channels and increase its resilience to economic fluctuations.

### Global network covering major markets

TWS has 14 production bases in nine countries: in Europe in Italy, the Czech Republic (3 bases), Latvia, Serbia, Slovenia; in North America in the United States (2 bases); in South America (Brazil); in Asia (China (2 bases), and Sri Lanka (2 bases)), with Europe accounting for about 60% of the company's sales. By adding TWS's strengths in Europe to the Group's strengths in Japan, North America and Asia, the Yokohama Rubber Group will be able to build a global network that covers major markets, and anticipates greater growth.

In terms of services, Yokohama Rubber will expand TWS's proprietary tire maintenance services for industrial vehicle tires currently offered at 83 bases in 21 countries around the world to include tires for agricultural machinery and construction vehicles.

### Use of DX

TWS is developing remote monitoring systems for air pressure and tire temperature, similarly to Yokohama Rubber. Its Adaptive Tire Management System (ATMS) improves agricultural productivity by detecting working conditions such as load, pressure, and temperature in real time and constantly suggesting the optimal tractor vehicle settings. Its Tire Pressure Management System (TPMS) developed for construction and port vehicles constantly monitors air pressure and temperature to improve operational efficiency and ensure operator safety. The combination of TWS's and Yokohama Rubber's DX knowledge will promote the provision of more convenient and efficient services.



ATMS: Real-time tire data for ultimate tractor performance



TPMS: Digital tool for construction/port vehicles

## Future issues and responses

Going forward, the Yokohama Rubber Group will need to maximize synergies from the TWS acquisition, and it is now implementing a PMI program toward this end. Specifically, utilizing the bases of both companies, the Group will work to further grow the OHT business by combining its strengths with TWS's in all areas, such as building optimal production, sales, service, and quality assurance systems that meet the needs of each region, combining our R&D knowledge to create new tire products and services, and strengthening sustainability initiatives such as utilizing sustainable materials.