

Monorail prototype unveiled



A prototype of a mounted monorail train is tested at CRRQ Qingdao Sifang.[Provided to China Daily]

Chinese rail car manufacturer CRRQ Qingdao Sifang has unveiled a prototype of a mounted monorail train with a maximum operating speed of 70 kilometers per hour, the fastest of its kind in China.

Driven by a high-efficiency magnet motor, the experimental train runs along an overhead monorail.

The mounted monorail train is a rising new mode of transportation featuring light weight, moderate speed and low manufacturing cost.

Liu Yuwen, deputy head of the company's technology center, said the train can comprise three or five cars, with a passenger capacity of 300 to 510 people.

"The train has a strong climbing ability, with a maximum rise of 100 meters over a distance of 1,000 meters," Liu said. "The mounted monorail system is suitable for passenger transport in scenic areas, mountainous regions and urban areas where road traffic is heavy."

The train is built to the strictest European safety standards, with various safety devices, including a whole-train monitoring system that can help passengers escape in the event of danger.

The company, based in Qingdao, Shandong Province, is undertaking China's first overhead monorail project in Hancheng, Shaanxi Province. The construction of the line, which is designed to stretch 55 kilometers, began

in November.

Wang Mengshu, a railway expert and academician at the Chinese Academy of Engineering in Beijing, applauded the breakthrough.

“Mounted monorail does not rely on land facilities, and is even immune from bad weather such as a big snowfall or frost. It should be an important part of China’s urban transportation network,” Wang said.

Moreover, it costs only about one-third of what a subway costs. Building one kilometer of subway or light rail generally costs 500 to 800 million yuan (US\$74 million to 118 million).

China plans to complete more than 2,500 kilometers of rail transportation in major cities during the 13th Five-Year Plan (2016-2020), at an estimated cost of 1 trillion yuan.

“If one-fifth of the investment is put into mounted monorail projects, loads of money will be saved,” Wang said.