Better trains through technology

On display at the Future Railway Technology for Depots and Trains event were the following innovations, aimed at improving the efficiency of rail maintenance procedures here.



AUTOMATIC TRACK INSPECTION

A system of cameras and sensors installed on trains that can spot defects such as rail cracks, allowing faults to be quickly detected. The system is in place on four trains on the Downtown Line, and will be introduced on all other rail lines here.

AUTOMATED VEHICLE INSPECTION

The system has sensors and lasers installed on tracks to monitor issues such as the temperature of the gearbox and axles on trains. The first system will be introduced at the Tuas West Depot next year, and will also be in place at the upcoming Mandai Depot.

AUTONOMOUS MOBILE ROBOT

These robots can navigate themselves and lift up to 635kg, reducing the need for technicians to do heavy lifting and allowing them to focus on maintenance work.



VIRTUAL REALITY

VR technology will allow trainees to repeatedly dismantle and assemble large components such as train car bodies, which is not possible in real life. The LTA will conduct a trial of VR technology at the Tuas West Depot next year.

