

## Aichi Steel to Exhibit Products at the "27th ITS World Congress Hamburg 2021"

Aichi Steel Corporation (President: Takahiro Fujioka) will exhibit its products at the "27th ITS\*<sup>1</sup> World Congress Hamburg 2021" to be held in Germany from October 11 to 15. Aichi Steel will exhibit its "Global Magnetic Positioning System (GMPS)\*\*<sup>2</sup>, an autonomous driving support technology utilizing its ultra-sensitive magnetic sensor, the "MI sensor".

GMPS has been demonstrated and tested in areas where radio waves such as GNSS and LiDAR are difficult to receive, for example, under elevated roads, tunnels and restricted areas in airports with many shields. All tests have shown GMPS to be highly reliable. Since last year, magnetic markers have been officially defined as a fixtures to roads under the Japanese Road Act, making good progress towards social implementation.

Most recently, it has proved its effectiveness in experimental tests such as unmanned platooning of trucks, autonomous driving equivalent to level 4 in restricted areas of airports, driving at 60 km/h in BRT\*<sup>3</sup>, and position identification and docking. Aichi Steel is steadily making advances to solve social issues in local public transportation.

This time, GMPS, which supports "safe and secure" autonomous driving, will be exhibited in an easy-to-understand manner using demonstration data and video exhibitions, aiming for further application development by actively communicating with visitors.

\*1 ITS: Abbreviation for Intelligent Transport Systems. A system for sending and receiving information between people, roads, and automobiles to solve various problems related to road traffic.

\*2 Global Magnetic positioning system: An autonomous driving support system independently developed by Aichi Steel that estimates the position of the vehicle with high accuracy from the weak magnetic force of the magnetic markers laid along the lane using the MI sensor module mounted on to the bottom of the vehicle.



GMPS: Abbreviation for Global Magnetic Positioning System

\*3 BRT: Abbreviation for Bus Rapid Transit. A high-speed transportation system that uses a dedicated bus road.



Exhibition Image

### [Outline of the Exhibit]

1. Schedule : October 11, 2021 – October 15, 2021
2. Place : The Hamburg Messe and Hamburg Congress Center
3. Theme : "Experience Future Mobility Now"
4. ITS World official website : <https://itsworldcongress.com/>
5. GMPS official website : <https://www.aichi-steel.co.jp/ENGLISH/smart/mi/>