News Release

AICHI STEEL

February 12, 2019
Aichi Steel Corporation

Magnetic Positioning System in the Automated Driving Demonstration Testing Technical Cooperation conducted in Tama New Town

Aichi Steel Corporation (Headquarters: Tokai, Japan, President: Takahiro Fujioka) provided technical cooperation for the automated driving demonstration testing being conducted by Kanagawa Chuo Kotsu Co., Ltd. and SB Drive Corp. under the support of the Tokyo Metropolitan Government in Tama New Town (Tama City, Tokyo) for eight days, from February 13 to 22, Saturday and Sunday excluded.

This demonstration testing was chosen as a "Project concerning Business Model Creation that Utilizes Automated Driving Technology" started by the Tokyo Metropolitan Government in the fiscal year 2018, and it was conducted with the support of the "Tokyo Automated Cruising One Stop Center" jointly established by the national government and the Tokyo Metropolitan Government.

Since fiscal year 2017, Aichi Steel Corporation has provided the Magnetic Positioning System using the MI sensor (hereinafter the system)* for automated driving demonstration testing being conducted throughout Japan. Results have steadily been achieved, as demonstrations aiming for social implementation have been conducted at various places.
In this test, an automated driving bus equipped with the MI sensor modules provided by Advanced Smart Mobility Co., Ltd., travelled in a 1.4 km section with magnetic markers laid underground at an interval of 2 m.

In Tama New Town, developed clearing a hill country rich in undulations, where there are many slopes, assuring public transportation to the residents for shopping or to regularly go to the hospital is important, and the implementation of automated driving is greatly expected. Especially in places where the influence of pedestrian bridges or with roadside trees makes the reception of GPS signals difficult, the accurate vehicle position estimation technology of the system contributes to a safe automated driving.
Going forward we will tackle the establishment of the next-generation public transportation system through repeated technological verification in environments that necessitate this system.

*Magnetic Positioning System: An automated driving support system originally developed by our company that uses an MI sensor module affixed to the base of vehicles to measure the fitted vehicle's position with high accuracy from the weak magnetic force of magnetic markers fitted along the road and control steering equipment so that the vehicle passes over the magnetic markers.

Hino Poncho-based experimental automated driving bus (Owned by Advanced Smart Mobility)

Outline of automated driving bus travelling section outline
(Source: Kanagawa Chuo Kotsu press release data)

【Reference】Outline of automated driving bus service demonstration testing in Tama New Town,

1. Period: February 13 to 22 (Saturday and Sunday excluded)

2. Service Hours: 9:30 to 16:30 (about one bus every 30 min.)

3. Place: Tama New Town (Tama City, Tokyo), Toyogaoka 4-chome→Santoku supermarket in Kaidori (about 1.4 km)

(URL Reference)Kanagawa Chuo Kotsu release: http://www. kanachu.co.jp/news/pdf01/2019/1.21release.pdf