

November 7, 2018
Aichi Steel Corporation

Aichi Steel Enhances Production Capacity and Establishes Two-base Production System for Next-generation Automobile Components —Completes new power card lead frame production line at Gifu Plant—

Aichi Steel Corporation (Headquarters: Tokai, Japan; CEO: Takahiro Fujioka) held a completion ceremony today for a new production line constructed within its Gifu Plant at Kakamigahara-shi, Gifu Prefecture. The aim of the new line is to enhance production capacity for power card lead frames, which are essential heat-dissipating components for inverters used in hybrid, electric, and other next-generation vehicles, and to create a two-base production system for BCP purposes.

Power cards¹ are installed in hybrid, electric and other vehicles powered by electricity in order to control motor power. The key component of these cards is the power card lead frame, which is an intricately shaped contact and heat-dissipating component constructed by high-precision pressing of copper plates of irregular-shaped cross-sections, and which is finished with a uniform nickel plating and occasional gold plating just a few microns thick. With integrated production on a single site enabled through a merger of precision press technologies and functional plating technologies, this is one of the company's strongest products.

The newly-completed line is an integrated, automated production line, built with a focus on the "4S" concept of simple, slim, short and straight, which has improved productivity by 20 percent and which offers better prevention of the contaminants that impact on product quality. As such, the company has created a work environment conducive to manufacturing products of higher quality than ever. The line was also designed with a view to further expansion of production capacity in the future.

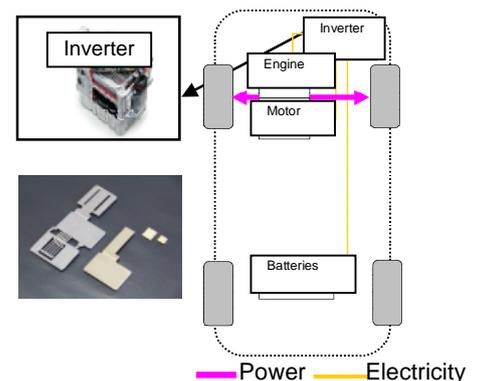
This new production line is located at Aichi Steel's Gifu Plant, which is away from the existing Electronic Components Plant located within its Chita Plant in Tokai, Aichi Prefecture. This has enabled the company to establish a system providing stable supply continuity to its customers even in times of natural disaster such as large earthquakes.

Going forward, Aichi Steel is committed to ongoing investment in growing markets such as next-generation vehicles and autonomous driving technologies. By engaging in manufacturing closely with its customers, it will continue to support safe, secure and convenient mobility, and to help create a people-friendly, environment-friendly smart society.

¹Power Card: a thin, card-shaped power module equipped with multiple power semi-conductors. Each vehicle uses multiple power cards.

Overview of the new production building and new production line

1. Location: Within Aichi Steel Corporation's Gifu Plant
(3-36, Unuma, Oigi-cho, Kakamigahara-shi, Gifu prefecture)
2. Produced articles: Power Card Lead Frames
3. Production capability: 1.8 million units per month
(equivalent to 60,000 vehicles' worth per month)
4. Building area: approx. 4,200 square meters (across two floors)
5. Investment: approx. 3 billion yen (building and facilities)



Use of power card lead frames
(hybrid vehicles)



Wide view of plating line