

Epson Atmix Completes Construction on New Factory at Kita-Inter Plant

- New plant will boost amorphous alloy powder production capacity to meet future demand -



The new factory at Epson Atmix's Kita-Inter Plant

- AOMORI and TOKYO, Japan, December 20, 2017 –

Epson Atmix Corporation has announced the completion of construction work on a new factory for amorphous alloy powder*¹ production at its Kita-Inter Plant, in Hachinohe, Aomori Prefecture, Japan. A group company of Seiko Epson Corporation (“Epson,” TSE: 6724), Epson Atmix is the world’s leading*² manufacturer of superfine alloy powder. The new factory will begin operations in January 2018.

Epson Atmix’s superfine alloy powders are used as raw material in a host of high-performance components found in products ranging from automobiles and smartphones to wearable products and medical equipment. In 2004, Epson Atmix became the first company in the world*³ to successfully mass-produce amorphous alloy powder using an original production method called SWAP*⁴ (spinning water atomization process). Amorphous alloy powders have high magnetic flux densities and low energy loss in addition to excellent high-frequency characteristics. These characteristics make amorphous alloy powders extremely attractive as performance-enhancing, highly functional material powders that enable small, low-power voltage control components and that support high frequencies and large currents.

Demand from the smartphone, wearable product, low-power component, and automotive industries in particular has been growing by the year, and this trend is expected to continue for the foreseeable future. Epson Atmix has invested approximately 1.25 billion yen in the new factory, construction on which started in November 2016, to meet expanding demand for amorphous alloy powders.

Going forward, Epson Atmix plans to increase its amorphous alloy powder production capacity in stages from the current 2,000 tons per year to approximately 6,000 tons per year by 2025.

Epson Atmix is committed to leveraging its unique metal powder manufacturing technology to continue to create customer-pleasing, trusted products and services.

Epson Atmix Kita-Inter Plant Profile (After New Factory Construction)

Address	2 Kita-Inter Industrial Park, Hachinohe, Aomori Prefecture
Manufactured products	Superfine alloy powders (magnetic powder and MIM powder* ⁵)
Floor area	Approximately 7,500 m ² of factory floor space on a 30,600 m ² lot (the new factory floor occupies approximately 1,800 m ²)

Construction work on the Kita-Inter Plant was completed in September 2013. The plant came online in October of that year, making it Epson Atmix's second production site. The new factory operations means that Epson Atmix will have amorphous alloy production lines at both its Head Office and Kita-Inter Plant.

Epson Atmix profile

Name	Epson Atmix Corporation
Address	4-44 Kaigan, Aza, Kawaragi, Hachinohe, Aomori, Japan 039-1161
President	Isamu Otsuka
Beginning of operations	October 1, 1999
Employees	Approximately 280
Capital	450,000,000 yen (Epson Atmix is a wholly owned subsidiary of Seiko Epson Corporation)
Businesses	Development, manufacture, and sales of metal alloy powders, metal injection molded parts, and synthetic quartz crystals

For further information, please visit the Epson Atmix web site at http://www.atmix.co.jp/en/e_index.html

*1 Amorphous alloy powders

Ordinary alloys have a crystalline structure in which atoms are arranged regularly. In contrast, amorphous alloy powders are non-crystalline, meaning the atoms that comprise the material are not arranged in a definite, regular manner. Although solids, amorphous alloy powders, like liquids, have a structure in which atoms are densely and irregularly packed. Amorphous alloys are lightweight and have excellent electric and thermal conductivities, as well as high tensile strength. Amorphous alloy powders are amorphous alloys that have been reduced to fine particles that range from several dozen to several hundred microns in size.

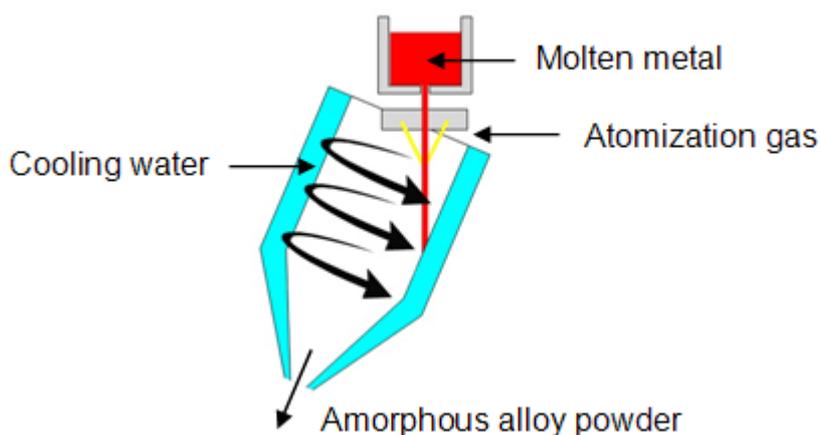
*² Market share based on 2016 annual sales (according to Epson Atmix research).

*³ Epson Atmix is believed to have been the first company in the world to mass-produce these powders.

*⁴ Spinning water atomization process (SWAP)

SWAP was developed by Epson Atmix in 2004 to mass-produce amorphous alloy powders. Amorphous (non-crystalline) alloy powder is produced by blasting an alloy that has been melted in a high-frequency induction furnace with high-pressure gas and cooling water to create tiny droplets that are then solidified by rapidly cooling them at a rate of several tens of thousands of degrees Celsius per second. Amorphous alloy powders are technically challenging to produce in volume, but Epson Atmix has continued to accumulate expertise in this area in an effort to stabilize supply as one of the few suppliers of amorphous alloy powders.

Note: SWAP is a registered trademark of Epson Atmix Corporation.



*⁵ MIM: Metal injection molding.

A metalworking process that has the features of both injection molding and powder metallurgy. MIM enables very fine alloy powder to be used to produce parts with complex configurations that are highly accurate, dense and strong.

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Led by the Japan-based Seiko Epson Corporation, the Epson Group comprises more than 80,000 employees in 86 companies around the world, and is proud of its contributions to the communities in which it operates and its ongoing efforts to reduce environmental impacts.

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