



ORIX Rentec Begins Handling the Metal X, a Safe, Easy-to-Use Metal 3D Printer Made in the US That Does Not Use Metal Powder

TOKYO, Japan - November 19, 2021 - ORIX Rentec Corporation (“ORIX Rentec”) today announced that it will begin to offer contract-based modeling using Metal X, the metal 3D printer manufactured by US-based Markforged, Inc., and sales/rental services of the printer.

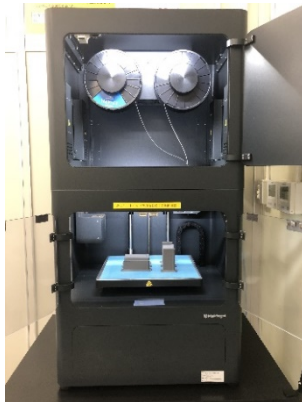
Metal X is a metal 3D printer that uses Atomic Diffusion Additive Manufacturing (ADAM), the latest modeling technology independently developed by Markforged, and it can safely and easily model light and strong metal parts. The common method for traditional metal 3D printers is sintering metal powder with lasers, but with the ADAM method, materials in the shape of a thin cable called a “filament,” a mixture of metal powder, wax and resin, are sintered in a furnace. As the metal powder is not dispersed in the modeling process, the printer is safe to use and easy to clean, and the materials can be easily exchanged.

In addition to the printer being cheaper than traditional metal 3D printers, it can be installed at a lower cost as there is no need for dust-proofing or explosive-protection measures for the operation room. The printer modeling is also compatible with stainless steel, tool steel, Inconel, copper and other various metal materials, and does not have to be operated by a specialist technician as it is easy to operate.



Metal X installed in the Tokyo 3D Lab. inside the Tokyo Technology Center

ORIX Rentec will offer a wide range of services to its customers based on their installation and usage needs. These services include a contract-based modeling service for prototypes and other products using Metal X and a verification service that allows users to experience modeling while receiving support from the company’s technicians at the Tokyo Technology Center (in Machida, Tokyo). ORIX Rentec will also sell Metal X or provide the printer on an operating lease.



The interior of Metal X with a filament set inside

In terms of the contract-based modeling service, ORIX Rentec collaborates with Japan 3D printer Co., Ltd., a Metal X distributor in Japan; after ORIX Rentec has printed something using Metal X, Japan 3D Printer degreases and cleans, and then models by sintering in a furnace. ORIX Rentec will support the improvement of efficiency in the manufacturing process by providing a wide range of shapes for customers in aerospace, automobile, electric and other industries which have increasing needs in recently years.

ORIX Rentec was established in 1976 as Japan’s first measuring instrument rental company and, since then, it has focused on providing rental services for high-tech devices. In 2015, the company commenced a 3D printer business that includes contract-based modeling service by metal and resin 3D printers. By leveraging expertise accumulated through the use of wide-ranging devices and providing opportunities to customers to use the latest technologies, ORIX Rentec seeks both to help increase the productivity of its customers and to contribute to the development of the manufacturing industry.

Product overview

Manufacturer: Markforged, Inc.

Model: Metal X

Compatible materials (as of Nov 2021)

- 17-4 stainless steel (equivalent to SUS630)
- H13 tool steel (equivalent to SKD61)
- A2 tool steel (equivalent to SKD12)
- D2 tool steel (equivalent to SKD11)
- Inconel 625
- Copper alloys

Maximum model size: W300× D220 × H180 mm

Maximum sintering size: 141 mmID × 305 mmL

Laminating pitch: 50 μm & 125 μm & 129 μm

Features: As Metal X does not use a laser, it can create shapes with fewer residual stresses. Also, it is compatible with highly reflective materials such as copper. It can also make shapes lighter and save materials as it creates the interior of shapes using a lattice structure.



An example of a shape—on the right is a shape with the base removed

Material: 17-4 stainless steel (equivalent of SUS630)

■ Overview of Markforged, Inc.

Markforged develops and manufactures 3D printers that create shapes through the laminate molding of light, strong resin or metal through carbon fiber reinforced composite technology (patented).

Company name: Markforged, Inc.

Location: Massachusetts, United States

Representative: Shai Terem (President & CEO)

Established: 2013

Description of business: Development and manufacture of strong, functional and precise new-generation 3D printers

Website: <https://markforged.com/>

■ Overview of Japan 3D printer Co., Ltd.

Company name: Japan 3D printer Co., Ltd.

Location: 1F, Ariake Frontier Building B, 3-7-26 Ariake, Koto-ku, Tokyo

Representative: Shihaku Kitagawa (Chief Executive Officer)

Established: October 2013

Description of business: Sale of 3D printers and 3D scanners, 3D printing services (contract-based modeling), 3D consulting solutions, specialized in 3D education and training industry

Website: <https://3dprinter.co.jp/> (in Japanese)

Contact Information:

Investor Relations and Sustainability Department

ORIX Corporation

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About ORIX:

ORIX Corporation (TSE: 8591; NYSE: IX) is a financial services group which provides innovative products and services to its customers by constantly pursuing new businesses.

Established in 1964, from its start in the leasing business, ORIX has advanced into neighboring fields and at present has expanded into lending, investment, life insurance, banking, asset management, automobile related, real estate and environment and energy related businesses. Since entering Hong Kong in 1971, ORIX has spread its businesses globally by establishing locations in 28 countries and regions across the world.

Going forward, ORIX intends to utilize its strengths and expertise, which generate new value, to establish an independent ORIX business model that continues to evolve perpetually. In this way, ORIX will engage in business activities that instill vitality in its companies and workforce, and thereby contribute to society. For more details, please visit our website: <https://www.orix.co.jp/grp/en/>

(As of September 30, 2021)

Caution Concerning Forward Looking Statements:

These documents May contain forward-looking statements about expected future events and financial results that involve risks and uncertainties. Such statements are based on our current expectations and are subject to uncertainties and risks that could cause actual results that differ materially from those described in the forward-looking statements. Factors that could cause such a difference include, but are not limited to, those described under “Risk Factors” in the Company’s annual report on Form 20-F filed with the United States Securities and Exchange Commission and under “(4) Risk Factors” of the “1. Summary of Consolidated Financial Results” of the “Consolidated Financial Results April 1, 2020 – March 31, 2021.”