

RICOH Additive Manufacturing Machine

RICOH
imagine. change.

RICOH AM S5500P

Selective Laser Sintering



Materials

PA 12
PA 11
PA 6
PP

Scan Speed

15
m/sec

Layer Thickness

0.08 – 0.20mm

Build Volume

(W)500mm
(D)500mm
(H)480mm

**Polymer Laser Sintering System
for Additive Manufacturing of
Functional Prototypes and End-use Parts**

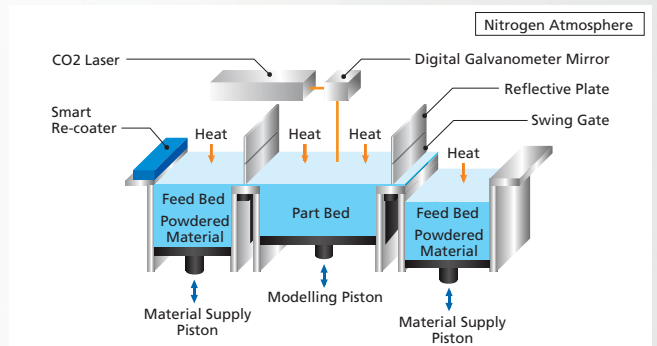
RICOH AM S5500P





What is the Ricoh AM S5500p?

The RICOH AM S5500p uses Powder Bed Fusion (or SLS® technology) sinter polymer powder to produce parts. Our technology uses heat and a smart re-coater combined with a laser to manufacture design prototypes and functional prototypes, which can be used in a range of industries such as Aerospace, Automotive and Medical.



1 High performance using a range of polymers

Users are able to choose from a selection of polymer-based materials. The parts produced can be utilised in a range of applications from prototyping to functional parts.

2 Efficient building at a lower running cost

Using its generous build volume, the AM S5500p enables users to produce many components at once; ensuring fast, flexible and cost-effective production

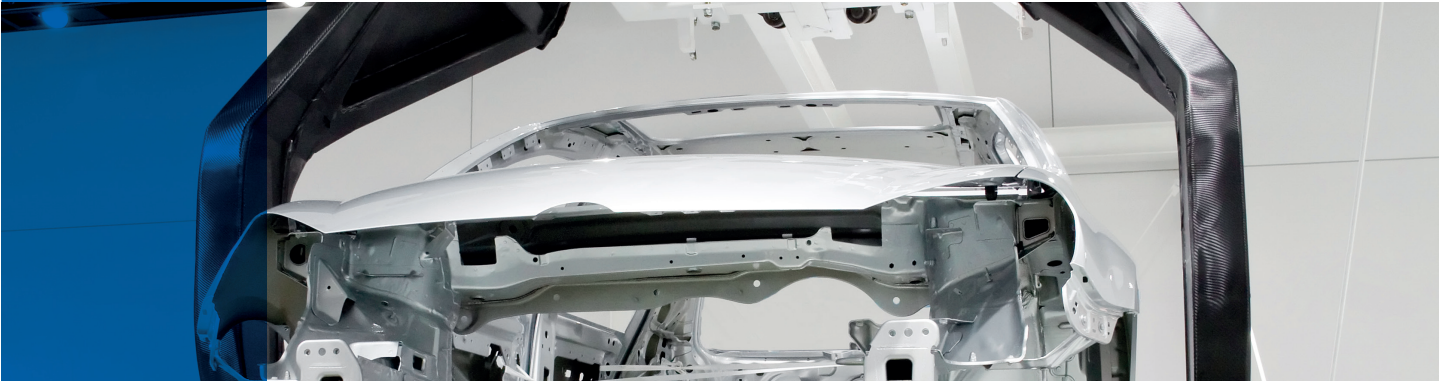
3 High quality and repeatability of components manufacture

Using the advanced thermal control parameters, users can benefit from highly accurate and repeatable manufacture.

ADVANTAGES

RICOH AM S5500p Strengths

High end additive manufacturing technology with a range of high performance materials for the manufacturing industry and beyond.



Substantial Build size

The generous build size enables the manufacture of large components in one build, and the production of multiple parts in a single run.

Advanced Temperature Control

The system comes with Ricoh's own pre-configured settings for use with Ricoh approved materials. Via the systems software, the user can develop their own parameters to suit the application with access to all settings.

Smart re-coater and dual powder distribution

The smart re-coater feeds new powder from both sides of the feed cartridge in order to provide consistently denser and high quality parts.

High Machine reliability

The RICOH AM S5500p contains numerous support mechanisms, contributing to its high reliability. This includes mechanisms for independent control to prevent overheating, and power voltage fluctuation.

Service and Support - Tailored to meet your needs

You can rely on Ricoh Service to help you maximise your productivity and provide you the level of maintenance and support needed for your business. Our dedicated local teams are supported by a pan-European network of service engineers that can ensure proactive maintenance and swift on-site support depending on your requirements. Our support services include planned maintenance along with telephone and on-site support which are designed to ensure that your equipment is maintained in optimum condition and provide fast support response, minimising the impact on your business.



Automobile part

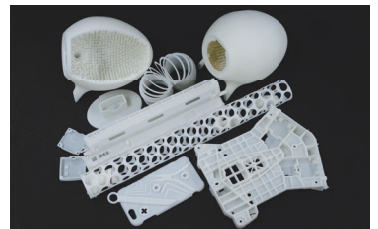


Image of the parts which can be created in one run



FEATURES

RICOH AM S5500P Highlights

Utilising the latest technology and high-performing materials to support the Additive Manufacturing Industry

The RICOH AM S5500P enables users to select materials from Ricoh's approved material range, including Polypropylene (PP), PA6GB* , PA11, PA12, PA12GB*

The range of materials available for use with the RICOH AM S5500P provides user with a range of material options depending on the application.

Material	Features	Application
PP	Polypropylene material with high flexibility, toughness, high chemical resistance and is lightweight	Functional prototypes to all Housing components, Hinges parts, Automotive interior parts
PA6GB	Polyamide 6 with glass beads, high heat resistance and toughness	Functional testing, design review, automotive interior parts.
PA11	Excellent flexible properties, Polypropylene-like material based on PA11 High robustness and durability equivalent to Polypropylene and ABS	Functional prototypes, design review, hinges parts
PA12	Unfilled polyamide 12 material with improved melt-flow Achieves better surface finish and feature details on parts produced	Architectural models, Functional testing, design review, tray, mechanical appliances, jig and fixtures
PA12GB	Polyamide 12 with glass beads material for improved part stiffness and heat resistance compared to unfilled polyamide 12 Achieves better part density, surface roughness and airtightness	Functional testing, wind tunnel testing, design review, automotive interior parts such as intake manifold

*Denotes glass beads

RICOH Rapid Fab

Layer upon layer of innovation

We've created everything you need for a complete Additive Manufacturing Service

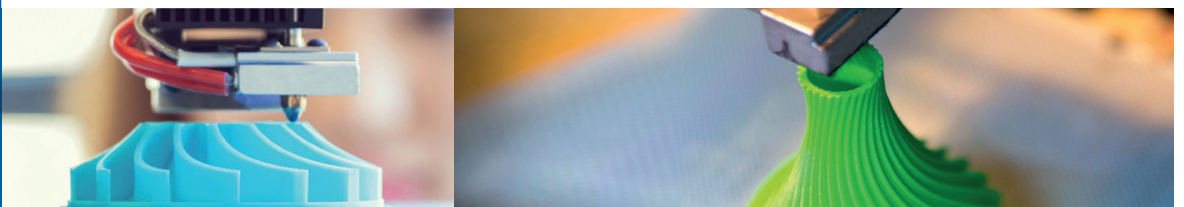


RICOH Rapid Fab is an innovation that encompasses a complete additive manufacturing service offering, with dedicated levels of manufacturing and prototyping support. We've built on our heritage as a world-leading manufacturer to offer you access to our knowledge and expertise in additive manufacturing.

With Full-Service Manufacturing, Prototyping and Manufacturing Consultancy and Web-based production, we can offer a range of solutions – or even full product development – from initial design and prototype, right through to manufacture.

We've built on our heritage as a world-leading manufacturer to offer you access to our knowledge and expertise in the Additive Manufacturing arena. Ricoh Rapid Fab utilises a range of the latest technologies in additive manufacturing, including the AM S5500P. The AM S5500P is built with high quality components and advanced technology to offer reliability and improved productivity.

You choose the combination of services that is right for you.



RICOH Rapid Fab

Layer upon layer of innovation

We've created everything you need for a complete Additive Manufacturing Service



Ricoh Rapid Fab services include:



General Specifications

Specifications

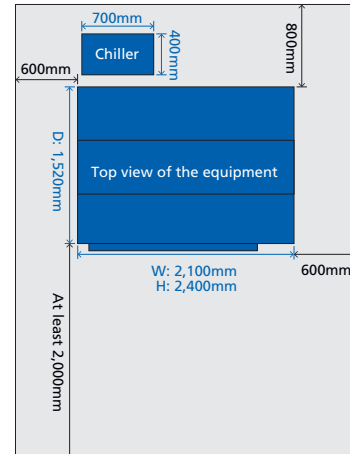
Item	Specification
Laser Output	100W
Scan Speed	15m/sec
Layer Thickness	0.08mm – 0.20mm
Build Volume(WxDxH)	500 × 500 × 480mm*
Dimensions(WxDxH)	2,100mm × 1,520mm × 2,400mm**
Power Supply	3 Phase AC200V±10% 50A 50/60Hz
Materials	PA 12, PA 12 (with glass beads), PA 11, PA 6 (with glass beads), PP

*This value is for reference and will differ depending on material, parts and build conditions.

**The above dimensions exclude the size of the PC, signal lamp, and valves.

Recommended Space for Installation

W: 3,300mm × D: 4,400mm × H: at least 3,000mm



Note: These specifications may change without prior notice.

About Ricoh

Ricoh is a global technology company specialising in office imaging equipment, production print solutions, document management systems and IT services.

Headquartered in Tokyo, Ricoh Group operates in about 200 countries and regions. In the financial year ending March 2015, Ricoh Group had worldwide sales of 2,231 billion yen (approx. 18.5 billion USD).

The majority of the company's revenue comes from products, solutions and services that improve the interaction between people and information. Ricoh also produces award-winning digital cameras and specialised industrial products. It is known for the quality of its technology, the exceptional standard of its customer service and sustainability initiatives.

Under its corporate tagline, imagine. change. Ricoh helps companies transform the way they work and harness the collective imagination of their employees.

For further information, please visit www.ricoh-europe.com

Note: SLS is a trademark or registration trademark of 3D Systems, Incl.

Note: All other company and product names are trade names, trademarks or registered trademarks of their respective companies.

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