



Plastic and Metal Materials
for Additive Manufacturing



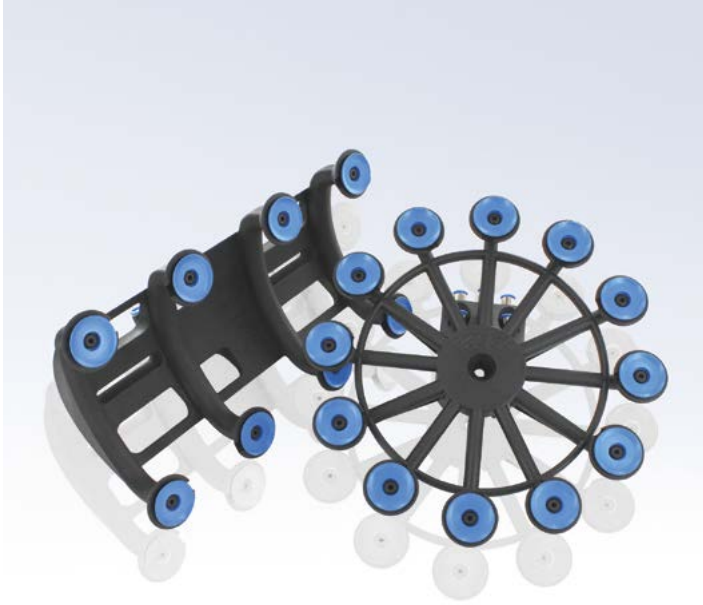
Systematic Approach Stronger Together

We always see the big picture to let you achieve the best possible result. This is why all our materials are optimised for our systems – and vice versa.

The development of our systems, powder materials and process parameters go hand in hand – all three elements are ideally aligned. The result: parts with first-class properties for their respective application, and thus ideally suited for cost-effective production.



Making Solutions Take Shape



Gripper, Material: PA 2200; Source: ASS Maschinenbau GmbH



Rear Hub, Material: EOS MaragingSteel MS1; Source: Kappius Components

Discover the optimal materials that turn ideas into possibilities – and possibilities into results.

A wealth of materials

EOS offers you a comprehensive range of plastic and metal materials for Additive Manufacturing. Material data sheets available online provide extensive information about the component properties that can be achieved.

Materials expertise

Our materials engineers have been continuously developing new materials for more than 20 years to support our customers in implementing their projects. This expertise is incorporated into every new development in order to meet the requirements of the different industries. The materials are subject to quality assurance in compliance with international standards.

What you want

For us, it is important that our portfolio contains precisely the materials that you need to implement your applications. As a result, new developments and enhancements at EOS evolve from customer requirements.

Only the best is good enough

For you, this means: high-quality, extensively tested materials that enable you to achieve your design, development and production goals.

Plastic Materials



*Stereotactic Platform, Material: PA 2201; Source: FHC, Inc.**



Housing, Material: PA 2202 black; Source: Valeo

EOS offers 16 materials for Additive Manufacturing with plastics, which meet a wide range of different component requirements: filled and unfilled polyamides (PA), thermoplastic elastomers (TPE), polyether ketone (PAEK) and polystyrene (PS). We provide advice and support to help you select the materials based on the property profiles required for your components.

EOS plastic materials can be used to produce innovative components in accordance with the most rigorous industrial standards. Moreover, they are essential to enhancing the overall flexibility of your production processes, and open up virtually unlimited flexibility of development and design.

The right powder for any application

Each material is characterised by specific material properties that optimally support the property profiles required by your products.

Strength, impact resistance, temperature, dimensional stability – EOS materials can comply with all requirements known to us.

Among our sustainability activities, we are preparing to offer a **polymer powder recycling program**. After collection is arranged, the material is processed for use in non-laser sintering applications, thus ensuring full recycling of EOS polymer materials.

For detailed technical information on our plastic materials and property profiles, visit the EOS materials database: <http://eos.materialdatacenter.com/eo/en>

**EOS systems are able to manufacture medical devices. However, EOS cannot offer any guarantee that these devices meet all requirements.*

Metal Materials



Spinal Implant, Material: Ti64ELI; Source: Autodesk Within Medical



Heat Exchanger, Material: EOS Aluminium AlSi 10Mg; Source: 3T RPD, Autodesk Within, EOS

EOS offers a wide range of materials that can be used in many industries. The part properties are ensured from one system generation to the next. You can make flexible and optimum use of the EOS technology with DMLS® (Direct Metal Laser Sintering) for your specific applications. At the end of the day this means **competitive advantages** for you thanks to favourably priced high-end metal parts.

Metal components can be manufactured with first-class quality by means of Direct Metal Laser Sintering (DMLS®). The reliable part quality is demonstrated by defined mechanical properties to a reproducible quality standard.

For detailed technical information on our metal materials, visit: <http://www.eos.info/material-m>

Unique quality assurance of material batches

Batch-specific factory certificates confirm both the standard chemical properties and grain size distribution as well as the tested material properties of the laser sintered material and the tolerances established during testing.

A **database** of the powder and part properties measured during the quality assurance process documents the performance capacity of the entire supply chain.



Combustor, Material: EOS NickelAlloy IN718; Source: Materials Solutions



Watch Case, Material: EOS StainlessSteel 316L; Source: Cooksongold

EOS GmbH
Electro Optical Systems
Corporate Headquarters
Robert-Stirling-Ring 1
82152 Krailling/Munich
Germany
Phone +49 89 893 36-0
Fax +49 89 893 36-285

Further EOS Offices

EOS France
Phone +33 437 49 76 76

EOS Greater China
Phone + 86 21 602307 00

EOS India
Phone +91 44 39 64 80 00

EOS Italy
Phone +39 02 33 40 16 59

EOS Korea
Phone +82 2 63 30 58 00

EOS Nordic & Baltic
Phone +46 31 760 46 40

EOS of North America
US material order
Phone +1 248 306 01 43

EOS Singapore
Phone +65 6430 0463

EOS UK
Phone +44 1926 62 31 07

www.eos.info • info@eos.info



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