

igus 3D printing service: low-wear polymer parts in 5 days!

Production-ready, long-lasting special parts from a 3D printer, increase design freedom in the automotive industry

Additive manufacturing gives designers new freedom and flexibility in the design of special solutions, including the development of efficient vehicle components. If lightweight and durable wear-resistant parts are required, igus offers a solution from their 3D printing service. Users can order a special part made of tribologically- optimised polymers from [igus](#) online in just a few seconds.

A quick response time and customised design are paramount in the automotive industry design teams. The industry needs partners who can deliver special solutions in small quantities, cost-effectively, fast, and by responding to new requirements to create a competitive advantage in the automotive market. The expanded 3D printing service from [igus](#) is particularly suitable for the short-term production of wear-resistant parts. The motion plastics specialist uses [3D printing](#) to cost-effectively produce prototypes or batches within a very short time. The main advantage of additive manufacturing: the designer has maximum freedom in the design of the component, without having to invest in expensive steel tools with long lead times. [igus](#) manufactures the solutions from their highly wear-resistant [iglidur](#) tribo-polymers. Tests in the [igus](#) laboratory show that they are up to 50 times more abrasion-resistant than standard polymers and are comparable to injection moulded parts in terms of wear resistance. They are both lightweight and quiet in motion - important criteria in vehicle design. Printed solutions from [igus](#) are already being used in turbochargers, as pivoting bearings in suspension systems and for a special accelerator mechanism.

print2mold process ensures the free choice of materials

In the [igus 3D printing](#) service, the user can choose between different manufacturing processes: they can either manufacture their component using the laser sintering process, with [iglidur I3](#), [iglidur I6](#) and I8 ESD tribo-polymers or alternatively using twelve different filaments using the FDM process. For the

individual component to be made from the ideal [iglidur](#) material for the respective application, [igus](#) also offers the [print2mold](#) process. An injection moulding tool is printed for the special solution and is then used in the injection moulding machine. This allows the designer to make use of the total [iglidur](#) material range of 55 tribo-polymers.

Wear-resistant components requested online

The way to a lubrication-free special solution is very simple: click on the link <https://iglidur-designer.igus.tools/upload>, upload the STEP file of the component and select the appropriate material. The price for production (in the [print2mold](#) process including the costs for the injection moulding tool) as well as information about the material, precision and flexural strength are shown online. After selecting the appropriate tribo-polymer, the user can enter the quantity and request either a quotation or order the parts. The additively manufactured special parts are shipped 5 days after the order has been placed. In the case of the [print2mold](#) process, the injection-moulded parts are ready for shipping approximately 10 business days after the order has been confirmed.

Caption: wear-resistant parts with complex geometries made of tribo-polymers



igus resources:

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-  Follow us at twitter.com/igusUK
-  Watch our videos at igus.co.uk/YouTube
-  Connect to us at igus.co.uk/Facebook
-  Read our blog at blog.igus.co.uk

About igus:

Based in Northampton in the UK and with global headquarters in Cologne, Germany, igus is a leading international manufacturer of energy chain systems and polymer plain bearings. The family-run company is represented in 35 countries and employs over 4000 people around the world. In 2019, igus generated a turnover of 764 million euros with motion plastics, plastic components for moving applications.

With plastic bearing experience since 1964, cable carrier experience since 1971 and continuous-flex cable experience since 1989, igus provides the right solution based on 100,000 products available from stock, with between 1,500 and 2,500 new product introductions each year. igus operates the largest test laboratories and factories in its sector to offer customers quick turnaround times on innovative products and solutions tailored to their needs.

For further information, please contact:

Erin Kemal

Tel: 01604 677240

Email: ekemal@igus.co.uk

Hannah Durrant

Tel: 01604 677240

Email: hdurrant@igus.co.uk

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