

# igus 3D printing service: low wear plastic parts in 3 days!

Production-ready, long-lasting special parts from the 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 the right solution from its 3D printing service. Users can order their special part made of tribologically optimised polymers from igus online in just a few seconds. You can choose from over 55 lubrication-free iglidur materials.

A quick response time and customised design are daily business in the development divisions of the automotive industry. Accordingly, the industry needs partners who deliver special solutions in small quantities, cost-effectively and in the shortest possible time. Because responding quickly to new requirements creates real competitive advantages in the hard fought 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 his component, without having to invest in expensive steel tools with long delivery times, igus manufactures the solutions from its 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 can keep up with injection-moulded parts in terms of wear resistance. The printed wear-resistant parts made of high-performance polymers are also lightweight and quiet in motion - important criteria for vehicle construction. Printed solutions from igus are already being used in turbochargers, as pivot bearings in wheel carriers or for mounting a gas ring in special vehicle construction.



# print2mold process ensures the free choice of materials

In the igus 3D printing service, the user can freely choose between different manufacturing processes: they can either manufacture their component using the laser sintering process with the iglidur I3 or iglidur I6 tribo-polymers or alternatively using seven 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 user to make free use of the iglidur material range with its 55 tribo-polymers.

## Wear-resistant components requested online

The way to a lubrication-free special solution is very simple: call up the 3D printing service at <a href="www.igus.in/iglidur-designer">www.igus.in/iglidur-designer</a>, 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 directly request a quotation from igus or order the parts. The additively manufactured special solutions are available after just 3 to 5 days. In the case of the print2mold process, the injection-moulded solutions are ready for shipping after 10 business days.



# Caption:



#### Picture PM5819-1

At igus, wear-resistant parts with complex geometries made of tribo-polymers can be produced within a few days. (Source: igus GmbH)

#### **PRESS CONTACT:**

## **Shery George**

igus (India) Private Limited 36/1, Sy. No. 17/3 Euro School Road, Stage Mahadevapura Post Bangalore - 560048 Phone: +91-80-45127827 (Direct)

: +91-9379517885 sgeorge@igus.in Visit us on www.igus.in

#### **ABOUT IGUS:**

igus GmbH is a globally leading manufacturer of energy chain systems and polymer plain bearings. The Cologne-based family business has offices in 35 countries and employs around 4,150 people around the world. In 2018, igus generated a turnover of 748 Dodda Nekkundi Industrial Area - 2nd million euros with motion plastics, plastic components for moving applications. 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.

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