

WATERPROOF WITH SOLIDWORKS AND MARKFORGED



The midsize company **Kaut & Janke GmbH & Co KG**, better known as **KAJA Sanitär-Armaturen**, was founded in 1981 by Günter Kaut and Walter Janke and is still firmly in family hands. Since 2018, the grandson of the founder Dennis Janke has been managing the business of Armaturen Manufaktur together with Martin Kaut.

KAJA stands for clear design and quality "Made in Germany" in bathroom and kitchen fittings but also for customer-specific, individual special solutions and reliability. KAJA faucets integrate seamlessly into every home and living space concept.

At the location in Hemer, North Rhine-Westphalia, in the heart of the Sauerland region, fittings are developed, designed and manufactured with the highest precision. Short distances and flat hierarchies make Armarturen Manufaktur flexible and fast in order processing and the development of new series or special customer products.

In the production hall directly next to the administration office first-class valves are created that combine design and function. High-quality materials and excellent surfaces turn KAJA valves into masterly trend objects.

All KAJA products are assembled and tested on site by specially trained staff. This way, KAJA offers the end user a maximum of safety in terms of quality and warranty.

Customers can rely on Kaut & Janke valves at any time and for long term.



Dennis Janke, Managing Director

Kaut & Janke GmbH & Co. KG - KAJA Sanitär-Armaturen



FREE-FORM SURFACES FOR FIRST-CLASS DESIGN AND AESTHETICS

The product development at Kaut & Janke GmbH & Co. KG often starts with an idea or a customer request. Then it is time for development manager Florian Sica to get to the computer. For the development of KAJA valves he uses the **CAD Software SOLIDWORKS** in the Professional version. In this way, the first 3D designs are created very quickly, taking feasibility and functional performance into account. Mr. Sica mainly uses the SOLIDWORKS surface functions with which ergonomic shapes or particularly beautiful designs can be created with ease. Smooth transitions and flowing shapes for

a good "grip" are the goal here on the 3D model. Whether classic, modern or romantic - KAJA offers for every bathroom and for every kitchen great ensembles. Even customer-specific special models are no problem for Mr Sica and his team. Special designs are now part of their daily business.



DETAILED PROTOTYPES THE NEXT DAY

In the development phase of a new valve, speed plays a particularly important role. "The market demands meaningful results in ever shorter intervals", says managing director Dennis Janke. An enormously important component within the KAJA development processes is therefore the 3D-printer from Markforged. With the desktop version **Onyx Pro von Markforged**, glassfibre reinforced components can be printed within a very short time. Extremely stable and waterproof, these components can go directly into testing. Attaching additional components or surface treatments, such as chrome plating, are no problem. KAJA is therefore able to print prototypes overnight, which are in no way inferior to conventional cast prototypes, but are visibly faster and more cost-efficient to produce.

"SOLIDWORKS made it easy for me! You don't have to search for a long time and have your head free for new products"

Florian Sica, KAJA

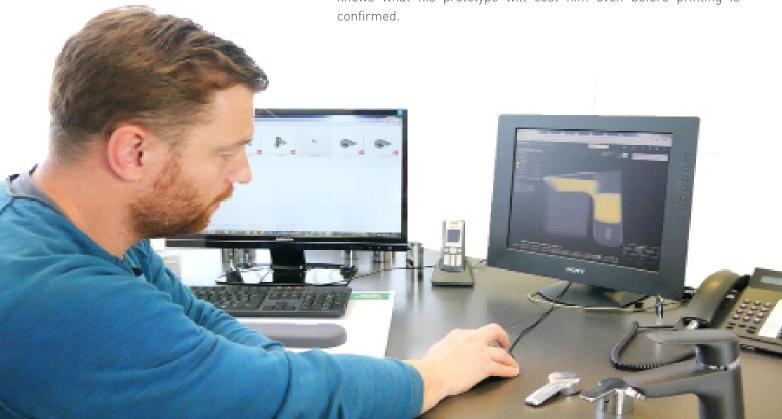


BY "DRAG AND DROP" TO THE 3D-PRINTED COMPONENT

"Super fast, super easy without complications!"

Florian Sica, KAJA

The Markforged 3D printers come with their own cloud-based software, **Eiger**, ausgeliefert. This software is available immediately after registration of the printer and can be used on any computer with internet access. So Mr. Sica simply drags and drops his 3D CAD model into the Eiger user interface. There he then defines the print parameters for the component to be printed. The position, the structure and the material can be determined in detail. The extrapolation of the material consumption and the associated cost determination is of decisive importance. This way, Mr. Sica knows what his prototype will cost him even before printing is





Markforged Onyx Pro

The use of the Markforged 3D printer and the SOLIDWORKS software solution opened up a whole new world of possibilities. Conventional production methods no longer have to be taken into account during development. "There is no longer any need to resort to spatulas and milling cutters when creating prototypes," says Janke. "Just print!" The managing director also explains that even in-house spare parts for the company's own machines and equipment are printed using the Onyx Pro 3D printer. The resilience of the 3D-printed components is enormous and so they can be used as functional parts without any problems.



THE PERFECT COMBINATION - SOLIDWORKS AND MARKFORGED

"You are quickly and easily assigned an answer or a contact person"

Dennis Janke, KAJA

The combination of SOLIDWORKS solutions from **COFFEE GmbH** and 3D printers from **Mark3D** is perfect for KAJA. Both the sales consulting and the support are competent, uncomplicated and fully coordinated. Mr. Sica especially appreciates the chat on the two company websites. The possibility of direct input of questions and contact without further interface is top.

NEW SHAPES AND FRESH DESIGNS

For the future, KAJA Armaturen will continue to develop products. With new shapes, fresh designs and customer-specific fittings, the small manufactory is heading for completely new markets. Best equipped with the SOLIDWORKS CAD software and the 3D printer from Markforged as a complete solution, nothing stands in the way of a successful further development of Kaut & Janke GmbH & Co. KG.



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