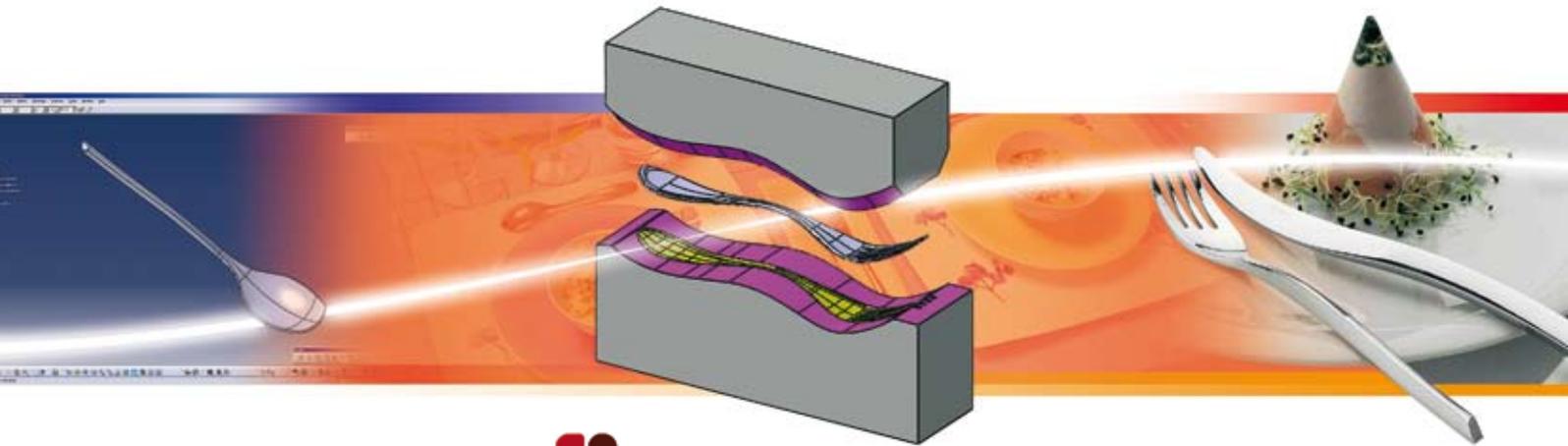


Guy Degrenne Group

Pushes the limits of creativity and innovation with CATIA and ENOVIA SmarTeam



Overview

■ Challenge

Guy Degrenne Group needed a solution that would cover its entire production process for metal and porcelain products

■ Solution

The company chose CATIA to manage its design-to-manufacturing process for cutlery and ENOVIA SmarTeam to manage and secure its technical documentation

■ Benefits

Guy Degrenne reduced the time required to produce the first cutlery stamping matrix from eight to two weeks

“DS PLM has become an essential part of our development strategy. CATIA and ENOVIA SmarTeam are configured to meet the needs of our profession. They help us push the limits of creativity and innovation thanks to the flexibility of each solution.”

Christian Van Boxesom,
Director Cutlery Division, Guy Degrenne

Leader in the art of entertaining

Founded in 1948, Guy Degrenne Group is a leading manufacturer of cutlery and tableware with annual sales of 100 million Euros. The company has 1,400 employees, 25 boutiques and four production sites worldwide including Vire and Limoges, France (cutlery, industrial subcontracting, and porcelain) Thailand (cutlery) and Hungary (porcelain).

The Vire site employs 600 people and produces more than 14 million items per year. The design and manufacturing office, equipped with five CATIA seats since 2004, creates all digital models and designs the tooling for each production site.

Master the product launch process

“We installed CATIA V3 in 1989 and V4 in 1995, before moving to CATIA V5,” said Christian Van Boxesom, Director Cutlery Division, Guy Degrenne. “It was a wise choice since CATIA covers all our production

processes for metal as well as porcelain.

Today, CATIA manages the entire design-to-manufacturing process for cutlery, from initial studies all the way to the machining of stamping matrices for our most delicate pieces or the forging of thicker pieces or knife blades.”

Once a new product launch has been validated at Guy Degrenne, it is managed by the design office where designers define the 3D representation of the object. They then design the tooling for pre-series production using the shape of the objects and manufacture, on site, a prototype, which will be reviewed before the final decision. “Any modifications at this stage can easily be taken into account with CATIA, thanks to parametric geometry,” explained Charly Herbert, Design Office Manager. “And since we can make changes quickly, we are able to test many possibilities.”



Tooling is then produced directly from the 3D CATIA model, which is natively linked to the CATIA NC programming. "Before CATIA, we had to do extensive redesign work whenever modifications had to be made," said Herbert. "Now we can completely guarantee the quality and create a design that respects the desired style."

Optimize the cutting process with CATIA

Once the final form is validated and the tooling is manufactured, production can begin. Guy Degrenne places a priority on optimizing the use of raw materials. Since cutlery is manufactured using steel rolls, CATIA can optimize how each band of steel will be cut, thereby ensuring that the least amount of material is used for any given number of items. CATIA can also automatically flatten out the surfaces making it possible to take into account deformations of the metallic parts. Know-how is capitalized in the software, which guarantees that the final form is exactly as requested.

"Thanks to standard parameterized elements, our tooling is optimized and can be perfectly mounted," said Van Boxesom. "Our computer-aided manufacturing processes are also standardized, which is a considerable time saver. We have reduced the time needed to produce the first cutlery stamping matrix from eight to only two weeks, and it is easily modifiable."

Guy Degrenne plans to integrate CATIA throughout the entire value chain of its design office. "We are even going to digitally model the packaging for our products. This will not only be a way to propose attractive cases for our cutlery, it will also provide us with ready-to-use, parameterized packaging that will help us optimize the production of our gift boxes," added Herbert. "CATIA has been an indispensable ally when it comes to meeting our objectives to reduce costs and design cycle time. It has helped us not only procure the right amount of material, it has also allowed us to design and react quickly to market demands."

In constant evolution: CATIA Design Studio

Guy Degrenne is looking into the possibility of using the modeling tools of CATIA Design Studio for better integration with design and engineering. The company uses ENOVIA SmarTeam to manage and secure its technical documents thereby maintaining its know-how throughout the lifecycle of its products. ENOVIA SmarTeam will also enable Guy Degrenne engineers to improve collaboration with the company's production sites around the world.

"DS PLM has become an essential part of our development strategy here at Guy Degrenne," concluded Van Boxesom "CATIA and ENOVIA SmarTeam are configured to meet the needs of our profession, They help us

push the limits of creativity and innovation thanks to the flexibility of each solution. They also provide the different actors of a project with an efficient means of communication."

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Charly Herbert,
Design Office Manager, Guy Degrenne



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