

Snop

An industrial project to develop a composite beam

The Quilted Stratum Process (QSP), a high-speed thermoforming pilot line developed by Cetim, is now being used in industrial production. Snop and Cetim have indeed confirmed the interest of this demonstrator for the manufacture of an automotive front bumper beam.



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OUR CUSTOMER

Corporate name
Snop

Turnover
EUR 884 million

Workforce
3,200 people

Business activity
As a stamping, profiling, assembly and tooling specialist, Snop is a leading player in the automotive industry. The company is a benchmark supplier in the design and manufacture of components making up the body in white, the passenger compartment and the engine environment as well as the design and manufacture of press tooling and automatic presses.

Composite materials have only recently been introduced into automotive production; however Snop is ready to take the plunge!

It all began in 2015. At that time the company, which specialises in the stamping of metal automotive bumper beams wanted to assess the possibilities of using composite materials in this field. It therefore partnered with Cetim to create an industrial demonstrator based on the Quilted Stratum Process (QSP), a high-speed thermoforming pilot line. This line relies on a patented technology that stems from scientific work conducted with the Comp'Innov laboratory and

Onera, and its industrial development is carried out in partnership with three French mechanical engineering companies, Pinette Emidecau Industrie (PEI), Compose and Loiretech.

A win-win project

"This project was carried out in close coordination with Cetim and enabled us to increase our skills in composite materials while at the same time transferring our bender beam know-how to Cetim's experts," explained Bernard Hugot, Process innovation Manager at Snop. "We view this sharing of expertise as a means of always staying sharp and at the cutting edge of research in these emerging technologies. This is a crucial issue as composite materials are increasingly being used in automotive production and production rates are on the decline, thereby enhancing the appeal of this solution".

What matters is being ready

For the time being the company has decided to invest in a new hot stamping machine, despite several conclusive impact tests. *"This is an entirely strategic decision supported by the company's prospects on its various markets," Bernard Hugot continued. "The future of composite materials is a bright one. The automotive market is currently undergoing radical changes and technologies are constantly evolving, it is therefore fundamental that companies stand ready so they are able to act when all the conditions are in place."*

Cetim's asset

Cetim has the dimensioning, calculation and process implementation expertise to successfully carry through industrial projects involving composite materials. The centre's experts leverage on resources such as the Quilted Stratum Process (QSP) to achieve this.

