# DAV Equipements
# A sparkling concept

The Castalie machine ecodesigned by DAV Equipements refines drinking water from the local mains and adjusts its sparkling, mineral content and temperature on demand.

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## Cetim's asset

Through Cetim's support, customers are provided with a standardised approach (NF E 01-005 / CEN TS 16 524), pragmatic tools that can be used by design offices (ATEP tool) and environmental data which constitute benchmarks to guide design decisions and enhance the value of improvements.

**OUR CLIENT**

**Corporate name**
DAV Equipements

**Activity**
Bar outfitting, Draft beverage dispensing systems

**2013 turnover**
21 million Euro

**Workforce**
130 employees

DAV Equipements was commissioned by Castalie to take the concept of a machine that is able to "manufacture" water on site to an industrial scale for hotels, restaurants and businesses. A prototype was created with the principle being that drinking water is micro-filtered to remove chlorine, particles and any residues from the pipelines. A carbonator, which is incorporated into a cooling unit, is used to adjust the sparkling on demand. The temperature and the mineral content can also be adjusted. Castalie then asked DAV Equipements to reduce the environmental impact of the machine. DAV Equipements called on Cetim to carry out an ecodesign approach. *"Our basis was a machine that was already being used by customers,* explained Jean-Denis Bargibant, production manager at DAV Equipements. We then analysed the environmental impacts of the various lifecycle stages before devising an improvement plan."

## Energy consumption reduce by 20%

The first improvement integrated the production of plain water and sparkling water with two bubble sizes into the same machine. Whereas before, two different machines were required. Secondly, the electricity consumption was reduced by 20%. This was done by incorporating standby functions into the machine and by optimizing the temperature setting in the electronic board that manages cold production and gasification. Thirdly, the copper, a rare material, was replaced with stainless steel. In the future, replacing the refrigerant will help substantially reduce the product's environmental impact on the environment. In fact, by replacing the R134a gas with propane, the greenhouse gas released will be 450 times less.

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