



Princes Gate Water

Knowledge Transfer Centre puts the sparkle back into Princes Gate Water.



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Swansea University's Knowledge Transfer Centre (KTC) in simulation-based product design has helped Princes Gate Spring Water address the premature loss of carbon dioxide from its bottles of sparkling water.

The Swansea KTC promotes and demonstrates the benefits of new technology and specialist services, to both industry and business. The collaboration provided Princes Gate with access to research facilities and technical assistance that was readily available within a short time-frame.

The KTC at Swansea University, supported by Welsh Government A4B funding, employed four technologists to work on the three-month project. They used simulation tools to investigate design

issues within the two areas of emphasis – fluids (the water) and solids (the bottle).

KTC personnel initially looked at the company's bottling plant to research any obvious issues, but no such issues were identified. Subsequent investigations centred on the bottle- cap; specifically on how to prevent the escape of gas.

Within the time frame, the only potential cause of gas loss that could be investigated with tools immediately available to the KTC was that associated with the cap design. Research and computational analysis was then undertaken and the results presented to Princes Gate at the end of the three months. This resulted in the company improving its production process in light of the KTC's findings.

Peter Moran, Director of Operations, Princes Gate Spring Water commented: "We're a manufacturer of bottled water, which runs still and sparkling variants through our production lines. A few years ago we were having issues that our sparkling water was not "fizzy" enough. This was often after some time in storage; we were unsure whether this was through the cap or whether it was down to our water, for this reason we approached the university to help understand why we were losing our sparkle. The technical research and report provided by Swansea Uni was very helpful and as a result we were able to move on and increase how much Co2 we put in with no further complaints."



To find out more about funding and support from the Welsh Government:

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