A sister company with cutting edge expertise in IR pyrometry

Pentronic is owned by Indutrade, which is one of the current success stories on the Swedish stock market. However, Pentronic doesn't just have a strong owner. The Indutrade group also includes other companies with special expertise in the temperature field.

Gedevelop AB in Helsingborg is a company with in-depth knowledge of temperature. It is no coincidence that Pentronic's CEO Lars Persson is also chairman of the Gedevelop board.

"There are clear synergies between the companies," says Gedevelop's CEO Stefan Ekström.

The company originated as a development project by Gullfiber AB, a Swedish manufacturer of insulation materials. The aim was to measure the stream of molten glass in the production of fibreglass. When Gullfiber was bought by Saint-Gobain Isover, the project was spun off as an independent company, which was then acquired by Indutrade.

The original measuring process during fibreglass production has now been expanded into another application: glass containers – which includes bottles, jars and other containers made of glass. The aim of the measuring process is to help create identical containers with the exact same thickness of glass and lower consumption of energy and raw materials.

Gedevelop has developed the method from scratch. When containers are made, the stream of molten glass is separated into individual bits, called "gobs". These pass by an advanced camera, which without touching the molten glass measures its speed, geometric properties and, indirectly, its viscosity. The data are then used to optimise the gobs so they can be turned into high quality glass containers. Everyone who has ever looked closely at a bottle of Absolut Vodka knows that the results are first class.

So what does the temperature have to do with this?

"Inside the camera is an infrared pyrometer," explains Stefan Ekström. "We measure the temperature to provide data for calculating the viscosity of the glass."

The pyrometer has been designed by Gedevelop. It operates within the double-wavelength ranges so that it can measure semi-transparent objects that are rapidly passing by the camera. This kind of knowledge should be applicable in applications far outside the world of glass containers, and this is where Pentronic enters the picture.

"We've begun exploring the idea of closer cooperation, and hope it will be mutually beneficial," Stefan says.