



IT WOULDN'T BE AMSTERDAM WITHOUT PUMPS

Holland has an unusual situation when it comes to providing wastewater solutions. Over 45% of the country is actually up to 6 metres below sea-level.

When Bosman Klimaat & Sanitair were asked to deliver a drainage system for the underground car parking area of a major new office complex, The Plaza Arena outside Amsterdam, they involved Grundfos at the very beginning of the project.

Hans van Dijk, Company Manager for Bosman Klimaat and Sanitair, has had over 18 years of experience as a hydraulic engineer in Holland, and has worked with Bosman for two years. He already had a firm relationship with Grundfos through many Hydro booster installation projects. This was the first time he had asked them to supply a wastewater solution.

The Plaza arena is the first project of its kind in Holland and unique challenges were encountered at every turn. It was Hans' job to provide reliable drainage for two parking decks – one above and one below ground level – with space for around 1,800 vehicles. With no comparative data available, calculations had to be based on historical data alone – and future climatic developments could only be guessed at. In combination with his building advisors he chose to consult Grundfos.

IN-DEPTH KNOWLEDGE SHARING
Grundfos were called on to combine their international experience and wide range of wastewater technology with Bosman's specific local knowledge to create an effective and reliable solution. A system was eventually developed by Grundfos, Bosman and the building advisor which provided significant over-capacity to allow for any eventuality.

With Grundfos taking on the project, from pre-engineering to final installation, the 3,500 metres of rainwater drainage pipes were channeled through the upper deck support columns to a drainage pit in the lower deck. Here, three electronically controlled S2 pumps transport the wastewater to an open drainage channel.

In addition, when it came to providing service and support for the system, Grundfos offered Bosman a special package that included the wastewater systems of nearby Amsterdam ArenA stadium. These savings in time and logistics are an added bonus.