



Water



To date, Singapore has largely relied on imports from Malaysia for its supply of drinking water. In order to reduce this dependency, it was necessary to expand the provision of drinking water in Singapore. Nijhuis Pompens BV is supplying the pumps required for this project.

The Public Utilities Board, the company that is responsible for infrastructure work in Singapore, launched the large-scale project under the name 'Marina Barrage'. The aim of the project is threefold: water supply, flood protection and the creation of leisure facilities.

A dam will separate Marina Bay from the ocean, creating a basin in which rainwater can be collected. The intention is that within two years of closing the dam, the seawater will be converted into normal fresh water by means of 'natural flushing', thereby making it suitable for drinking water treatment and leisure purposes. So that the water level in the basin is kept under control, a drainage system with seven pumps will be installed next to the dam to discharge excess water back into the sea. This will keep the basin's water level constant and prevent flooding.

Major project for Nijhuis Pompens BV

Singapore gets its own drinking water supply

The Singapore-based company Metax Engineering is acting as the supplier of the complete mechanical system for this project. Metax has commissioned Nijhuis to provide the seven vertical pumps. Nijhuis has taken on the design of the entire pump system, the model tests and the supply of the pumps. The capacity of the pumps constructed for this project is 40 cubic meters per second, with a head of 3.8 mlc. One pump weights 28,000 kilograms and is 7.8 meters high when assembled. The propeller measures 3.2 meters in diameter. As it would be very complicated to transport

the pumps in their assembled state, the pump components will be assembled in Malaysia. Assembly will take place under the supervision of experienced Nijhuis employees. This section of the project is scheduled to be completed in mid-2007. The final transfer of the entire project from Metax to the Public Utilities Board, the end customer, is scheduled for late 2007.