



CLIENT:
De Stichtse Kraan VOF

LOCATION:
Utrecht
The Netherlands

PROJECT
START-END DATES:
04/2017 - Ongoing

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ABOUT UTRECHT WWTP

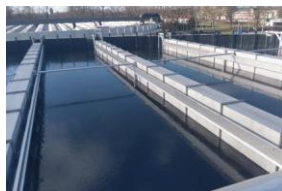
The city of Utrecht, one of The Netherlands' major cities, needed a new wastewater treatment plant. The plant was required to replace the current outdated installation, while meeting the more rigorous effluent demands. Following a public tender, in April 2016, the Dutch construction companies Heijmans and GMB were awarded the contract to build a new municipal wastewater treatment plant by water authority De Stichtse Rijnlanden. The €120 million project comprises the design, construction and 10-year maintenance of the plant, which will use Nereda's award-winning wastewater treatment technology.

THE CHALLENGE

Heijmans-GMB was awarded the contract by De Stichtse Rijnlanden based on its selection of the use of Nereda technology to purify the municipal wastewater, meeting the stringent effluent requirements, within a compact plant. Two important effluent parameters for the project were for nitrogen (N total: 5 mg/l) and phosphate (P total: 0.5 mg/l).

THE SOLUTION

Construction work to rebuild the current obsolete WWTP that was built in 1959, commenced in 2017. Due to the location of Utrecht's sewer system, it was decided to build the new installation on the existing site. Owing to its compact nature, it was possible to construct it alongside the existing plant. The new wastewater treatment plant removes twice as much nitrogen and phosphate from the water. The purification process of the plant is much faster, so as well as being 30% more energy efficient compared to the original plant, it is also considerably smaller. With no need for large post-settling tanks, a great deal of space has been saved. The original plant had 14 sedimentation tanks in use, which have been replaced by just six Nereda tanks. The old plant was removed from service once the new plant had been commissioned. The project is now complete and the 10-year maintenance period has commenced.





THE OUTCOME

The fact that Nereda was again selected by a Dutch water authority demonstrates the technology's popularity and reputation for delivering excellent results in The Netherlands and beyond. On completion, the Nereda plant at Utrecht is the biggest constructed so far in The Netherlands, with an average daily flow of 55,000m³ and a capacity of 343,000 pe. For Nereda technology owner Royal HaskoningDHV, this project represents an important milestone.

Nereda in brief:

- Uses less space
- Totally biological action
- Cheaper to run
- Lower energy consumption
- Better water quality
- Ecologically sound
- Sustainable performance