

Dredging Gets Green



▲ *Watermaster arrives on-site...*



▲ *...is detached from its trailer and...*



▲ *...'walks' into the pond*

A small site and a difficult location were among the challenges faced during this unusual project to dredge an irrigation pond at a Finnish horticultural college

Founded in 1977, but dating back as far as the 1500s, the *Countryside College of Southwest Finland* was formed to educate professionals in the farming, gardening, forestry and nature sectors.

Annually, over 400 students attend the college, which is spread over 300ha, with 145ha dedicated to the farming of plants including apple trees and blueberry bushes.

In the 1960s, an artificial pond was created to help improve watering of these fields, but during the following decades, sediment build up made irrigation increasingly difficult.

"Solids were jamming the pipes so something had to be done," says the college's headmaster Matti Korhonen. "The site's small size and difficult location, with deep slopes and shallow waters, however, made it tricky to find suitable machinery to remove the excess material. None of the traditional dredgers were up to the task," he confesses.

Eventually, the right tool for the job came along – Aquamec's small and powerful *Watermaster* environmental dredger, which was able to literally 'walk' by itself into the water.

MIRACULOUS MANOEUVRES

After careful planning, the project began with construction of a temporary settlement pool where dredged material could be pumped and clean water allowed to drain back into the pond. The depth and condition of the pond and its bottom were then assessed to determine the amount of dredging required, which both client and operator eventually agreed would have to take the pond down to an average 2.5m.

Watermaster was initially detached from its trailer and manoeuvred into a position on the bank, where operator Sami Ojanen switched its backhoe bucket attachment with a cutter suction pump, then 'walked' the vessel into the pond. *Watermaster* was next brought close to the settlement pool and a pipeline attached to pump sediment mixture from the pond into the pool.

The altitude difference between the pond and the settlement pool was about 10m and the distance from the dredger about 50-100m. The entire project took about

Fingers



▲ *Work begins with Sami Ojanen at the helm*



▲ *Dredging site and the school from above*

three days and a total of about 3000m³, of solids were removed.

FINALLY...

Mr. Korhonen was very happy with the results, saying: "Watermaster displayed great efficiency and versatility, taking just a few days to complete a task that might have proved problematic for other equipment."

Now, with the fresh water irrigation system flowing normally again and the plantations flourishing, all that remains is for the settlement pool area to be landscaped for farming.

More info at www.watermaster.fi



▲ *Settlement pool before and...*



▲ *...after dredging*