The world's population consumes an enormous amount of mushrooms each day. To meet this demand, highly efficient and hygienic production methods are required to deliver quality mushrooms on-time. Because of their proven performance and reliability, TenCate materials have become the mushroom and composting industry standard for pulling nets.

For instance, the indoor composting process for mushroom substrate uses a lot of energy. High energy prices have pushed composting companies to look for ways to reduce costs. They have found a solution in TenCate Nicolon pulling nets. Their high airflow performance combined with high pulling strength, low weight, thin material and limited narrowing effect significantly increase yield and quality while reducing energy cost and down time.

Nicolon nets are used in mushroom growing, composting and other related applications. More than 30 years of knowledge and experience prove that Nicolon nets are a reliable and tested contribution to your results.

Remediation of the mercury-contaminated sediments in Svartsjöarna with Geotube®

Application : Pulp and paper sludge containment and dewatering
Location : Paulistrom Sweden
Contractor : DEC/Dredging International Belgium
Product : Geotube® GT 500
Project cost : 10.8 million Euro
The Challenge
Svartsjöarna in Sweden are located near Pauliström. Through the lake, a small river runs into the river Emån. This Emån river is considered to be one of the most valuable water courses in Sweden. The river has a very high diversity of fish species and animal like otter. Some parts of the river have very well developed meander systems. For these reasons, a remediation had to be carried out very carefully. Industrial sites have been located along the river since the 1700’s, affecting the water quality. Svartsjöarna have for a long time served as sedimentation basin for pulp fibres coming from the Pauliström paper mill, 3 km upstream of the lake. In the mid-60’s, a mercury based product was used for protecting the pulp from bacteria. The contaminated sediments consist of cellulose fibres polluted with mercury. It is estimated that the total fibre discharge from the mill amounts to between 15 and 20.000 tons.

The Solution
A joint venture of DEME Environmental Contractors (DEC) and Dredging International was rewarded this design and construct contract. DEC-DI is a Belgian consortium with long standing international experience from similar environmental projects. The remediation works in Svartsjöarna involves dredging of approx 260.000 m$^3$ of mercury contaminated fibre sediments. These sediments are pumped to the landfill nearby, specially prepared for this project where it is treated with polymers (flocculants) and pumped into Geotube®. It is the first time that this new technology is used in Sweden and the largest project in Europe with Geotube® till now (sept 2006). Geotube® is a structure, made from filterweave from TenCate, with small pores, resulting in effective dewatering of sediments. The dimensions of Geotube® for the project are approx 50 meters long with a circumference of 18,3 meters. In order to reduce the landfill surface, Geotube® will be stacked up to three layers high. Dewatering of the sediments takes place in the basin. After several times of filling and dewatering of Geotube® the consolidation of the sediments reaches its final stage. The wastewater coming from the dewatering process is treated and controlled before it flows back into the lake. After the final consolidation of the three layers, the landfill will be covered with soils and closed in 2007 after final inspection.