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# The usage potential of geotextile tubes in Finland

# Možnosti uporabe geotekstilnih cevi na Finskem

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## Abstract

The purpose of this study/paper was to survey Finland's geotextile tube market. In Finland sludges and fluid waste are generated within different branches great volumes every year. The handling of these sludges and fluid waste often requires the separation of the fluid and the solid fractions from each other by drying. The geotextile tube treatment is an alternative to the drying of sludges and fluid waste in lagoons. Geotextile tubes have been used to contain and stabilize coarse-grain materials around the world for more than 50 years. In many applications geotextile tubes have been used as hydraulic management or coastal protection structures. Fine-grained materials have been treated with geotextile tubes for about ten years. For example municipal, industrial and environmental dredging sludges have been contained successfully in geotextile tubes. The use of geotextile tubes in the handling of fine-grained contaminated materials has been made possible by the cooperation of the chemical and geotextile tube industries.

**Key words:** geotextile tubes, paper sludge.

## Povzetek

Namen te študije/članka je v pregledu ponudbe/uporabe geotekstilnih cevi na Finskem. Mulji in tekoči odpadki v velikih količinah nastajajo vsakodnevno v različnih industrijskih branžah na Finskem. Ravnanje z mulji in tekočimi odpadki pogosto zahteva ločevanje tekoče in trdne faze/frakcije s postopkom sušenja. Uporaba geotekstilnih cevi lahko predstavlja alternativo metodi sušenja muljev in osuševanju lagun s tekočimi odpadki. Geotekstilne cevke, ki so v praksi namenjene predvsem stabilizaciji grobozrnatih materialov, se v svetu uporabljajo že več kot 50 let. V številnih primerih uporabe so bile geotekstilne cevi uporabljene v hidro-inženiringu ali z namenom zagotavljanja stabilnosti priobalnih objektov. Za ločevanje drobnozrnatih materialov se geotekstilne cevi uporabljajo okoli deset let. Tako so poznani primeri uspešne uporabe geotekstilnih cevi za komunalne vode, industrijske vode in vode z naravnimi rečnimi mulji. Uporaba geotekstilnih cevi tudi pri ravnanju s finozrnatimi onesnaženimi materiali bi bilo mogoče v primeru sodelovanja med kemijsko industrijo in industrijo geotekstilnih cevi.

**Ključne besede:** geotekstilne cevi, papirniški mulj.