CASE HISTORY

SEMICONDUCTOR

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POWER GENERATION

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CHEMICAL

OIL AND GAS

MINING

AEROSPACE AND TRANSPORT

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Toveko Filters

Gävle Harbour, Sweden - Oily Waste Treatment



The city of Gävle is situated about 180 kilometres north of Stockholm. About 100,000 people live in Gävle. The city is an important part of northern Sweden's industry and its port handles much of the nation's oil imports. Goods of all kinds are unloaded from more than 1,100 ships every year including 900,000 m³ of oil products.



View over Gävle Oil Harbour

Eight well-known oil companies have facilities for the unloading and storage of products in silos located at the harbour area. For the treatment of oil spill from ships being unloaded, each company has its own oily waste water system that removes most of the contamination. These plants are followed by a common water reception area that is piped to a 6,000 m³ lagoon. The final treatment stage involves removal of final traces of oil using a sand filter. A Model S-300 filter was supplied to operate as the final polishing step for this application. The flow rate for the installation in Gävle is about 24m3/h per hour. Typical influent suspended solids peaks at 50 mg/l.

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Influent pit to cleaning plant



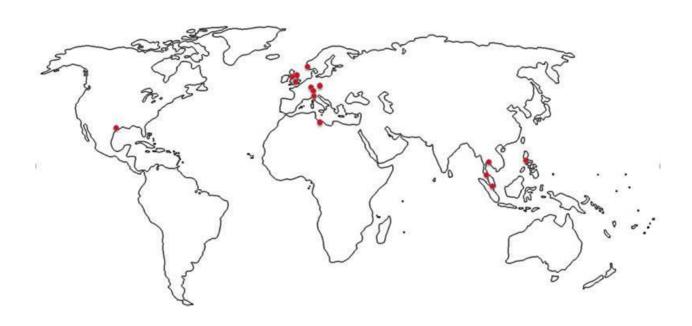
Technical Manager Per Hedlund of Gävle Harbour at Toveko CX filter

The governmental and the environmental protection authorities in Sweden conform to the EUregulations requiring a value of less than 5 mg/l suspended solids in the treated effluent. The Toveko filter has performed so well, and reliably that its reputation has spread to other Swedish ports. This has resulted in several more Toveko filters being supplied for similar applications and there are more to come.

Oily wastewater from the production and surface treatment industries that contains heavy metals such as iron, chrome, nickel, copper, lead or zinc or emulsions can also be successfully treated by a Toveko CX filter providing precipitation of the metals is carried out prior to the sand filter.

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