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Arab Water World

عالم المياه العربي

February 2016 / Vol. XXXIX Issue 2

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KWT's Latest Development Holds Great Promise

KWT Group is a well-known supplier of stainless steel fabricated penstocks, channel gates and weirs for quantitative water management applications, such as wastewater treatment plants, pumping stations, surface water management, wetlands creation, hydropower dams, and industrial applications (power stations, paper mills etc). KWT combines both HDPE and Low Carbon Stainless Steel in order to reach the sustainable quality required for most aggressive environments like tropical marine applications and the inlet section of Sewage Treatment. The company produces a large range of Penstocks resisting both on- and off seating operating pressures as used in the industry today. High pressure penstocks resist a nominal pressure of 10 Mwc but can be designed to resist operational pressures of over to 28 Mwc, using a unique and patented wedge system. The penstocks are specified against an off-seating rate of 0,3 ltr/min/



Channel penstocks at a UK wastewater treatment plant

mtr seating perimeter thus meeting both DIN 19569-4, AWWA C561-04 and BS-EN 7775 requirements. Stainless steels comply to BS EN 10088 and ASTM A 240. In addition to its current range of penstocks KWT's latest development has been named INOX4 DT; its excellent characteristics hold a promise. Thanks to

new technologies and design techniques, such as the practical use of finite element analysis (FEA), improved leakage rates have been achieved. Better use of raw material became possible and as a result, products are now lighter, stronger and 'drop tight'. KWT is an approved supplier in all of the GCC countries. ■

APATEQ Provides Treatment Technology for Scandlines Ferries

Luxembourg clean-tech company **APATEQ** has been awarded a contract by shipping company **Scandlines Danmark ApS** to develop, build and supply a harbor installation of its new one-stop solution for scrubber water treatment: "MarinePaq". The containerized plant will treat the wastewater produced during the exhaust gas cleaning process on Scandlines'

two new ferries connecting Rostock (D) and Gedser (DK). The resulting clean water will exceed current and future legislation. APATEQ's compact scrubber water treatment system MarinePaq uses proprietary process technologies for high-efficiency primary treatment, followed by ultrafiltration and rounded up by heavy metal extraction processes. The sold MarinePaq will treat wastewater

arising from closed-loop scrubbers that are installed on Scandlines' ferries. The treatment will take place at a centralized facility at the harbor of Gedser (DK) producing an effluent with a quality compliant for direct discharge into the harbor basin. The plant will be built in two 12 meter containers stacked on top of each other, ensuring a minimum footprint, which is an important factor for an installation at an existing harbor. Scrubber wastewater is typically highly contaminated with heavy metals, hydrocarbons and soot arising from the heavy bunker oil used. Current treatment technologies available on the market such as hydro-cyclones and centrifuges are often overstrained with scrubber water. By means of the MarinePaq solution, even the smallest particles are reliably removed, providing an effluent that allows a direct discharge into open water. ■



Ultrafiltration module in APATEQ's MarinePaq container for scrubber water treatment