

# REFIT AND ENLARGEMENT OF AN URBAN WASTEWATER TREATMENT PLANT

<b>CLIENT</b>	PUBLIC UTILITY
<b>LOCATION</b>	CORDENONS, PROVINCE OF PORDENONE, ITALY
<b>USE</b>	REFIT AND ENLARGEMENT OF AN URBAN WASTEWATER TREATMENT PLANT
<b>PRODUCT</b>	OPEN-MESH GRATINGS, COVERED GRATINGS, HANDRAILS, STAIRWAYS, FIXED LADDERS, FRP PROFILE SUPPORT STRUCTURES, SUBMERGED BAR SCREEN FOR PUMP PROTECTION
<b>SERVICE</b>	SURVEY, DETAILED STRUCTURAL DESIGN INCLUDING CALCULATION REPORT



## OBJECTIVE

Create all support structures for the enlargement and refitting of the current water treatment plant following removal of pre-existing deteriorated structures in galvanised steel.

## SOLUTIONS

For the refit of this undersized wastewater treatment plant running on obsolete technology, the customer went ahead building new support structures in fibreglass, as was requested in the specification, to lower maintenance costs over the plant's operating life. One part of the existing deteriorated structures in galvanised steel was therefore replaced with gratings, handrails, stairways and fixed ladders in FRP (fibre-reinforced plastic).

The new plant was equipped with an odour control solution using covered gratings to cover the tank. Finally, appropriate corner profiles and a custom support structure were used to create a bar screen that will remain permanently submerged in the wastewater to prevent large solid elements reaching the pump. M.M.'s technical department supported the client through different phases, including initial design (with particular attention to the different loads to which the structure could be subjected), calculation report and site survey.