

# GANGWAYS AND STAIRWAYS FOR WATER TREATMENT BASSINS

## LOCATION

The waste-to-energy facility allows a great energy recycling of refuse. This plant assimilates indicatively 90.000 tons of refuse which combined produces electric energy (33.400 MWh in 2010) and thermal energy used for the heating of most of the city of Como.

## CLIENT

The municipalized company for the public utility servicing runs this plant.

<b>LOCATION</b>	<b>COMO (ITALY)</b>
<b>USE</b>	<b>GANGWAYS, STAIRWAYS AND PARAPETS</b>
<b>PRODUCT</b>	<b>GRATING SCH 38/30_IFR AND SCH 38/30 C_IFR</b>



## OBJECTIVE

The company that runs the water treatment of this plant wanted to remove the metal gangways and stairways that were ruined by use and corrosion. They needed a material that could resist to any weather conditions (-12° to + 38°). The pedestrian gangways were placed over water bassins (water with 7-10 pH value and temperature of 30-40°C) and were used for servicing and for the running of the plant. In order not to stop the plant production, the new installations had to be pre-fabricated and ready to be installed. All installation phases had to be planned. The proposed materials had to be easy to install and resistant to acids and bases in a range of 2 - 13 pH and with the need of minimum servicing. Antiskid level had to reach level R13-V10 of the DIN 51130 norm.

## SOLUTION

M.M. has designed and built new structures made with gratings type SCH38/30\_IFR and pultrudes profiles in isophtalic resin and glass fibers. The structures have been assembled in M.M. works in order to reduce as much as possible the installation work in the plant. They have been built according to the UNI EN ISO 14122 - 1,2,3 norms and according to the 81/2008 Legislative Degree. These light weight structures could stand the required load and the antiskid level R13 of the DIN 51130 norm was guaranteed. The installation of both open and covered surface gratings allowed an immediate visibility of the basin and the prevention emission of spurts and odors. The properties of the materials guarantee a long life without the downfall of the mechanical resistance even in aggressive environments. Due to the dielectric property of M.M. gratings, they are considered excellent insulators according to the EN 61340-2-3 and IEC 61340-4-5 norms of the electric field. The yellow color of the profiles is related to safety.