

FRP STRUCTURE FOR ACCESS AND MAINTENANCE TO THE MACHINERY IN THE DEHYDRATION AREA

CLIENT	SUEZ INTERNATIONAL S.A.S
LOCATION	PANAMA
USE	STRUCTURE FOR ACCESS AND MAINTENANCE TO THE MACHINERY IN THE DEHYDRATION AREA
PRODUCT	STAIRCASE AND PLATFORM IN FRP
SERVICE	DESIGN, DELIVERY AND INSTALLATION ASSISTANCE



OBJECTIVE

The client had to substitute the structures for accessing the machinery (made up of a platform with its staircase to reach the upper area) in a water treatment plant. The structure was made of metal and it was evidently degraded by the on-site corrosion problems.

Considering the factual production needs for the treatment plant, it was necessary to reduce to a minimum the time to get rid of the old structure and to install the new one made of FRP, keeping a disposition according with the available space, which is limited by the presence of the machinery already in place.

SOLUTIONS

The client chose a product made of composite material instead of one made of metal. This choice was conditioned by the high resistance of FRP to corrosion and by the ease to install the elements which were completely or in part pre-assembled. M.M.'s technical department followed the whole project from the design to the on-site setting through its local representative.

First of all, the existing metal structure was cut off in order to remove it from the installation site. After the iron structure was removed the steel basement and the anchoring bolts from the old structure were removed as well. Then, a cement base was laid to reset the floorcovering for the installation of the new FRP structure. After the new structure was taken to the installation site, the surface was cleaned and the tracing for the anchoring was made in order to firmly secure the structure onto the floor. The FRP staircase and platform were then positioned and attached and later the whole structure was anchored to the floor. Ultimately, the bracings were installed to make the structure rigid.

The whole removal of the old structure and the complete installation of the new one required only 2 working days, including the 12-hour pause to let the cement mix to harden.

This system for the setting of pre-assembled modular elements is swift and guarantees high quality with a considerable reduction of work time.