

RADIO-TRANSPARENT AND FRANGIBLE FENCE FOR AIRPORTS

CLIENT	CONSTRUCTION COMPANY WHICH DEALS WITH INDUSTRIAL AND CIVIL CONSTRUCTIONS, BOTH PUBLIC AND PRIVATE.
PLACE	VENEGONO INFERIORE (VA), ITALY
USE	MILITARY AIRPORT
PRODUCT	POSTS WITH DOUBLE TOPS, AND FRP GRATING
SERVICE	DESIGNING, MAKING AND DELIVERING ALL THE MATERIALS FOR ON-SITE INSTALLATION OF THE FENCE



OBJECTIVE

According to the airport technical specifications required by Leonardo Spa, it was necessary to build a fence which complied with the defined shape but which had to be radio transparent to airport radars. It also had to be frangible in case of an accidental impact by an aircraft. Furthermore, it was necessary to deliver all the components promptly and in such a way to install the fence as quickly as possible without the need of making changes or adaptations at the working site.

SOLUTIONS

A perimeter fence with FRP posts and gratings was tested at a specific lab and it was found to comply with the frangibility requirements specified in standard ICAO 9157 "Aerodrome Design Manual – Part 6 – Frangibility".

In order to meet the client's needs, the vertical elements were delivered already cut to measure and drilled, with preassembled extension arms; in this way, after the embedment of the posts in the reinforced concrete, it has been enough to tense the polyamide lines by using the clamps and turnbuckles included in M.M. supply, and finish the operations by fixing the FRP mesh which was delivered in rolls.

All the components of the fence, including the polyamide lines, the clamps and the turnbuckles for the lines, as well as the fixing ties for the mesh, are made of non-ferrous material in order to avoid possible interference with airport radars.