



BESHIELDING
BUSBAR | ENGINEERING | SHIELDING



FLAT SHIELDING FOR LARGE SURFACE AREAS

Description of the problem

When shielding areas very close to the source, it is necessary to intensify the use of ferromagnetic types of shields rather than conductive ones. The use of materials with high permeability orienting grains in the required thickness and assessed through calculation can be an effective solution.

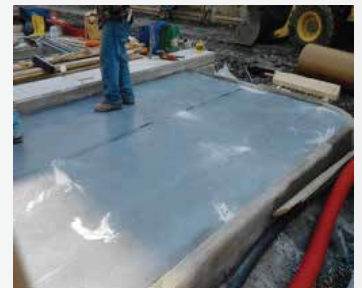
The layers of material are duly set up based on the direction of the currents.

The illustrated case shows the shielding of an office hut at a car wash in Genoa, situated on top of a high voltage cable.

Solution

The pictures illustrate the various shielding installation phases, comprised of high magnetic permeability shielding layers. Installation is very simple and is carried out starting with a roll of ferromagnetic material which is cut to size on-site.

Ferromagnetic continuity is ensured by overlapping the layers by a few centimetres.



Results

The first picture shows the magnetic induction levels on the ground without shielding.

The second picture shows how shielding is able to expel the magnetic field by modifying the trend of the contour lines, guaranteeing observance of the 3 microT above the office hut (grey area).

