



BESHIELDING
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INDUSTRIAL FLAT SHIELDING

Description of the problem

The protection of workers occupationally exposed to electromagnetic fields has been the subject of European directives since 2004 (2004/40/EC) and, after successive postponements, the limits set by Directive 2013/35/EU will be implemented by all European countries in July 2016. In November 2015, guidelines to the directive were published and many professions and a great deal of equipment are affected by the issue of EMF emissions. BESHielding can design ad hoc solutions for the shielding of such devices. The case of a “demagnetizer” is given by way of example: this is a device used to demagnetize ferromagnetic objects, eliminating their residual magnetism.



Solution

The shielding solution proposed in this case consists of a wheeled-structure that can be moved about to perform maintenance on those items to be demagnetized.



Results

The demagnetizer significantly reduces the magnetic impact generated. As can be seen from the figure showing the magnetic induction trend along the blue line, the reduction in magnetic induction is on the order of 4- to 5-fold compared to the unshielded condition. The magnetic induction levels are below the limits of 500 and 1000 microT, the limits indicated in the current Directive 2004/40/EC and the forthcoming 2013/35/EU.

