

## ELEKTROPROVODLJIVI KERAMIČKI PODOVI IZVEDENI NA OBJEKTU PLIVA ZAGREB, HRVATSKA

Od farmaceutske industrije "Pliva", Savski Marof dobili smo zahtjev da damo ponudu za isporuku i ugradnju elektroprovodljivih keramičkih kiselo otpornih podova, u prostorijama kemijske sinteze u proizvodnji lijekova gdje postoji opasnost od eksplozije.

Poznato je da ljudi koji se kreću prostorijom na sebi stvaraju statički potencijal koji se prazni kod dodira sa drugom osobom ili predmetom u prostoru. To pražnjenje se očituje stvaranjem iskre koje često i sami doživljavamo.

Kako do te iskre ne bi došlo u prostorijama gdje postoji opasnost od eksplozije (smjesa zraka i otapala) na podove se ugrađuju elektroprovodljivi podovi koji mogu biti kao samolivi (epoksi, poliuretan), trake od PVC-a ili keramički elektroprovodljivi podovi.

Kada se radi se o mokrim površinama opterećenim i kiselinama, koriste se keramičke elektroprovodljive pločice sa provodljivošću od  $10^4$  do  $10^6 \Omega$  (ohma). Pločice se polažu u elektroprovodljivo ljepilo sa istim karakteristikama i za dobru odvodnju elekticiteta u ljepilo se ugrađuju bakrene trake koje se uzemljuju na barem dva mjesta u svakoj prostoriji.

U "Pliva" tvornici farmaceutskih proizvoda u Savskom Marofu izvedeno je oko 600 m<sup>2</sup> takvih podova, za koje su korištene keramičke pločice "Kerasafe" firme "Klingenberg" dimenzija 20x20x1,2 cm i "Keraflex" ljepilo za keramiku firme Mapei, sa 10 % dodatka "Mapelectric" elektrolita.

Pločice su fugirane kiselo otpornim kitom "Habenit 60" firme "Höganäs".



## ELECTROCONDUCTIVE CERAMIC FLOORS DONE AT THE PHARMACEUTICAL INDUSTRY PLIVA ZAGREB, CROATIA

We have received a request from the pharmaceutical industry "Pliva", Savski Marof- Croatia to make an offer for the supply and installation of electroconductive ceramic acid-resistant floors, in the premises of chemical synthesis in the manufacture of pharmaceutical products, in the rooms with the risk of explosion.

It is known that people who move through the room itself create static potential which is being discharged in contact with another person or object in space. This discharge is manifested by creating sparks which we often experience.

To avoid sparks in environments where is danger of explosion (mixture of air and solvent) on the floors are installed electroconductive coverings, which can be as epoxy, polyurethane or strips of PVC, or electroconductive ceramic floors.

For antistatic floor surfaces affected with acids, mainly are used electroconductive ceramic tiles with conductivity from  $10^4$  to  $10^6 \Omega$  (ohm). The tiles are laid in the electroconductive adhesive with the same characteristics, and for good conductivity of electricity in the adhesive is installed copper strips which are earthed at least two places in each room.

In "Pliva" factory for pharmaceutical products in Zagreb was install about 600 m<sup>2</sup> of such floors, for which are used ceramic tiles "**Kerasafe**" from company "**Klingenberg**", dimensions 20x20x1,2 cm and "Keraflex" adhesives from company "Mapei", with 10% additive of "Mapelectric" electrolyte.

The tiles are grouted with acidresistant jointing mortar "**Habenit 60**" from "**Höganäs**" company.

