
PEKA
CHEMIE
INDUSTRIAL COMPANY

PEKA CHEMIE INDUSTRIAL. CO.

Our Company was established in March 1996 to produce various types of industrial coatings. We became a pilot in producing electrostatic powder coatings in 1999 after having accomplished the study and design phases of production in 1996 and 1997. We started mass producing in mid-2000, with a wide range of products and up-to-date technology, we are now among the leading manufacturers in the region.

ANTIBACTERIAL POWDER COATING

In the early 20th century, infectious diseases were the major cause of high mortality rates. Owing to anti-bacterial agents, death rates have decreased drastically. However, due to the resistance of bacteria to anti-bacterial drugs, the company developed an anti-bacterial powder coating which would be more efficient.
Peka Chemie's new range of anti-bacterial powder coatings are based on nanoparticles and are resistant to gram positive and negative bacteria.
About 99.9% of the bacteria are killed after 24 hours following the application of these coatings. Among the advantages of these coatings are:

1. Used in the interior coating of household appliances: Inside refrigerators and water-cooled chillers where humidity leads to bacterial growth.
2. Medical equipment: Widely used in hospitals and clinics to stem the infestation of bacteria. Lighting and disinfectant systems, cabinet works and beds are the major applications of antibacterial coatings.
3. Household sanitary equipment: Bathroom equipment, washing machines and dishwashers, hampers and baskets, etc.
4. Kitchenware: Mixers, cooking appliances, foodstuff containers and the like.
5. Shelves used to keep items: steel shelving, storage cabins and...

ANTIBACTERIAL
POWDER COATING

SUPER DURABLE POWDER COATING

SUPER DURABLE POWDER COATING

Polyester-based coatings are highly resistant to weathering and corrosion when compared with other coatings. However, the use of these powder coatings has some limitations in its mechanical properties. The application of Super Durable powder coating is necessary in severe weather conditions.

ZINC RICH POWDER COATINGS

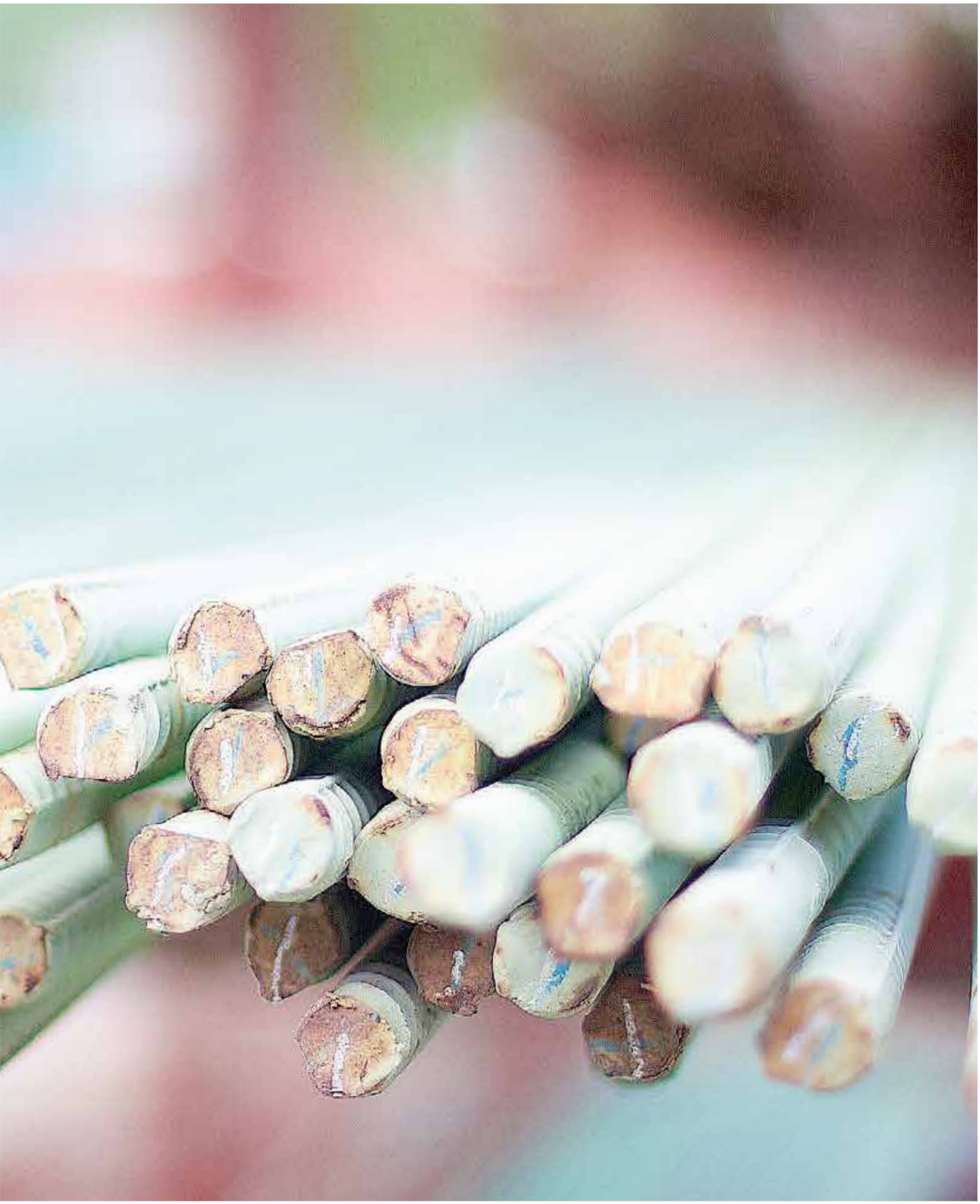
On account of the high zinc powder content in these coatings together with their sacrificial potential compared to iron-based coatings, the zinc rich version provides outstanding anti-corrosive and protective properties, which makes it an efficient coating used in many sectors of industry, including:

1. Agricultural machinery
2. Coatings for marine structures and corrosive environments
3. Electric panels
4. Industrial equipment

These coatings are partially cured for 3 -5 minutes under 180° C. Upon application of the second coat, the article will be fully cured. However, the second layer must be applied within 12 hours (at most) after the application of the first coat.

REBAR POWDER COATING

Rebar corrosion is among the major causes of the short life span of concrete structures. To overcome this problem, high corrosion resistant and flexible epoxy powder is used. The curing process will be complete by preheating rebar under 220° C.
It is highly recommended to use this coating in marine structures and highly humid regions.

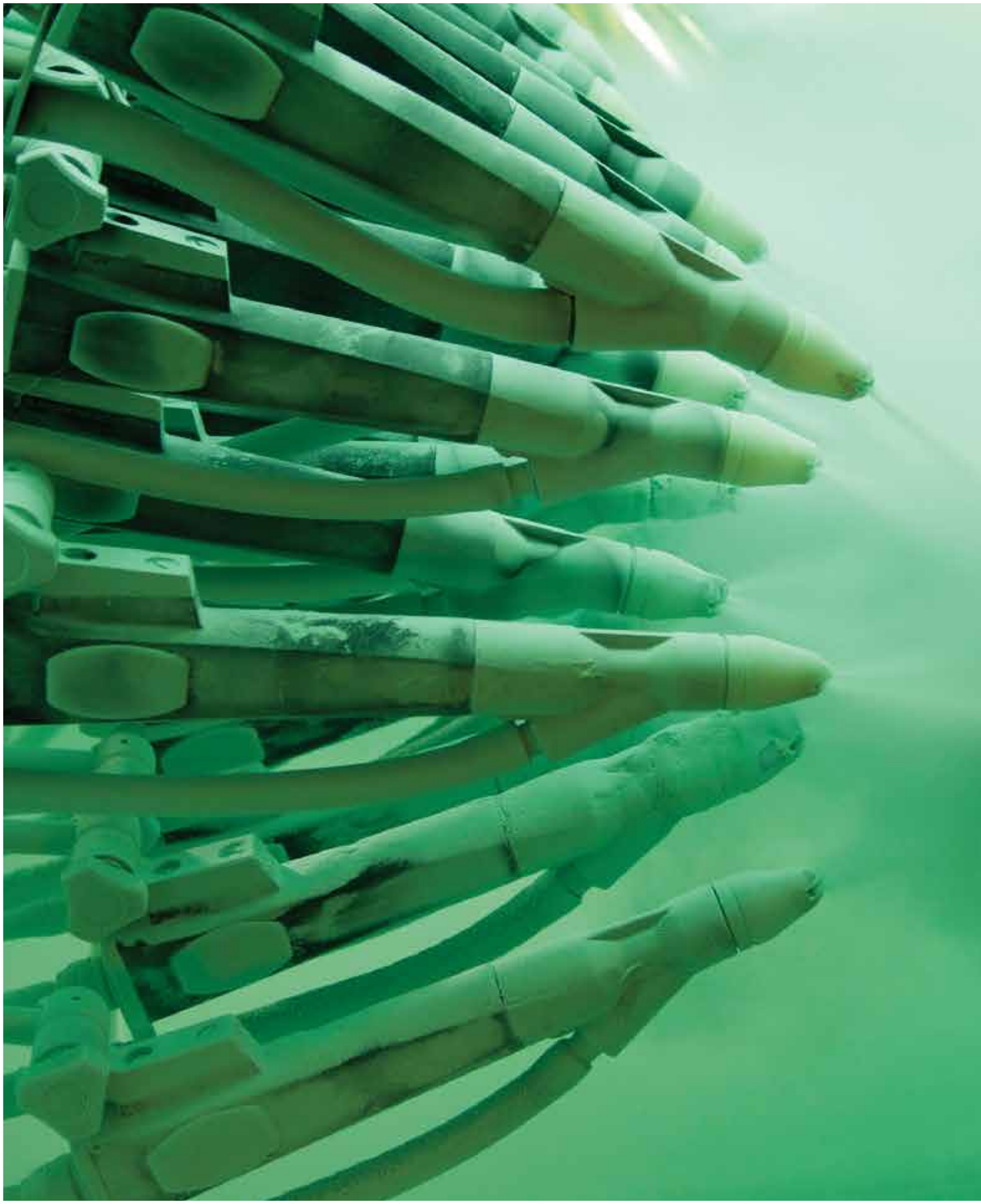


ANTI-GRAFFITI POWDER COATING

Graffiti is a modern phenomenon which disfigures painted surfaces, using inks with different solvents. There are two alternatives to overcome this shortcoming: either by repainting the disfigured structure (which entails high costs and considerable loss of non-renewable resources) or to use anti-graffiti powder coating which is easily washed. Indeed, these coatings are highly resistant to different solvents used in graffiti inks and are not easily degraded, so the graffiti could be easily removed with a suitable solvent.

FUSION BONDED EPOXY POWDER COATING
(PE three layer coating)

PE (Polyethylene) coating system is one of the most common protective systems used in different industries.
It consists of three layers:
The first layer is a Fusion-Bonded Epoxy (FBE) coating which is used as a protective coating in pipelines, due to its anti-corrosive and adhesive properties. Aiming to enhance physical-mechanical and thermal properties, FBE coating is bonded by an adhesive layer
(as intermediate coat) to the polyethylene top coat.
FBE powder coatings enjoy high curing rate under the temperature range 180°-230° C. The application temperature and curing time could vary depending on the pipe size and pipeline surrounding conditions. .
Adhesion of the FBE primer to the adhesive layer could prove a major challenge. The protective capability could decrease if the layers come apart.



FUSION BONDED EPOXY POWDER COATING (Dual layer FBE)

Within the past few years, the dual layer FBE has proven to be an efficient substitute to PE three layer coating and has been extensively used in the coating of pipelines. This system consists of two FBE layers: The first one (anti-corrosive and adhesion properties) and the second layer (with mechanical and thermal properties). The second layer is immediately applied on the first coat. Compared to the PE three layer coating, the dual layer alternative offers better performance in terms of corrosion resistance, adhesion to the substrate and resistance to cathodic disbondment while being more economical.

WHEEL POWDER COATING

The car wheels are exposed to harsh, corrosive environments. It's essential for the wheels to be resistant to corrosion and chemicals. The wheels are coated with three protective layers, the first one being powder coating. According to their special formulation, they provide a highly polished surface with resistance to corrosion.

WHEEL POWDER COATING

COOL COATING POWDER COATING

When exposed to direct sunlight (especially in very bright days), the painted structures such as children playthings in playgrounds and parks or metallic benches in the streets absorb infra-red rays and become too hot to be used. To solve this problem, cool coating powder coatings are highly effective by reflecting a major portion of the infra-red received.

THERMAL RESISTANCE POWDER COATING

As a result of the high silicone-resin content in their formulation, these coatings are more heat-resistant compared to other powder coatings. They have different curing conditions and limitations in mechanical properties. Heat resistant powder coatings could be deemed as an appropriate substitute to enamel, especially under the high temperature of up to 300° C.

METALLIC BONDING POWDER COATING

This category of metallic powder coatings are characterized by the metallic pigments physically confined in the powder matrix through an advanced bonding technology and they provide the following advantages over the conventional metallic non-bonding alternatives.

1. Prevents metal spitting
2. Excellent recyclability
3. Provides uniformity in the final design and fixes powder-clouding problem
4. Access to different metallic effects such as chrome effect.

ANODIZED POWDER COATING

Within the scope of aluminum door and window industry, there are two protective coating processes in common use: Protection by electrostatic powder coating or anodizing process to create a protective coating.
Anodizing process is not very economical as it requires highly purified aluminum and a large amount of aluminum is wasted in the process. These coatings provide a highly polished surface with matt effect very similar to the one produced in the anodizing process. They are applicable to all aluminum substrates and maintain their gloss in various temperatures.