PEKA CHEMIE

INDUSTRIAL COMPANY

GeneralCatalog

General Catalog

PEKA CHEMIE
INDUSTRIAL COMPANY

A Word by our Managing Director

Having established standardized systems essential to our innovations and development-oriented organization, Peka Chemie Industrial Co. has been observing the following principles:

- Ensuring Customers' satisfaction to such extent that they always prefer our products to foreign products.
- Production and supply of premium products with the prevailing international standards to have a competitive edge over similar products manufactured abroad.
- Acknowledge and observe the prevailing environment protection standards in the production of environment-friendly products.
- Continuous innovation and development while working to acquire state-of-the-art technologies in manufacturing a variety of novel products.
- Systematic endeavor to promote exports by enhancing the prestige and reliability Iranian products in both regional and international markets.

COMPANY'S HISTORY IN A GLANCE

- 1995: Establishment.
- 1998: designing powder coating lines, procurement and installation of machinery.
- 1999: Pilot production and creation of knowhow essential to the powder coatings.
- 2000: Identification of the prerequisites to the household appliances sector of industry and access to target market.
- 2000: Mass production on industrial scale.
- 2001: Implementation of the first development phase (transfer to new plant located in Qods town).
- 2005: Identification of the prerequisites to the aluminum sector of industry and access to target market.
- 2007: Start of the second development phase (commencement of the new plant construction located in Shamsabad Industrial Estate).
- 2009: Commencement of exports of goods in part with the prevailing global standards.
- 2010: Third development phase (boosting production capacity).
- 2010: Identification of prerequisites to the production of taps and fittings for (either household- or industrial-purposes) and access to target market.
- 2012: Identification of prerequisites to the production of FBE powder coatings for water- and oil-condensate supply pipelines.
- 2013: Production of PU-based decorative coatings
- 2013: Production of antibacterial powder coatings for medical and hospital equipment.
- 2014: Production of TGIC polyester coatings in keeping with QUALI- COAT Certificate.
- 2015: Production of TGIC-free polyester coatings.
- 2016: Implementation of development and renovation schemes through the addition of three new European production lines and replacement of four outdated lines with new European ones, thereby increasing the total production lines to 12.

VISION

Peka Chemie Industrial Co. has always kept an edge over its competitors and stabilized its position as the leader in the region and one of the leading manufacturers on international level. The company has ensured high quality while having variety in production by continuously implementing development and renovation schemes to raise its brand's esteem.

POWDER COATINGS & THEIR APPLICATIONS

In the 1960s, electrostatic powder coatings were introduced in various sectors of the industry. They are efficient substitutes to certain categories of liquid paint.
Their production and application have greatly increased on a global scale. These paints are first applied to substrate surfaces as dry powder and later treated in the oven to produce the desirable characteristics. They are usually applied to metallic surfaces like car spare parts, household appliances, electric panels, as well as a wide range of metallic surfaces
(galvanized, aluminum, etc.). In modern technology, these powder coatings are applied to non-metal substrates like MDF and are later treated by UV radiation.

POTENTIALITIES

- Production of more than 800 types of products up until now
- Manufacturing products in keeping with K7 standards
- Manufacturing customized products
- Capability to manufacture under a vast range of output volume with 12 units of production line and a total output capacity of over 14000 tons per single shift per year.
- Producing 18 different types pf products simultaneously with special designs.
- Availability of an advanced, well-equipped and self-sufficient laboratory for conducting any tests required as well as conduction of research and prototyping activities.
- Our laboratory is certified by the Iranian Standards Organisation in keeping with ISO 17025 Certificate.
- Having at our disposal a wide range of software/hardware facilities to provide technical and training services for our customers within the framework of periodical visits, seminars and workshops.

SALE

Our sales facilities comprise of four different departments: Marketing, Domestic sales, Exports and After-sales engaged in the following activities:

MARKETING DEPARTMENT

The marketing department collects the required information about customer's desired substrate and evaluates the technical capabilities of the company to apply the powder coatings to the substrate. This department follows up the production and presentation of the prototype to the clientele. Once the suitable substrate is identified and the paint is applied, this department dispatches the initial deliveries to customers.

DOMESTIC SALE DEPARTMENT

Establishing permanent communication with the customers, taking and dispatching orders are the main functions of this department, which assigns a distinct sales expert to present the services required by each customer.
Should any modification arise in terms of the product specifications or application by the customer of a new product, the sales expert registers the issue for further processing and follow-up. It is to be noted that the assigned sales expert registers any complaint and/or suggestion (whether in quality or otherwise) made by the customer, which will be transferred to the After-Sales Department for verification and follow-up.

EXPORTS DEPARTMENT

This department deals with the marketing and sales activities outside the Iranian geographic territory by engaging in the following activities:

- Survey and study of the markets in target countries together with the priorities prevailing in those markets.
- Participation in fairs and exhibitions at regional or international levels.
- Paying visit to the major customers at the target markets
- Taking and registering orders, follow-up of production processes and shipment of the products to foreign customers
- Deriving advantage from all Company's departments to promote the production of premium products, and giving regular and prompt service to foreign customers to reinforce their confidence and promote the markets.

AFTER-SALES DEPARTMENT

This department should make sure the powder coatings are properly applied and get customer feedback on the products they have received. The department personnel are responsible for:

- Updating technical information on customer's coating line in an attempt to increase the knowledge of our Company's personnel in the technical department in line with the production and supply of products tailored to the customers' requirements and infrastructural details.
- Providing technical suggestions on the correction and improvement of powder coating application such as control of oven temperature, quality of spraying system, substrate preparation quality and etc.
- Providing training courses on the appropriate mechanism of powder coating application and troubleshooting.
- Receiving customers' suggestions and complaints (either directly or through the sales experts) and following up and resolving them.

R&D DEPARTMENT

Our company's R & D Department's activities date back to the establishment and construction of our plant. The R & D Department currently conducts the following activities in order to reach our objectives and assignments, given our invaluable assets (personnel, well-equipped laboratory's instrumentation, equipment and light testing machines):

- Draw-up of our prerequisites to purchasing raw materials
- Draw-up of technical specifications of our products
- Draw-up of supervision techniques for product QC on the incoming raw materials according to our executive procedures.
- Draw-up of instructions for verification and QC in manufacturing stations and supervision over their implementation.
- Applying to acquire international certificates (General or specific) relative to our products' quality.
- Diversifying colors as per the request of sales facilities or customer, from prototyping stage up to large-scale production.
- Interacting constructively with Iranian Standards Organization, other laboratories, other R & D departments and university research centers.
- Studying and doing research to acquire the knowhow in producing new products such as:

- FBE powder coatings to protect water, gas and oil-condensates pipelines against corrosion.
- Silicone-resin based heat-resistant powder coatings.
- Thin film powder coatings
- Antibacterial powder coatings
- High-corrosion resistance powder coatings
- Super Durable powder coatings

IN-HOUSE LABORATORY

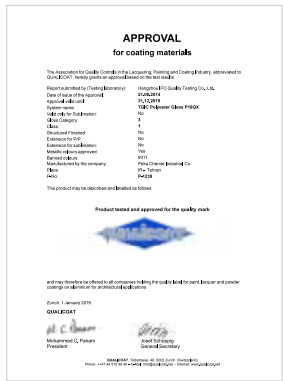
Our company has always invested in the mobilization of our in-house laboratory. Equipped with the latest hardware, software and tools, it is one of the leading powder coating laboratories worldwide. With the cooperation of our specialists and experienced personnel in the polymer and paint industry, the in-house laboratory operates in the following:
Testing the incoming raw material, prototyping customized products, profile control of raw materials and finished products.
R&D aims at producing a variety of products and giving technical services to our customers by virtue of certificate ISO 17025 in the capacity of a laboratory certified by the Institute of Standard and Industrial Research of Iran (ISIRI)

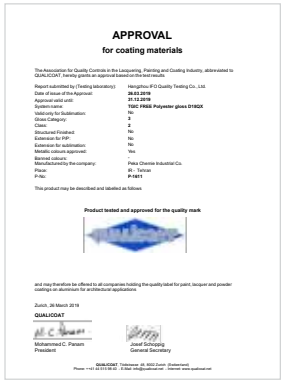
PRODUCTION & QC ISSUES

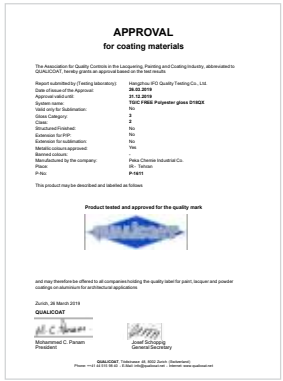
Peka Chemie Industrial Co. has always deemed its mandate and policy to continually enhance the production process while capitalizing on such issues like sustainability, reliability and monitoring capacity of the production processes by QC and Production Departments.
To this end, our products' quality is assessed at various production stages from blending the raw materials, chips and powder paints, using a complete range of advanced laboratory tools and equipment and conducting various tests to monitor the technical specifications as expected and to ensure the premium quality of the final products.

CERTIFICATES

- ISO 9001 Certificate for Quality Management System
- ISO-14001 Certificate for Environment Management System
- ISO-18001 Certificate for professional Health & Safety regulations
- 17025 Certificate for General Requirements for Competence in Testing and Calibration in laboratories
- QUALICOAT Certificate for verification of polyester powder coating quality
- Certificate for verification of antibacterial powder coating quality issued by SANITIZED International Institute in Switzerland
- Certificate for verification of quality powder coatings in drinking-water supply pipes and fittings issued by BODY COAT International Institute in the UK.







BASIC PRODUCT

PEKA CHEMIE
INDUSTRIAL COMPANY

PEKA CHEMIE INDUSTRIAL. CO.

Our Company was established in March 1996 in a bid to produce various grades of industrial coatings. Having accomplished the study and design phases for the production of electrostatic powder coatings in 1996 and 1997 as well as those relative to procurement and installation of plant machinery and equipment in 1998, Peka Chemie Industrial Co. achieved successfully the pilot production in 1999, the Company started mass production of the said coatings mid-2000. Owing to its deriving benefit from versatile production plants together with the state-of-the-art technologies, our Company is now one of the leading manufacturers of these items in the region.

SAND TEXTURE POWDER COATING

These coatings have a rough surface similar to sandpaper. The degree of surface roughness can be controlled by monitoring the coat thickness. In order to achieve a rougher surface, the color coat should be thinner than usual and must be cured completely. The level of gloss and roughness can be adjusted based on preference and the application requirements.

These coatings are available in all coating bases like polyester, epoxy polyester, polyurethane, etc. In fact, PU-based sand texture powder coatings can be used to great advantage in aluminum door and window sector of industry as they have a wood-like decorative effect.

The ratio of virgin-to- recycled coating affects the roughness or smoothness of these coatings, therefore it is recommended to keep the ratio constant to ensure a uniform design.

WRINKLE POWDER COATING

WRINKLE POWDER COATING

These coatings are characterized by alternating depressions and elevations, either with a wide amplitude of low height or a very compact pattern of minute depressions and elevations. The surface must be sprayed cautiously, to prevent cavitation in the final product. These coatings could be used on surfaces exposed to sunlight, chemicals or corrosive agents.

ANTIQUE POWDER COATING

These coatings have an uneven, rough surface. This kind of coating can be used on uneven surfaces, like those with welding dents on them.

The thickness of these coatings is higher than usual, so they are not suitable where high mechanical resistance is required. Antique powder coatings usually have a decorative purpose, we may apply a coat of Zinc plus a suitable lacquer on the top to increase their resistance.
Peka Chemie specializes in manufacturing antique powder coating for indoor and outdoor purposes with a range of colors and effects

CROCODILE SKIN POWDER COATING

This coating resembles a crocodile skin pattern once cured. This coating has two distinct variations:

1. PU-based crocodile skin coating with high resistance to harsh atmospheric conditions with bold embossed patterns suitable for outdoor applications such as roofings.
2. Epoxy-based crocodile skin coating which has high thermal resistance and is suitable for kitchenware, utensils and heaters.

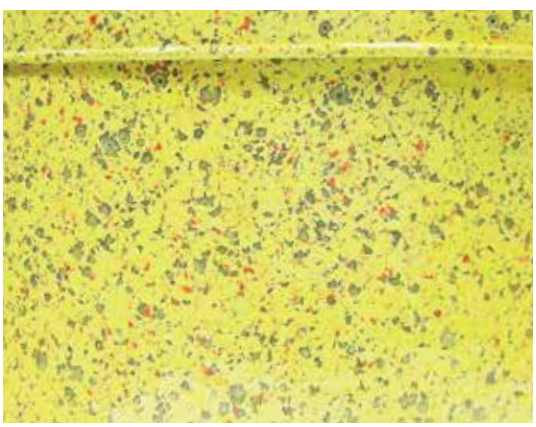
CLEAR COAT POWDER COATING

These coatings are transparent and cover the substrate surface. They are either made of epoxy-polyester or polyester and come in different colors to suit the decorative or protective applications.
This type of coating lacks weather resistance. To prevent corrosive effects, clear polyester powder coatings could be used.

METALLIC POWDER COATING

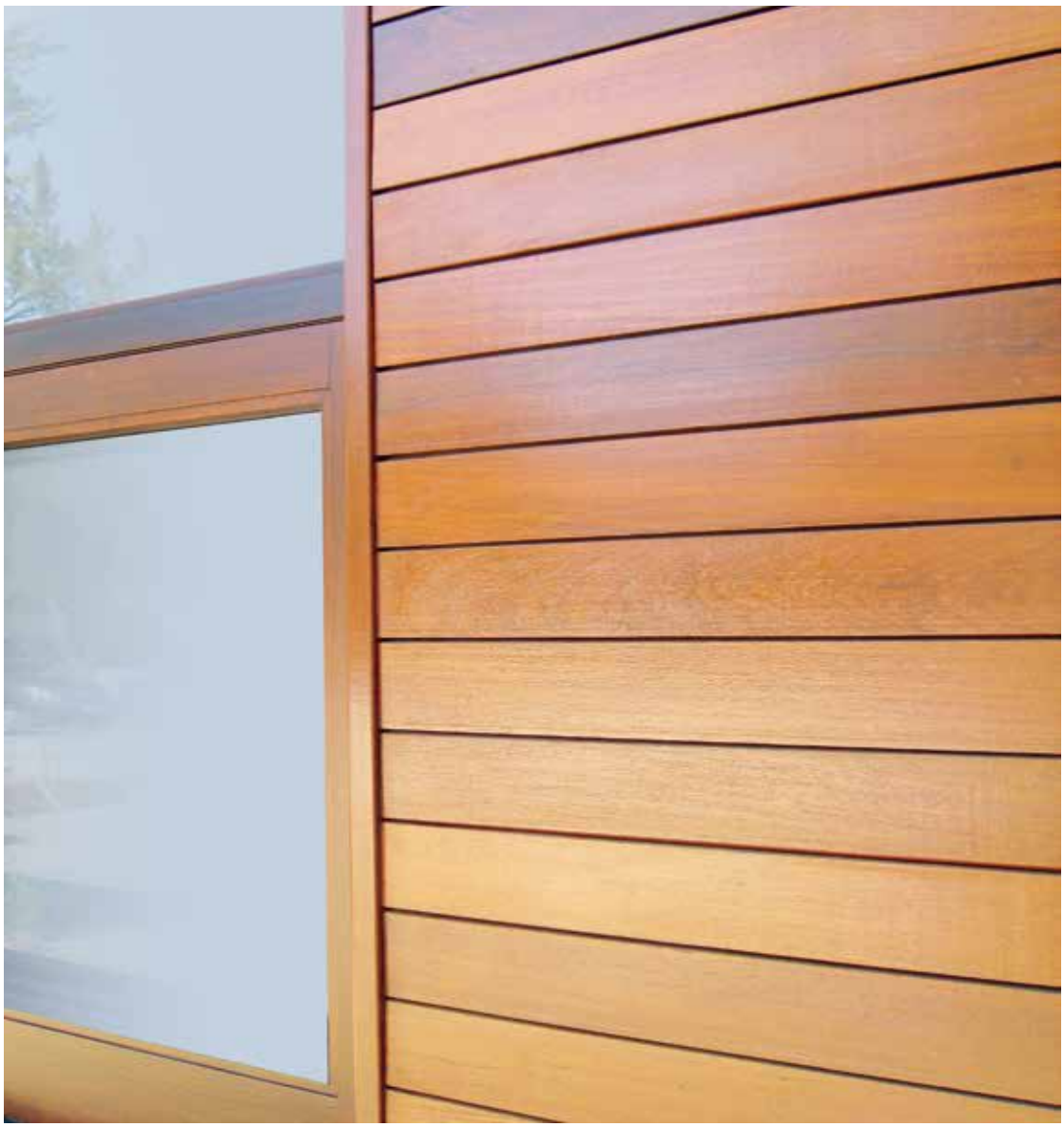
These coatings are produced by mixing color powder and metallic pigments with various types of granule.These coatings are mostly lustrous and depending on customer demand, they have indoor and outdoor application.
The major metallic coatings are the following:

- Silver metallic coatings (M.C.)
- Pearlescent M.C.
- Gold M.C.
- Special Color M.C.
- Copper M.C.



MULTICOLOR POWDER COATING

This type of coating is characterized by a background color and patches in various colors scattered in the main background. Both coatings could be produced in different shades. These coatings are best suited to applications like teflon-coated utensils or toys. It is worth mentioning that to achieve the uniform effect, it is recommended to maintain the virgin-to-recycled-powder ratio as constant as possible, as any variation in this respect affects the final effect.



WOOD-EFFECT POWDER COATING

Another type of powder coating is the wood-effect powder coating. This coating is applied in two stages: First the powder coating is applied and cured on the surface of the metal substrate. In the second stage, the desirable effect is achieved by attaching the pattern (either in paper or in PE film) to the substrate and transferring it to the substrate by using a special machine under specific temperature, pressure and vacuum circumstances.
On account of attractive and varied patterns, these coatings are used extensively in the aluminum industry, Teflon-coated utensils, and kitchen cabinetworks.

SPACIAL PRODUCT

PEKA CHEMIE
INDUSTRIAL COMPANY

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...

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.

METALLIC BONDING POWDER COATING

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.

Address:
No. TM-55, Booalisina Blvd, Baharestan Blvd., Shamsabad Industrial Complex, 35th Km Tehran-Qom Highway, Iran
Tel. : +9821 83824 +9821 83825000
Fax : +9821 82208983

Email : info@pekachemie.com
Website : www.pekachemie.com