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Project Specification

Location: Beijing

Application: Laboratory anti-corrosion flooring

Product: Square Mesh Molded Grating

Project Overview

The project is located in Beijing, a company engaged in research and development in the field of ophthalmic medicine.

In January 2023, this company contacted us through the internet and invited us to visit the project site, which includes anticorrosive flooring for chemical laboratory equipment and testing aisles for chemical wastewater treatment, etc. These will be used for daily experiments as well as wastewater treatment, and need to meet the requirements of daily laboratory and wastewater treatment. These will be used for daily experiments as well as wastewater treatment, and need to meet the requirements of corrosion resistance, anti-slip, high durability, light weight, environmental protection, insulation, and high load-bearing capacity.







Problem

Due to the highly corrosive chemical environment of their laboratory facilities, a product was needed that could both resist the effects of corrosion and improve the safety conditions of the facilities. We have organized the customer's needs as follows:

Non-conductive and non-thermal conductive: To ensure the safety of personnel during production, the material must be non-conductive and have low thermal conductivity.

Corrosion resistance: Considering the highly corrosive chemical environment on the floor and aisle boards corrosion, not only affects the load-bearing, but also poses a potential hazard to personnel safety, so the material must be able to withstand the corrosion of chemical substances on the aisle boards.

Lightweight: easy to install is the key, without large equipment, greatly reducing the construction time.

Non-slip: A safe, non-slip surface needs to be provided for those using the flooring to avoid the risk of people slipping and falling.

Low maintenance and long service life: The customer specifically required a product that would not cause inconvenience during use.



Solution

Fiberglass reinforced plastic (FRP) molded grating products are ideal for this type of application. For this project, we used standard square mesh molded grating to line the walkways along the filling equipment and conveyor lines. Molded steel grating was chosen for its unmatched combination of corrosion resistance, strength, long service life and safety.

Tianfu profiles use branded resins to manufacture molded gratings. Branded polyester resins are superior in performance quality to many similar fiberglass and metal products and meet the corrosion resistance requirements of industrial, chemical, metallurgical, food, pharmaceutical, food packaging, food processing and other industries. Fiberglass reinforced plastic (FRP) molded grating comes against corrosion resistance and improves safety conditions. The floor of a room where chemical storage tanks are stored is an ideal place for FRP molded grating to demonstrate its long-life capabilities and non-slip performance. A pure mixture of resin and continuous glass fibers produces a corrosion-resistant panel that provides years of use without deterioration by harmful chemical environments.

The non-slip surface of molded fiberglass grating provides a safe, secure surface for laboratory personnel, even when wet and slippery due to grease, chemicals, oil or water Under proper support conditions, fiber grating has the structural characteristics of steel without the weight. Compression grating has excellent corrosion resistance and lasts far longer than steel, even under harsh conditions.