

Composition and function of PPGI

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Composition and function of color coated plate coating

The various coatings of the color coated board are composed of four parts, namely resin, pigment, solvent and auxiliary. Wherein the solvent is a volatile portion.

(1) Resin

Resin is a film-forming substance, which is the most important component and foundation in coatings. It is also called base material, which is the main factor determining the properties of coating film.

The resin required as a film-forming substance is quite stable during the storage period of the coating, and no obvious physical changes and chemical changes occur; in the film formation, the film can be rapidly solidified under the specified conditions.

There are many types of resins, and resins commonly used in coil coatings include acrylic resins, epoxy resins, polyester resins, and polyurethanes. Different resins have different physical and chemical properties, as well as weather resistance and corrosion resistance.

(2) Pigments

The pigment must be used in combination with the resin. The main role of the pigment in the coating is to color the coating film. The difference in pigment ratio affects the hardness, gloss and corrosion resistance of the coating film.

(3) Solvent

An important component of a liquid coating of a solvent is a volatile component during the drying process of the coating. The viscosity of the coating is also typically adjusted with a solvent. This solvent used to adjust the viscosity of the coating is referred to as a diluent. Solvents have a large impact on the manufacture, storage, adhesion, film formation and film formation quality of the coating.

(4) Additives

Auxiliaries are small amounts of additives added to improve coating performance. The additives are rarely used in the coating, but the effect is remarkable. If some can improve the performance of the coating and the coating film, some can improve the drying time, and some can prevent the coating film from being ill, etc., the variety of additives, there are reminders Drying agent, curing agent, leveling agent, antifoaming agent, matting agent, stabilizer, etc.